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

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

CITY OF FORT WAYNE
LAKESIDE SEWER SEPARATION
STATE REVOLVING FUND PROJECT WW 14 31 02 07 – Project 14

DATE: October 8, 2014

TARGET APPROVAL DATE: November 10, 2014

I. INTRODUCTION

The above entity has applied to the State Revolving Fund (CWSRF) Loan Program 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, which can also be viewed at http://www.in.gov/ifa/srf/.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF 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:

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

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address:	**Lakeside Sewer Separation** City of Fort Wayne 200 East Berry Street, Suite 270 Fort Wayne, IN 46802
SRF Project Number:	WW 14 31 02 07 – PROJECT 14
Authorized Representative:	Mr. Kumar Menon, Director of Public Works

II. PROJECT LOCATION

Fort Wayne's Lakeside Sewer Separation project is located in Wayne Township in Allen County in the Fort Wayne East Quadrangle, Township 30N, Range 13E, Section 6, and Township 30N, Range 12E, and section 1.

III. PROJECT NEED AND PURPOSE

The Lakeside Sewer Separation project is being completed to help reduce combined sewer overflows (CSO's) from the Morton Street Pump Station (CSO 048) by off loading the storm water flow, and piping it to the ponds in the Lakeside Park area. This project is part of the Long Term Control Plan (LTCP) CSO Control Measure #6 to complete partial sewer separation projects that are cost effective for Subbasins tributary to the Parallel Interceptor (PI).

IV. PROJECT DESCRIPTION

The Lakeside Park Ponds are located in subbasin 010101 near Lake and Crescent Avenues. This subbasin is served by a combined sewer system that flows to the Morton Street Pump Station. Wet weather flows in the area surrounding the ponds contribute to overflow events at structure 010252 (CSO 048 Outfall). This outfall, once improved, will reduce CSO volume by 13 million gallons (MG) per typical year. The LTCP has defined pumping to the CSO ponds as the control method for this overflow. Any additional improvements within subbasin 010101, to reduce either the peak flow or the total volume, could prove cost effective when compared to the costs of pumping and handling the combined wastewater at the CSO ponds.

During dry weather conditions, the Lakeside Park Ponds have a lower than desired water level. This has become apparent during recent drought conditions. To maintain the water level in the ponds, the sluice gate at structure 010 332 located in a pipe connecting the Maumee River to the south pond (pond #3) can be opened to allow river water to enter the ponds. The Lakeside Park Ponds serve as intermediate storm water retention for street runoff from Lake Avenue, Columbia Avenue, and Delta

Boulevard. The three ponds are interconnected with piping that allows flow from the southern-most pond located adjacent to the Maumee River, through the middle pond and to the northern-most pond. Interconnection piping is located under Columbia Avenue, and under Lake Avenue. The north pond has an emergency weir overflow outlet structure 014 049 that discharges to the combined sewer system on Morton Street and then to the Morton Street Pump Station.

The proposed storm sewers will direct the separated storm water to the three ponds in the Lakeside Park area. When the water level in Pond 3 increases to a set level, a new pump station will be activated discharging the storm water from Pond 3 (and ultimately Ponds 1 and 2 which are interconnected) to the Maumee River. This design will mitigate the overflows from Pond 1 into the combined sewer system in conjunction with raising the emergency overflow weir.

The proposed project includes: installing a pump station rated at a capacity of 500 gallons per minute between the outfall of pond 3 and the Maumee River; and installing 12,865 linear feet of 12-inch, 15-inch, 18-inch, 21-inch, 24-inch, and 30-inch storm sewers. Six outfalls in total will need to be constructed; three outfalls each in ponds 2 and 3 (see Figures 1 through 8).

V. Estimated Project Costs, Affordability and Funding

A. Selected Plan Estimated Cost Summary

Construction Components	**Costs**
Mobilization/Demobilization	$150,000
Clearing and Grubbing	30,000
Erosion and Sediment Control	20,000
Maintenance and Traffic Control	50,000
Catch Basins, Inlets	221,250
Manholes	123,200
Metal End Sections	6,250
12-inch Reinforced Concrete Pipe	190,400
15-inch Reinforced Concrete Pipe	60,600
18-inch Reinforced Concrete Pipe	42,300
24-inch Reinforced Concrete Pipe	137,500
30-inch Reinforced Concrete Pipe	160,550
Special Backfill	706,750
Pump Station	200,000
Site Restoration	666,650
Utility Conflicts	65,000
Contingency	283,045
Construction Sub-Total	**$3,113,495**
Non-Construction Costs	
Planning and Design	470,300
Construction Management and Inspection	268,700
Legal and Financial	117,600
Non-Construction Sub-Total	**$856,600**
Project Total Estimated Project Cost	**$3,970,095**

B. Fort Wayne will finance the project with a loan from the State Revolving Fund Loan Program for a 20-year term at an annual fixed interest rate to be determined at loan closing. The monthly

user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. Description of Evaluated Alternatives

The **"No Action"** alternative is not practical, environmentally sound nor economical. Continued use of the combined sewer will not allow the city to meets its LTCP goals and schedule, and CSO discharges would continue during wet weather.

New Collection System/Interceptor Routes and Alternatives: This alternative proposes the construction of storm drains to pick up inlets and catch basins that are currently connected to the combined system. **Based on cost this is the selected alternative.**

Phasing: The project is part of the phased approach to comply with CSO Control Measure #6 in the LTCP by completing partial sewer separation projects that are cost effective for Subbasins tributary to the PI.

VII. Environmental Impacts of the Feasible Alternatives

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land: Work related to the installation of storm sewers will occur in disturbed rights-of-way, adjacent to and within roadways, alleys, existing utility trenches, and disturbed area near manmade ponds. All areas have been disturbed by previous construction activity.

Structural Resources (Figures 9, 10 and 11): Curbs and sidewalks will be impacted by the construction, but the architectural and historic structures and yards will not be impacted. 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: Maumee River will be temporarily affected by the installation of a 15-inch storm outfall. The project will not adversely affect outstanding state resource waters listed in 327 IAC 2-1.3-3(d), exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-(2), or Salmonid Streams listed in (327 IAC 2-1.5-5(a)(3) or streams on the Outstanding River List for Indiana.

Wetlands (Figure 12): The ponds into which the storm sewers will discharge are identified as wetlands.

