



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

AND-TRO WATER AUTHORITY

Preliminary Engineering Report Addendum #1:

Water Main Installation on Austin, Alcoa and Aloe Roads

STATE REVOLVING FUND PROJECT # DW 09 38 62 02

DATE: January 3, 2012

TARGET PROJECT APPROVAL DATE: February 2, 2012

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

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **And-Tro Water Authority
New Water Lines and Hydrants
Preliminary Engineering Report Addendum #1
14100 Old State Route 37
P.O. Box 603
Tell City, IN 47586**

SRF Project Number DW 09 38 62 02

Authorized Representative: Pat Solbrig, General Manager

II. PROJECT LOCATION AND BACKGROUND

On December 20, 2010, the Indiana Finance Authority's State Revolving Fund (SRF) Loan Program approved for funding an extensive distribution project for the And-Tro Water Authority, comprising approximately 60,000 feet of water main, hydrants, valves, meters, service connections and a system wide telemetry system. That system is largely installed, and And-Tro wishes to use the unspent loan balance to fund additional water main installation along three roads.

The proposed project is located in Perry County (Figure 1). The proposed project will install new water lines along Austin Road, Hartz Road and Aloe Road. The USGS topographic maps label Austin Road as St. Merks Road and Alcoa Road as Hartz Road.

The proposed water lines are in the Gatchel USGS 7.5' quadrangle, T5S, R3W, Section 33, and T6S, R3W, Section 4; and in the Fulda quadrangle, T5S, R3W, sections 32 and 33, and T6S, R3W, sections 4, 5, and 6. The project is in Anderson Township. See Figure 2.

Note that some of the graphics may show the proposed lines off-road, but they will be placed as close to the road as possible in private easements, if possible, or in county road easements, if necessary.

III. PROJECT NEED AND PURPOSE

The water main extension will bring potable drinking water to approximately 10 residences which are served by inadequate drinking water wells. Currently, those residents have to haul drinking water to cisterns because their wells have limited capacity and/or quality.

IV. PROJECT DESCRIPTION

This project will install approximately 14,500 feet of 4-inch diameter water main with valves, flush hydrants and meters along Austin, Alcoa and Aloe roads.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Cost Summary:

Construction Costs

<u>Item Description</u>	<u>Cost</u>
4-inch PVC water main with tracer wire	\$ 116,000
10-inch PVC RJ Casing with 4-inch PVC water main with tracer wire, directional bore	12,000
4-inch gate valves with poly encasement	2,800
Wet tap new 4-inch main to existing main	2,000
Flush hydrant with gate valve	8,800
5/8-inch meter and pits	7,000
3/4-inch inch service line	1,500
Surface restoration	780
Grade "B" Borrow	1,400
Construction Total	\$ 152,280

Non-Construction Costs

Design and Construction Engineering	\$ 17,000
Easements	568
Archeological	4,152
Non- Construction Total	\$ 21,720

Distribution System Improvements Total Cost \$ 174,000

- B. These costs represent actual bids from the existing construction contractor. The Authority plans to issue the existing contractor a change order to perform the additional work. The And-Tro Water Authority plans to use the balance of \$166,376 in SRF Loan DW 09 38 62 02 to finance the project, as well as hook-on fees.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

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, etc., along Austin, Alcoa and Aloe roads.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land: The water main extension project will be installed using open cut construction techniques with a total disturbed width of 15 feet (1) in existing utility easements and /or (2) beneath roadways in public rights-of-way. The Authority will use directional drilling under some county roads and at the intermittent stream crossing on Alcoa Road.

Structural Resources: (Figure 3). The proposed water main extension project will not 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 IDNR 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 (Figure 4): The proposed line will cross an intermittent stream at the bend on Alcoa (Hartz) Road; the line will be installed via directional drilling, if possible; if bedrock precludes directional drilling, the line will be open-cut-installed. 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: (Figure 5). Wetlands will not be impacted by the construction or operation of the proposed project.

Floodplain (Figure 6): The proposed project will not adversely affect or be affected by a 100-year floodplain.

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

Plants and Animals (Figure 7): Trees along the edge of a road might be affected by the water line installation.

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 project will neither create nor destroy open space or recreational opportunities.

