



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

CITY OF LAPORTE

PRELIMINARY ENGINEERING REPORT AMENDMENT #3:

DARLINGTON/WORDEN SEWER SEPARATION PROJECT

SRF # CS182 304 02

DATE: March 31, 2009

TARGET PROJECT APPROVAL DATE: April 30, 2009

I. INTRODUCTION

The above entity has applied to the Clean Water State Revolving Loan Fund (SRF) for a loan to finance all or part of the wastewater 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.

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 4-4-11, 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 deadline 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:

Max Henschen
Senior Environmental Manager
State Revolving Fund -- IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
317-232-8623

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **Darlington/Worden Sewer Separation Project:
Addendum #3**
City of LaPorte
2101 Boyd Boulevard
LaPorte, IN 46350

SRF Project Number: CS182 304 02

Authorized Representative: Mr. Jerry Jackson, Superintendent
City of LaPorte

II. PROJECT LOCATION

LaPorte is located in LaPorte County in northwest Indiana. The study area is bounded by the LaPorte corporate limits. The Darlington/Worden project area is located on the northeast side of LaPorte in Kankakee and Center Townships, in the LaPorte East USGS quadrangle, T37N, R3W, SE ¼ section 25, and T37N, R2W, SW ¼ section 30, and in the Springville quadrangle T37N, R3W, section 25; see Figure 1.

III. PROJECT NEED AND PURPOSE

The city's collection system is comprised of 89.4 miles of combined sewer (i.e., sewers which carry both storm water and sanitary wastewater) and 11.2 miles of strictly storm sewer. The collection system contains one combined sewer overflow point (designated CSO 002) located at the wastewater treatment plant (WWTP). The WWTP and a 17 acre storage lagoon discharge from this point into Travis Ditch.

The area near Lawrence and Jefferson Streets floods with combined sewage in heavy rains, as sewers surcharge due to flow from the upstream Darlington and Worden Streets area. This project will relieve that situation.

On June 25, 2001, the State Revolving Fund (SRF) Loan Program approved the city's Preliminary Engineering Report (PER) that consisted of three combined sewer improvement projects. Since that time, property acquisition problems have forced the city to reevaluate its proposed project several times.

The city has now submitted Amendment # 3, which still proposes the installation of storm sewers as originally approved. However, amendment #3 also proposes installation of an intermediate detention pond (see figures 1 and 2). The proposed pond will link to the existing wetland/pond system located

on both sides of the Norfolk Southern Railroad in the project area. There is a retention pond north of the railroad which is a diked palustrine wetland labeled POWHx (Palustrine-Open Water-Permanently Flooded-Excavated) on Figure 1; there is also a smaller POWHx wetland south of the railroad and east of the newly proposed intermediate detention pond. The city has sent stormwater to those wetland/ponds for years.

In the revised project, stormwater from the combined sewer system will enter the proposed intermediate detention pond. From there, the water will be conveyed north beneath the railroad into the existing stormwater retention pond/wetland.

At the north end of the existing retention pond/wetland north of the railroad, a transfer structure will be installed to allow storm water to overflow into an adjacent palustrine wetland complex to the north; that complex is shaded in gray on Figure 1 and labeled "Proposed Darlington/Worden St. Sewer Wetland Detention Area"; the wetlands are labeled "PEMC" and "POWGx", denoting palustrine-emergent vegetation-seasonally flooded and palustrine-open water-intermittently exposed, respectively. The transfer structure will have a baffle system to keep floating material in the storm water from the wetland area. The storage volume will accommodate a 100-year storm event.

