



State Revolving Fund Loan Programs

Clean Water, Drinking Water, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

EVANSVILLE WATER AND SEWER UTILITY Pfeiffer Road/Wansford Lift Station, Force Main and Gravity Sewer SRF PROJECT WW 21 20 82 20

DATE: December 29, 2021

TARGET PROJECT APPROVAL DATE: January 31, 2021

I. INTRODUCTION

The above entity has applied to the Clean Water State Revolving Fund (SRF) Loan Program for a loan to finance all or part of the Clean Water project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed in color at <https://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF Clean Water Program has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 5-1.2-3, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the target approval date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

April Douglas
Environmental Review Coordinator
State Revolving Fund
100 N. Senate Ave. IGCN 1275
Indianapolis, IN 46204
317-234-7294
adouglas@ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **Pfeiffer Road/Wansford Lift Station, Force Main and Gravity Sewer**
City of Evansville Water and Sewer Utility
1 S.E. 9th Street, Suite 200
Evansville, IN 47708

SRF Project Number: WW 21 20 82 20

Authorized Representative: Lane T. Young, Executive Director

II. PROJECT LOCATION

The proposed lift station, force main and gravity sewer are located in Vanderburgh County, Center & Pigeon Township, Evansville North 24K USGS Quadrangle, township 6S, range 10W sections 8, 9 and 17.

III. PROJECT NEED AND PURPOSE

Evansville's consent decree with the U.S. Environmental Protection Agency and the Indiana Department of Environmental Management requires Evansville Water and Sewer Utility to develop and implement an Integrated Overflow Control Plan (IOCP). The IOCP establishes projects to prevent and eliminate sanitary sewer overflows (SSOs) within the Highway 41 and Millersburg Basins. Evansville's Sewer Master Plan further identifies capacity improvements in this area, including Pfeiffer Road Lift Station upgrade, Pfeiffer Road Lift Station force main upgrade, storage facility requirements, and upgrade to the existing gravity sewer coming to Pfeiffer Road Lift Station.

Pfeiffer Road Lift Station serves the Highway 41 and Millersburg separate sanitary sewer basins. The lift station wet well/dry well has inadequate storage volume, pumps are improperly sized for existing and future flow rates, electrical components are inefficient, and conditions cause hazardous entry and problematic maintenance. The discharge force main is undersized and has reached the end of its useful life. The interceptor conveying wastewater to the lift station is hydraulically limiting, causing surcharging, SSOs, and property damage. The interceptor will be addressed in future Phases 2 and 3; these phases are not included in the SRF loan. See **Figure 1**.

IV. PROJECT DESCRIPTION

The project will replace the deficient and aging Pfeiffer Road Lift Station with a new Wansford Lift Station. See **Figure 2**. The project includes:

- 20 MGD Wansford Lift Station, with ability to upgrade to 25 MGD, including four submersible pumps with open wet well, screening, electrical/controls, and odor control systems;

- Approximately 8,700 LF of 30-inch diameter discharge force main;
- Approximately 3,000 LF of 30 to 48-inch diameter gravity sewer from Pfeiffer Road Lift Station to Wansford Lift Station; and
- Pfeiffer Road Lift Station demolition, proper disposal, and site restoration.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

Construction Costs

New Wansford Lift Station	\$13,037,000
Elimination of Pfeiffer Road Lift Station and New Gravity Sewer	\$ 5,473,000
New Wansford Yard Force Main	<u>\$ 7,522,000</u>
Subtotal	\$26,032,000
Contingency (10%)	<u>\$ 2,603,000</u>
Construction Sub-Total	\$28,635,000

Non-Construction Costs	<u>\$ 3,862,000</u>
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Total Estimated Project Cost	\$32,497,000
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- B. The total cost of these projects is estimated to be approximately \$32,497,000. The City of Evansville Water and Sewer Utility will finance the project with a loan from the State Revolving Fund Loan Program for a term and annual fixed interest rate to be determined at loan closing. The actual loan amount will depend on the bids received. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

A. Pfeiffer Road Lift Station

- No action – this option requires EWSU to do nothing, which would leave the system with a failing lift station, sanitary sewer overflows, and sewer backups. This is not a viable option.
- Resizing Pfeiffer Road Lift Station to Accommodate Future Flow Projections – the existing lift station site is constrained by size and does not allow for future flow expansion. This is not a viable option.
- Elimination of Pfeiffer Road Lift Station – installing a 30” gravity sewer from Pfeiffer Road to the new Wansford lift station allows for elimination of the existing lift station. **This is the selected alternative.**
- Downsizing of Pfeiffer Road Lift Station – replacing the Pfeiffer Road lift station with a new smaller lift station once the new Wansford lift station is online would involve a force main rather than a gravity sewer to Wansford lift station. This alternative has higher capital cost and would result in double pumping with increased operations and maintenance costs.