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

B. Indirect Impacts

The And-Tro 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 Natural Resources Conservation Service, in correspondence dated December 1, 2011, stated that the project *will not cause a conversion of prime farmland.*

The U.S. Fish and Wildlife Service, in an email dated December 12, 2011, stated: *After reviewing the project expansion described in your letter I concluded that my previous comments dated November 2, 2010 are still adequate. We have no additional comments. The Service's November 2, 2010 comments included:*

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 IDNR Division of Historic Preservation and Archaeology, in correspondence dated December 27, 2011, stated: *Based on our analysis, it has been determined that no historic properties will be altered, demolished, or removed by the proposed project. If any archaeological artifacts, features, or human remains are uncovered during construction, state law (Indiana code 14-21-1-27 & 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days.*

The IDNR Environmental Unit, in emailed correspondence dated December 21, 2011, stated:

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

Regulatory Assessment: *This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1, unless it qualifies for a general license under Administrative Rule 312 LAC 10-5 that applies to utility line crossings (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the general license criteria.*

Natural Heritage Database: *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.*

Fish & Wildlife Comments: We recommend minimizing the removal of trees and brush by placing the line and the disturbed area/construction limits outside any areas of forested or woody vegetation. Where the private easements adjacent to a previously disturbed/cleared road right-of-way are wooded, the line should be placed as close to the previously cleared road right-of-way as possible to minimize forest fragmentation impacts.

Impacts to non-wetland forest under 1 acre should be mitigated at a 1:1 ratio, while impacts to non-wetland forest over 1 acre should be mitigated at a minimum 2:1 ratio. Impacts to wetlands should be mitigated at the appropriate ratio as well (see <http://www.in.gov/legislative/register/20061213-1 R-312060562NRA.xml.pdf>).

We recommend that all creek or stream crossings be done using a trenchless method. If the open-trench method is necessary and the only feasible option at any of the planned stream crossings due to the site conditions, then the following measures should be implemented:

1) Any open-trench stream crossing should be timed to coincide with the low-water time of year (typically mid-to late-summer).

2) Restore disturbed stream banks using bioengineering bank stabilization methods. The following is a link to a USDA I NRCS document that outlines many different bioengineering techniques for stream bank stabilization: <http://directives.sc.egov.usda.gov/17553.wba> (Choose Handbooks; Title 210 Engineering; National Engineering Handbook; Part 650 Engineering Field Handbook. Choose Chapter 16 from next window). Revegetate disturbed banks with native trees, shrubs and herbaceous plants. Stream bank slopes after project completion should be restored to stable-slope steepness (not steeper than 2:1).

3) The cleared width through any forested area should be the minimum needed to install the line and no more than 20 feet wide through the forested area to allow the canopy to close over the line.

4) Use graded stone or riprap to protect the section of trench below the normal water level from scour or erosion (any stone or riprap fill in the streambed should remain at the existing streambed level to avoid creating a fish passage obstruction).

Additional measures that should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources, include the following:

1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.

2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.

3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.

4. Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.

5. *Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction.*
6. *Post "Do Not Mow or Spray" signs along the right-of-way.*
7. *Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.*
8. *Seed and protect disturbed stream banks and slopes that are 3:1 or steeper with bio- or photo-degradable heavy-duty erosion control blankets (follow manufacturer's recommendation for installation); seed and apply mulch on all other disturbed areas.*

VIII. MITIGATION MEASURES

The 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 project will be implemented to minimize impact to non-endangered species and their habitat.

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.

