



# State Revolving Fund Loan Programs

## Drinking Water, Wastewater, Nonpoint Source

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### ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

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#### CITY OF FORT WAYNE

#### SPY RUN RELIEF INTERCEPTOR – PHASE 1

#### STATE REVOLVING FUND PROJECT WW 14 31 02 07 – Project 9

**DATE: October 3, 2014**

**TARGET APPROVAL DATE: November 3, 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](mailto:adouglas@ifa.in.gov)**

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# ENVIRONMENTAL ASSESSMENT

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## I. PROJECT IDENTIFICATION

Project Name and Address: **Spy Run Interceptor Relief – Phase 1**  
City of Fort Wayne  
200 East Berry Street, Suite 270  
Fort Wayne, IN 46802

SRF Project Number: WW 14 31 02 07 – PROJECT 9

Authorized Representative: Mr. Kumar Menon, Director of Public Works

## II. PROJECT LOCATION

Fort Wayne's Spy Run Interceptor Relief – Phase 1 project is located in Wayne Township in Allen County in the Fort Wayne West Quadrangle, Township 31N, Range 12E, and sections 26, 27, 35 and 36.

## III. PROJECT NEED AND PURPOSE

The Spy Run Relief Interceptor – Phase 1 project is needed to address critically surcharged sections of the Spy Run interceptor sewer. Through computer modeling three siphons were identified as restricting flow in the interceptor, and as a result caused surcharging upstream of the siphons. This project is proposed as one of the system improvements that will allow the city to be in compliance with their Consent Decree and Long Term Control Plan (LTCP). Upgrades to the Spy Run interceptor siphons will provide hydraulic capacity in the siphon structures that will complement the capacity of the upstream gravity sewers. This will reduce the risks of sanitary sewer overflows by mitigating surcharging in the existing sewer system for future 2030 flows based on 2-year storm events.

## IV. PROJECT DESCRIPTION

The Spy Run Relief Interceptor- Phase 1 project involves the construction of additional siphon barrels at three siphon structures along with modifications to the upstream and downstream structures. The work will involve approximately 600 linear feet of 36-inch siphon pipe in total installed at three locations and modification of three upstream structures and three downstream structures. Two of the siphons are located under Spy Run Creek and the third siphon is under St. Joseph River. The siphon barrels to be constructed would be in addition to the existing siphon barrels at the three locations (see Figures 1, 2, 3 and 4).

## V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

### A. Selected Plan Estimated Cost Summary

<u>Construction Components</u>	<u>Costs</u>
36-inch N18183 – N18182 Siphon Pipe	\$685,628
N18183 – N18182 Siphon Upstream and Downstream Structures	100,000
36-inch M18231-M18232 Siphon Pipe	\$297,358
N18183 – N18182 Siphon Upstream and Downstream Structures	30,000
36-inch L18129-L18088 Siphon Pipe	\$151,520
N18183 – N18182 Siphon Upstream and Downstream Structures	30,000
Contingency	<u>129,451</u>
<b>Construction Sub-Total</b>	<b>\$1,423,957</b>
<u>Non-Construction Costs</u>	
Planning and Design	199,354
Construction Management and Inspection	113,917
Financial and Legal	<u>49,838</u>
<b>Non-Construction Sub-Total</b>	<b>\$363,109</b>
<b>Total Estimated Project Cost</b>	<b><u>\$1,787,066</u></b>

- 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. The Spy Run Interceptor is subject to surcharging during wet weather and if no action is taken, the city would not meet its LTCP goals.

**Optimal Operations of Existing Facilities:** Fort Wayne operates the sanitary and combined sewer systems as effectively as possible with continual observation and maintenance. This alternate would not reduce surcharging in Spy Run Interceptor and would not allow the city to meet its LTCP goals.

**Collection System Rehabilitation/Replacement:** Rehabilitation of the existing sewers would not address the surcharging problem, but modification of the three existing siphon structures to add an additional siphon barrel at each and modify the upstream and downstream structures at each siphon location would address the flow restriction problem and, in turn, address the city’s LTCP goals.

**Based on cost this is the selected alternative.**

**New Collection System/Interceptor Routes and Alternatives:** Alternative routes for the interceptor relief sewer were evaluated, but were determined to be more costly than the siphon barrel replacement and therefore rejected.

**Phasing:** The project is part of the phased approach to comply with the city’s Consent Decree and LTCP and to allow the City to provide sanitary sewer service to the area as it develops. This is the first phase of the Spy Run Relief Sewer projects. Future phases may include construction of parallel

relief sewer, storage or pumping facilities.

## VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

### A. Direct Impacts of Construction and Operation

**Disturbed/Undisturbed Land:** All work related to the proposed project will occur in areas previously disturbed by the construction of the existing sewer.

