



State Revolving Fund Loan Programs Drinking Water, Wastewater, Nonpoint Source

PRELIMINARY DECISION OF CATEGORICAL EXCLUSION

TO ALL INTERESTED CITIZENS, ORGANIZATIONS AND GOVERNMENT AGENCIES:

EVANSVILLE WATER & SEWER UTILITY

EAST AND WEST WASTEWATER TREATMENT PLANTS DIGESTER CLEANING AND REHABILITATION PROJECT

PRELIMINARY ENGINEERING REPORT F: PROJECT #1 SRF # WW 14 21 82 14

Date: September 22, 2014

Pursuant to IC 4-4-11, the State Revolving Fund (SRF) Loan Program has determined that the project described here and in the city's Preliminary Engineering Report F received by the SRF on June 12, 2014 will have no substantial negative environmental impact. Therefore, the SRF is issuing a preliminary decision of Categorical Exclusion from the requirements of substantive environmental review.

How were environmental issues considered?

The National Environmental Policy Act requires agencies disbursing Federal funds to include environmental factors in the decision making process. A summary of the project is attached for your review. The SRF's preliminary review has found that the proposed project does not require the preparation of either an Environmental Assessment or an Environmental Impact Statement.

Why is additional environmental review not required?

Our environmental review has concluded that significant environmental impacts will not result from the proposed action.

How do I submit comments?

Comments can be submitted to:

April Douglas,
Senior Environmental Manager
SRF Programs
317-234-7294; adouglas@ifa.in.gov

CATEGORICAL EXCLUSION

I. PROJECT IDENTIFICATION

Project Name and Address: **East and West Wastewater Treatment Plants
Digester Cleaning and Rehabilitation Project
Preliminary Engineering Report F
Project #1**
Evansville Water & Sewer Utility
1 NW Martin Luther King Jr. Blvd., Room 104
Evansville, IN 47740-0001

SRF Project Number: WW 14 21 82 14

Authorized Representative: Mr. Allen Mounts, Director
Evansville Water and Sewer Utility

II. PROJECT LOCATION

Evansville is located in southeastern Vanderburgh County. The East Wastewater Treatment Plant (WWTP) digester cleaning and rehabilitation project area is located in the Evansville South USGS 7.5' topographic quadrangle in Pigeon Township, T6S, R10W and section 31; the West WWTP digester cleaning and rehabilitation project area is located in the Evansville South USGS 7.5' topographic quadrangle in Perry Township, T6S, R11W and section 26 (see Exhibit 1).

III. PROJECT NEED AND PURPOSE

The purpose for the East and West WWTP's digester cleaning and rehabilitation project is to extend the useful life of the anaerobic digesters for another 20 years, since most of the equipment has reached the end of their useful service life. In addition, the anaerobic digestion process produces beneficial methane gas to power existing equipment and processes. Failure to improve the system components will result in a decrease in methane production and an increase in utility supplied natural gas for sludge heating and powering gas-driven engines used to operate influent pumps.

The proposed digester cleaning and rehabilitation project includes: replacement of Digester Cover No. 1 and the rehabilitation of Digester Covers for Nos. 2, 3 and 4 at the East WWTP; replacement of Digester Covers Nos. 1 and 2 and the rehabilitation of Digester Covers Nos. 3 and 4; digester cleaning at both WWTPs; rehabilitation of the digester structures (i.e., digester tanks, digester control buildings and tunnels) at both WWTPs; piping modifications at both WWTPs; replacement of gas handling equipment (i.e., digester gas pipelines, flame traps, waste gas burners) at both WWTPs; replacement of the primary sludge, sludge transfer and sludge recirculation pumps at both WWTPs; replacement of the gas mixing system with a jet mixing

system at the West WWTP in Building 34; replacement or rehabilitation of the boiler at the West WWTP; making improvements to the fats, oils and grease (FOG) receiving system, which includes providing discharge piping from the plug valve on the downstream side of FOG transfer pump to each of the three primary digesters at the East WWTP; replacement of the sludge heat exchanger at the West WWTP; application of coatings to the walls and pipelines of the digesters at both WWTPs; making improvements to the electrical, HVAC and plumbing at both WWTPs; and making improvements to the instrumentation and controls at both WWTPs (see Exhibits 2 and 3).

Two alternatives were evaluated for the both of the WWTPs digesters cleaning and rehabilitation project, including the “No Action” alternative.