B. Wansford Yard Lift Station

- Submersible pump station – this option has a smaller footprint and simplicity. However, the larger pumps and depth result in difficult operations and maintenance for the application.
- Dry well/wet well pump station – this option uses a separate wet well and dry pit to house the pumps and motors which can be more easily serviced in the dry pit. The overall footprint is larger.
- Submersible open wet well pump station – this option includes an open structure built down to a level just above the pumps which provides a clear workspace to maintain the pumps. The footprint is reduced because a dry well is not required. **This is the selected alternative.**

- C. Influent Screening for Wansford Yard Lift Station
 - a. No action – this option does not provide any screen protection for the pumps, which could result in damage and failure. This is not a viable option.
 - b. Manually cleaned bar screen – this option involves constructing two influent channels, each with a bar screen sized to handle 25 MGD. Manual bar screens create added labor and maintenance, including the need to remove debris at a depth of 40 feet which poses a safety risk and is inefficient. This is not a viable option.
 - c. Mechanical bar screen – this option includes a similar layout to the manually cleaned bar screen option, but a mechanical rake system cleans the screen automatically. **This is the selected alternative.**

- D. Odor Control for Wansford Yard Lift Station
 - a. Standard carbon unit – this is a vapor phase technology used to control odorous compounds at point source applications. **This is the selected alternative.**
 - b. Catalytic carbon unit – this is similar to standard carbon unit, but with a regenerate so replacement is less frequent. The cost is higher for this alternative.

- E. Force Main for Wansford Yard Lift Station
 - a. No action – this option would require the utility to continue to use the 16” steel force main which is not adequately sized and has excessive deterioration. This is not a viable option.
 - b. *Force main route options* were considered, including along Tulip Avenue and along Olmstead Avenue. **The Olmstead Avenue route was selected** to avoid impacts to the major entrances to Evans Elementary School, reducing construction safety hazards to children.
 - c. *Energy dissipation options* were considered, including vortex structure within Diamond Avenue interceptor and vortex structure in a new structure. **A new structure near the median of Diamond Avenue was selected** because it eliminates the flow restriction in the existing sewer and allows for streamlined future maintenance.
 - d. *Force main configuration options* were considered, including single 30” force main, parallel 24” and 18” dual force main, and parallel 30” and 18” force main. The dual force main options were considered to accommodate potential low flow scenarios that would create low velocities, and inadequate cleansing, in a single larger pipe option. However, lift station design includes influent gates which allow for an automated method of flushing the force main, eliminating concerns with low velocities. **The 30-inch diameter single force main was selected.**

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land: Most construction activities will be confined to areas previously disturbed by the installation/decommission of the CSX Wansford Rail Yard and existing utility lines. Parts of the path of the interceptor will be in areas previously undisturbed that has been subject to an archaeological survey.

Structural Resources (Figure 3): Construction and operation of the project will not alter, demolish or remove historic properties. If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF’s finding pursuant to Section 106 of the National Historic Preservation Act is: “*no historic properties affected.*”

Surface Waters (Figure 4): *Little Pigeon Creek, a tributary of Pigeon Creek, runs from north to south and extends through the Planning Area. Pigeon Creek runs through the southern portion of the Planning Area (Figure 5-4). A Wetland Determination and Waters of the US Report was prepared by CHA Consulting, Inc. and completed on July 18, 2018. Two (2) perennial streams and thirteen (13) ephemeral streams were identified in the project area and are identified clearly on figures in this report (attached). The fifteen (15) streams were identified as Waters of the U.S. and will likely be under the jurisdiction of the USACE. Since this project involves work within or close to multiple waterways, a USACE Section 404 permit will be required. Any impacts to surface waters will be avoided and minimized to the extent possible.*

The Planning Area is located in the HUC 14 watersheds 05140202040080, 05140202040090, and 05140202040100 as shown in Figure 5-5. There are no waterways in the Planning Area that are listed as outstanding rivers and streams by the Indiana Department of Natural Resources (IDNR). There are no outstanding state resource waters, exceptional use streams, or natural and scenic rivers in the project area. Therefore, these resources will not be impacted by the recommended project.

Wetlands (Figure 5): Wetlands will be impacted by the construction.

There are several wetland sites within the planning area. A Wetland Determination and Waters of the US Report was prepared by CHA Consulting, Inc. and completed on July 18, 2018. Seven (7) wetland areas were identified in the project area including emergent wetland (PEM), forested wetland (PFO) and scrub-shrub wetland (PSS). Each wetland was identified as a Waters of the U.S. and will likely be under the jurisdiction of the USACE. Please see the CHA Wetland Determination and Waters of the US Report (attached) for additional details on the identified wetlands. If the sewer installation impacts the ground surface (i.e. installed through trenching as opposed to a trenchless method) and converts over 0.1-acre of forested or scrub shrub wetland, an IDEM Application for Authorization Discharge Dredged or Fill Material to Isolated Wetlands and/or Water of the State (i.e. individual permit) will be required. If the impacted wetland area will be less than 0.1-acre an IDEM Section 401 Water Quality Certification (WQC) general permit (i.e. nationwide permit) will suffice. Mitigation measures to lessen and compensation for wetland impacts cited in comment letters about the project from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.

Floodplain: Construction will occur in floodplain and floodway areas; however, no significant impacts are anticipated, as improvements will be located primarily underground. For construction activities occurring within floodway boundaries, an IDNR Permit for Construction in a Floodway will be required.

