



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

AND-TRO WATER AUTHORITY

Water Distribution and SCADA Improvements

STATE REVOLVING FUND PROJECT # DW 09 38 62 02

DATE: November 19, 2010

TARGET PROJECT APPROVAL DATE: December 20, 2010

I. INTRODUCTION

The above entity has applied to the Drinking Water State Revolving Fund (DWSRF) Loan Program for a loan to finance all or part of the drinking 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 at <http://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The DWSRF 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
100 N. Senate Ave. IGCN 1275
Indianapolis, IN 46204
317-232-8623; mhensche at ifa.in.gov

IV. PROJECT DESCRIPTION

Water Main Extension Projects

Liberty Road Extension: This project will install approximately 9,100 feet of 4-inch diameter water main. The route begins on St. Joe Cemetery Road approximately 860 feet west of Arlington Road, then north on Arlington Road and then west on Liberty Road.

Avery Ridge Road Extension: This project will install approximately 20,820 feet of 4-inch diameter water main along Avery Road from south of Archer Road to Jones Mill Road, then south on Jones Bridge Road to a point just north of the Anderson River.

French Ridge Road Extension: This project will install approximately 40,000 feet of 4-inch diameter water main beginning at a point approximately 2800 feet east of SR 145 west along French Ridge Road to the intersection of French Ridge Road, Lakewood Road and Limestone Road. At this intersection, the water main proceeds south along Lakewood Road, as well as approximately 3000 feet north along Limestone Road; the line also continues on French Ridge Road to a point just east of Old State Road 37.

The authority will install telemetry and monitoring devices at various water towers, booster stations and other monitoring points in existing structures within the water authority's service area. See Figure 7.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary:

French Ridge Road Extension

	<u>Estimated Cost</u>
4-inch PVC water main with tracer wire	\$ 194,680
4-inch Ductile Iron water main with tracer wire	72,960
10-inch PVC RJ Casing with 4-inch PVC water main with tracer wire, directional bore under county roads	62,850
4-inch PVC water main with tracer wire, directional bore under creeks	18,200
4-inch gate valves with poly encasement	10,800
Dry tap new 4-inch main to existing main	1,500
Flush hydrant with gate valve	7,000
4-inch blow off valves	14,000
Leak detection device	1,500
5/8-inch meter and pits	27,300
3/4 inch service line	26,400
Line location markers	2,310
Surface restoration	9,475
Rock Excavation	<u>66,500</u>
French Ridge Road Extension Construction Sub-Total	\$ 515,475
Contingency	<u>51,525</u>
French Ridge Road Extension Construction Total	\$ 567,000

Liberty Road Extension

4-inch PVC water main with tracer wire	\$ 54,805
10-inch PVC RJ casing with 4-inch PVC water main with tracer wire by directional bore under county roads	7,500
4-inch gate valves with poly encasement	1,800
Dry tap new water main to existing main	1,500
Flush hydrant with gate valve	1,750
4-inch blow off valves	6,000
5/8-inch meter and pits	5,850
3/4-inch service line	5,670
Line location markers	550
Surface restoration	<u>1,200</u>
Liberty Road Extension Construction Sub-Total	\$ 86,625
Contingency	<u>8,375</u>
Liberty Road Extension Construction Total	\$ 95,000

Avery Ridge Road Extension

4-inch PVC water main with tracer wire	\$ 84,800
4-inch Ductile Iron water main with tracer wire	76,960
10-inch PVC RJ casing with 4-inch water main with tracer wire, directional bore under county roads	26,550
4-inc gate valves with poly encasement	3,600
Dry tap new water main into existing main	1,500
Flush hydrants with gate valves	3,500
4-inch blow off valves	6,000
5/8-inch meters and pits	11,050
3/4-inch service lines	10,710
Line location markers	1,210
Surface restoration	1,200
Rock excavation	<u>44,800</u>
Avery Ridge Road Construction Sub-Total	\$ 271,880
Contingency	<u>27,120</u>
Avery Ridge Road Construction Total	\$ 299,000

SCADA System Improvements

SCADA System Improvements	\$ 200,000
Contingency	<u>20,000</u>
SCADA System Improvements Construction Total	\$ 220,000

Non-Construction Costs (All Projects)

Design and Construction Engineering	\$ 231,000
Legal Fees	24,000
Easements	2,000
Archeological	10,000

Crop damage	2,000
Administration Fees	<u>10,000</u>
Non- Construction Total	\$ 319,000

Water System Improvements Total Estimated Cost \$ 1,500,000

- B. The And-Tro Water Authority plans to finance the project through a 20-year SRF loan at an interest rate to be determined at the loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

Water Main Extensions

No Action: Under this alternative, the poor water supply issues would continue. This alternative was rejected. The selected alternative is to install new water mains.