Floodplain (Figure 12): The pump station and force main construction will occur within the 100-year flood plain with the design providing for protection of the facility structures and electrical/mechanical equipment from damage caused by a100 year flood event. The PER states the following relative to construction within a floodplain: *We will follow the requirements of the permitting agency including any mitigation measures. All construction will be in accordance with permit requirements.*

Groundwater: The project will not negatively impact a drinking water supply or sole source aquifer.

Plants and Animals: The proposed project will impact about ten trees along the piping route, and two trees at the pump station site. The construction and operation of the proposed project will not negatively impact State or Federally listed endangered species or their habitat. The PER states: *The project will be implemented to minimize the impact to non-endangered species and their habitat. Mitigation measures will be implemented as requested by the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service.*

Prime Farmland: The project will not convert prime farmland.

Air Quality: Construction activities may generate some noise, fumes and dust, but should not significantly affect air quality.

Open Space and Recreational Opportunities: The project will neither create nor destroy open space or recreational opportunities. The outfalls will be constructed within the park and pond area, however, disruption will be minimal and temporary.

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 Preliminary Engineering Report (PER) states: *The City of Fort Wayne through the authority of is Council planning commission, or other means, will ensure that future development, as well as future collection system or treatment works projects connecting to SRF funded facilities will not adversely affect wetlands, wooded areas, steep slopes, archaeological /historical/structural resources, or other sensitive environmental resources. The City will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental authorities.*

C. Comments from Environmental Review Authorities

This document serves as the first notice to the U. S. Fish and Wildlife Service and the Indiana Department of Natural Resources: Environmental Unit and Department of Historical Preservation and Archaeology.

In correspondence dated August 13, 2014 the Natural Resources Conservation Service stated: *The proposed project...will not cause a conversion of prime farmland.*

VIII. Mitigation Measures

Fort Wayne's Preliminary Engineering Report states:

The project will be designed and implemented to minimize soil erosion and mitigation measures cited in comment letters from governing agencies will be implemented. Erosion control measures including seeding , sodding, inlet protection, silt fence, stone construction entrance and dust control may be implemented in accordance with current soil erosion control practices at the time of construction to reduce/eliminate erosion of the soils.

To mitigate construction noises and the subsequent resident complaints, construction will only be allowed from 7:00 am to 5:00 pm Monday through Friday. Appropriate erosion control measures will be implemented during construction to abate dust and airborne dirt particles. The contractor will be required to maintain all equipment in good working order to mitigate noise and air pollution caused by faulty operating equipment.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on August 13, 2014, at 10:00 am at the Council Chambers, Room, Room 035, Citizens Square, Fort Wayne to discuss the PER. No verbal comments were received at the public hearing, and no written comments were received during the 5-day comment period following the hearing.

LAKESIDE SEWER SEPARATION

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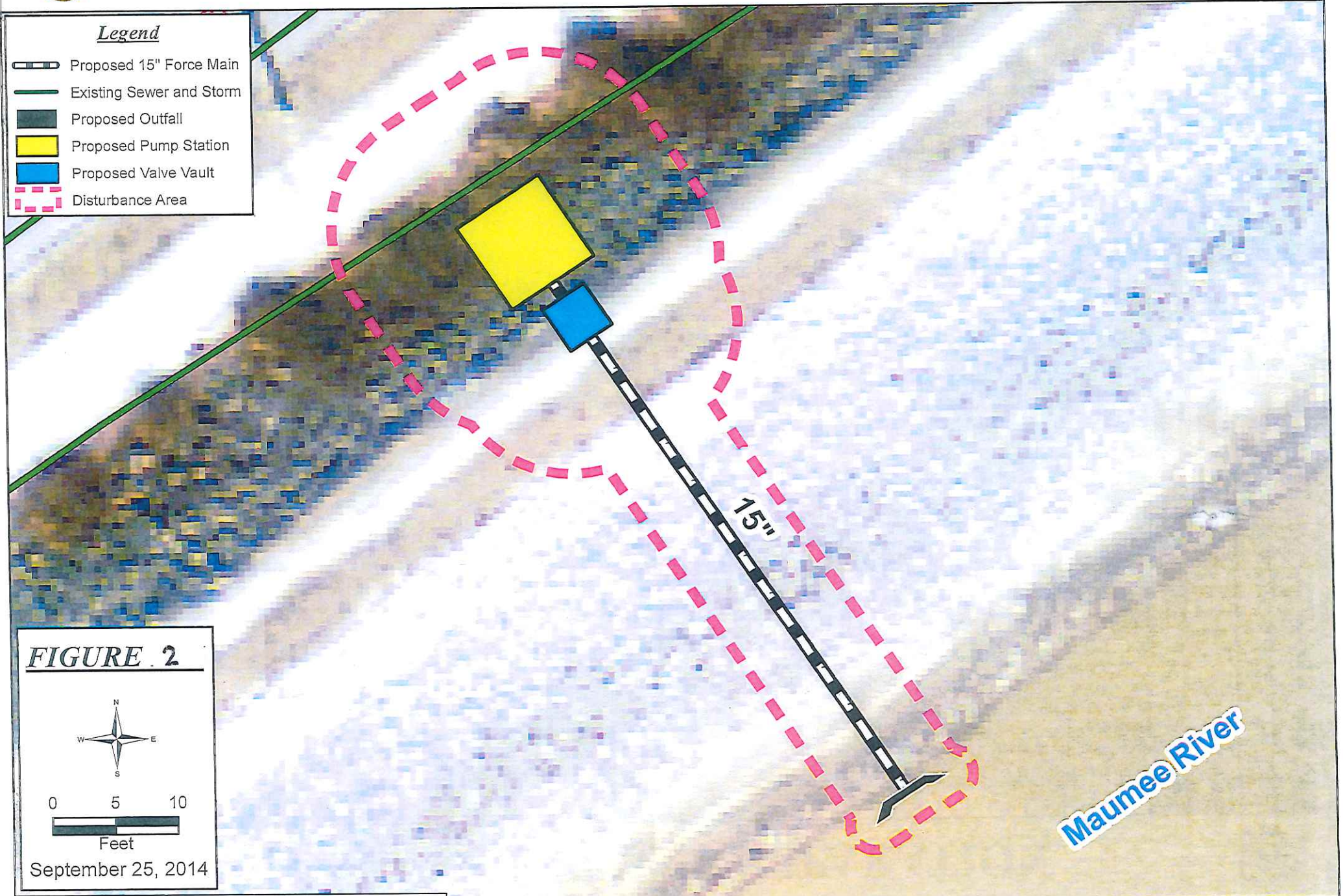