**Structural Resources** (Figures 5 and 6): There is one identified notable structure near the proposed project, 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:** The siphon barrels would be installed by open cut of Spy Run Creek (two locations) and under St. Joseph River (one location). The siphon barrels will be installed 3.5 to 5 feet below the stream bed. For the crossing of St. Joseph River, the flow in the **Saint Joseph River will be dammed** for the construction. If dewatering is required as part of the construction, the dewatering flows will be settled prior to discharge to avoid discharge of solids to surface waters. 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 7): The project will not impact wetlands.

**Floodplain** (Figure 7): All of the proposed project will be located within the 100-year flood plain. However, there are no above-grade structures associated with this project. The Preliminary Engineering Report states: *The 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 areas adjacent to the river and stream beds contain trees and shrubs which will be removed as part of the project. One of the new siphon barrels on Spy Run Creek will impact approximately 10 trees and the other new siphon barrel on Spy Run Creek will impact approximately 8 trees. The new siphon barrel on the Saint Joseph River will impact approximately 12 trees. 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.

**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 its 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 PER 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.*

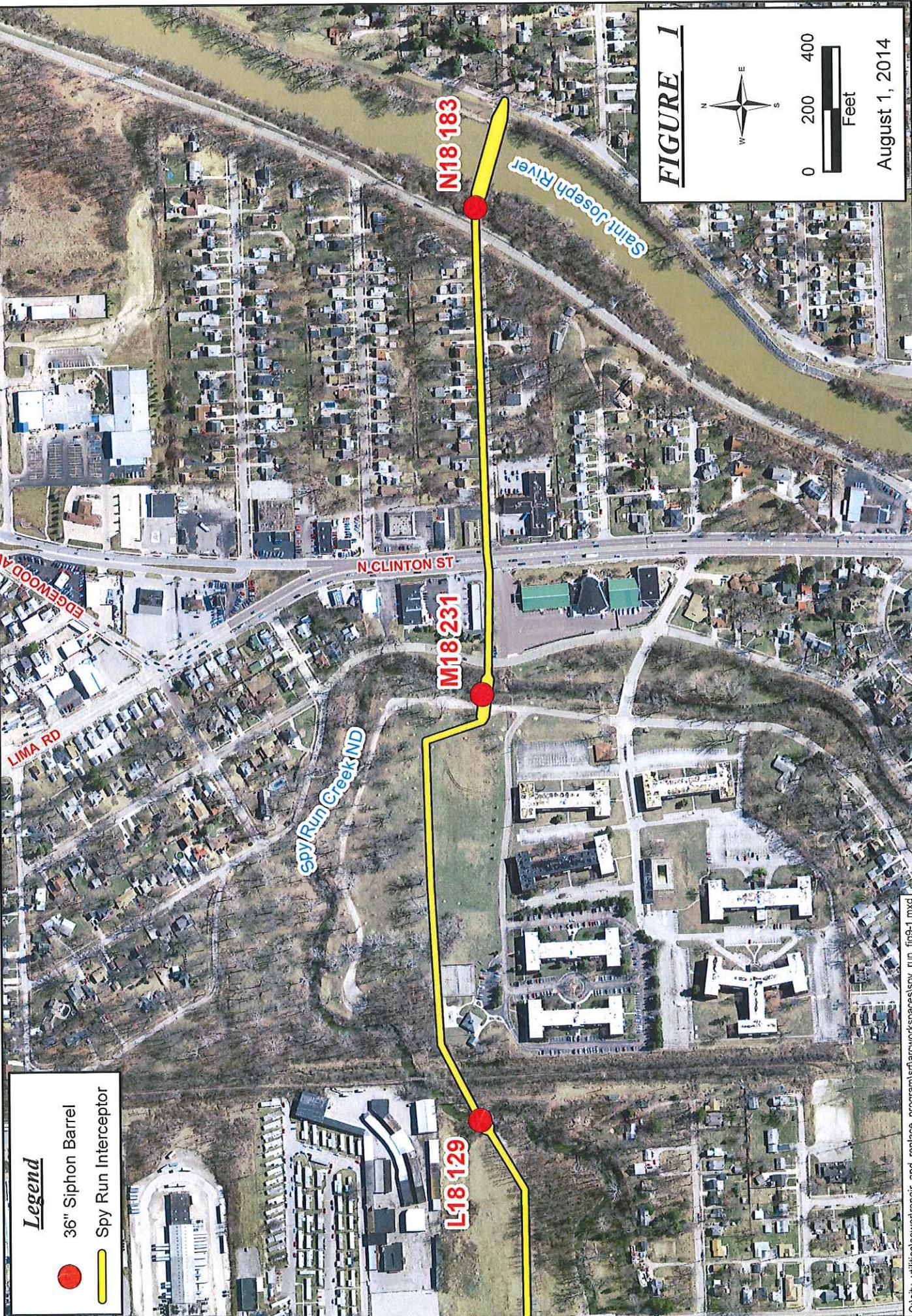
*To mitigate construction noises and the subsequent resident complaints, construction will only be allowed from 7:00 am to 5:00 pm Monday through Friday. Appropriate erosion control measures will be implemented during construction to abate dust and airborne dirt particles. The contractor will be required 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.