After the storm event subsides, a motor-operated gate on the proposed intermediate detention basin south of the railroad will allow the stored storm water to flow into the proposed 24-inch and 30-inch sewers on Worden, Burson, and Darlington streets and Industrial Drive. The 30-inch sewer will connect to an existing 36-inch combined sewer at the intersection of Lincolnway (SR 2) and Industrial Drive. A proposed storm water lift station will pump stormwater from the small retention pond (labeled POWHx on Figure 1) south of the railroad at Cook and Worden Streets to the proposed intermediate detention pond, after the existing stormwater retention/wetland pond north of the railroad has been drained. The proposed pond regulating structure for the large existing stormwater retention/wetland pond north of the railroad will allow stormwater to either enter or leave the wetland.

The goal of the proposed project is to reduce flow in the Lawrence Street Trunk sewer through the separation of the sewers in the Darlington/Worden Street area, thus reducing the likelihood of sewers overflowing into streets during heavy rain.

IV. PROJECT DESCRIPTION

The proposed project includes:

- A. Installing approximately 1,502 feet of 24-inch reinforced concrete pipe (RCP) storm sewer;
- B. Installing approximately 474 feet of 30-inch RCP storm sewer;
- C. Installing approximately 1,123 feet of 36-inch RCP storm sewer;
- D. Installing approximately 147 feet of 42-inch RCP storm sewer;
- E. Installing approximately 505 feet of 48-inch HDPE/RCP storm sewer;
- F. Installing approximately 365 feet of 24-inch ductile iron pipe storm sewer;

- G. Bore and jack approximately 240 feet of 48-inch steel storm sewer;
- H. Installing approximately 118 feet of 18-inch polyvinyl chloride (PVC) pipe;
- I. Installing approximately 136 feet of 12-inch PVC pipe;
- J. Removing and replacing approximately 20 feet of 12-inch PVC pipe;
- K. Removing and replacing approximately 20 feet of 10-inch PVC pipe;
- L. Installing approximately 835 feet of 6-inch perforated drain pipe;
- M. Installing approximately one 96-inch diameter catch basin;
- N. Installing approximately one 72-inch diameter sluice gate manhole with an intermediate wall;
- O. Installing approximately 75 feet of 38-inch by 60-inch horizontal elliptical concrete pipe;
- P. Installing approximately 27 storm sewer manholes (48-inches thru 96-inches in diameter);
- Q. Installing approximately one motor operated sluice gate;
- R. Constructing approximately one detention pond with a capacity of 40 acre feet and dredging both of the existing retention ponds;
- S. Installing 240 feet of 4-inch PVC force main;
- T. Installing one lift station containing two pumps rated at 260 gallons per minute each;
- U. One standby natural gas generator with automatic transfer switch; and
- V. One reinforced concrete transfer regulating structure.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

Construction and Equipment Costs	
Proposed Storm Sewers	\$ 1,269,920
Storm Pump Station and Force Main	131,140
Detention Basin and Appurtenances	<u>280,450</u>
Construction and Equipment Subtotal	\$ 1,681,510
Contingencies	<u>168,140</u>
Total Estimated Construction Cost	\$ 1,849,650
Non-Construction Costs (legal, engineering, etc.)	\$ 252,225
** Land Acquisition	<u>120,000**</u>
Total Estimated Project Cost	\$ 2,221,875

** Land acquisition is ineligible for SRF funding

- B. LaPorte closed an SRF loan on June 29, 2001 for \$5,600,000. That loan has \$1,525,049 remaining as of March 26, 2009. The city will use the remaining SRF funds to finance the proposed project, as well as local funds. The city will close out its SRF loan.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

Three alternatives were evaluated, including the “No-Action” alternative. The “No-Action” alternative was rejected, since the area near Lawrence and Jefferson Streets would continue to be flooded with combined sewage, if nothing is done upstream at Darlington and Worden Streets area.

The “Optimum operation and maintenance of the sewers” alternative is already being implemented, but this does not relieve the sewer surcharging problem.