The “No Action” alternative was rejected since the process equipment and structures would continue to deteriorate and potentially lead to non-compliance of their National Pollutant Discharge Elimination System (NPDES) permit.

The “Existing Digester Cleaning and Rehabilitation alternative includes upgrades to the anaerobic digestion process, equipment and structures for continued compliance with their NPDES permit at both WWTPs. **This is the selected alternative.**

IV. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Cost Summary

<u>Construction Components</u>	<u>Costs</u>
<u>East WWTP</u>	
Digester Cleaning/Cover Replacement/Rehabilitation	\$2,372,400
Gas Handling Equipment	224,000
Pump Replacement	222,000
Structural Repair	315,000
Instrumentation and Controls	133,000
Piping Modifications	116,000
Improvements to the FOG System	46,000
Wall and Piping Line Coating	427,000
HVAC Improvements	<u>250,000</u>
Subtotal	\$4,276,000
<u>West WWTP</u>	
Digester Cleaning/Cover Replacement/Rehabilitation	\$2,836,000
Boiler Rehabilitation	525,000
Jet Mixing System	782,000
Gas Handling System	224,000
Pump Replacement	282,000
Structural Repairs	331,000
Instrumentation and Controls	132,000
Piping Modifications	93,000
Valve Replacements	170,000

Wall and Piping Coatings	186,000
Motor Control Center	348,000
HVAC Improvements	<u>250,000</u>
Subtotal	\$6,159,000
Mobilization/Demobilization	<u>522,000</u>
Subtotal Costs for Both WWTPs	\$10,957,000
Contingencies	<u>\$ 1,096,000</u>
Total Estimated Construction Costs	\$12,053,000
Non- Construction Costs	
Construction Administration Fees	\$ 509,000
Project Inspection	275,000
Plant Start-Up	<u>20,000</u>
Total Non-Construction Costs	\$ 804,000
Total Estimated Project Costs	\$12,857,000

- B. Evansville will borrow \$12,857,000 from the State Revolving Fund Loan Program through a 20-year loan at a fixed interest rate to be determined at the time of loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

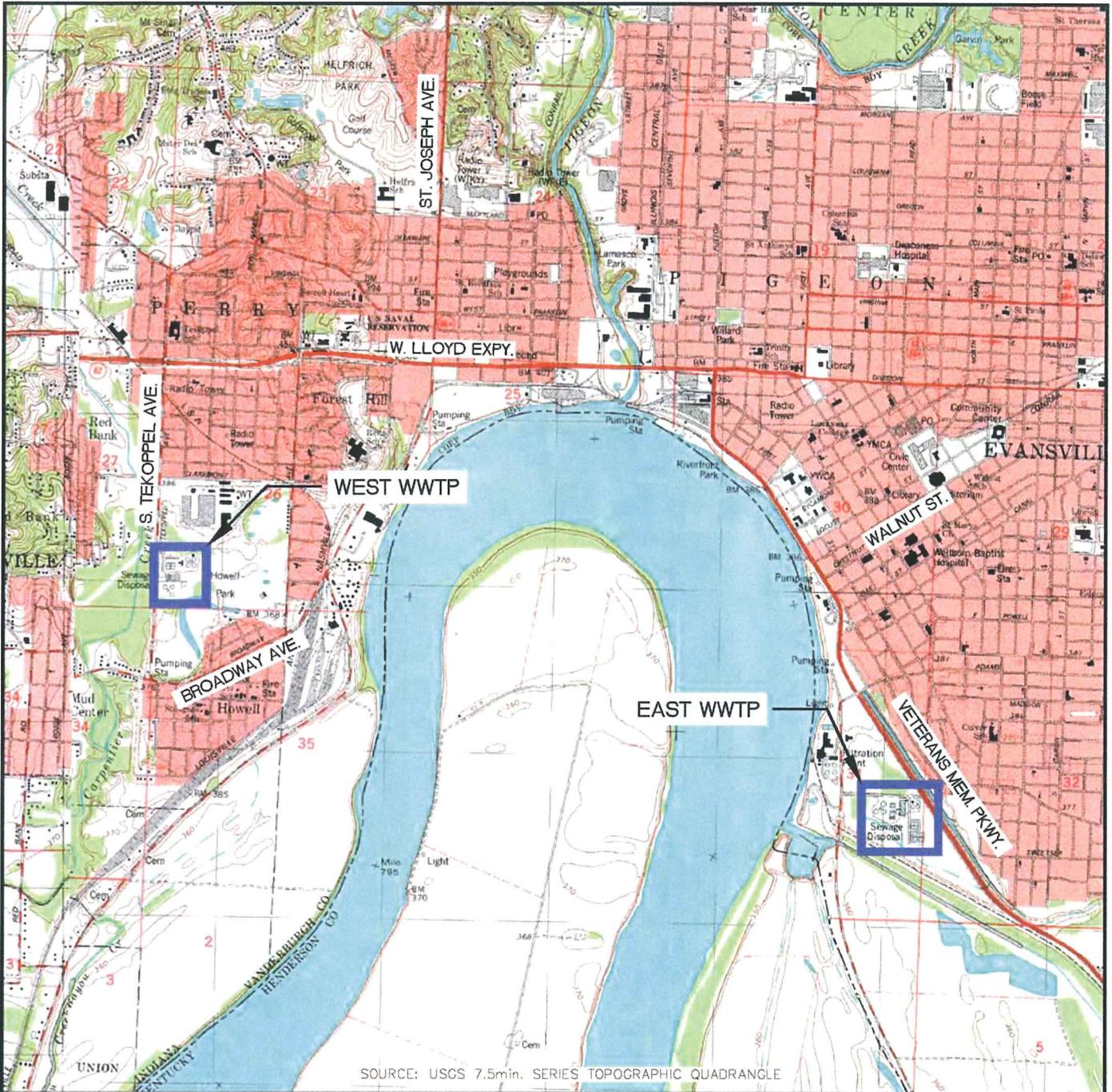
V. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