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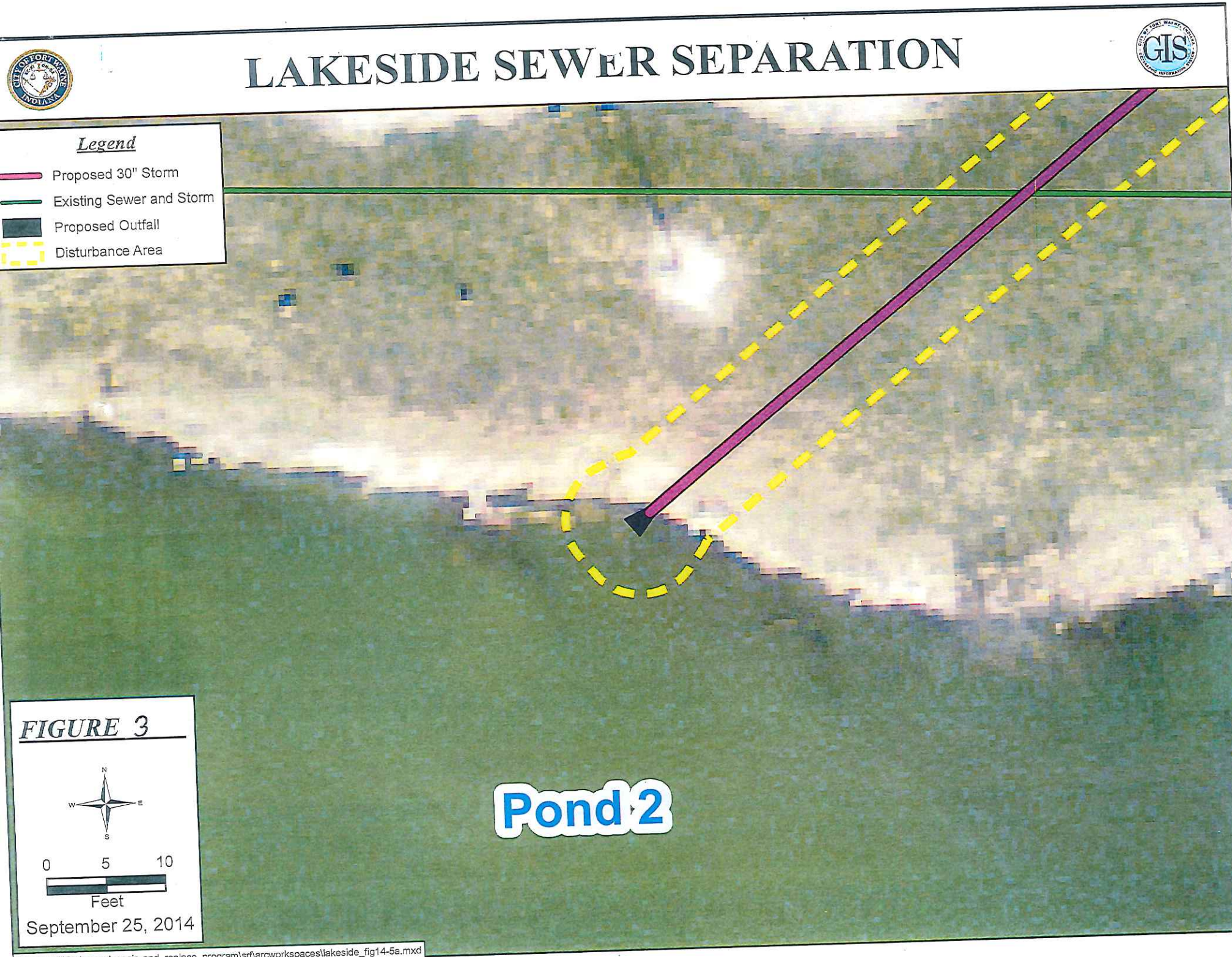

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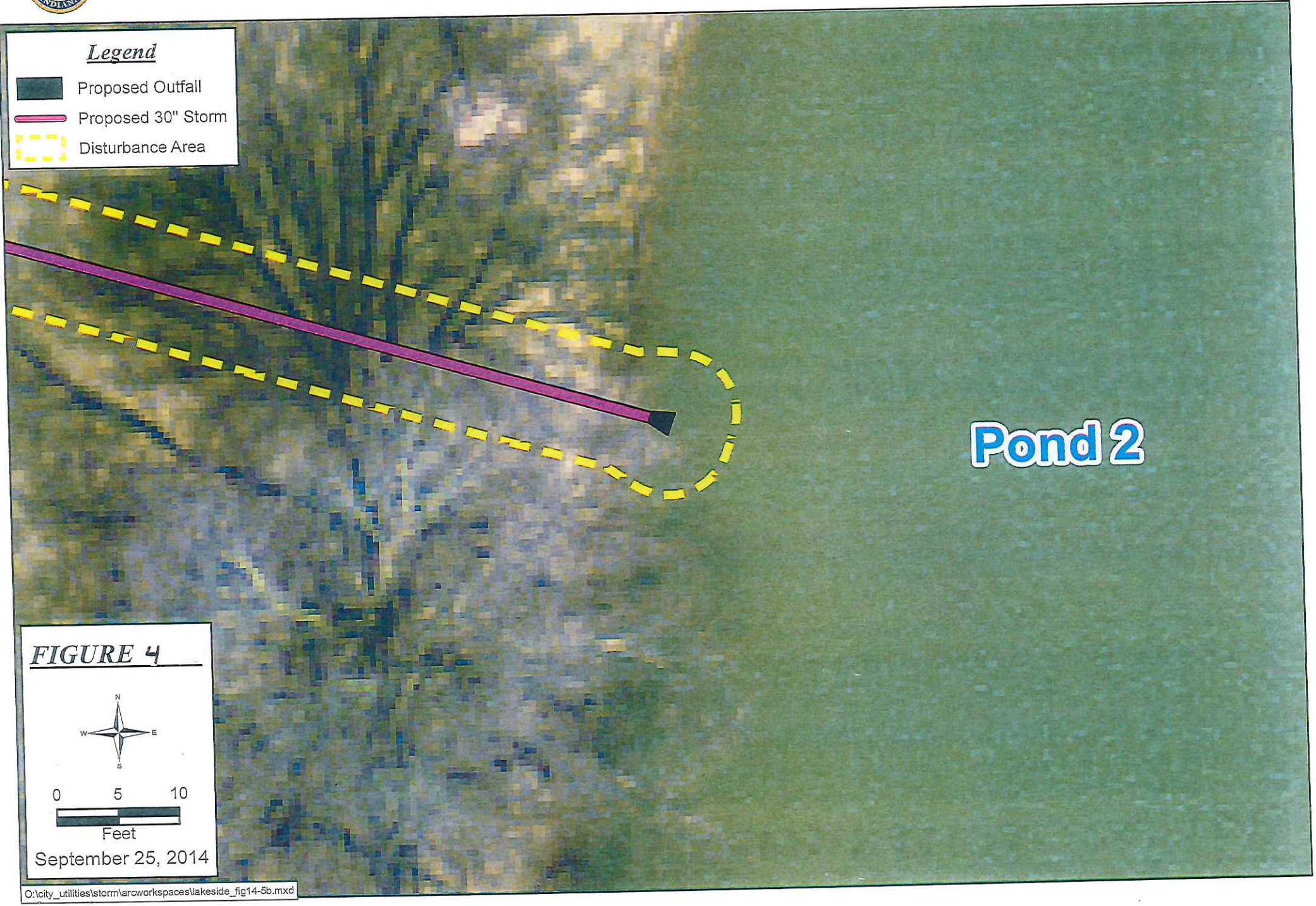