The selected alternative is the separation of sewers to remove storm water from the combined sewer system upstream of the Lawrence and Jefferson Street area. This will be accomplished by transporting the storm water in the existing and proposed storm basins to an existing combined sewer, and then to the WWTP, when flows subside in the system.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed and Undisturbed Areas: The proposed projects will take place under existing roads or in other disturbed areas. The proposed detention basin will be constructed in an area that was occupied by homes built prior to World War I. Those homes were demolished sometime after 1950, and the site is now grass and an asphalt parking lot (see figures 2 and 3).

Structural Resources (Figure 4): The project will not affect historic structures. The SRF’s finding pursuant to the Section 106 of the National Historic Preservation Act is: “no historic properties affected.”

Plants and Animals: The proposed projects will not impact state or federal-listed endangered species or their habitat. The project will be implemented to minimize impact to non-endangered species and their habitat.

Prime Farmland: The proposed projects will not impact prime farmland.

Wetlands (Figure 5): The proposed storm sewers and new detention basin will not impact wetlands. Installation of the transfer structure in the existing retention wetland/pond north of the railroad will require excavation of the existing dike, an area that may have been on the periphery of the original wetland. The city is working with the Indiana Department of Environmental Management’s wetland staff to ensure proper disposal of material dredged from that pond.

100-Year Floodplain (Figure 6): The project is not located in the 100-year floodplain.

Surface Waters: The proposed project will not adversely affect Exceptional Use Streams, Outstanding State Resource Waters, or Natural, Scenic and Recreational Rivers and Streams.

Groundwater: Dewatering during sewer construction may be necessary.

Air Quality: Construction will produce short-term impacts in the form of dust and noise. The project is located in a non-attainment area for ozone.

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

The proposed project will not affect National Natural Landmarks or the Lake Michigan Coastal Zone.

B. Indirect Impacts

The city's PER states: *The City of LaPorte will ensure, through local zoning laws or other means, that future development using SRF-funded facilities will not negatively impact sensitive environmental areas.*

C. Comments from Environmental Review Authorities

The U.S. Fish and Wildlife Service, in correspondence dated May 11, 2001, stated: *The proposed project is within the range of the Federally endangered Indiana bat (Myotis sodalis) and Mitchell's satyr butterfly (Neonympha mitchelli) and the threatened bald eagle (Haliaeetus leucocephalus). However, the proposed project is not likely to adversely affect these species because no habitat is available in the project areas.*

The State Historic Preservation Officer (SHPO), in correspondence dated July 31, 2001, stated: *Based on our analysis, no known historic buildings, structures, objects or districts listed in or eligible for inclusion in the Indiana Register of Historic Sites and Structures or the National Register of Historic Places will be altered, demolished, or removed by the above-indicated project. Also, we concur with the findings of the archaeological report in that no known archaeological sites listed in or eligible for inclusion in the National Register of Historic Places will be altered, demolished or removed by the above indicated project. However, as a reminder, if any 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.*

The LaPorte County Historian, in a letter dated July 15, 1999, stated: *"As LaPorte County (IN) Historian, I do not believe there would be anything historical or any archaeological locations disturbed by your planned work. Every area we discussed has already been altered from its original state by previous work and there is nothing recorded to indicate that either historical or archaeological sites were uncovered at the time that work was done."*

The Natural Resources Conservation Service, in a letter dated September 7, 2000, noted that the original project would have converted 6.15 acres of prime and unique farmland, but that part of the original project (a detention basin north of the railroad tracks) was dropped and replaced by the proposed detention basin in this project south of the railroad tracks.

The IDNR Diversity and Habitat Protection Unit, in correspondence dated June 18, 2001, stated: *This proposal will not require the formal approval of our agency for construction in a floodway*

pursuant to the Flood Control Act (IC 14-28-1). 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.