Groundwater: Groundwater will not be impacted by the construction or operation of the proposed project.

Plants and Animals: The Preliminary Engineering Report (PER) states: *Impacts to fish, wildlife, and botanical resources will be avoided and minimized to the extent possible. Trenchless drilling methods will be used when feasible to avoid impacts to wetland habitats. All bare and disturbed areas will be revegetated with a mixture of native species upon completion. Mitigation measures cited in comment letters from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.*

Prime Farmland: The project will not convert prime farmland.

Air Quality: *Vanderburgh County, Indiana is not considered a Nonattainment, Maintenance or At Risk Area as defined under the 1990 Clean Air Act Amendments. We evaluated air quality impacts from the proposed project for conformance with applicable Rules under Title 326 Articles 1, 2, 6, 7, and 8 of the Federal 1990 Clean Air Act Amendments.*

Construction Activity: To minimize non-conformance with 326 IAC 6-4, “Fugitive Dust Emissions”, reasonable and proper construction techniques and clean up practices will be provided. In addition, surface wetting practices will be utilized to control dust emissions where required. Please note that 326 IAC 6-4-6(3) provides for an exemption to the rule “...from construction or demolition activity where every reasonable precaution has been taken in minimizing fugitive dust emissions”. Exhausts of construction equipment will be required to have mufflers for noise and air pollution abatement.

Clean Air Act Title III – Hazardous Air Pollutants: Title III calls for a program to prevent the accidental releases of hazardous air pollutants from facilities. We do not anticipate use of chemicals in the project that may release hazardous air pollutants as defined by EPA’s Hazardous Air Pollutant Listing. If potential hazardous air pollutants are used on the water treatment project, we will require monitoring, record keeping, reporting, and vapor recovery, secondary containment, design, equipment, work practices and operation according to Federal Standards.

Open Space and Recreational Opportunities: The project will neither create nor destroy open space or recreational opportunities.

Lake Michigan Coastal Program: The project will not affect the Lake Michigan Coastal Zone.

National Natural Landmarks: Construction and operation of the proposed project will not affect National Natural Landmarks.

B. Indirect Impacts

The city’s PER states: *The City of Evansville, through the authority of its council, planning commission or other means, will ensure that future development, as well as future stormwater infrastructure projects will not adversely affect wetlands, wooded areas, steep slopes, archaeological/historical/ structural resources or other sensitive environmental resources. The City of Evansville will require new development and infrastructure projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.*

C. Comments from Environmental Review Authorities

In correspondence dated August 12, 2021, the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology stated:

Pursuant to Indiana Code 5-1.2-10, Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108), and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer (“Indiana SHPO”) is conducting an analysis of the materials dated and received by the Indiana SHPO on July 26, 2021, for the above indicated project in Evansville, Vanderburgh County, Indiana.

Based on our analysis, it has been determined that no historic properties will be altered, demolished, or removed by the proposed project.

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R. 800.

In correspondence dated June 1, 2021, the United States Fish and Wildlife Service stated:

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no objections to the project as currently proposed. This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

We appreciate the opportunity to comment at this early stage of project planning. If project plans change such that fish and wildlife habitat may be affected, please re-coordinate with our office as soon as possible.

In correspondence dated June 1, 2021, the Department of Natural Resources Environmental Unit stated:

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969. If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

*Regulatory Assessment: This proposal will require the formal approval(s) for construction in a floodway under the Flood Control Act, IC 14-28-1, unless it qualifies for a general license under Administrative Rule 312 IAC 10-5 that applies to utility line crossings (see **enclosure**). Please include a copy of this letter with the permit application(s) if the project does not meet the general license criteria.*

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity. However, the DNR, Division of Fish & Wildlife's Crane Tract Conservation Easement is located within 1/2 mile west of the project area.

Fish & Wildlife Comments: Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

1) Habitat Loss/Fragmentation:

This project will result in significant environmental impacts due to forested habitat loss

and fragmentation from the proposed road's alignment through large blocks of forested habitat east of Pigeon Creek, and the utility lines crossing solid blocks of forested habitat along the north bank of Pigeon Creek (Pfeiffer interceptor), and other forested areas along the Wansford main and interceptors.

Habitat loss and fragmentation are the main causes of the decline of wildlife. Habitat fragmentation creates smaller, more isolated habitat areas of lower habitat value for wildlife as compared to large, contiguous habitats. Fragmentation allows non-native species and predators access to the forest interior which is vital habitat for many neotropical migratory songbird species and can negatively affect the long-term viability of wildlife populations with limited mobility.

Minimize the removal of trees and brush by placing the line on the least forested side of a road, and place the line as close as possible to the road to avoid and minimize direct impacts to forested habitat and the fragmentation of forested habitat.

2) Stream Crossings/Boring:

While the Pigeon Creek crossing may be unavoidable, crossing Little Pigeon Creek twice in a relatively short distance should be avoided if at all possible, in order to minimize impacts to aquatic habitat and resources. We recommend that all creek or stream crossings be done using a trenchless method. The length of the bore should include any forested riparian areas along the creek to minimize impacts to forested habitat. Install erosion control measures such as silt fencing or other appropriate devices around directional drilling pits in order to prevent drilling mud from leaving the immediate area of the pit or entering the stream.