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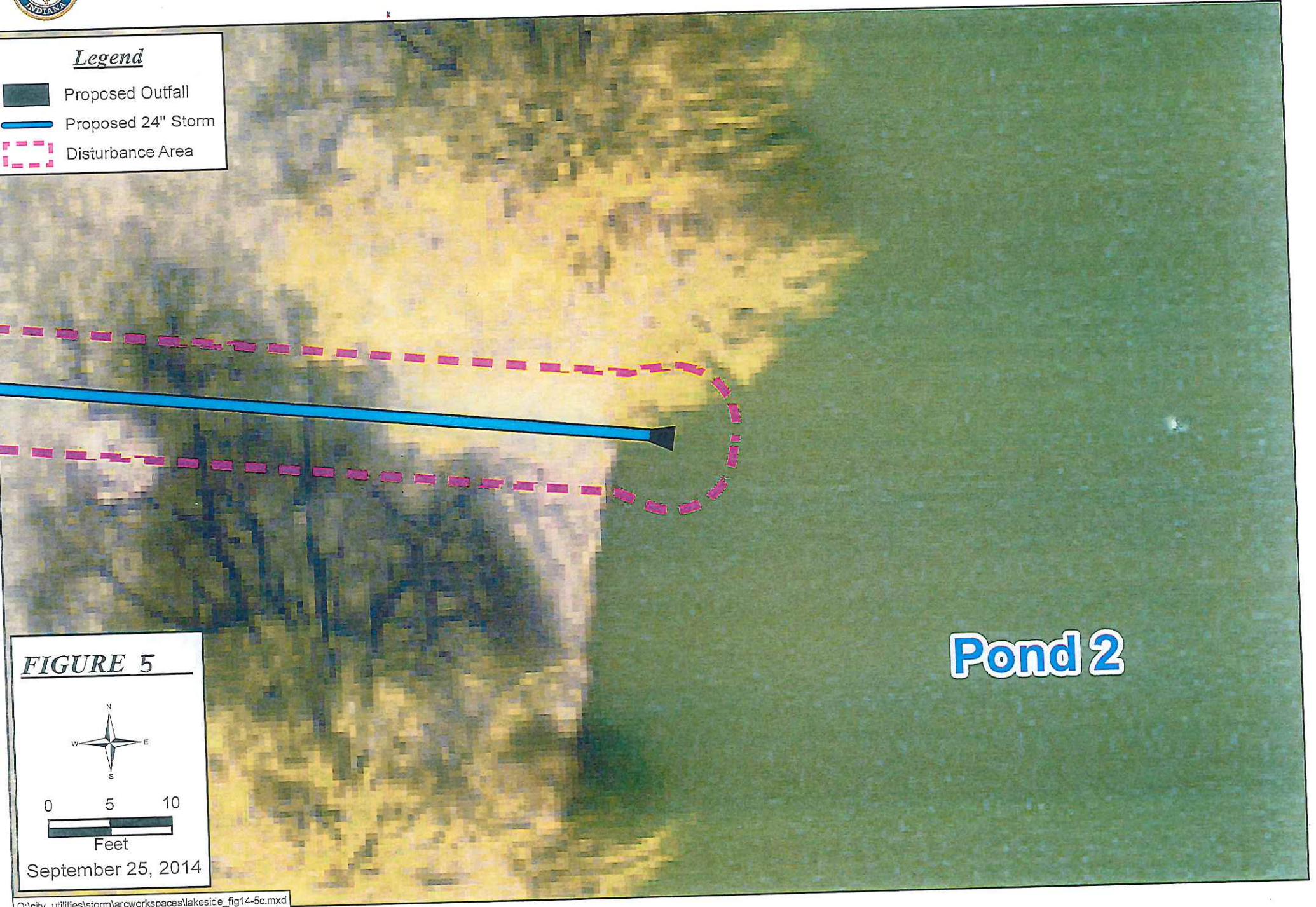