The project will occur in a previously disturbed area and will not affect endangered species or their habitat, streams, wetlands, or the 100-year floodplain.

Construction and operation of the project will not alter, demolish or remove historic properties (see Exhibits 4 and 5). 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 Historic Preservation Act is: "no historic properties affected".

VI. PUBLIC PARTICIPATION

A properly noticed public hearing was held at the Evansville Vanderburgh Public Library-North Park Branch on June 25, 2014, at 5:30 p.m. to discuss the Preliminary Engineering Report. There were no comments raised about Project #1 at the hearing and no written comments were received.



LEGEND

 EXISTING WASTEWATER TREATMENT PLANT



0 1500' 3000' 6000'



SCALE: 1" = 3000'

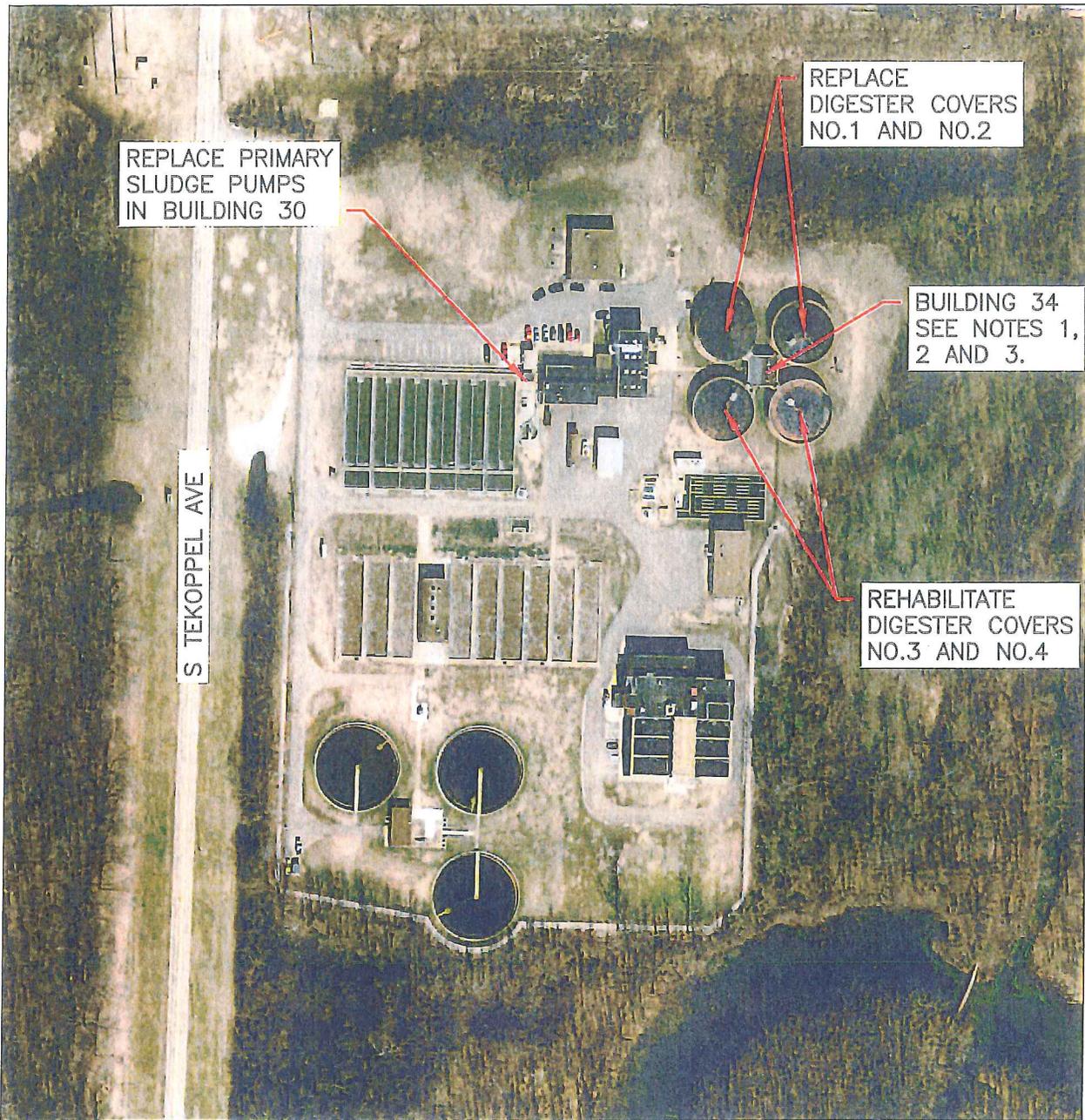


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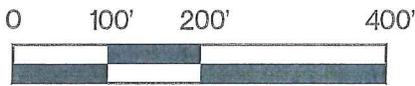
CITY OF EVANSVILLE WATER AND SEWER UTILITY
PRELIMINARY ENGINEERING REPORT F, PROJECT No. 1
EAST AND WEST WASTEWATER TREATMENT PLANTS DIGESTER CLEANING AND REHABILITATION

GENERAL TOPOGRAPHY MAP

EXHIBIT
1



AERIAL: WINTER 2013



SCALE : 1" = 200'

NOTES

1. REPLACE SLUDGE TRANSFER, RECIRCULATION AND INTERPLANT SLUDGE PUMPS AND GAS HANDLING EQUIPMENT.
2. INSTALL NEW JET MIXING SYSTEM.
3. REHABILITATE EXISTING HEAT EXCHANGERS.