If the open-trench method is necessary and the only feasible option at any of the planned stream crossings due to the site conditions, then the following measures should be implemented:

- a. Any open-trench stream crossing should be timed to coincide with the low-water time of year (typically mid- to late-summer).*
- b. Restore disturbed streambanks using bioengineering bank stabilization methods and revegetate disturbed banks with native trees, shrubs and herbaceous plants. Stream bank slopes after project completion should be restored to stable-slope steepness (not steeper than 2:1). Information about bioengineering techniques can be found at <http://www.in.gov/legislative/iac/20120404-IR-312120154NRA.xml.pdf>. Also, the following is a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: <http://directives.sc.egov.usda.gov/17553.wba>.*
- c. The cleared width through any forested area should be the minimum needed to install the line and no more than 20 feet wide through the forested area to allow the canopy to close over the line.*
- d. Use graded stone or riprap to protect the section of trench below the normal water level from scour or erosion (any stone or riprap fill in the streambed must not be placed above the existing streambed elevation to avoid creating a fish passage obstruction).*

3) Riparian Habitat: The Pfeiffer Interceptor that crosses the large blocks of forested habitat upstream of the confluence of Little Pigeon and Pigeon Creek should be placed in an area along the edge of any such forested habitat blocks or adjacent to an existing cleared easement in order to minimize habitat fragmentation.

We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at: <http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf>.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees) or by using the 1:1 replacement ratio based on area depending on the type of habitat impacted (individual canopy tree removal in an urban streetscape or park-like environment versus removal of habitat supporting a tree canopy, woody understory, and herbaceous layer). Impacts under 0.10 acre in an urban area may still involve the replacement of large diameter trees but typically do not require any additional mitigation or additional plantings beyond seeding and stabilizing disturbed areas. There are exceptions for high quality habitat sites however.

The mitigation site should be located in the floodway, downstream of the one (1) square mile drainage area of that stream (or another stream within the 8-digit HUC, preferably as close to the impact site as possible) and adjacent to existing forested riparian habitat.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

- 1. Revegetate all bare and disturbed areas with a mixture of native grasses, sedges, wildflowers, and also native hardwood trees and shrubs if any woody plants are disturbed during construction as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants, including prohibited invasive species (see 312 IAC 18-3-25).*
- 2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.*
- 3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.*
- 4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.*
- 5. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.*
- 6. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.*
- 7. Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction.*
- 8. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.*
- 9. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.*

In correspondence dated November 14, 2018, the Natural Resources Conservation Service stated:

The proposed project to make sewer utility collection system improvements in the City of Evansville, Vanderburgh County, Indiana, as referred to in your letter received October 4, 2018 will cause a conversion of prime farmland.