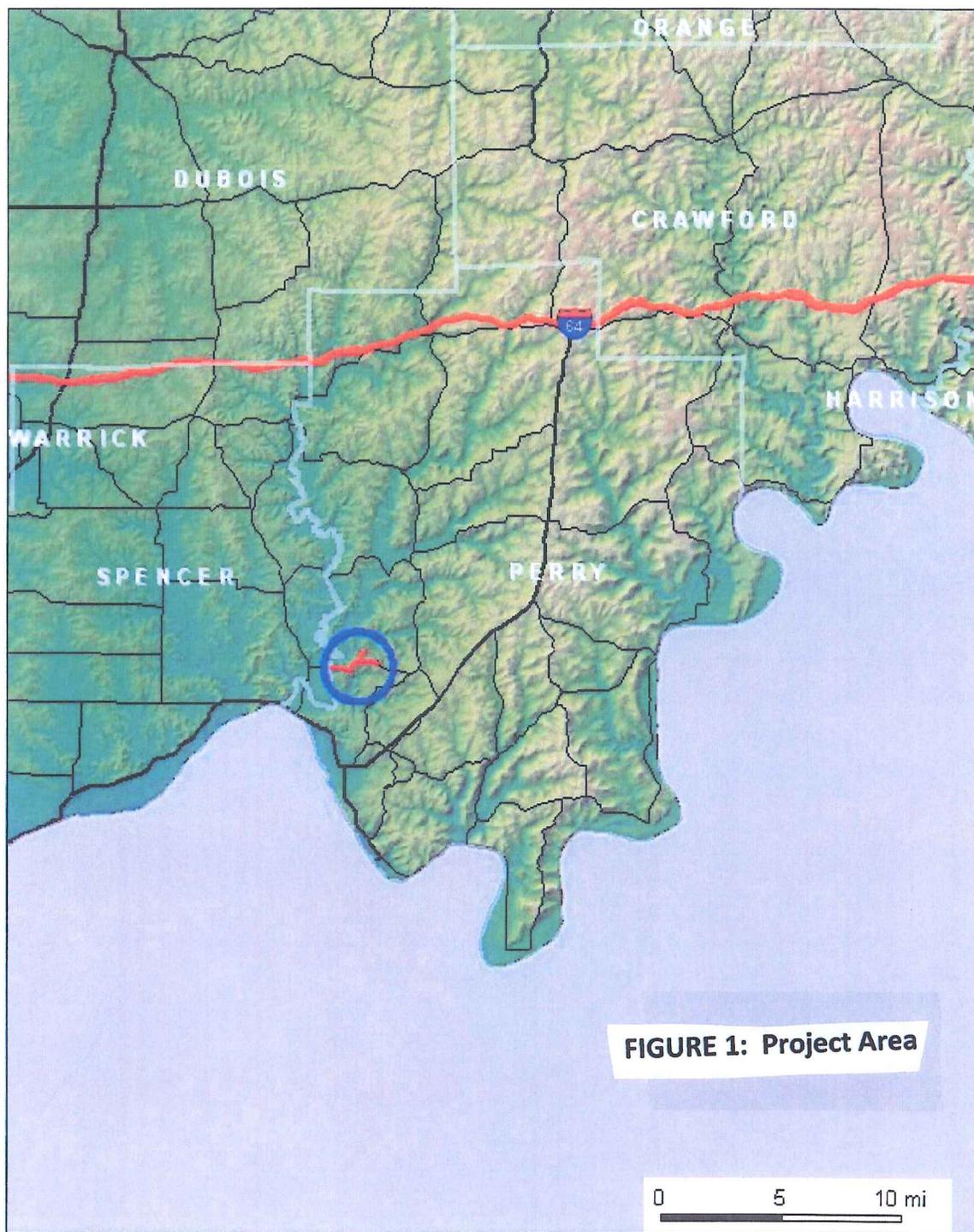
No fill material will be placed in flood areas that would impact the floodplain and the original grade will be restored when work is completed.

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 effects 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

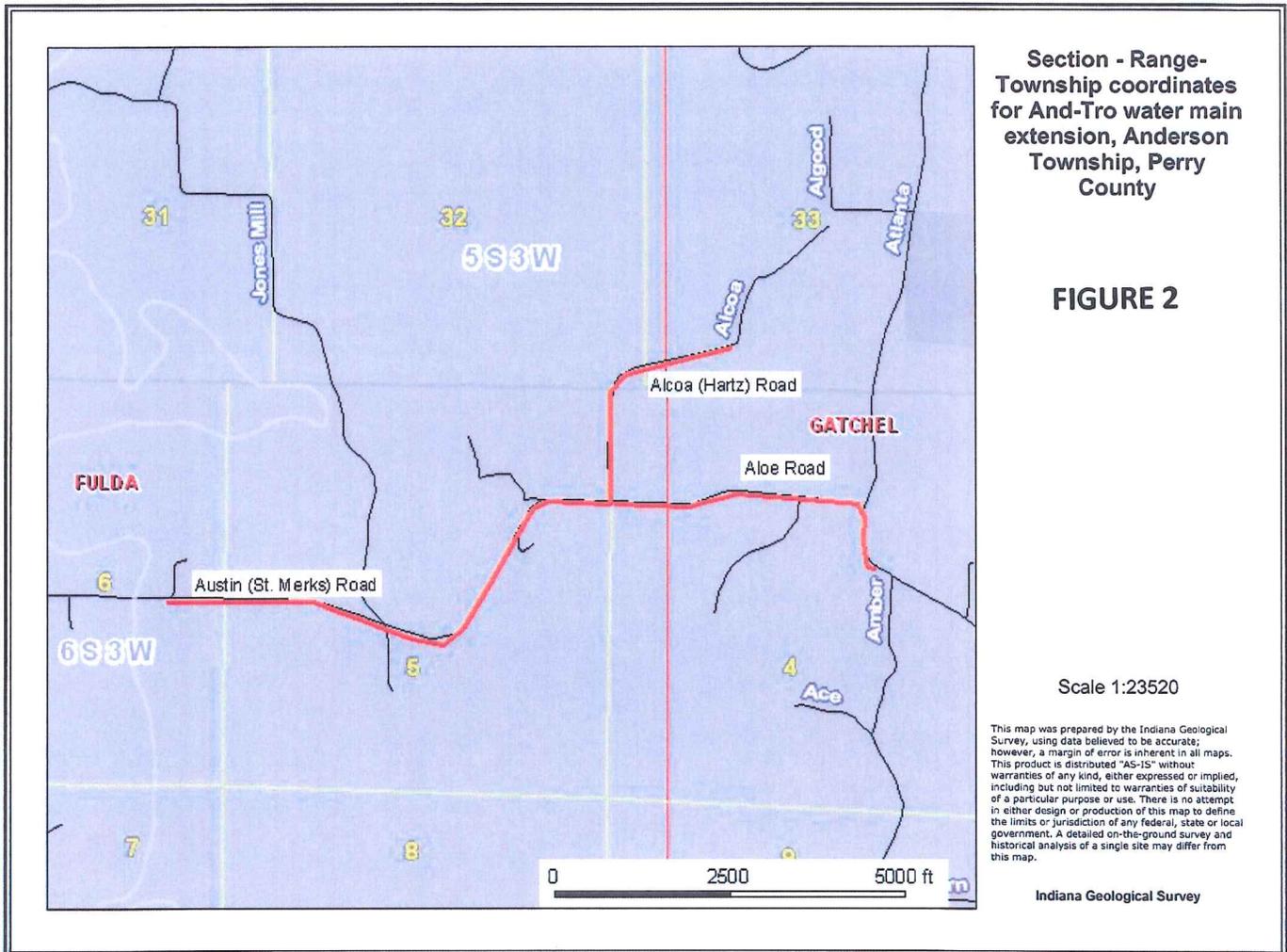
A properly noticed public hearing was held on September 12, 2011 at 6:45 pm at the And-Tro Water Authority offices to discuss the water main extension described in PER Addendum #1. Written letters from potential customers expressing very strong support for the proposed lines were submitted at the meeting.