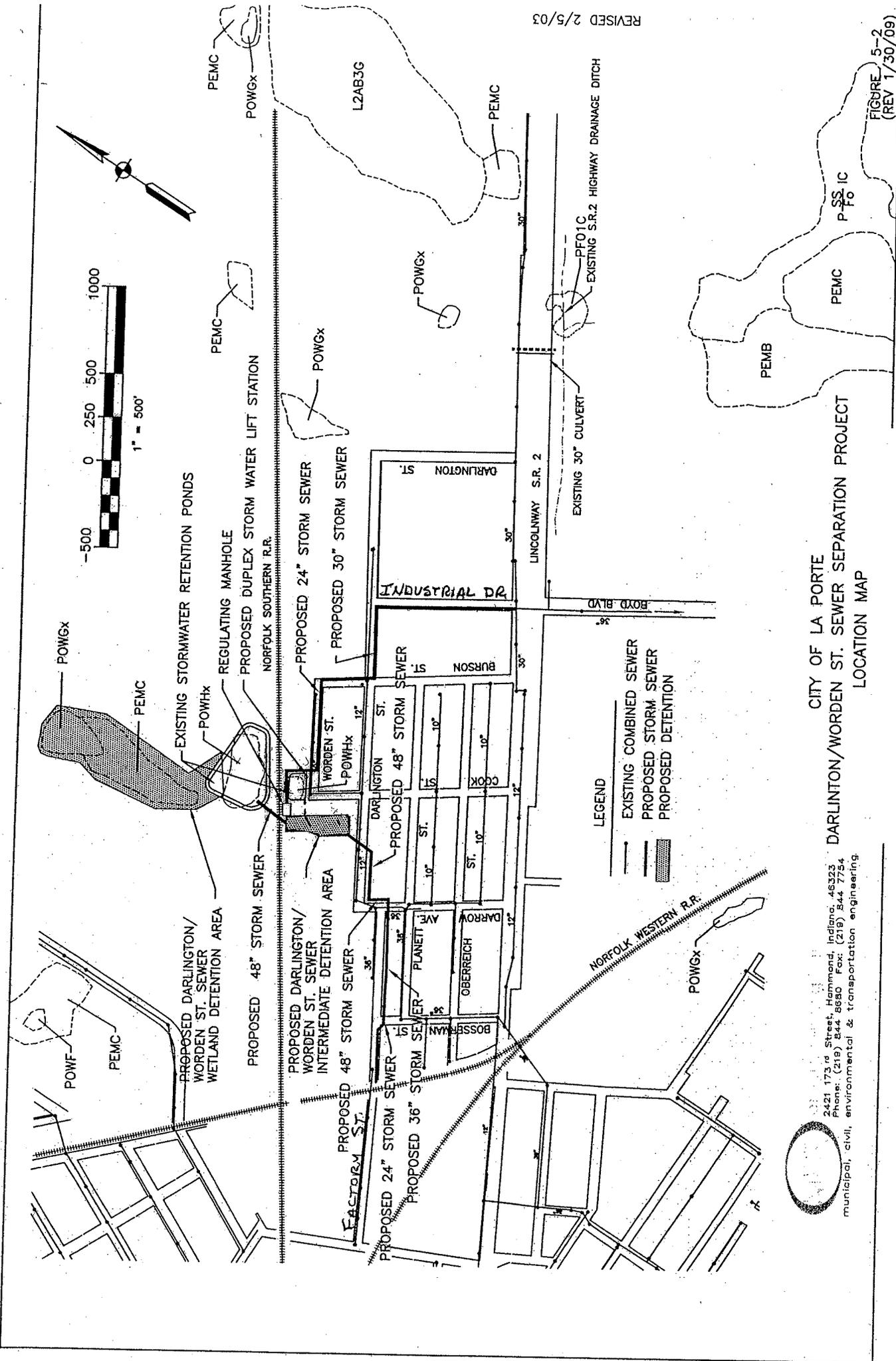
VIII. MITIGATION MEASURES

The city's PER lists the following mitigation measures:

- A. *Mitigation measures cited in the Indiana Department of Natural Resources (IDNR) and the U.S. Fish and Wildlife Service comments will be implemented.*
- B. *An Indiana Rule 5 Erosion Control Plan will be prepared to reduce the construction phase impacts of siltation and erosion.*
- C. *Specific language in the construction documents will require the contractor to mitigate dust problems. The project specifications will contain language requiring dust control during construction and restrict the hours of operation to control noise.*

IX. PUBLIC PARTICIPATION

A public notice describing the amended project was placed in the "LaPorte Herald-Argus" on March 20th and March 27th, 2009.