VIII. MITIGATION MEASURES

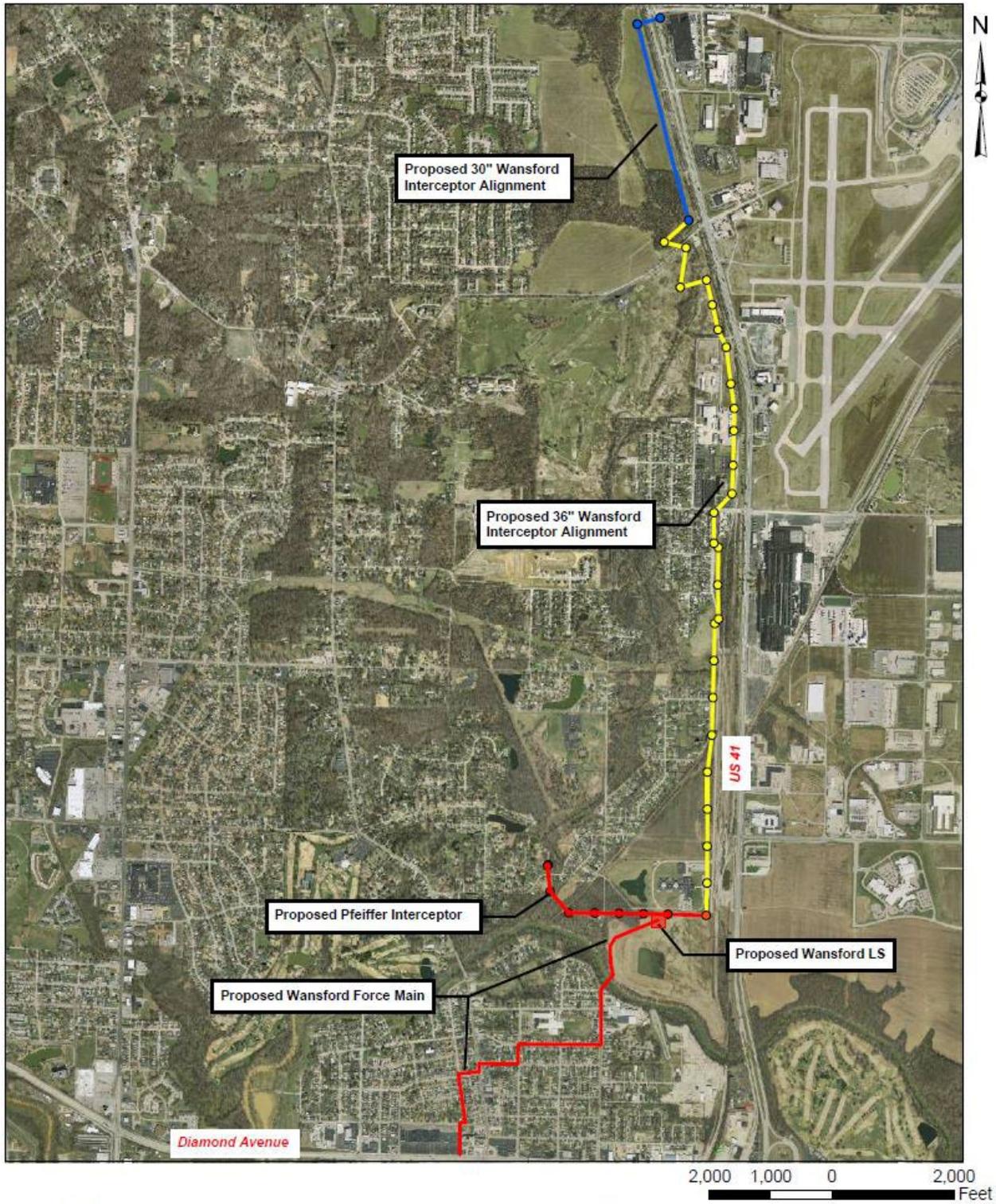
The city's PER states: *The majority of the environmental impacts will occur during construction of the recommended alternative. These issues will be considered temporary in nature since no significant impacts to environmental, historical, or other regulated resources are involved. These temporary construction impacts include the potential for noise, dust, and construction site erosion. Provisions will be included in the construction specifications to limit such problems and to provide erosion control in accordance with current state standards. The work is expected to be completed during normal working hours, restricting any work related nuisances to those hours. All construction equipment will be required to have mufflers to reduce noise pollution. Additionally, reasonable and proper construction techniques and clean up practices will be required by the contractor to reduce dust emissions. Proper surface wetting practices will be required. Erosion control measures including seeding, drainage inlet protection, and silt fencing will also be utilized.*

The following permits are anticipated:

- *IDEM Rule 5 Permit*
- *IDEM Construction Permit for the construction of any new sanitary sewers*
- *IDEM Construction Permit for the construction of new wastewater treatment facilities*
- *IDEM Application for Authorization Discharge Dredged or Fill Material to Isolated Wetlands and/or Water of the State (i.e. individual permit) / IDEM Section 401 Water Quality Certification (WQC) general permit*
- *USACE Section 404 permit*
- *INDOT Right-of-Way Permit*
- *Application for Construction Design Release (covers fire protection system for structures in the state of Indiana)*
- *IDNR Construction in a Floodway Permit*
- *CSX Pipeline Occupancy Permit (covers all crossing of CSX owned railroads)*
- *Overhead Transmission Right-of-Way Encroachment Permit (covers all work occurring within a right of way occupied by overhead electric utilities owned and operated by Vectren Corporation)*