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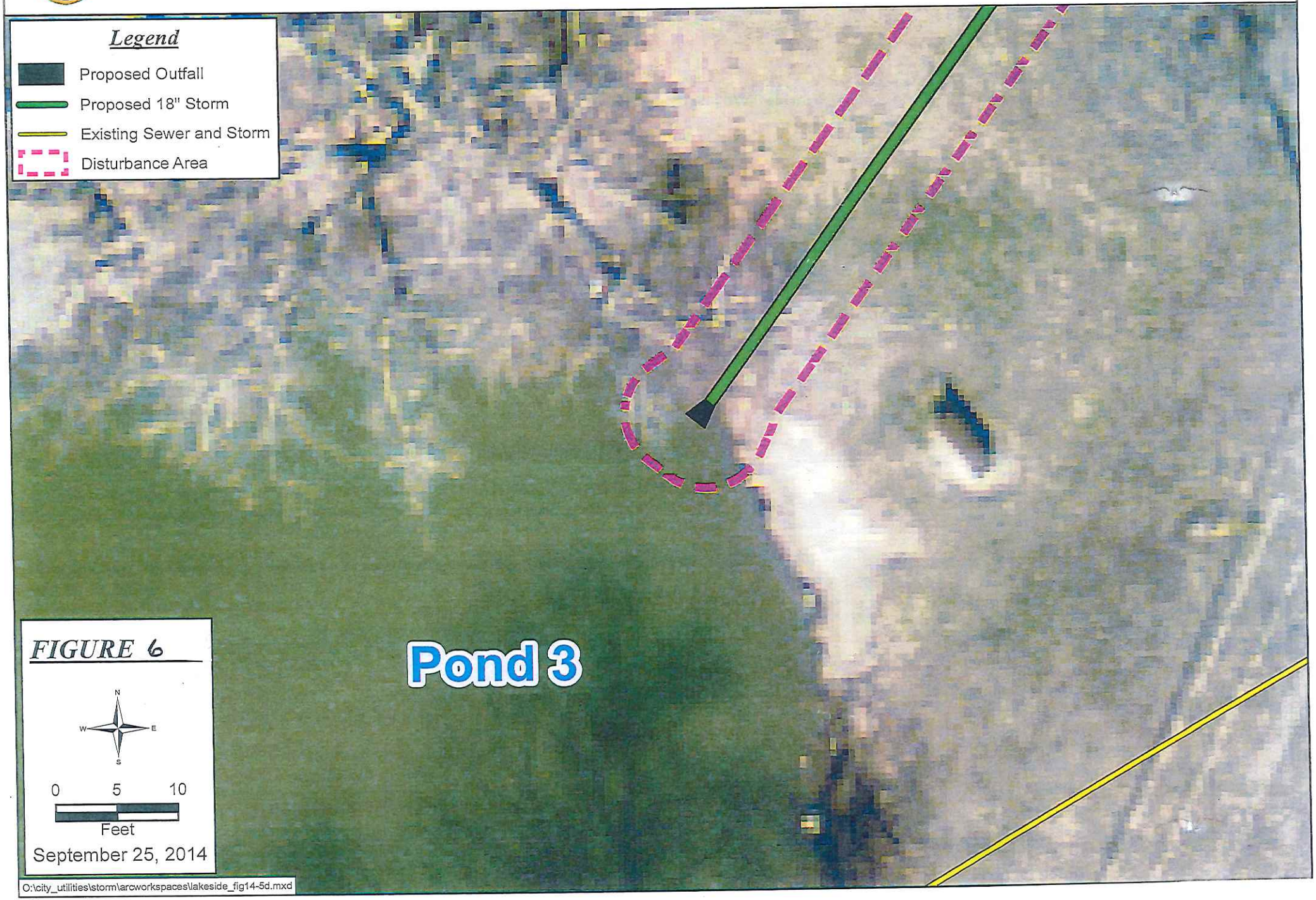

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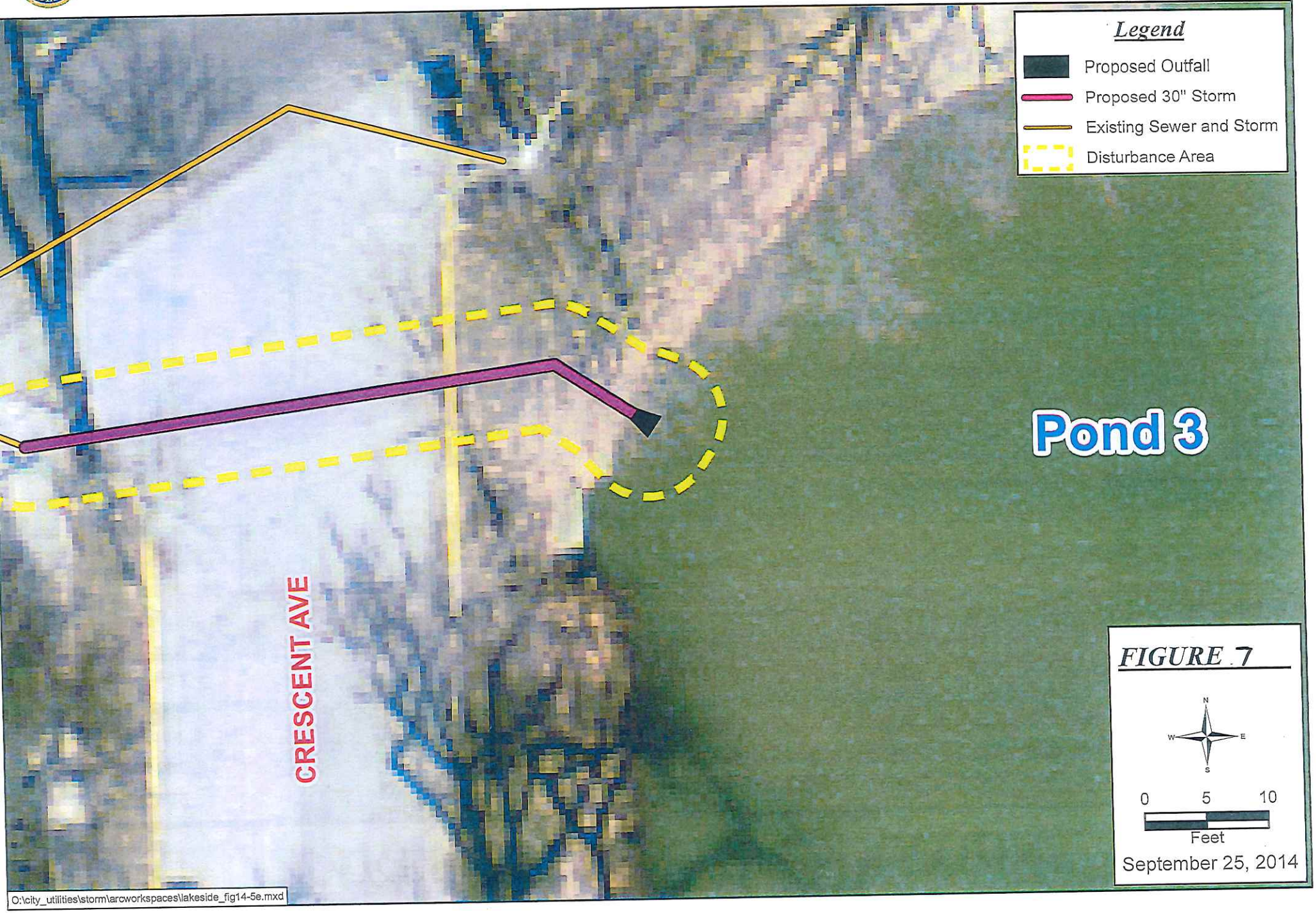