# SPY RUN INTERCEPTOR RELIEF



**Legend**

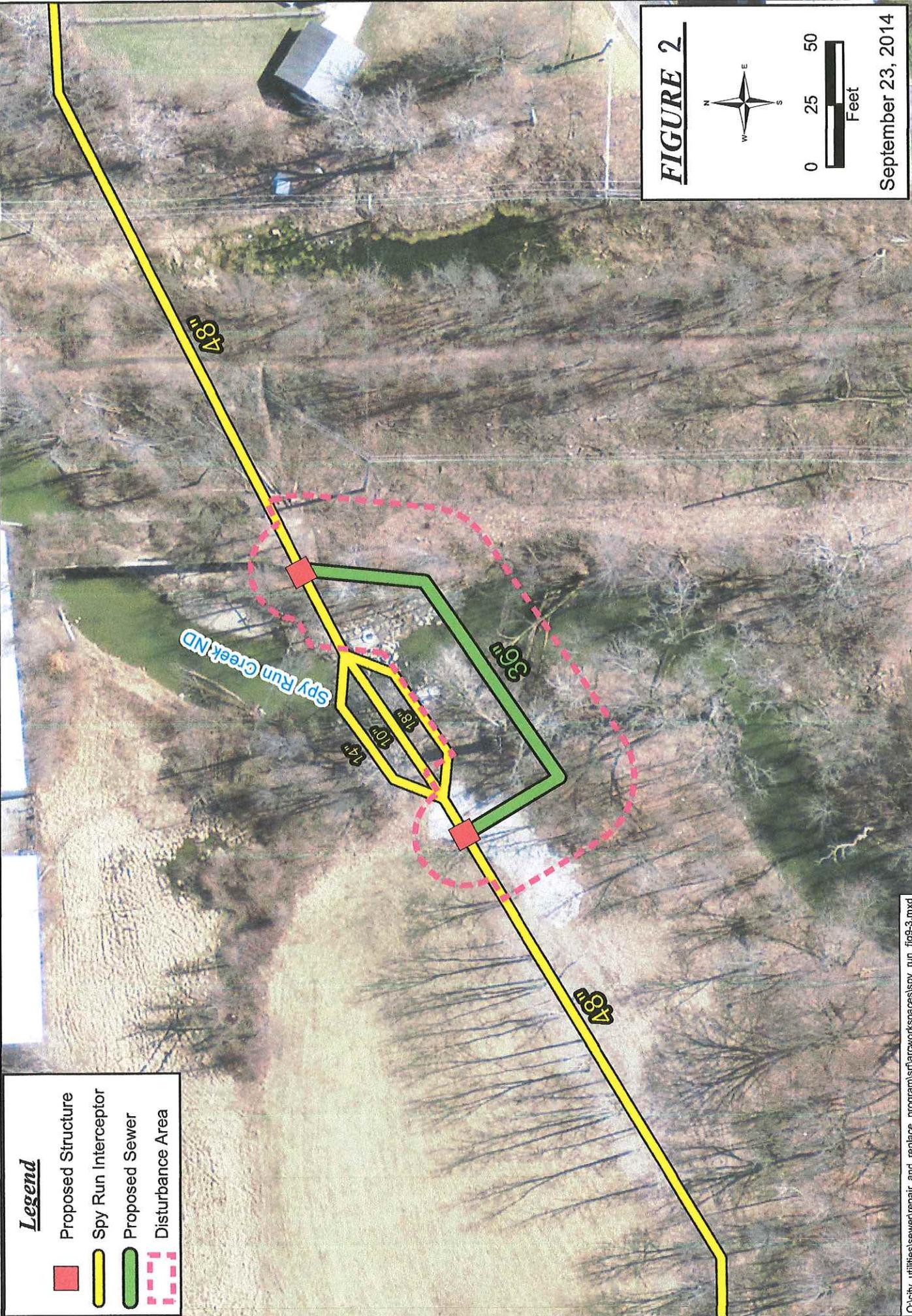
- 36" Siphon Barrel
- Spy Run Interceptor