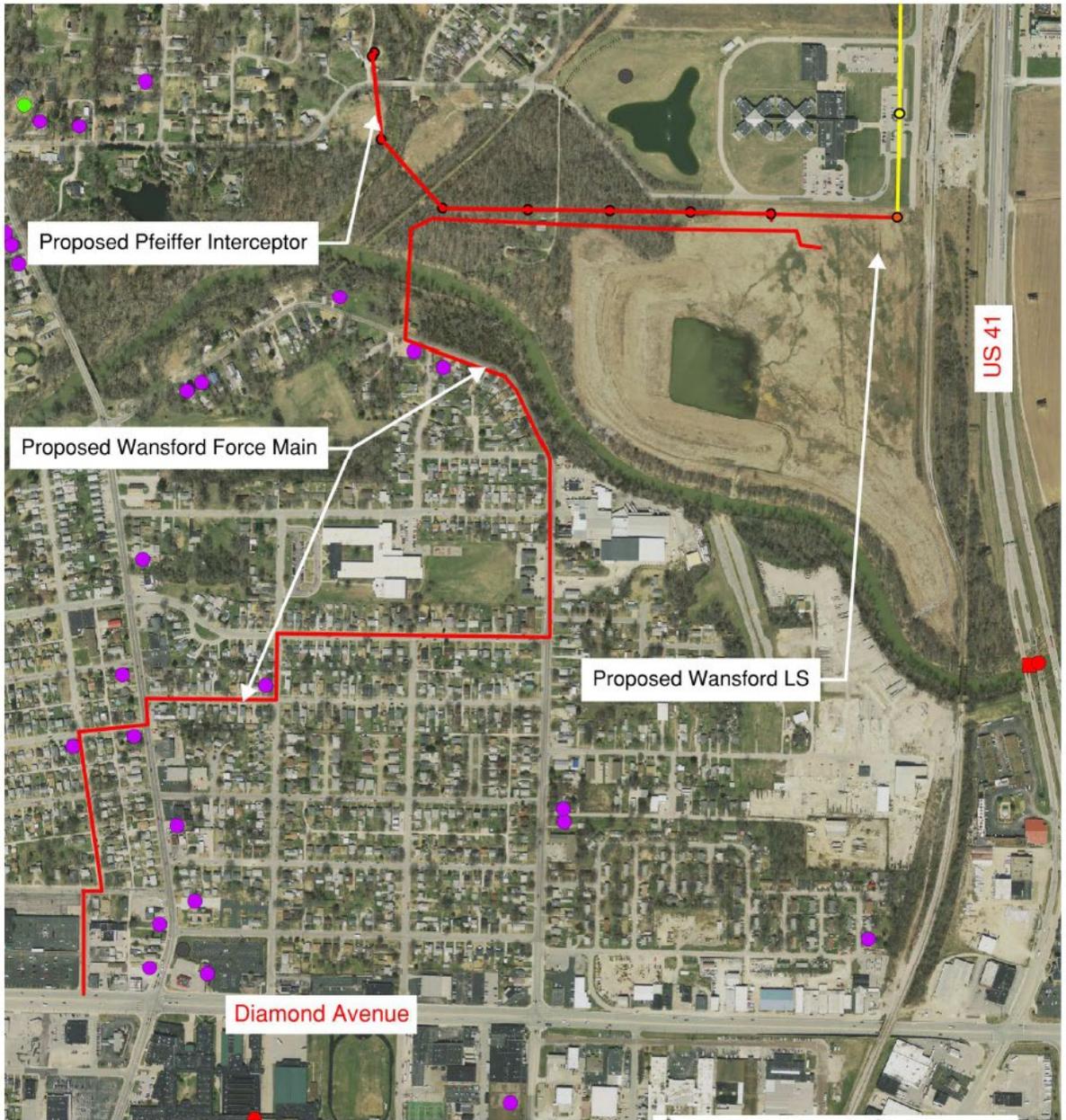
IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on July 14, 2021 at 4:00 pm at the Evansville Public Library to discuss the PER. No written comments were received during the 5-day comment period following the hearing.



Legend Prop. Pfeiffer Rd GS & Prop. Force Main Prop. 36" Interceptor (Phase 2) Prop. 30" Parallel Interceptor (Phase 3)	 COMMONWEALTH ENGINEERS, INC. <small>A wealth of resources to make a common goal.</small>	PFEIFFER RD/WANSFORD LS PROJECT CITY OF EVANSVILLE	
		PRELIMINARY ENGINEERING REPORT 36" INTERCEPTOR ALONG HARLAN AVE & 30" PARALLEL INTERCEP. W OF US 41	

Figure 1 – Proposed project including Phases 1, 2 and 3



Map Coordinate System:
WGS_1984_Web_Mercator_Auxiliary_Sphere

 1:50,547
Relative Scale

-  Cemeteries
-  Outstanding
-  Notable
-  Contributing
-  Non-Contributing
-  Demolished
-  Unknown

<ul style="list-style-type: none">  Prop. Pfeiffer Rd GS & Prop. Force Main  Prop. 36" Interceptor (Phase 2)  Prop. 30" Parallel Interceptor (Phase 3) 	 <p>COMMONWEALTH ENGINEERS, INC. <small>A wealth of resources to master a common goal.</small></p>	<p style="text-align: center;">PFEIFFER RD/WANSFORD LS PROJECT CITY OF EVANSVILLE PRELIMINARY ENGINEERING REPORT</p> <p style="text-align: center;">SHAARD</p>
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Figure 2 – Proposed project (Phase 1)



Map Coordinate System:
WGS_1984_Web_Mercator_Auxiliary_Sphere

 1:25,274
Relative Scale

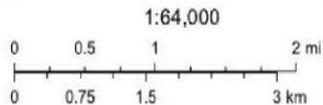
	Cemeteries		Demolished
	Outstanding		Unknown
	Notable		
	Contributing		
	Non-Contributing		

 Prop. Pfeiffer Rd GS & Prop. Force Main  Prop. 36" Interceptor (Phase 2)  Prop. 30" Parallel Interceptor (Phase 3)	 COMMONWEALTH ENGINEERS, INC. <small>A wealth of resources to master a common goal.</small>	PFEIFFER RD/WANSFORD LS PROJECT	
		CITY OF EVANSVILLE	
		PRELIMINARY ENGINEERING REPORT	
		SHAARD	

Figure 3 – Proposed project (Phase 1) on Indiana Historic Buildings, Bridges and Cemeteries Map



-  Lakes (NHD)
-  Streams (NHD)
-  Rivers (NHD)
-  State Boundary

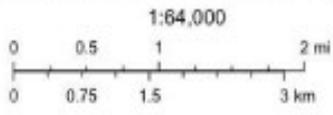


Legend  Prop. Pfeiffer Rd GS & Prop. Force Main  Prop. 36" Interceptor (Phase 2)  Prop. 30" Parallel Interceptor (Phase 3)	 COMMONWEALTH ENGINEERS, INC. A wealth of resources to master a common goal.	PFEIFFER RD/WANSFORD LS PROJECT
		CITY OF EVANSVILLE
		PRELIMINARY ENGINEERING REPORT
		SURFACE WATERS