SCADA System Improvements

No Action: This alternative would not resolve the lack of operational control and monitoring of the water system. This alternative was rejected. The selected alternative is to install a new SCADA system.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land: The water main extension projects will be installed using open cut construction techniques in 1) existing utility easements with the total disturbed width of 15 feet and /or 2) beneath roadways in public rights-of-way. There will be some directional drilling conducted under some county roads and at stream crossings. The SCADA system improvements will be performed in existing structures.

Structural Resources: (Figures 2 and 3). Neither of the proposed water main extension projects or SCADA system improvements will affect historic sites or districts, including sites on or eligible for listing on the National Register of Historic Places, according to the Interim Reports and the historic sites information on the website of the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology. The SRF's finding pursuant to Section 106 of the National Historic Preservation Act is: "*no historic properties affected.*"

Surface Waters: The U.S. Fish and Wildlife Service has identified four stream crossings along the French Road route and a crossing of an intermittent stream in the Liberty Road route. The Authority will implement those crossings by directional drilling, if possible. The project will not adversely affect waters of high quality listed in 327 IAC 2-1-2(3), exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-(2), Salmonid Streams listed in (327 IAC 2-1.5-5(a)(3), or waters on the Outstanding Rivers list (Natural Resources Commission Non-rule Policy Document).

Wetlands: Two of the streams to be crossed are riverine wetlands. If the lines are directionally drilled, impacts to those flowing wetlands should be minimal.

Floodplain: The proposed projects will not adversely affect a 100-year floodplain.

Groundwater: Groundwater will not be adversely affected by construction of these projects. The project will not affect a sole source aquifer.

Plants and Animals: The construction and operation of the project will not negatively 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 project will not cause a conversion of 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 projects will neither create nor destroy open space or recreational opportunities.

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

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

B. Indirect Impacts

The water authority's Preliminary Engineering Report (PER) states: *The Board of Directors will ensure that future development, as well as future collection system or treatment works projects connecting to SRF funded facilities, will not adversely impact archaeological/historical/structural/resources, wetlands, or other sensitive environmental resources. The Board will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, Indiana Department of Natural Resources (IDNR), Indiana Department of Environmental Management (IDEM), and other environmental review authorities.*

C. Comments by Environmental Review Authorities

The IDNR Div. Historic Preservation and Archaeology, in correspondence dated November 8, 2010, stated: *In regard to archaeological resources, the portion of the site 12Pe1498 that falls within the proposed project area is not eligible for the National Register of Historic Places. However, there is insufficient information to determine if the remainder of the site (which lies outside the project area) is eligible for the National Register of Historic Places. Therefore, if project plans would change, and other portions of the site would be impacted, then archaeological investigations would be needed in those areas.*

Based on our analysis, it has been determined that no historic properties will be altered, demolished, or removed by the proposed project. However, please note that this analysis does not apply to the portion of the proposed project area which we understand will take

place on Hoosier National Forest property. We recommend coordination with the staff of the Hoosier National Forest regarding this proposed project on a portion of their property.

In regard to the St. Joseph Cemetery, please be aware of the cemetery development plan requirements in Indiana Code 14-21-1-26.5 (<http://www.in.gov/legislative/ic/code/title14/ar21/ch1.html>) regarding ground disturbance within 100 feet of a cemetery. In addition please be aware of the restrictions regarding utilities and cemeteries in Indiana Code 14-23-14-44 (<http://www.in.gov/legislative/ic/code/title23/ar14/ch44.html>).