CITY OF LA PORTE
 DARLINGTON/WORDEN ST. SEWER SEPARATION PROJECT
 LOCATION MAP

2421 173rd Street, Hammond, Indiana, 46323
 Phone: (219) 844 8650 Fax: (219) 844 7754
 municipal, civil, environmental & transportation engineering



FIGURE 1: Proposed Project

FIGURE 5-2
 (REV 1/30/09)

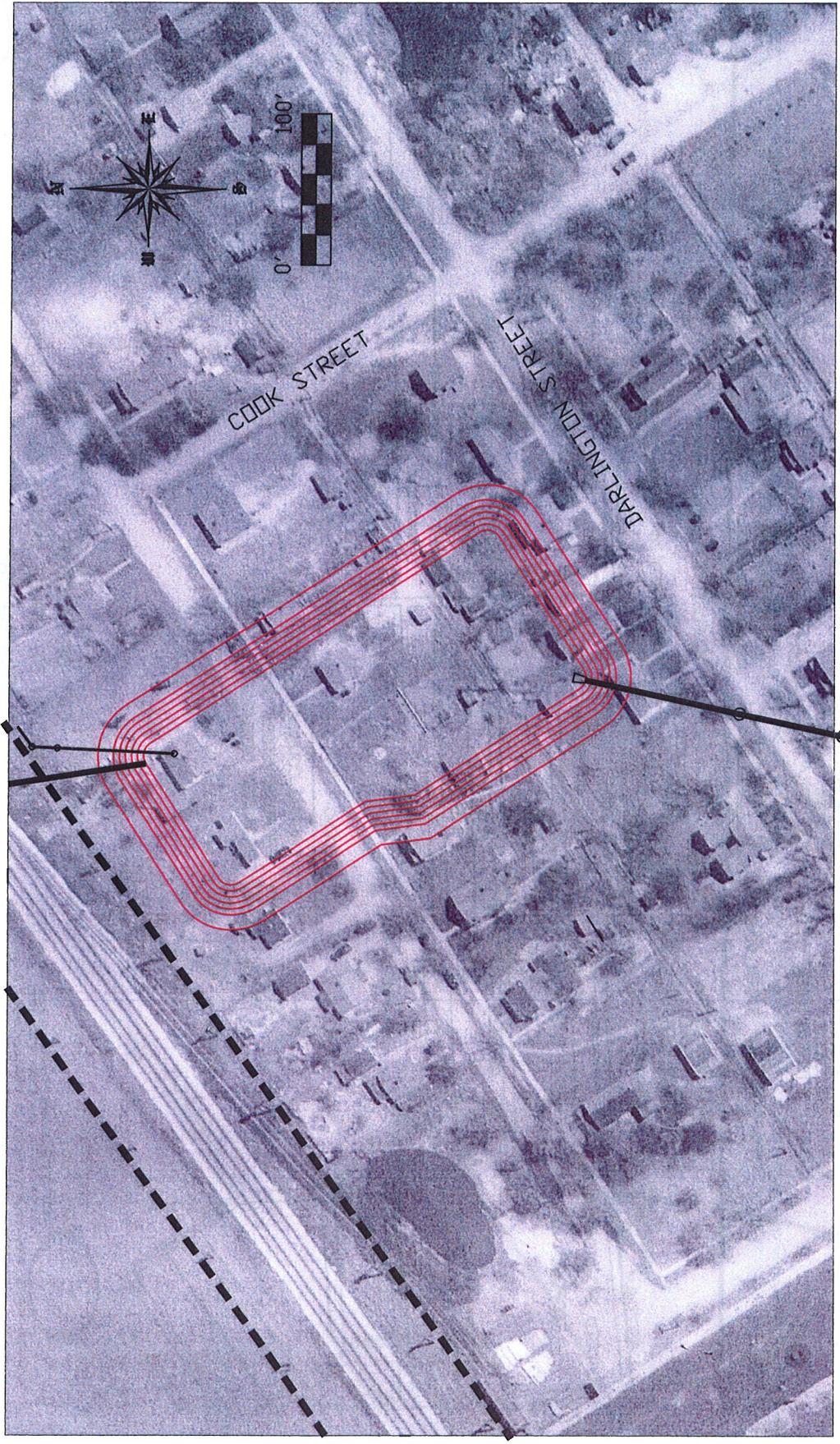


FIGURE 2:

DARLINGTON-WORDEN ST SEWER SEPARATION PROJECT
 SOUTH OF RR REVISED STORAGE POND
 SUPERIMPOSED ON 1950 AERIAL PHOTO OF SITE

ENGINEERING DEPARTMENT
 801 MICHIGAN AVENUE
 LA PORTE, INDIANA 46350
 PH 219-362-2327
 FAX 219-362-1325

PROJECT NUMBER
 None

DATE
 1/27/2009

SHEET
 1 OF 1



DESIGNED J.D.C.
 DRAWN J.D.C.
 CHECKED J.D.C.