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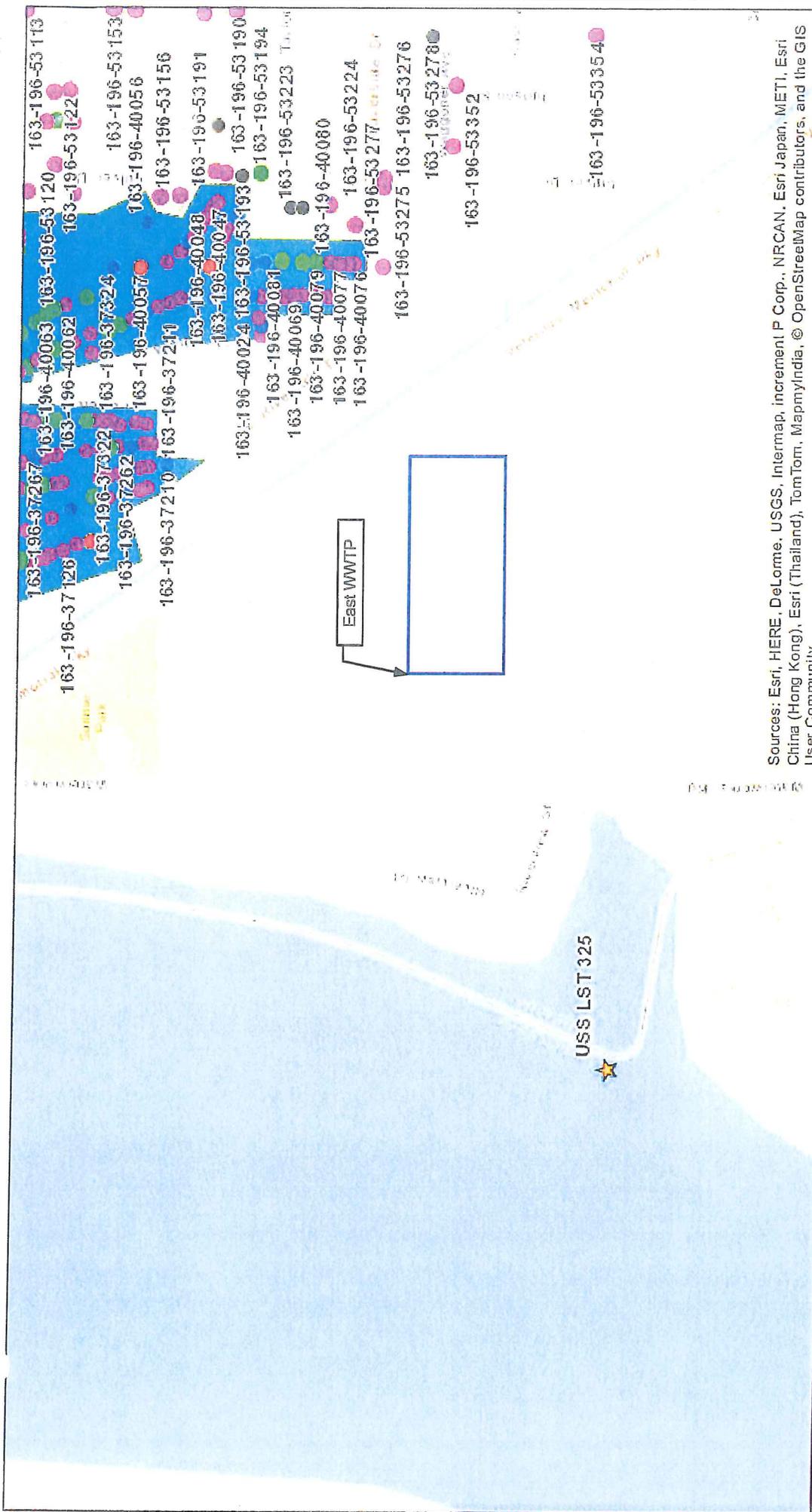
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CITY OF EVANSVILLE WATER AND SEWER UTILITY
 PRELIMINARY ENGINEERING REPORT F, PROJECT No. 1
 EAST AND WEST WASTEWATER TREATMENT PLANTS DIGESTER CLEANING AND REHABILITATION
SELECTED ALTERNATIVE-PLAN VIEW - WEST WWTP