This map was prepared by the Indiana Geological Survey, using data believed to be accurate; however, a margin of error is inherent in all maps. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability of a particular purpose or use. There is no attempt in either design or production of this map to define the limits or jurisdiction of any federal, state or local government. A detailed on-the-ground survey and historical analysis of a single site may differ from this map.

Scale 1:410517

Indiana Geological Survey



Anderson Township (20001-078)

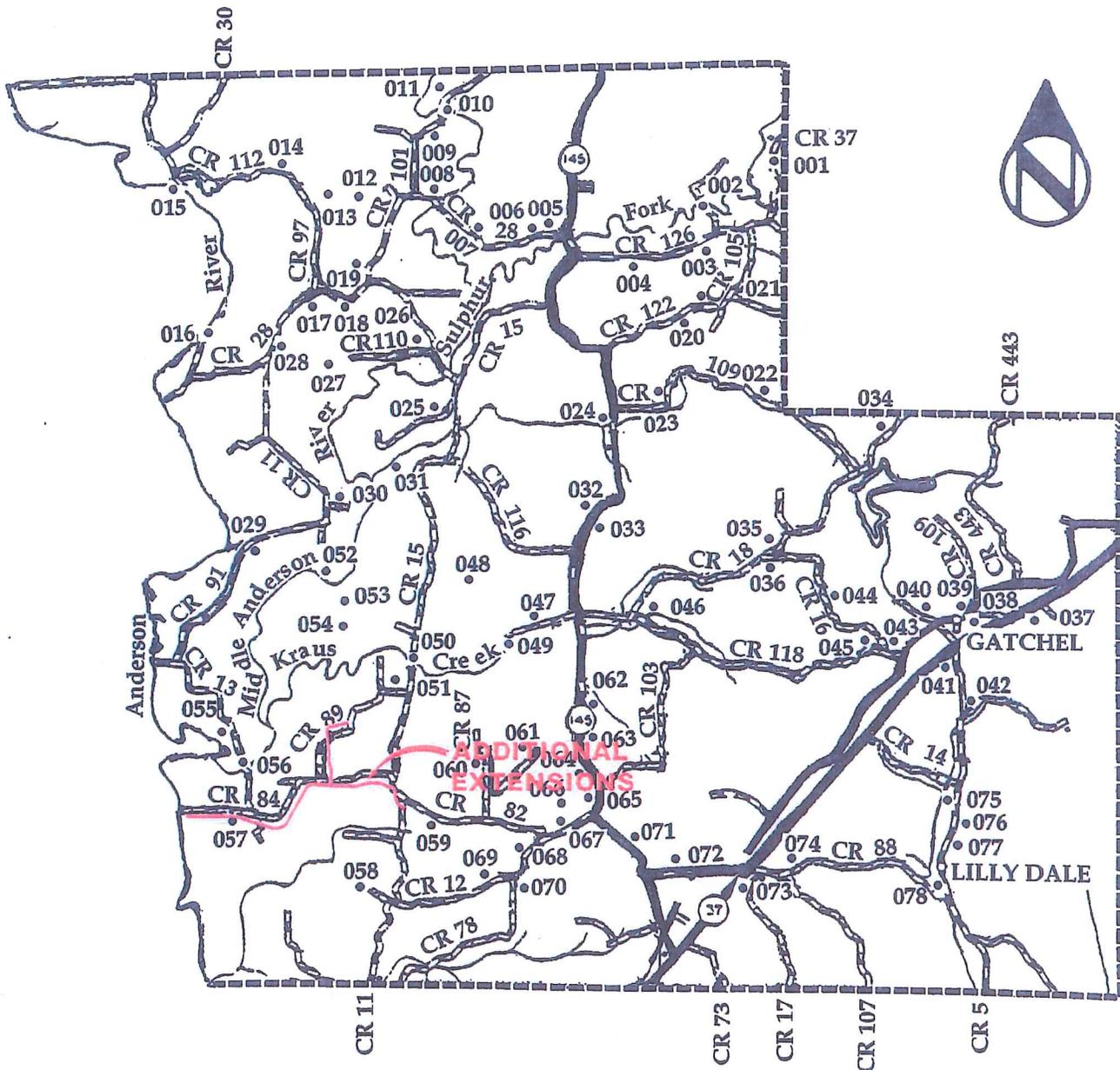
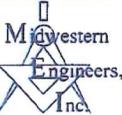