If any archaeological artifacts, features, or human remains are uncovered during construction, 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 U.S. Fish and Wildlife Service, in correspondence dated November 2, 2010, stated: *The Avery Ridge Road extension and the Liberty Road extensions generally follow ridge tops, although the Liberty Road route crosses a small intermittent stream at the route's eastern end. We have no site-specific comments for those two project components.*

The French Ridge Road extension is by far the longest of the three. It follows a combination of floodplain and ridge tops and has some specific environmental issues, as follows:

- 1. It includes 4 stream crossings: Little Sulphur Creek (perennial stream) and an unnamed tributary of Sulphur Fork Creek near its west end, a small headwater stream on the Lakewood Road extension near the east end and a very small headwater stream at the beginning of the non-road southern extension at the east end. In addition to the general stream protection measures below we recommend directional drilling of the Little Sulphur Creek crossing.*
- 2. Approximately the eastern 2/3 of the French Ridge Road route passes through the Hoosier National Forest purchase area, and the route passes through or adjacent to federal land in two areas totaling approximately a mile. You should coordinate with the US Forest Service regarding potential impingements and impacts on national forest land.*

General Mitigation Measures

- 1. Locate the water line on the least forested side of roads to minimize forest loss.*
- 2. Maintain a vegetated buffer between construction and streams, except at stream crossings. The buffer should be at least 25 feet wide, but preferably up to 100 feet wide if possible.*
- 3. Directional drilling is preferable for crossings of streams, riparian forest and wetlands. For stream crossings which cannot implement directional drilling, excavate the crossing in the dry or during low water periods.*

4. Minimize erosion and cover or contain soil piles to prevent runoff to streams during construction. Stabilize disturbed stream banks as quickly as possible after construction is completed. Revegetate with native plant species in areas that are currently dominated by natural vegetation.

Endangered Species

The proposed project is within the range of the federally endangered Indiana bat (Myotis sodalis). We concur that the proposed project is not likely to adversely affect this listed species. This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. If, however, new information on endangered species at the site becomes available or if project plans are changed significantly, please contact our office for further consultation.

The And-Tro Water Authority has been satisfactorily coordinating with the U.S. Forest Service in an effort to minimize negative environmental impacts in the portions of the project which occur in the Forest Service's jurisdiction.

The Natural Resources Conservation Service, in correspondence dated October 12, 2010, stated that the proposed project *will not cause a conversion of prime farmland.*

The IDNR Environmental Unit has not yet provided comments in response to the SRF's October 14 request.

VIII. MITIGATION MEASURES

The Authority's Preliminary Engineering Report (PER) states:

Mitigation measures cited in comment letters from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.

All mitigation measures to lessen and compensate 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.

The area around all construction will be restored to its original condition after construction is complete to minimize the direct impacts. All disturbed areas of the project located outside of the pavement will be refurbished and seeded to establish cover and prevent erosion. Siltation devices or temporary seeding will be utilized, where applicable. The contractor in charge of construction must abide by local and state requirements to minimize soil erosion. This will include complying with IDEM's Rule 5 for storm water runoff.

Stream crossings will be directionally bored for the installation of the new water mains to eliminate direct impacts to streams and avoid wetlands where possible.