FIGURE 3: Proposed detention basin site in 2005

CITY OF LAPORTE, INDIANA WETLAND MAP

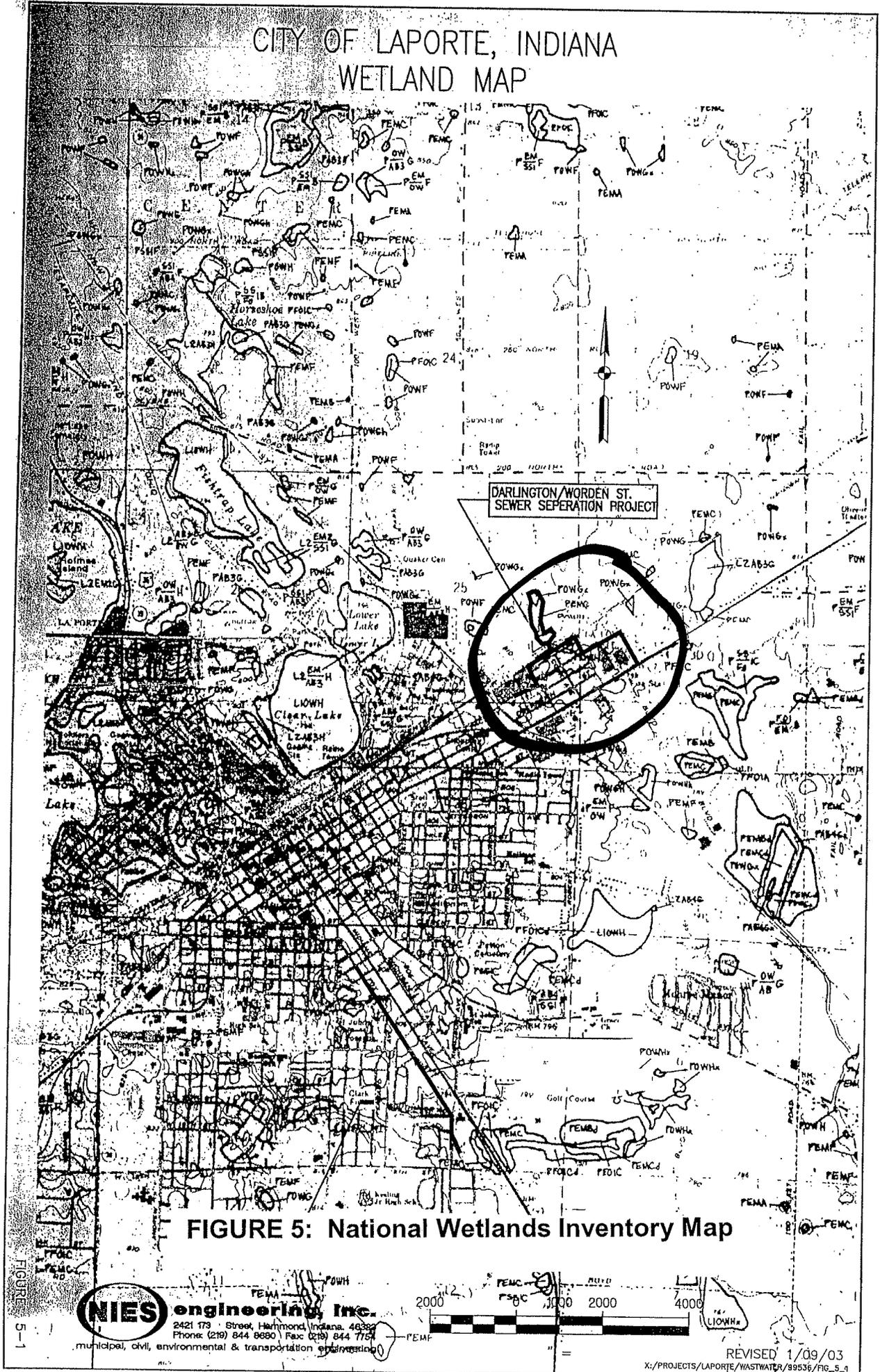
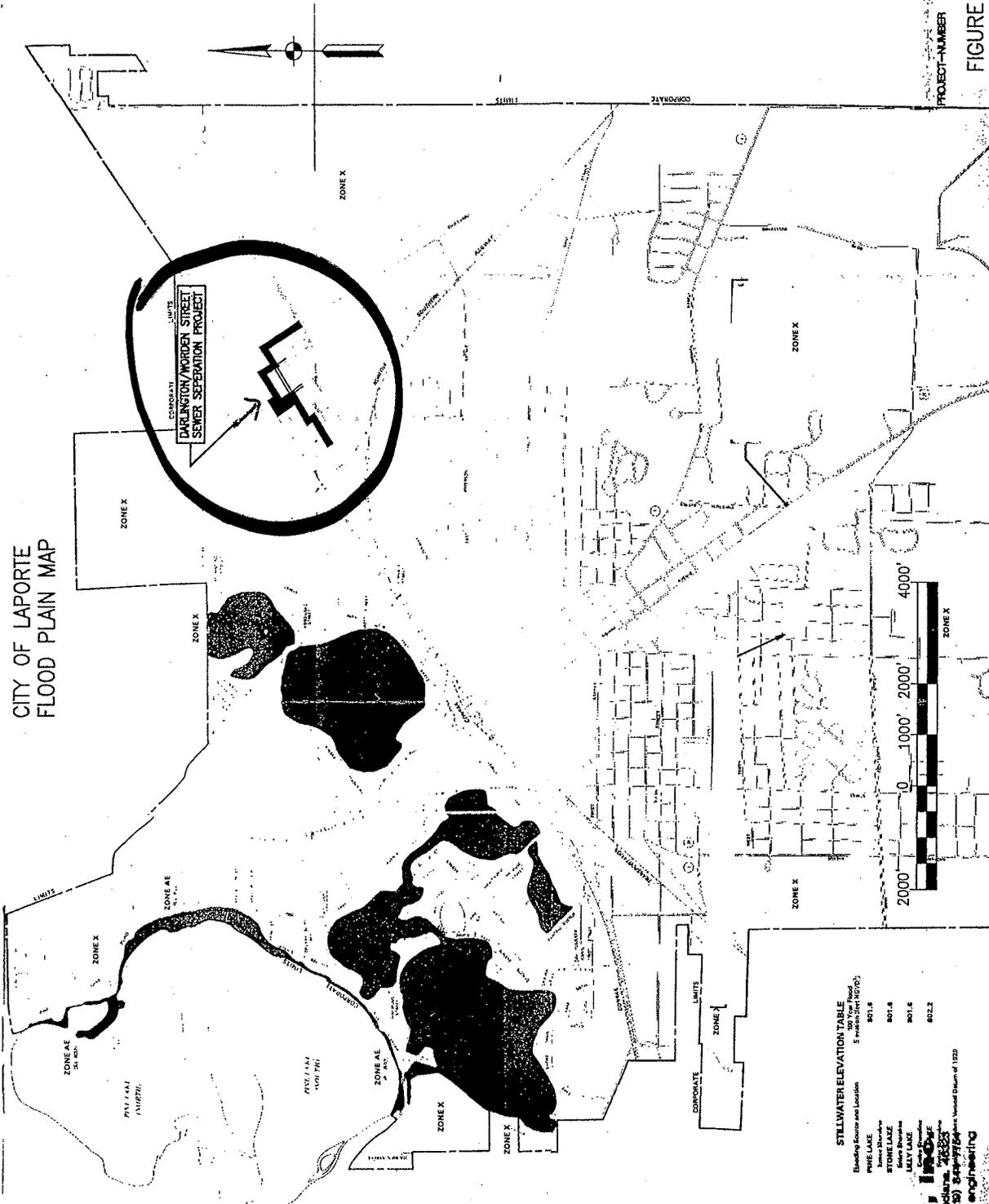