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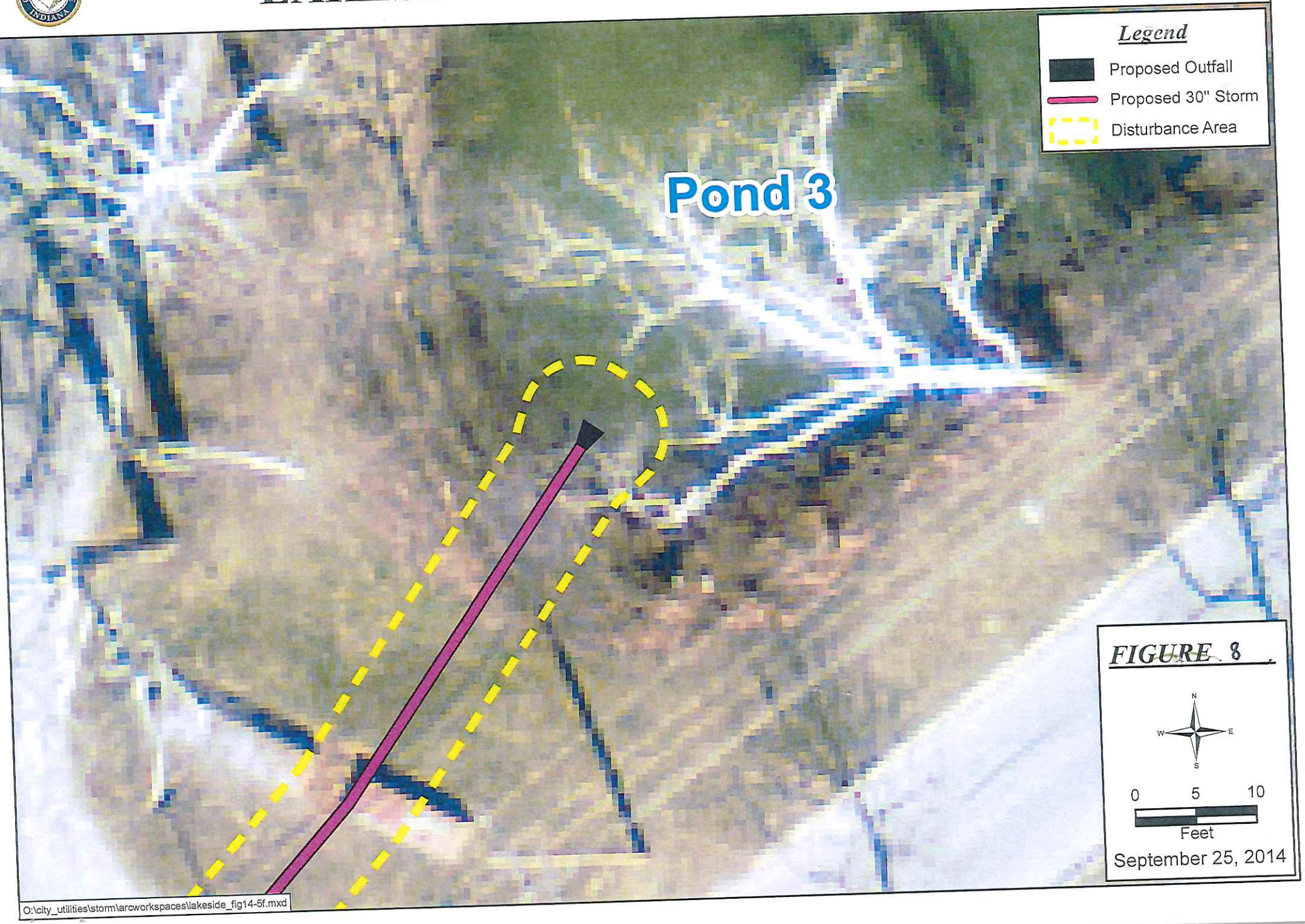


Sector 17 (003-214/215-17410/17707)