**FIGURE 1**

0 200 400  
Feet

August 1, 2014

# SPY RUN INTERCEPTOR RELIEF



**Legend**

- Proposed Structure
- Spy Run Interceptor
- Proposed Sewer
- Disturbance Area

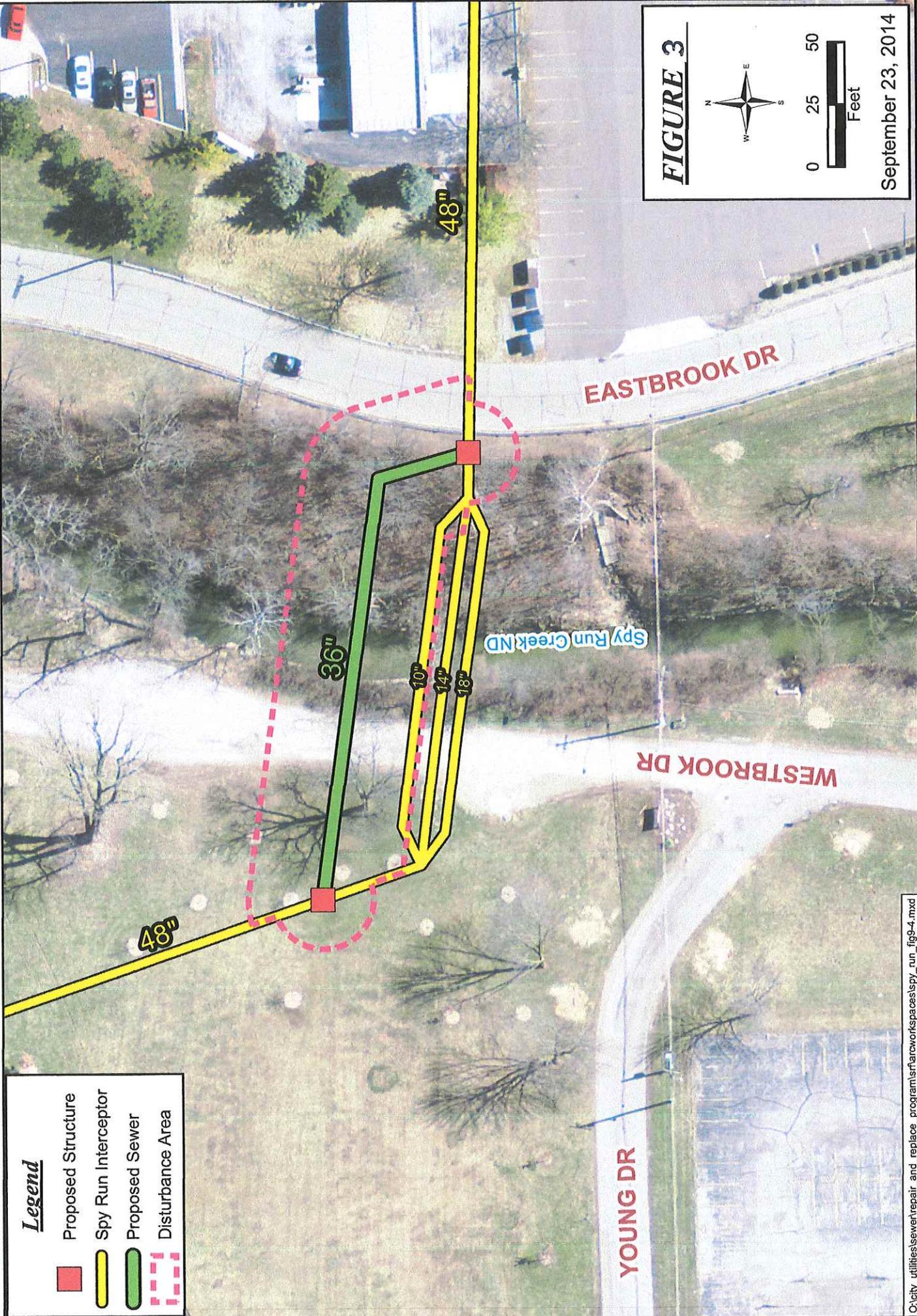
**FIGURE 2**

0 25 50  
Feet

September 23, 2014



# SPY RUN INTERCEPTOR RELIEF



**Legend**

- Proposed Structure
- Spy Run Interceptor