FIGURE 3: from Perry Co. Interim Report
Indiana Historic Sites and Structures Inventory

REVISED SEPT. 2011

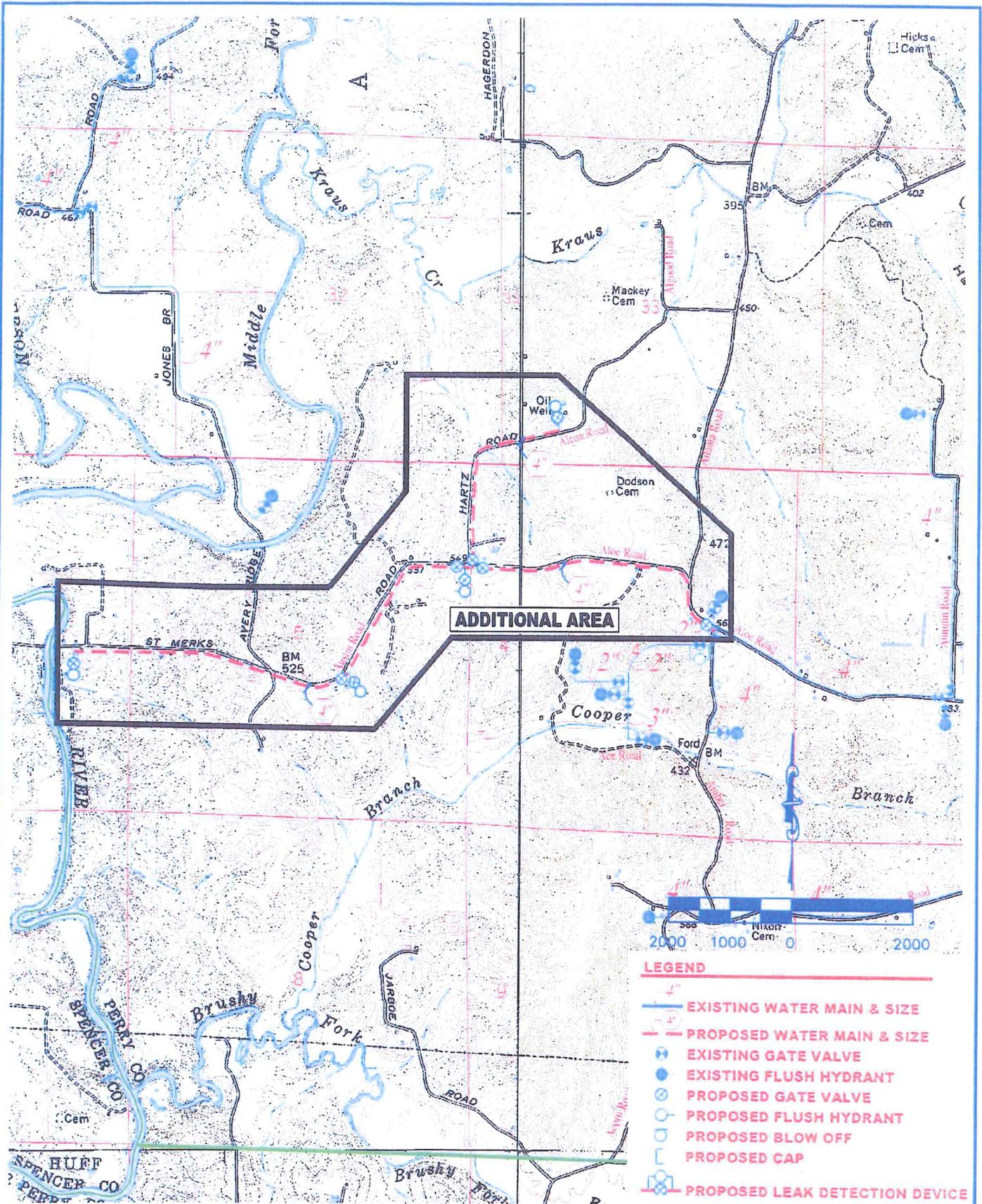

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WATER IMPROVEMENTS
AND-TRO WATER AUTHORITY
 PERRY COUNTY, INDIANA

FIGURE 3.
INTERIM REPORT

DATE: SEPT. 2011
 DESIGN: R.D.W.
 DRAWN: D.R.K.
 PROJECT: 200921-00

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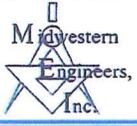
FIGURE 4