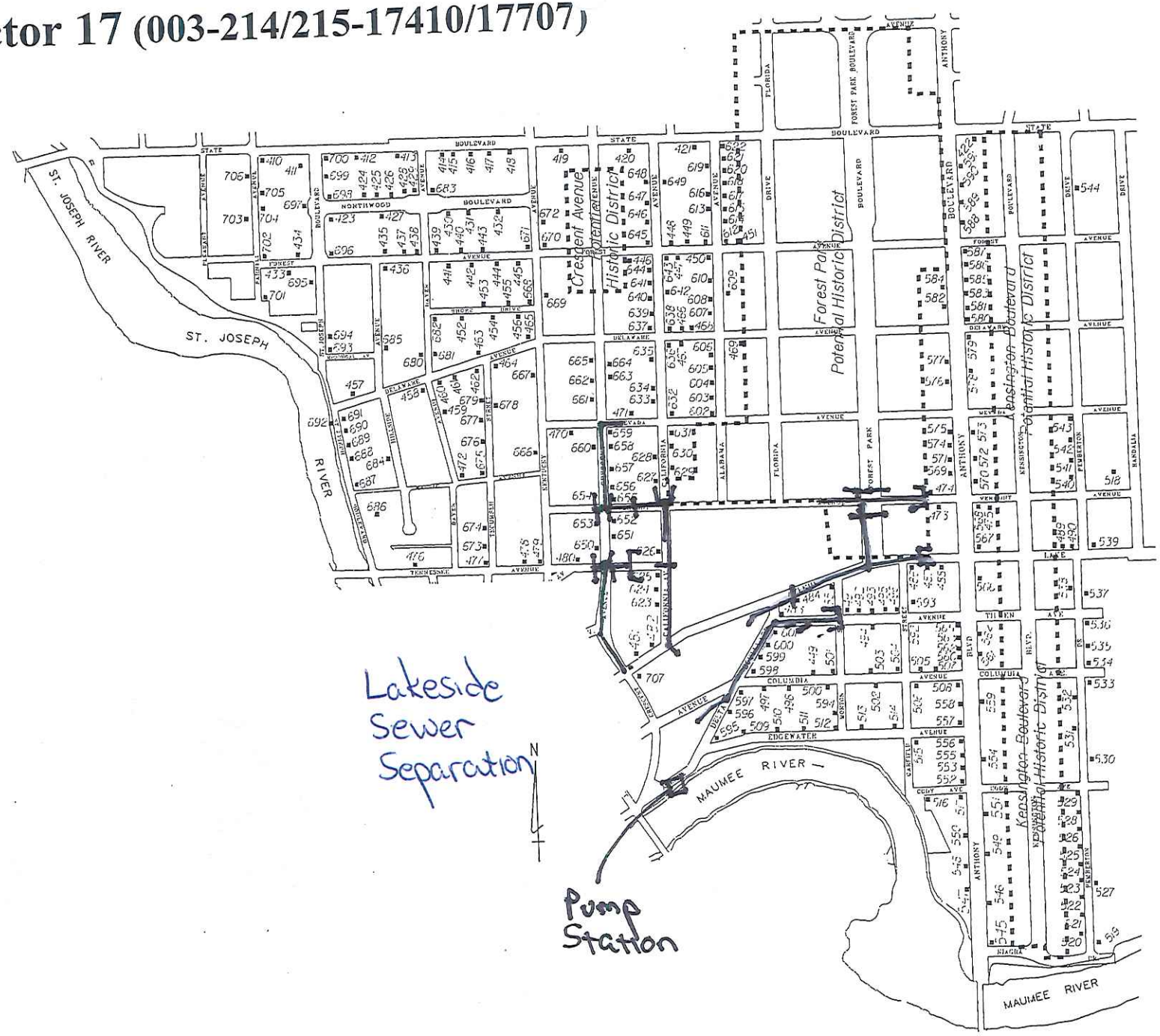
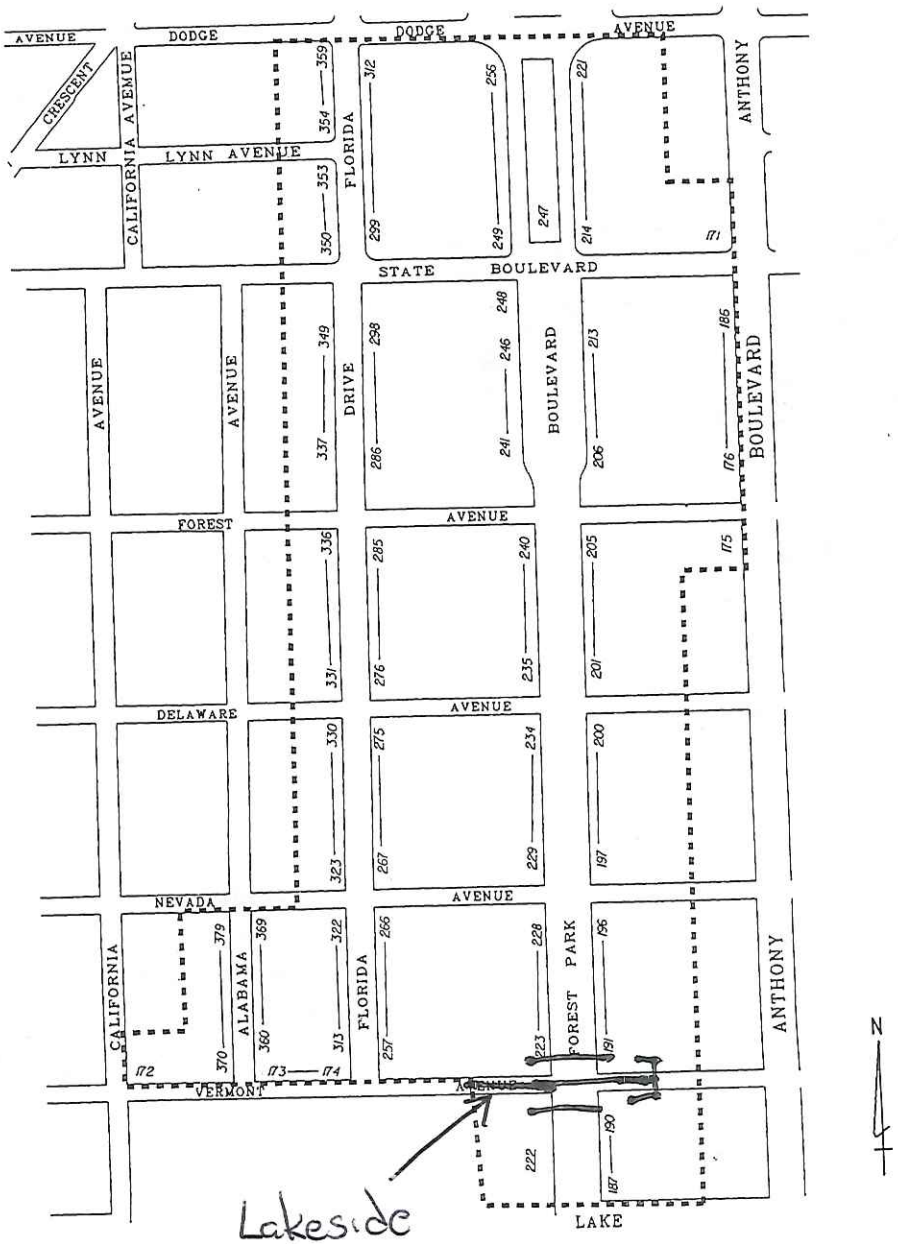


Figure 9: from the Allen County Interim Report Historic Sites and Structures Inventory

Sector 17
Forest Park Potential Historic District (003-214-17171/17379)