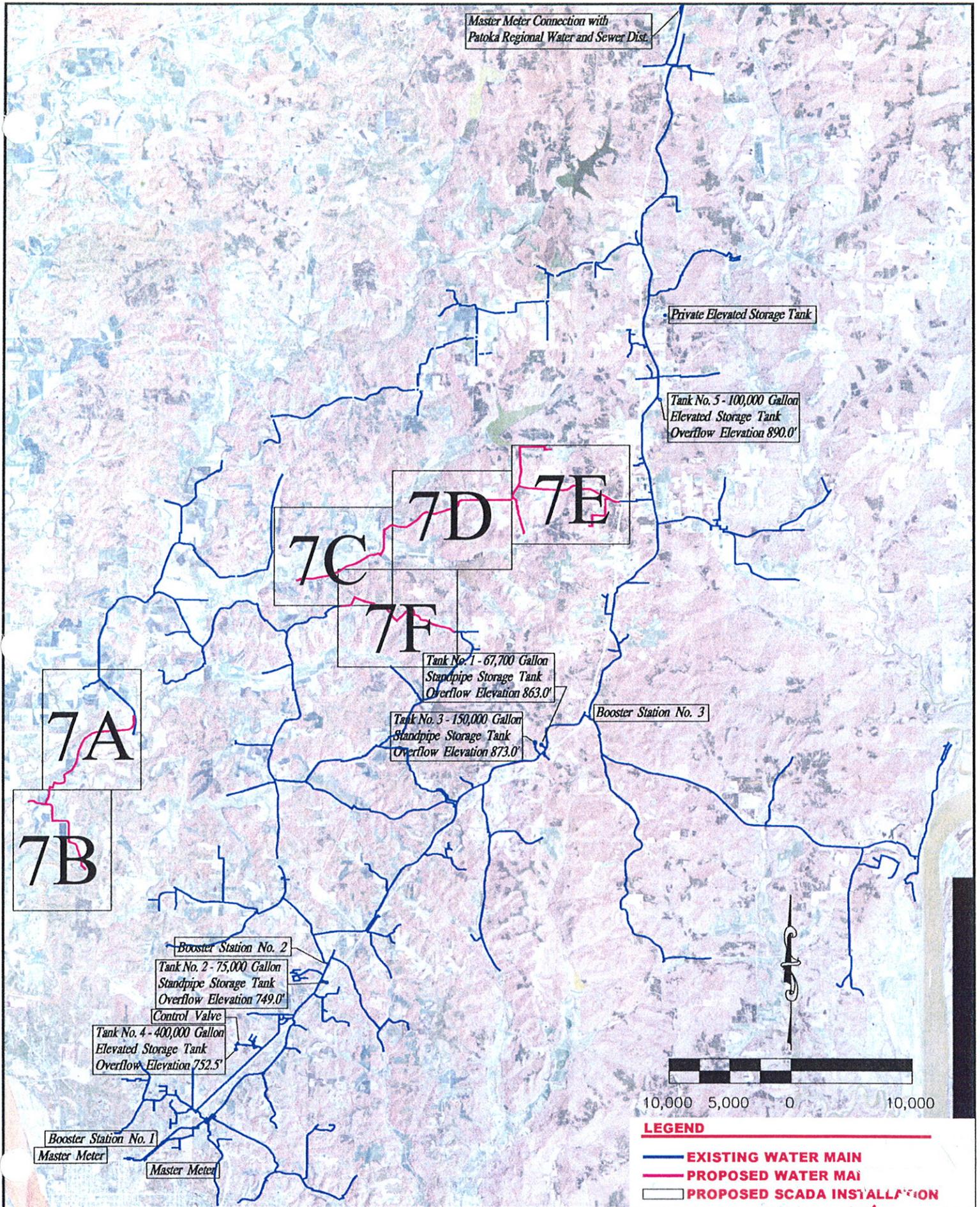
No fill material will be placed in flood areas that would impact the floodplain and the original grade will be restored when work is completed.

Upon completion of construction, the contractor shall remove all equipment, temporary structures, waste materials, and rubbish from the vicinity of which the work was being done. The premises should be left in a neat and presentable condition.

To minimize the affects on air quality, construction activities shall be limited to normal working periods and proper clean up practices shall be implemented. Surface wetting practices will be utilized to control dust emissions.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on March 9, 2009 at 5:30 pm at the And-Tro Water Authority offices in Tell City to discuss the project's preliminary engineering report. No written comments were submitted in the five-day period following the public hearing. Several residents in the proposed project area have provided letters of support.



Master Meter Connection with Patoka Regional Water and Sewer Dist.

Private Elevated Storage Tank

Tank No. 5 - 100,000 Gallon Elevated Storage Tank
Overflow Elevation 890.0'

7C 7D 7E

7F

Tank No. 1 - 67,700 Gallon Standpipe Storage Tank
Overflow Elevation 863.0'

Tank No. 3 - 150,000 Gallon Standpipe Storage Tank
Overflow Elevation 873.0'

Booster Station No. 3

7A

7B

Booster Station No. 2
Tank No. 2 - 75,000 Gallon Standpipe Storage Tank
Overflow Elevation 749.0'

Control Valve
Tank No. 4 - 400,000 Gallon Elevated Storage Tank
Overflow Elevation 752.5'

Booster Station No. 1

Master Meter

Master Meter

10,000 5,000 0 10,000

LEGEND

- EXISTING WATER MAIN
- PROPOSED WATER MAI
- PROPOSED SCADA INSTALLATION

Midwestern Engineers, Inc.
802 West Broadway Street
P.O. Box 295
Logansport, IN, 47553
Phone: 812-293-2800
Fax: 812-293-2801
Consultants - Civil - Mechanical - Electrical
Quality Engineering Services Since 1959

