





United States Environment Protection Agency

Region 5

77 West Jackson Blvd.

Chicago, IL 60604-3590

## **DRAFT FINDING OF NO SIGNIFICANT IMPACT**

### **Sanitary and Storm Sewer Improvements Project**

#### **Town of Upland, Indiana**

**PROJECT:** The Town of Upland is located in Jefferson Township in Grant County, Indiana (Exhibit 1). The proposed projects are located in three areas of town (Exhibits 2, 5, 6 and 8). The first project area (Project Area I, Exhibit 4A) includes sanitary lines in the area of Urban and Main Street. The second project area (Project area II, Exhibits 4C and 9) will replace a storm sewer near Taylor University; the sewer will extend from Main Street east to the Jefferson Ditch. The third project area (Project area III, Exhibit 4B) is within an existing sanitary sewer along Main Street from the railroad tracks to Berry Ave. The Town of Upland system has areas of high inflow and infiltration that cause high flows and overflows at their wastewater treatment plant. Additionally, Taylor University has frequent issues with flooding at the corner of Reed and Main Streets and is working with the Town to improve stormwater management. Investigations have shown that the northeastern part of the Town is prone to significant inflow during rainfall events. To correct the inflow issues, the Town of Upland will line and perform spot replacements on the sanitary sewers in the area of Urban Street and Main Street and replace select manholes. The Town will also line the existing 10” sewer along Main Street from the railroad tracks south to Berry Ave. To alleviate flooding issues at the University, the Town will install a 30” storm sewer beginning at the site of the existing storm sewer near Main and Reade Street and relocate the line north to Reade Street and then east to Jefferson Creek.

**Federal Grant:** The United States Environmental Protection Agency (U.S. EPA) is proposing to amend an existing grant to assist in the implementation of the proposed Sanitary and Storm

Sewer Improvements project. Because Federal grant funds will be utilized to assist in meeting the project's anticipated costs, the provisions of the National Environmental Policy Act (NEPA), which require an analysis of the project's potential to result in significant environmental impacts, are applicable to this project. The provisions of Section 106 of the National Historic Preservation Act are also applicable to this project, which require an analysis of the project's potential to have an adverse effect upon cultural resources and/or historic properties.

**Analysis of Environmental Impact:** The proposed improvements will not have significant direct impacts on environmental resources; however, it has potential cumulative impacts on trees, and wetlands. All direct and cumulative impacts will take place within the project area as described in the EA.

The scope of this project is rehabilitation and replacement of existing sanitary sewers and manholes and installation of a storm sewer. Work activities will include lining, replacing and repairing existing sewer lines and manholes (Exhibits 4A & 4B). This project will reduce inflow and infiltration in critical areas of Town. In addition, a storm line will be installed in an area near Taylor University to allow discharge to an appropriate storm water outlet (Exhibit 4C).

The manhole and sewer replacement will occur in existing trenches, in and along existing streets and in existing easements. Lining and repair will occur in the existing structures. No land acquisition or tree removal will be necessary for the sanitary sewer improvements. The re-routed storm line will be installed in and adjacent to existing rights-of-way

The following social or environmental features will not be affected by this project for the following reasons:

- There are no existing or proposed state nature preserves, state parks, unique ecological sites, unique geological features or state forests within one-half mile of the project area;
- Wild, scenic or recreational rivers are not located in the project area;
- Wilderness areas or coastal zones are not located in the project area;
- Special aesthetic features, recreational facilities or undisturbed terrestrial habitat are not located within the project area;
- The proposed project is not located within a 100-year floodplain and will not induce development in the floodplain;

- The project will not impact prime or unique farmland.
- The proposed project does not present environmental justice issues or potential impacts on community structures, institutions or the overall quality of life.

To ascertain the effect, if any, of the proposed federal action on federally-listed or state-listed species, letters of concurrence have been received from the Indiana Department of Natural Resources (IDNR), the Indiana State Historic Preservation Officer, the U.S. Department of Agriculture (USDA), and the U.S. Department of the Interior Fish and Wildlife Service (USFWS). These affirm that no archeological sites are expected to be disturbed, and no threatened or endangered species will be affected. Potential impacts to wetlands will be from storm water sources and temporary in nature.