- Proposed Sewer
- Disturbance Area

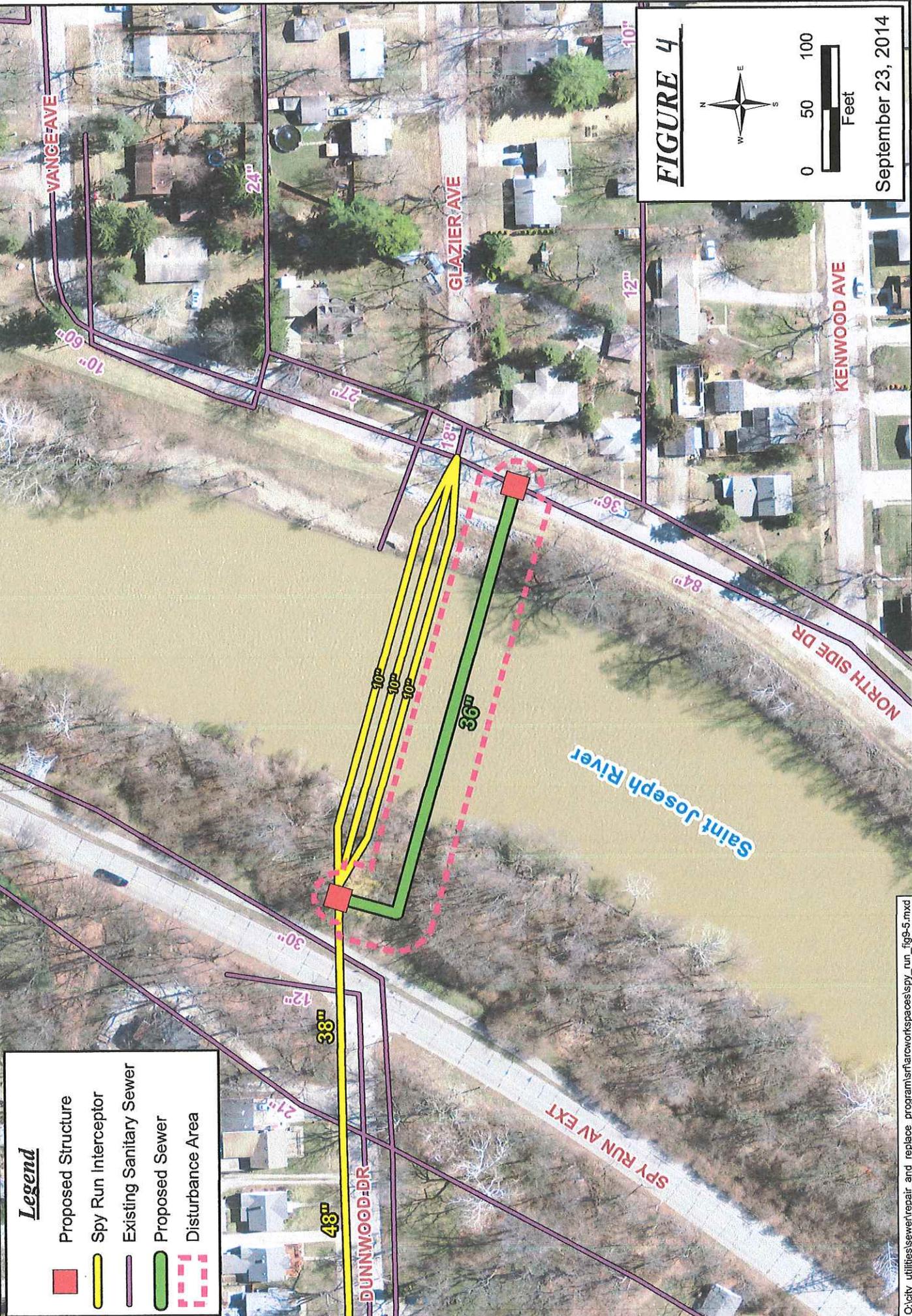
**FIGURE 3**

0 25 50  
Feet

September 23, 2014



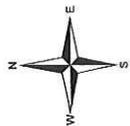
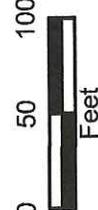
# SPY RUN INTERCEPTOR RELIEF



**Legend**

-  Proposed Structure
-  Spy Run Interceptor
-  Existing Sanitary Sewer
-  Proposed Sewer
-  Disturbance Area