WATER IMPROVEMENTS AND-TRO WATER AUTHORITY
PERRY COUNTY, INDIANA

Figure 1
IMPROVEMENTS MAP

DATE: MARCH 2009 3/10
DESIGN: R.D.W.
DRAWN: D.R.K.
PROJECT: 200921-00
© 2009

Anderson Township (20001-078)

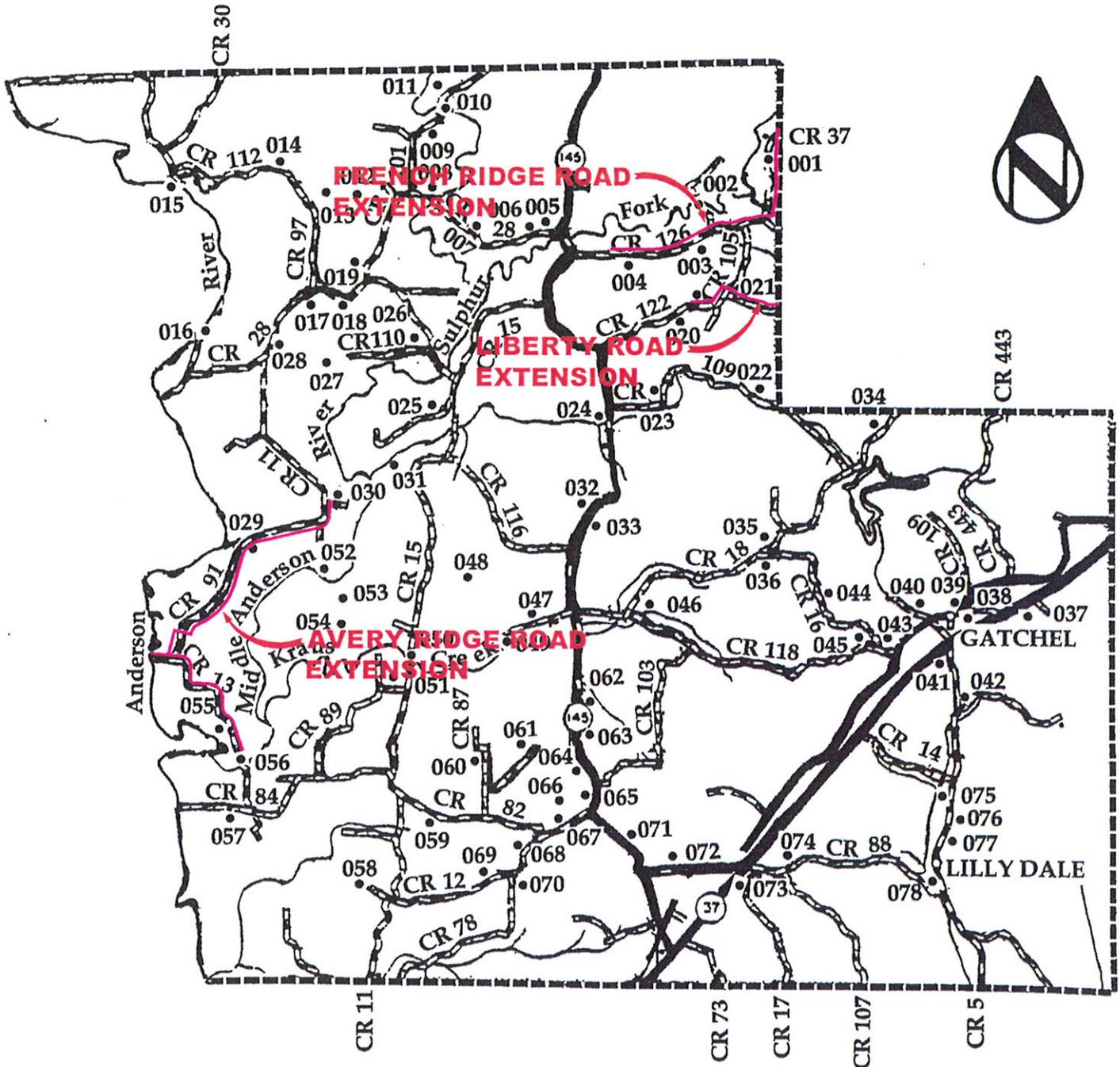


Figure 2: from Perry County Interim Report
Historic Sites and Structures Inventory