**WATER IMPROVEMENTS
AND-TRO WATER AUTHORITY**
PERRY COUNTY, INDIANA

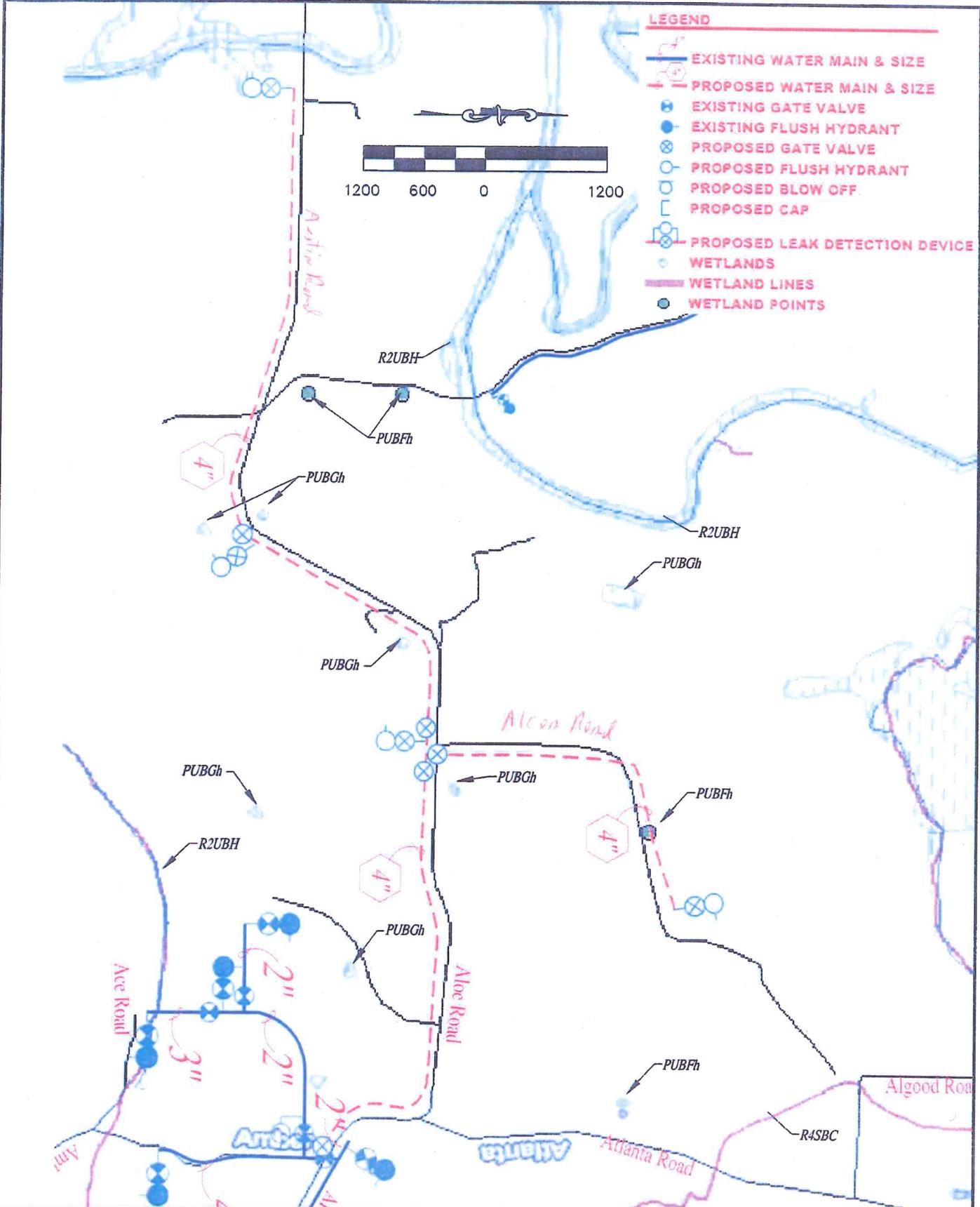
**PROPOSED PROJECT
LOCATION MAP
ALOE AND ALCOA ROAD
EXTENSIONS**

DATE: SEPT. 2011
DESIGN: R.D.W.
DRAWN: K.J.G.
PROJECT: 200921-00

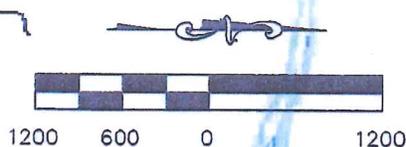
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- LEGEND**
- EXISTING WATER MAIN & SIZE
 - PROPOSED WATER MAIN & SIZE