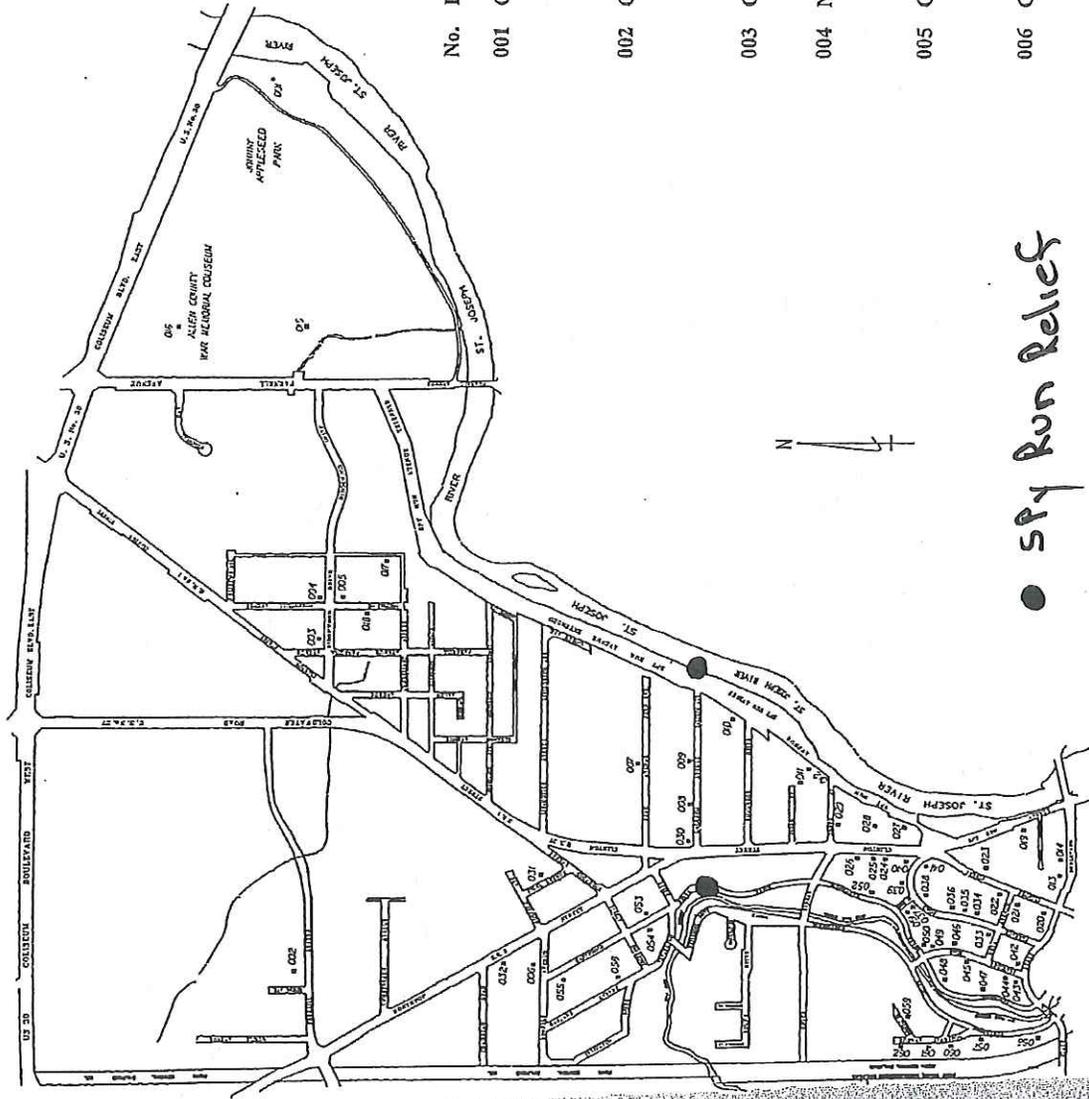
**FIGURE 4**

0 50 100  
Feet

September 23, 2014

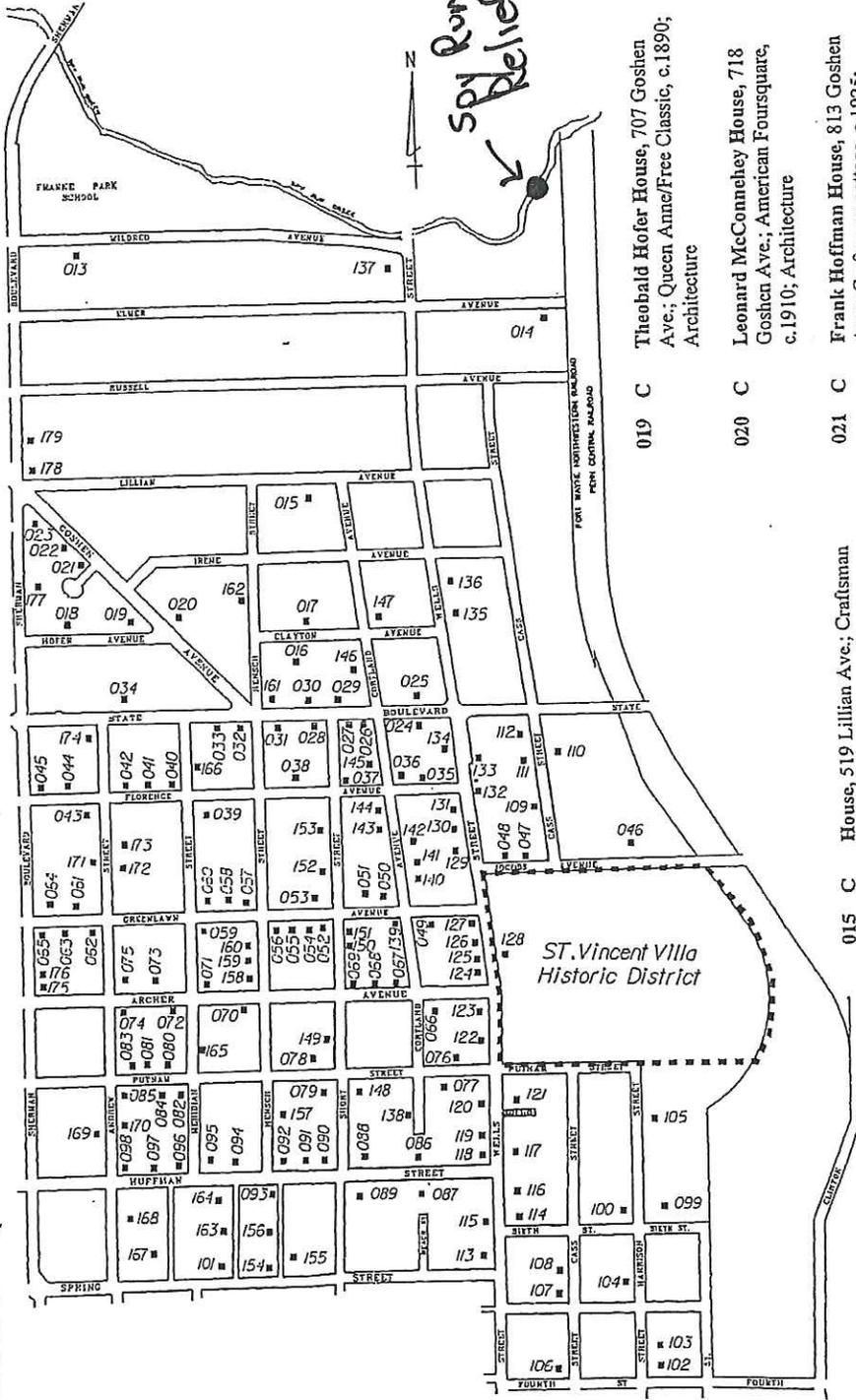
# Sector 09 (003-214/215-09001/09062)



No.	Rtg.	Description
001	C	Vietnam War Memorial, 3900 Harry W. Baals Dr.; Military Tank, c.1955; War Memorial, 1968; Military, Social history (214)
002	C	House, 205 Fernhill Ave.; Vernacular Craftsman/Tudor Revival, c.1930; Architecture, Vernacular/Construction (215)
003	C	House, 611 Ridgewood Dr.; Craftsman Bungalow, c.1930; Architecture (215)
004	N	Wayne Schlosser House, 705 Ridgewood Dr.; American Foursquare/Craftsman, c.1927; Architecture (215)
005	C	Carl Bassett House, 706 Ridgewood Dr.; Craftsman Bungalow, c.1927; Architecture (215)
006	C	House, 215 Norfolk Ave.; Gabled-T7 Craftsman, c.1890/c.1930; Architecture, Vernacular/Construction (215)

Figure 5: from the Allen County Interim Report Historic Sites and Structures Inventory