Only one species is identified by the USFWS in their June 15, 2009, letter: Indiana bat (*Myotis sodalis*). The USFW service states: *There is suitable summer habitat for this species present along the forested corridors of the Mississinewa River and its tributaries, including Jefferson-Ditch. There are no current records of Indiana bats near the project site but to our knowledge the area has not been surveyed. The project will not eliminate enough habitat to affect this species, but to avoid incidental take from removal of an occupied roost tree we, recommend that tree-clearing in Project Area 2 be avoided during the period April 1 – September 30.* The May 19, 2010, USFWS letter concurs that the proposed project is not likely to adversely affect this listed species.

The Indiana State Historic Preservation Officer (SHPO) has concurred with the finding of “No Historic Properties Affected” in their letters dated June 1, 2010 and June 9, 2009. In the unlikely event that historic properties are discovered during project construction, work will immediately stop and the Indiana SHPO will be notified within 24 hours of the discovery. If continuation of the project may result in an impact to historic properties, contact the U.S. EPA, Region 5 NHPA expert in the NEPA Implementation Section.

Features that could be affected by the construction of these improvements are described below. All adverse impacts are expected to be minor and will be monitored by the mitigative measures described below. See Grant Conditions / Required Mitigation Section for a discussion of mitigation.

- The relocated storm-line will discharge near a wetland (PFO1A). The outfall will not cross the wetland; no trees will be removed from the wetland.
- A minor amount of short-term, localized air pollution, produced by construction vehicles, will be unavoidable, but should be insignificant. The short-term increase in dust will be minimized by spraying water. Prompt repaving and reseeded of disturbed areas is expected to further minimize dust problems.
- Any increase in noise associated with the construction will be unavoidable and will cease when construction is complete. In order to minimize potential adverse impacts, construction equipment will be maintained in good working order, and construction activities will be prohibited during evening and weekend hours.
- Some traffic detours will be necessary to construct the project. The detours will be temporary and limited to local streets. Residents will be able to access properties and businesses throughout the construction period.
- It has been identified that the construction will affect three trees that are 10 inches in diameter-at-breast height or larger. Mitigation will include a minimum planting of 15 new trees at least 2 inches in diameter-at-breast height. A native riparian forest planting plan must use at least five canopy trees and five understory trees, shrubs, or vines selected from the Woody Riparian Vegetation list or an approved equal. Additionally, a native herbaceous seed mixture should be planted consisting of at least 10 species of grasses, sedges, and wildflowers selected from the Herbaceous Riparian Vegetation list or an approved equal. Restore disturbed areas within forested habitats such that trees are planted as close as possible to the storm sewer.

**Grant Conditions / Required Mitigation:**

To limit the projects impacts the following mitigation measures are recommended as conditions of the grant agreement:

- 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.
- Do not work in the waterway from April 1 through June 30 without prior written approval of the Division of Fish and Wildlife.
- 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.
- Install appropriate armament below pipe outfalls
- Do not excavate or place fill in any riparian wetland.

- Avoid impacts to the palustrine emergent wetland north of Washington Street
- Minimize and contain within the project limits all tree and brush clearing and provide the opportunity to utilize cleared trees of firewood and timber size.
- 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.
- Seed and protect all disturbed stream banks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation) or use an appropriate structural armament; seed and apply mulch on all other disturbed areas.
- Install best management practices (BMPs) or measures to prevent untreated storm water from flowing directly to the stream.
- Plant five native trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height. Restore disturbed areas within forested habitats such that trees are planted as close as possible to the storm sewer right-of-way.
- 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.

**Review/Comment Period:** The U.S. EPA is soliciting comments on the Sanitary and Storm Sewer Improvements project for a period of **thirty days (30)**, beginning **May 10, 2012** on this draft Finding of No Significant Impact (FONSI). The comment period ends on **June 9, 2012** and comments postmarked after this date will not be accepted. Following completion of the 30-day draft FONSI review/comment period, U.S. EPA will evaluate any and all comments received on the project. If no comments are received that are sufficient to cause this Agency to change its position on the project and its anticipated environmental consequences, the U.S. EPA will issue the FONSI and proceed with the remaining administrative actions on the grant application.