 - EXISTING GATE VALVE
 - EXISTING FLUSH HYDRANT
 - PROPOSED GATE VALVE
 - PROPOSED FLUSH HYDRANT
 - PROPOSED BLOW OFF
 - PROPOSED CAP
 - PROPOSED LEAK DETECTION DEVICE
 - WETLANDS
 - WETLAND LINES
 - WETLAND POINTS



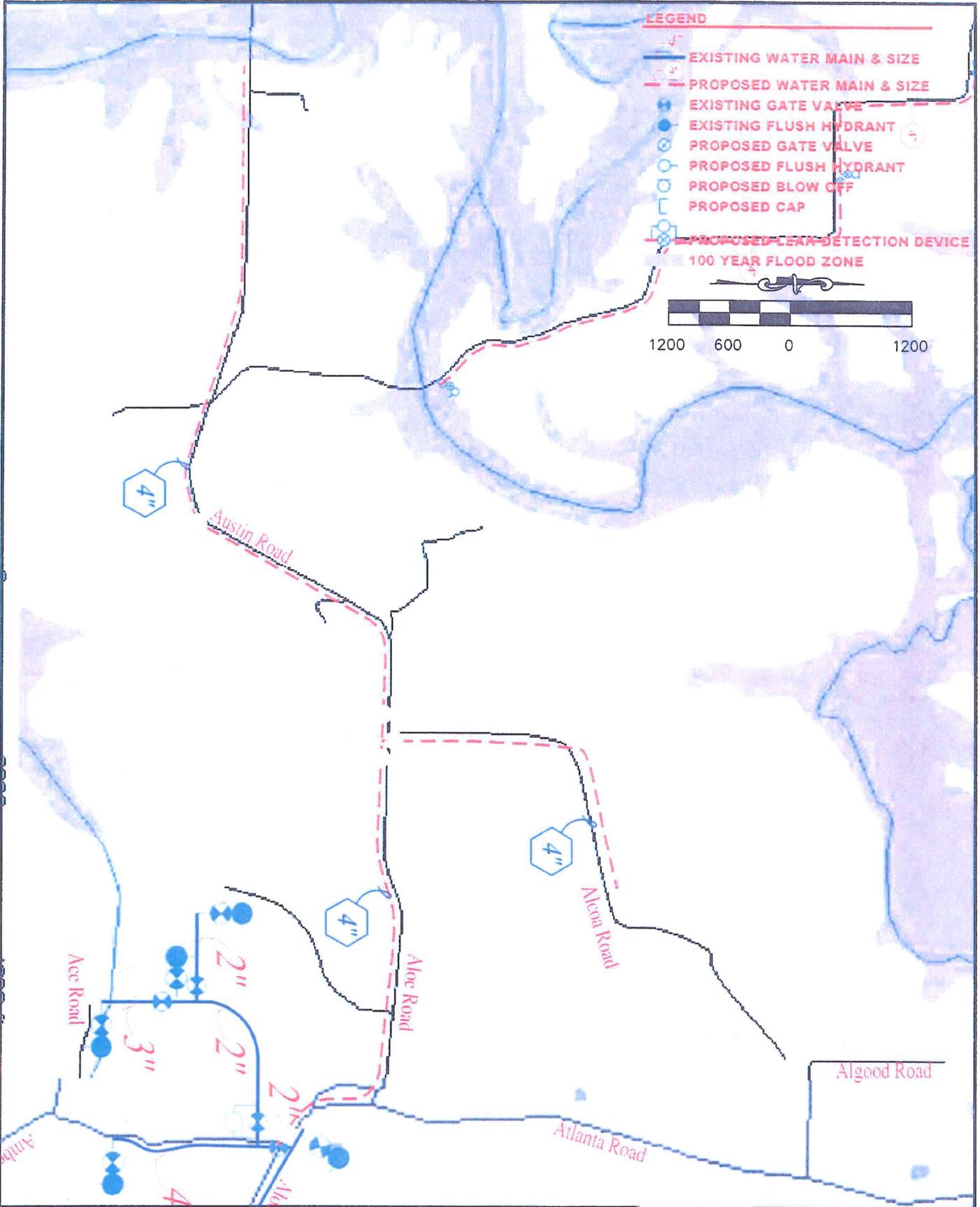
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**WATER IMPROVEMENTS
 AND-TRO WATER AUTHORITY**
 PERRY COUNTY, INDIANA