FIGURE 5: National Wetlands Inventory Map

NIES engineering, Inc.
 2421 179th Street, Hammond, Indiana, 46324
 Phone: (219) 844-8680 Fax: (219) 844-7754
 municipal, civil, environmental & transportation engineering

REVISED 1/09/03
 X:/PROJECTS/LAPORTE/WASTWATER/89536/FIG_5_1

CITY OF LAPORTE
FLOOD PLAIN MAP



LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

ZONE A No base flood elevations determined.

ZONE AE Base flood elevations determined.

ZONE AH Flood depths of 1 to 2 feet (lowly areas of Federal flood protection system under construction to base flood elevations determined).

ZONE AS9 To be protected from 100-year flood by Federal flood protection system under construction to base flood elevations determined.

ZONE V Coastal flood with velocity hazard (wave action); no base flood elevations determined.

ZONE VE Coastal flood with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

ZONE X Areas of 500-year flood, areas of 100-year flood with average depth of less than 1 foot, or with average areas less than 1 square mile; and areas protected by levees from 100-year flood.

OTHER AREAS

ZONE X Areas determined to be outside 500-year floodplain in which flood hazards are undetermined.

ZONE D Areas in which flood hazards are undetermined.

UNDEVELOPED COASTAL BARRIERS

Identified 1983

Identified 1950 or later

Other/Unidentified 1950 or later

Other/Unidentified 1951 or later

Coastal barrier areas are normally located within or adjacent to special flood hazard areas.

Floodplain Boundary

Zone D Boundary

Boundary (Including Special Flood Hazard Zones, and Boundary Floodway Areas or Other Areas) Within Special Flood Hazard Zones.

Base Flood Elevation Line (Elevation in Feet)

Cross Section Line

Base Flood Elevation in Feet (Where Uniform Within Zone)

Elevation Reference Mark

River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

513

(EL 987)

RM 7x

M 1.5

STILLWATER ELEVATION TABLE
100 Year Flood
5 Year Flood

Standing Source and Location	100 Year Flood (100Y)	5 Year Flood (5Y)
PINE LAKE	801.6	801.8
STONE LAKE	801.6	801.8
LAKE LAKE	802.2	802.2

Scale: 1" = 4000'
0 1000' 2000' 4000'

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