Midwestern Engineers, Inc.
802 West Broadway Street
P.O. Box 295
Loogootee, IN, 47553
Phone: 812-295-2800
Fax: 812-295-2801
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**WATER IMPROVEMENTS
AND-TRO WATER AUTHORITY**
PERRY COUNTY, INDIANA

INTERIM REPORT

9/1/0

DATE	MARCH 2009
DESIGN	R.D.W.
DRAWN	D.R.K.
PROJECT	200921-00

Leopold Township (10001-047)

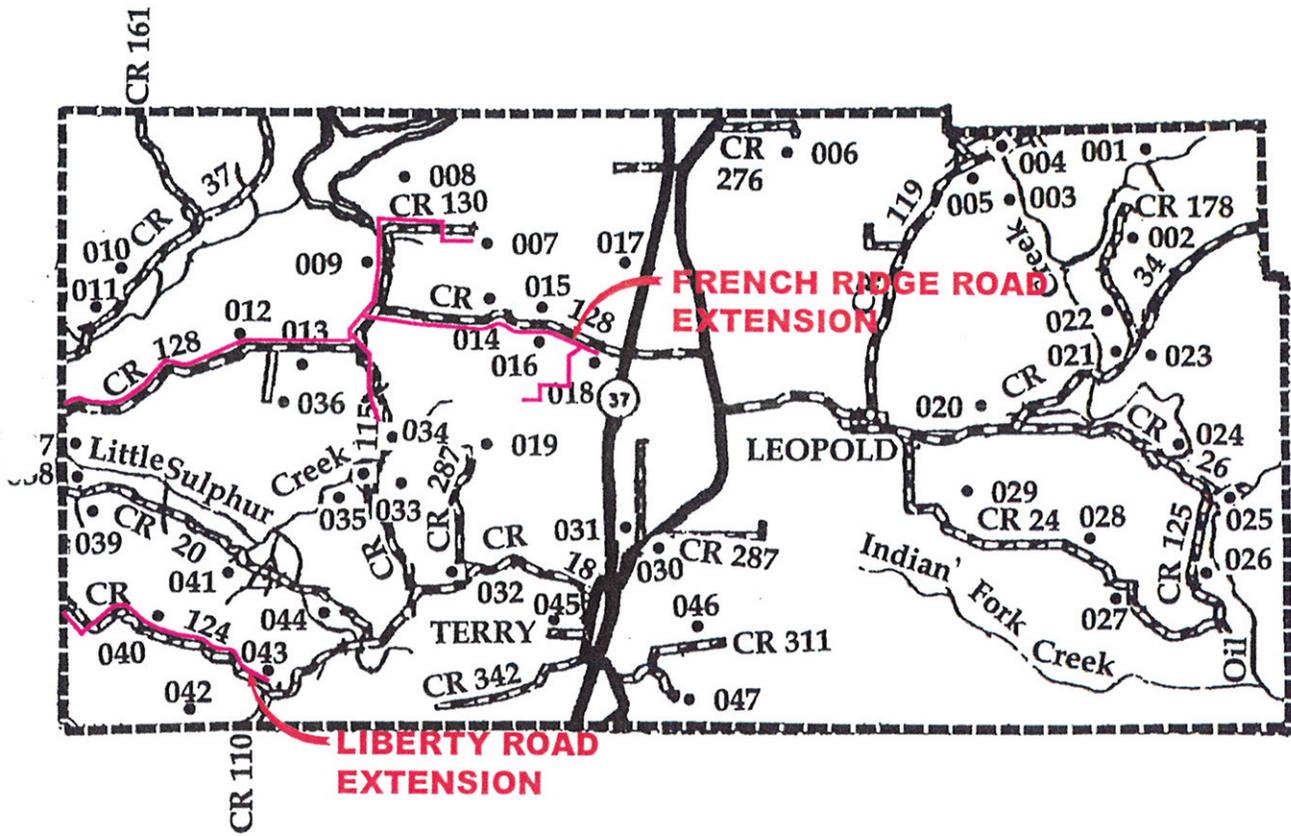


Figure 3: from Perry County Interim Report
Historic Sites & Structure Inventory

9/10