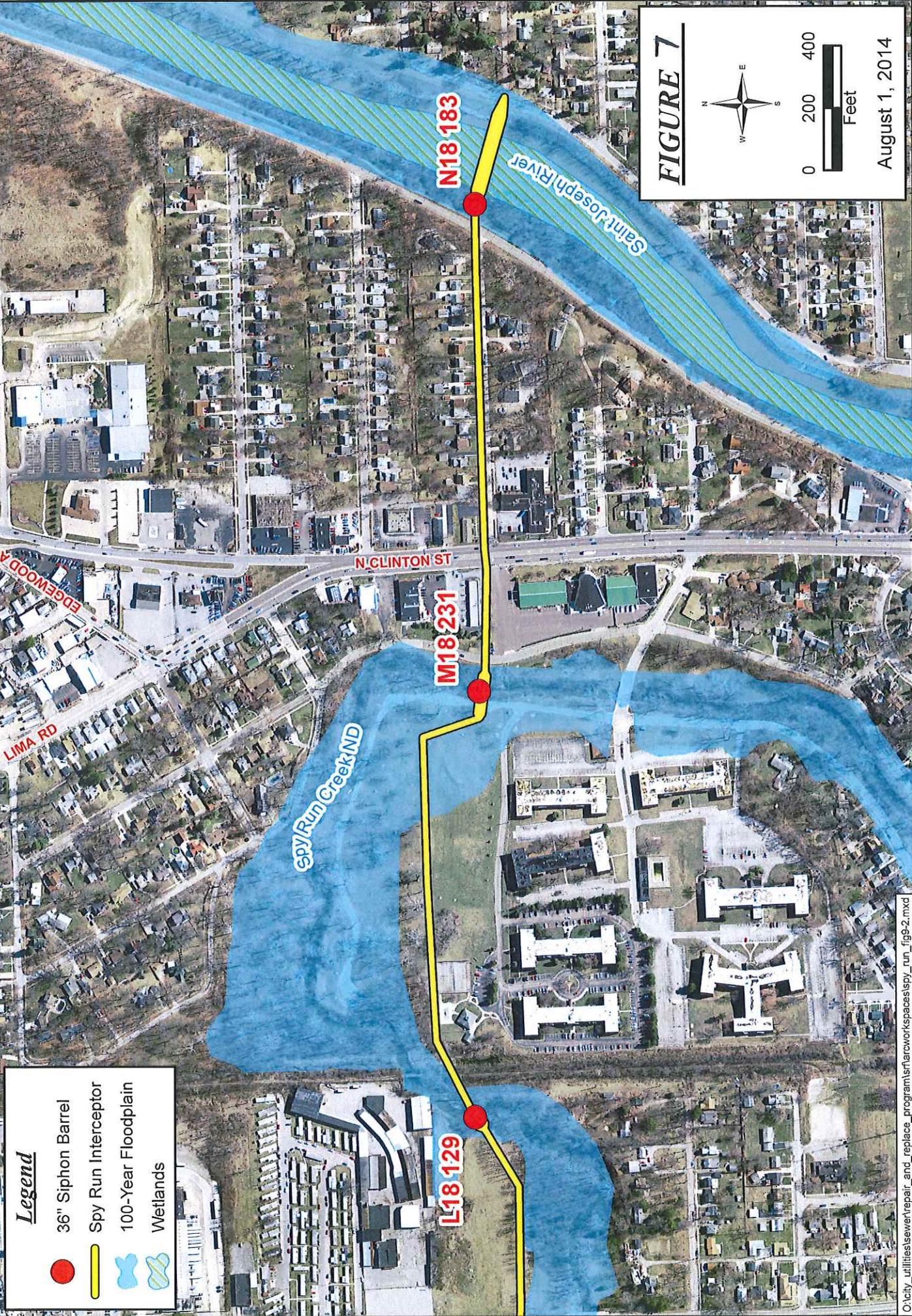
# Sector 15 (003-215-15013/15179)



No.	Rtg.	Description
013	C	013 C Theobald Hofer House, 707 Goshen Ave.; Queen Anne/Free Classic, c.1890; Architecture
014	C	014 C Leonard McConnehey House, 718 Goshen Ave.; American Foursquare, c.1910; Architecture
015	C	015 C Frank Hoffman House, 813 Goshen Ave.; Craftsman cottage, c.1925; Architecture
016	C	016 C House, 823 Goshen Ave.; Craftsman cottage, c.1928; Architecture
017	C	017 C Lincoln Highway Service Station (Indian Oil Filling Station), 843 Goshen Ave.; Tudor Revival, c.1927; Architecture, Commerce, Transportation
018	C	018 C House, 816 Hofer Ave.; Colonial Rev./Cape Cod, c.1940; Architecture
019	C	019 C House, 519 Lillian Ave.; Craftsman Bungalow, c.1928; Architecture
020	C	020 C House, 523 Clayton Ave.; Craftsman Bungalow, c.1927; Architecture
021	C	021 C Arthur Bottoms House, 534 Clayton Ave.; Craftsman Bungalow, c.1920; Architecture
022	C	022 C House, 816 Hofer Ave.; Colonial Rev./Cape Cod, c.1940; Architecture
023	C	023 C House, 816 Hofer Ave.; Colonial Rev./Cape Cod, c.1940; Architecture

Figure 6: from the Allen County Interim Report Historic Sites and Structures Inventory

# SPY RUN INTERCEPTOR RELIEF



**Legend**

- 36" Siphon Barrel
- Spy Run Interceptor
- 100-Year Floodplain
- Wetlands

**FIGURE 7**

0 200 400  
Feet

August 1, 2014