FIGURE 5
 WETLANDS MAP
 ADDITIONAL
 EXTENSIONS

DATE	SEPT. 2011
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DRAWN	D.R.K.
PROJECT	200921-00

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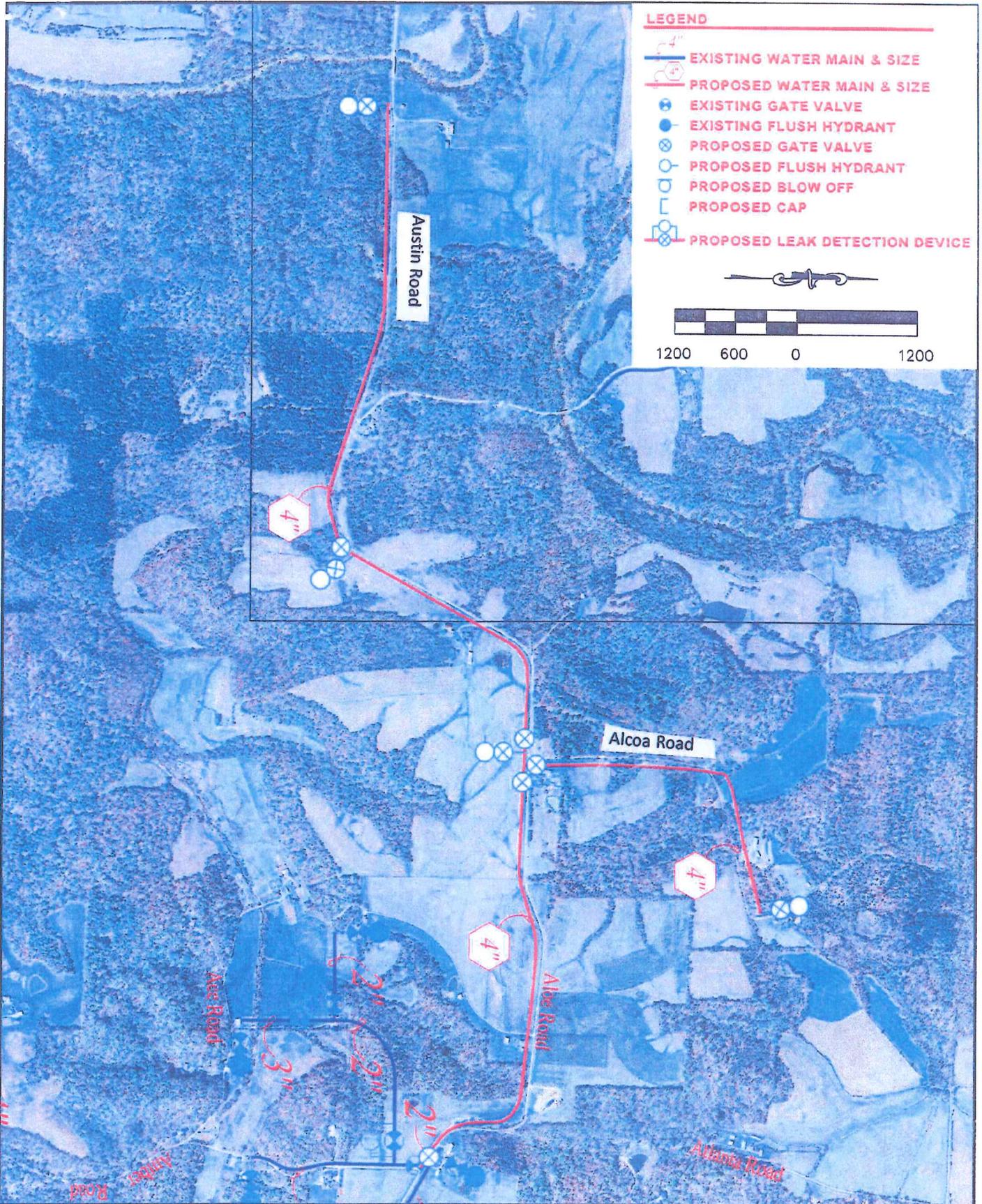

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**WATER IMPROVEMENTS
 AND-TRO WATER AUTHORITY
 PERRY COUNTY, INDIANA**

FIGURE 6
 FLOOD MAP
 ADDITIONAL
 EXTENSIONS

DATE	SEPT. 2011
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DRAWN	D.R.K.
PROJECT	200921-00


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**WATER IMPROVEMENTS
 AND-TRO WATER AUTHORITY
 PERRY COUNTY, INDIANA**

**FIGURE 7,
 PROPOSED PROJECT
 ADDITIONAL
 EXTENSIONS**

DATE: SEPT. 2011
 DESIGN: R.D.W.
 DRAWN: D.R.K.
 PROJECT: 200921-00