Lakeside
Sewer Separation

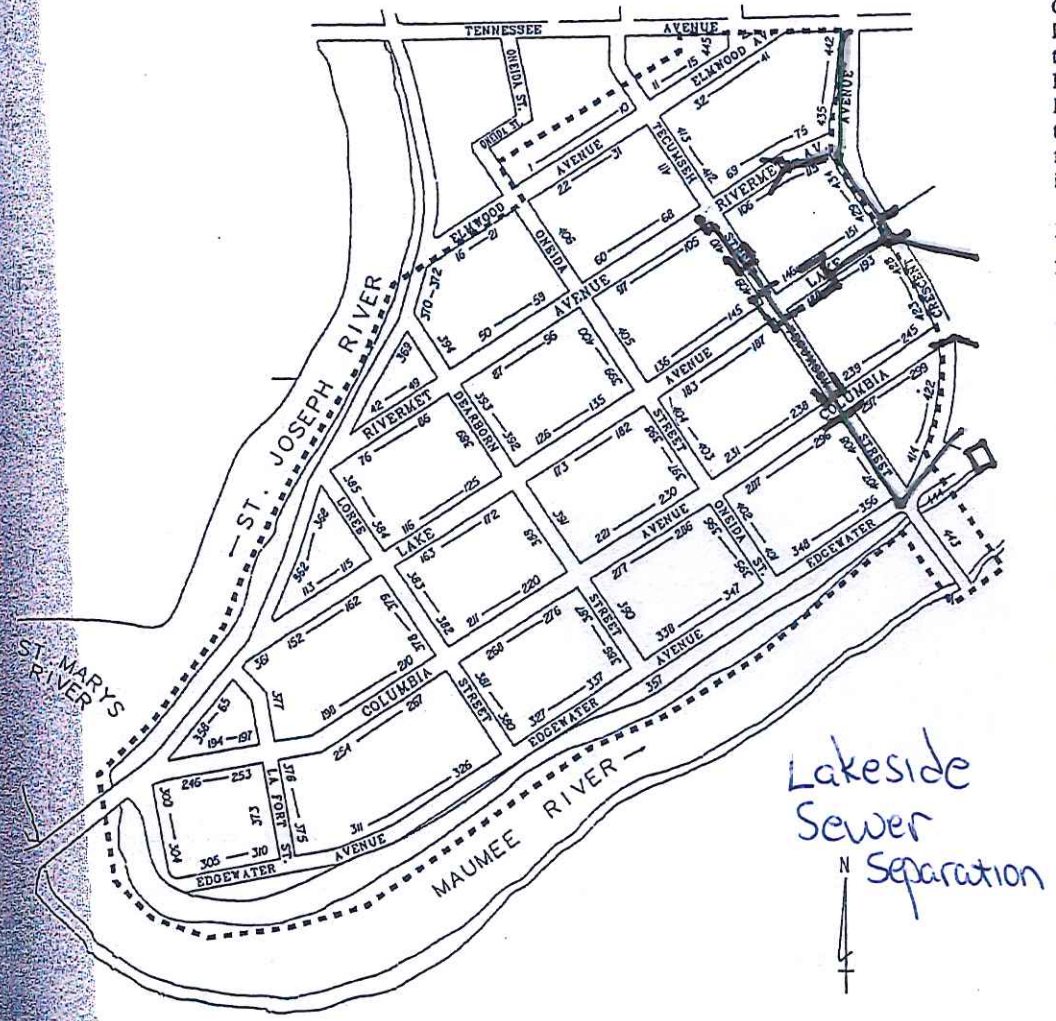
Figure 10: from the Allen County Interim Report Historic Sites and Structures Inventory

The Fort Wayne Trotting Association leased the Hayden farm in 1889 and used the grounds for horse racing. When the Fort Wayne Driving Club was organized in 1891, they took over the track until 1902 when the Fort Wayne Fair Association took control of the property for use as the fairgrounds. In 1913, the area known as Driving Park was turned into a suburban residential development by Louis Curdes who had previously developed the Williams Woodland Park neighborhood.

The original tract was designed as a wide boulevard of 56 large lots by the Blvd. Realty Co. and soon became a prestigious location for many of the city's prominent families. Large homes in the Colonial Revival, Tudor, Craftsman, Prairie, and early 20th century eclectic styles, were designed by prominent architects such as Charles Weatherhogg, Barry Byrne, Marshall Mahurin, Guy Mahurin, and A.M. Strauss. Blvd. Realty also donated land for the development of Lakeside Park which features rose gardens and a sunken garden designed by Adolph Jaenicke.

No.	Add.	Description
E. State Blvd. (North Side)		
171	1725	**John T. Klett House;** Colonial Revival, c.1925 (C)
Vermont Ave. (North Side)		
172	1301	**Angus C. McCoy House;** Tudor Revival, c.1930 (N)
173	1403-1405	**Kannel-Archer Duplex;** Craftsman, c.1925 (C)
174	1407	**House;** Craftsman, c.1925 (C)

Sector 21
Lakeside Potential Historic District (003-214/215-21001/21445)



In 1890, the Fort Wayne Land and Improvement Company purchased a large tract of undeveloped land that formed a peninsula at the intersection of the St. Joseph, Maumee, and St. Mary's Rivers. Dikes were built along the river banks to protect the land from flooding, a street car line was extended through the area from downtown, and Fort Wayne's first suburb came into being. The majority of houses in this potential district were constructed between 1893 and 1920, and vary from large, two-story homes to one-story cottages representing the Queen Anne, Colonial Revival, Craftsman, and American Foursquare styles of architecture.

No.	Add.	Description
Elmwood Ave. (North Side)		
001	1101	**Harry Prochal House;** Craftsman, c.1925 (C)
002	1107	**House;** Queen Anne/Gabled Ell, c.1905 (C)
003	1111	**House;** Queen Anne/Gabled Ell cottage, c.1905 (C)
004	1115	**House;** Queen Anne/Craftsman, c.1905/c.1925 (C)
005	1117	**House;** Queen Anne, c.1905 (C)
006	1121	**House;** Queen Anne/Gabled Ell cottage, c.1900 (N)
007	1125	**House;** Queen Anne cottage, c.1905 (C)
008	1129	**House;** Gable Front/Queen Anne, c.1895 (C)
009	1135	**House;** Queen Anne/Gabled Ell cottage, c.1905 (C)

Figure 11: from the Allen County Interim Report Historic Sites and Structures Inventory

LAKESIDE SEWER SEPARATION

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