Figure 4 – Proposed project (Phase 1) on Surface Waters Map



Wetlands NWI (USFWS)
 Wetlands Project Metadata NWI (USFS)



Legend State Boundary

- Wetlands NWI USFWS IN 8
- Prop. Pfeiffer Rd/GS & Prop. Force Main
- Prop. 36" Interceptor (Phase 2)
- Prop. 30" Parallel Interceptor (Phase 3)



PFEIFFER RD/WANSFORD LS PROJECT CITY OF EVANSVILLE PRELIMINARY ENGINEERING REPORT
WETLANDS

Figure 5 – Proposed project (Phase 1) on Wetlands Map

ARTICLE 10. FLOOD PLAIN MANAGEMENT

312 IAC 10-2-42 "Utility line crossing" defined

Authority: IC 14-28-1-5; IC 14-28-3-2

Affected: IC 14-27-7; IC 14-28-1; IC 14-28-3

Sec. 42. "Utility line crossing" means the utility crosses the waterway in a straight line at an angle of between forty-five (45) degrees and one hundred thirty-five (135) degrees from the streambank and does not parallel the waterway for more than fifty (50) feet in the floodway before crossing unless the parallel portion of the line is contained within existing road right-of-way. (*Natural Resources Commission; 312 IAC 10-2-42; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3389, eff Jan 1, 2002*)

Rule 5. General Licenses and Specific Exemptions from Floodway Licensing

312 IAC 10-5-0.3 Determining project eligibility for a general license; general criteria

Authority: IC 14-10-2-4; IC 14-28-1-5

Affected: IC 14-28-1; IC 14-29-1

Sec. 0.3. (a) Except as provided in subsections (b) and (c), a project for a utility line crossing, the removal of logjams and obstructions, or the placement of outfall projects within a floodway is eligible for a general license if the project satisfies the requirements of this rule. For the removal of logjams and obstructions, these requirements include the procedures established by section 0.6 of this rule.

(b) Subsection (a) does not authorize a project in any of the following circumstances:

(1) Within a river or stream listed in the Indiana Register at 16 IR 1677 in the Outstanding Rivers List for Indiana unless prior written approval from the division of water's environmental unit has been obtained.

(2) Within a salmonid stream designated under 327 IAC 2-1.5-5(a)(3).

(3) Within a natural, scenic, or recreational river or stream designated under 312 IAC 7-2.

(4) For a utility line crossing, below the ordinary high watermark of a navigable waterway listed in the Indiana Register at 20 IR 2920 in the Roster of Indiana Waterways Declared Navigable or Nonnavigable unless the utility line is placed beneath the bed of the waterway under section 4(b) of this rule.

(5) Where the project requires an individual permit from the United States Army Corps of Engineers under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

(c) Subsection (a) does not authorize the removal of logjams or obstructions within one-half (½) mile of any of the following:

(1) A species listed in the Indiana Register at 15 IR 1312 in the Roster of Indiana Animals and Plants Which Are Extirpated, Endangered, Threatened, or Rare.

(2) A known mussel resource.

(3) An outstanding natural area, as contained on the registry of natural areas maintained in the natural heritage data center of the department.

(d) The limitations contained in subsection (b) and subsection (c) [subsections (b) and (c)] do not apply to section 7 of this rule.

(*Natural Resources Commission; 312 IAC 10-5-0.3; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3875*)

312 IAC 10-5-2 General licensing for utility line crossings

Authority: IC 14-10-2-4; IC 14-28-1-5

Affected: IC 14-27-7; IC 14-28-1; IC 14-29-1

Sec. 2. Except as provided in sections 3 and 4 of this rule, a license is required under IC 14-28-1, IC 14-29-1, and 312 IAC 10-4 to place a utility line in or on a floodway where:

(1) the drainage area of a river or stream is at least one (1) square mile at the downstream end of the line's floodway segment; or

(2) a dam or levee regulated under IC 14-27-7 is affected.

(*Natural Resources Commission; 312 IAC 10-5-2; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002*)

312 IAC 10-5-3 Aerial electric, telephone, or cable television lines; general license

Authority: IC 14-10-2-4; IC 14-28-1-5

Affected: IC 14-28-1; IC 14-29-1; IC 14-29-6

Sec. 3. The placement of an aerial electric, telephone, or cable television line is authorized without a written license issued by the department under IC 14-28-1, IC 14-29-1, and 312 IAC 10-4 if:

(1) the activity does not disturb the bed of the waterway beneath the line;

(2) the activity conforms with the minimum clearance requirements of section 4(b)(9) of this rule;

(3) the support mechanisms are located at least seventy-five (75) feet from the top of the bank; and

(4) the utility line crossing is not within the floodway of a natural river, scenic river, or recreational river designated under 312 IAC 7-2.