EXHIBIT
3

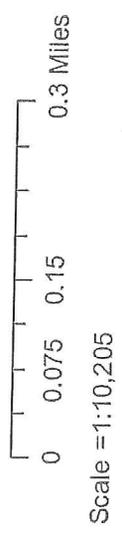
REV. 8/5/14

East MTP

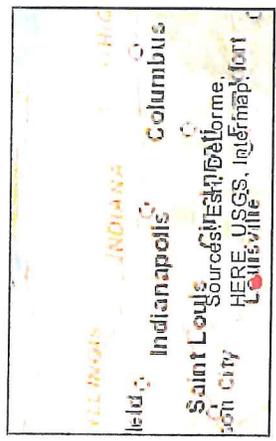


Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Map Coordinate System:
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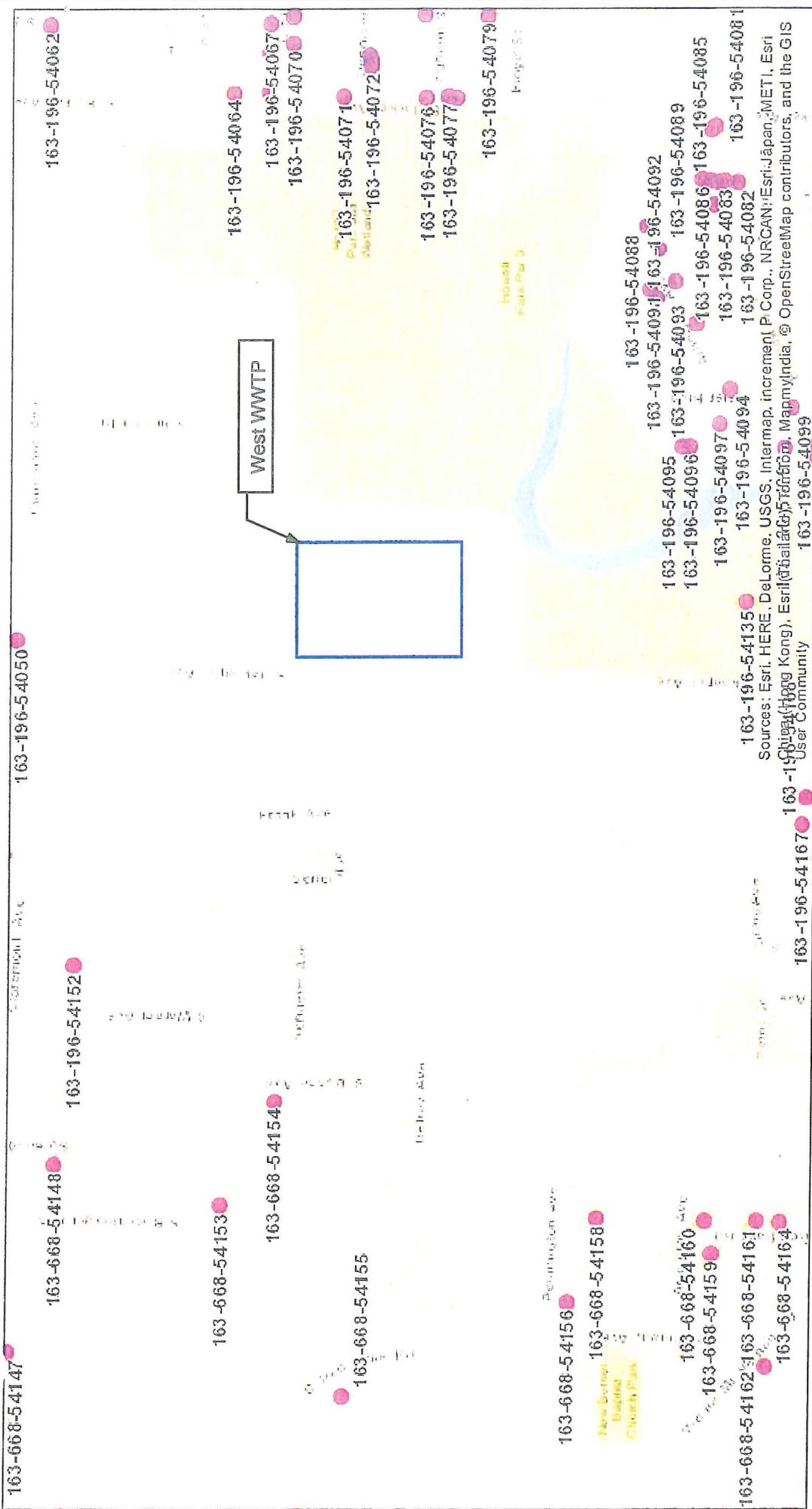


Indiana Dept. of Natural Resources
Geographic Information Systems

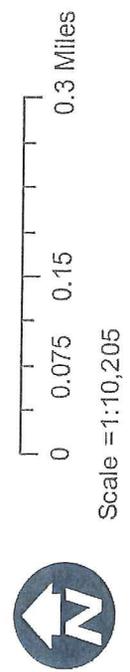


- Author:
- | | | | | | |
|---|------------------|---|------------------|---|-------------------------|
| △ | Cemeteries | ● | Unknown | ■ | Unknown |
| ● | Outstanding | ■ | Outstanding | ★ | National Register Sites |
| ● | Notable | ■ | Notable | ■ | Historic Districts |
| ● | Contributing | ■ | Contributing | ■ | World Street Map |
| ● | Non-Contributing | ■ | Non-Contributing | | |
| ● | Demolished | ■ | Demolished | | |

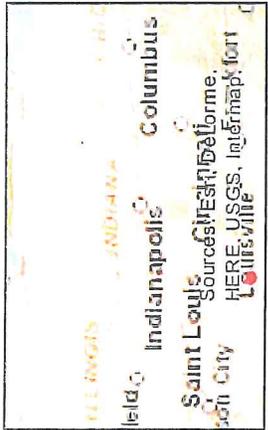
West WTP



Map Coordinate System:
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Author:

	Cemeteries		Unknown		Unknown
	Outstanding		Outstanding		National Register Sites
	Notable		Notable		Historic Districts
	Contributing		Contributing		World Street Map
	Non-Contributing		Non-Contributing		
	Demolished		Demolished		