(*Natural Resources Commission; 312 IAC 10-5-3; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3876*)

Enclosure from the Department of Natural Resources Environmental Unit (page 1)

312 IAC 10-5-4 Qualified utility line crossings; general license

Authority: IC 14-10-2-4

Affected: IC 13-11-2-260; IC 14-27-7; IC 14-28-1-29; IC 14-33; IC 36-9-27

Sec. 4. (a) This section establishes a general license for the placement of a qualified utility line crossing in a floodway.

(b) A person who wishes to implement a project for the placement of a qualified utility line crossing on a river or stream, other than on a river or stream identified in section 0.3(b) or 0.3(c) of this rule, may do so without notice to the department if the project conforms to the following conditions:

(1) Tree removal and brush clearing shall be contained and minimized within the utility line crossing area. No more than one (1) acre of trees shall be removed within the floodway.

(2) Construction activities within the waterway from April 1 through June 30 shall not exceed a total of two (2) calendar days.

(3) Best management practices shall be used during and after construction to minimize erosion and sedimentation.

(4) Following the completion of construction, disturbed areas shall be reclaimed and revegetated. Disturbed areas shall be mulched with straw, wood fiber, biodegradable erosion blanket, or other suitable material. To prevent erosion until revegetated species are established, loose mulch shall be anchored by crimping, tackifiers, or netting. To the extent practicable, revegetation must restore species native to the site. If revegetation with native species is not practicable, revegetation shall be performed by the planting of a mixture of red clover, orchard grass, timothy, perennial rye grass, or another species that is approved by the department as being suitable to site and climate conditions. In no case shall tall fescue be used to revegetate disturbed areas.

(5) Disturbed areas with slopes of three to one (3:1) or steeper, or areas where run-off is conveyed through a channel or swale, shall be stabilized with erosion control blankets or suitable structural armament.

(6) No pesticide will be used on the banks.

(7) If a utility line transports a substance that may cause water pollution as defined in IC 13-11-2-260, the utility line will be equipped with an emergency closure system.

(8) If a utility line is placed beneath the bed of a river or stream, the following conditions are met:

(A) Cover of at least three (3) feet measured perpendicularly to the utility line is provided between the utility line and the banks.

(B) If the placement of a utility line is not subject to regulation under IC 14-28-1-29, IC 14-33, or IC 36-9-27, cover is provided as follows:

(i) At least three (3) feet, measured perpendicularly to the utility line, between the lowest point of the bed and the top of the utility line or its encasement, whichever is higher, if the bed is composed of unconsolidated materials.

(ii) At least one (1) foot, measured perpendicularly to the line, between the lowest point of the bed and the top of the utility line or its encasement, whichever is higher, if the bed is composed of consolidated materials.

(C) If the placement of the utility line is subject to regulation under IC 14-28-1-29, IC 14-33, or IC 36-9-27, cover is provided as follows:

(i) At least three (3) feet, measured perpendicularly to the utility line, between the design bed and the top of the line or its encasement, whichever is higher, if the bed is composed of unconsolidated materials.

(ii) At least one (1) foot, measured perpendicularly to the line, between the design bed and the top of the line or its encasement, whichever is higher, if the bed is composed of consolidated materials.

(D) Negative buoyancy compensation is provided where the utility line has a nominal diameter of at least eight (8) inches and transports a substance having a specific gravity of less than one (1).

(9) If a utility line is placed above the bed of a river or stream, the following conditions are met:

(A) Except as provided in clauses (B) and (C), minimum clearance is provided from the lowest point of the utility line (determined at the temperature, load, wind, length of span, and type of supports that produce the greatest sag) calculated as the higher of the following:

(i) Twelve and one-half (12½) feet above the ordinary high watermark.

(ii) Three (3) feet above the regulatory flood elevation.

(B) If the river or stream is a navigable waterway that is subject to IC 14-28-1, the utility line that crosses over the waterway must be placed to provide the greater of the following:

(i) The minimum clearance required under clause (A).

(ii) The minimum clearance required for the largest watercraft that is capable of using the waterway. The utility must consult in advance with the department to determine the minimum clearance for watercraft at the crossing.

(C) If a utility line is attached to or contained in the embankment of an existing bridge or culvert, no portion of the utility line or its support mechanism may project below the low structure elevation or otherwise reduce the effective waterway area.

(10) A utility line placed in a dam or levee regulated under IC 14-27-7 does not qualify for a general license under this subsection.

(c) A person who elects to act under this section must comply with the general conditions under subsection (b). Failure to comply with these terms and conditions may result in the revocation of the general license, a civil penalty, a commission charge, and any other sanction provided by law for the violation of a license issued under IC 14-28-1 and, if the waterway is navigable, the violation of a license issued under IC 14-29-1. (*Natural Resources Commission; 312 IAC 10-5-4; filed Jul 5, 2001, 9:12 a.m.: 24 IR 3394, eff Jan 1, 2002; filed Dec 26, 2001, 2:42 p.m.: 25 IR 1545; errata filed Mar 13, 2002, 11:51 a.m.: 25 IR 2521; filed Aug 2, 2004, 3:18 p.m.: 27 IR 3876*)

Enclosure from the Department of Natural Resources Environmental Unit (page 2)