**Submission of Comments:** Comments on this project and its draft FONSI should be submitted in writing to the following address:

**Amy Henninger**  
**State Revolving Fund Loan Programs**

**100 N Senate Ave, Rm 1275**  
**Indianapolis, Indiana 462043**  
**317-232-6566**  
**ahenning@ifa.in.gov**

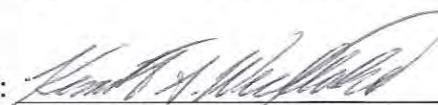
**Point of Contact/Questions:** Any questions on the project and this draft FONSI should be referred to Amy Henninger at (317) 232-6566.

**Decision:** On the basis of the Environmental Assessment (EA) and supporting documentation as summarized above, U.S. EPA has concluded that the Town of Upland Sanitary and Storm Sewer Improvements project will not result in significant adverse environmental impacts or have an adverse effect on cultural resources/historic properties, and that the development and distribution of an Environmental Impact Statement will not be necessary on behalf of this project. The signature on the front page signifies that U.S. EPA has conducted a 30-day comment period for this project and either no substantive comments on the project were received or those comments were appropriately addressed in the project's EA and supporting documentation, and this FONSI. Should the Town of Upland use this grant or future U.S. EPA grants for a project significantly different than that described in this FONSI the applicability of this FONSI will be re-evaluated.



**Environmental Assessment  
(EA) for the *Sanitary and  
Storm Sewer Special  
Appropriations  
Improvements Project  
(2012)*  
*Town of Upland, Indiana***

*The U.S. Environmental Protection Agency, as part of our National Environmental Policy Act and National Historic Preservation Act, Section 106 responsibilities, has independently evaluated the environmental analysis documentation provided by Triad Associate and supporting documentation for the project. This information forms the basis for the following EA. In preparing the EA, U.S. EPA and the Indiana Finance Authority relied in part on information prepared and submitted by the Town of Upland, Triad Associates, Inc. and Cornerstone Grants Management. This EA is now submitted for public review.*

Signature:  Date: APR 16 2012

Kenneth A. Westlake, Chief  
NEPA Implementation Section  
Office of Enforcement and Compliance Assurance

# U.S. EPA Environmental Assessment for Town of Upland, IN Sanitary and Storm Sewer Special Appropriations Improvements Project (2012)

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### **EXHIBITS for Town of Upland Sanitary and Storm Sewer Improvements Project (2012):**

- EXHIBIT 1: Project Location (2012)
- EXHIBIT 2: Existing and Future Study Area (Revised 03/12/2012)
- EXHIBIT 3: Proposed Sanitary & Storm Improvements (Project Areas I, II, III) (03/27/2012)
- EXHIBIT 4A: Project Area I (Revised 03/21/2012)
- EXHIBIT 4B: Project Area III (Revised 03/21/2012)
- EXHIBIT 4C: Project Area II (Revised 03/21/2012)
- EXHIBIT 5: National Wetlands Inventory Map (Revised 03/21/2012)
- EXHIBIT 6: Floodway Map (Revised 03/21/2012)
- EXHIBIT 7: Preliminary Floodway Map 18053C0280E (FEMA, FIRM, Grant County, Indiana, Town of Upland, Panel 280 of 295, effective date May 15, 2002) (03/28/2012)
- EXHIBIT 8: Proposed Improvements (Revised 03/21/2012)
- EXHIBIT 9: Existing and Proposed Outfalls (Area II) (undated)

### **DETAILS for Town of Upland Sanitary and Storm Sewer Improvements Project (2012):**

- DETAIL A: Outfall w/RipRap (undated)
- DETAIL B: Tree Mitigation [Plan] (undated)
  - List of Woody Riparian Vegetation

### **PHOTOS for Town of Upland Sanitary and Storm Sewer Improvements Project (2012):**

Photos - Area II (SW Line from Workplan)

### **APPENDIX A - SUPPORTING ENVIRONMENTAL CORRESPONDENCE for Town of Upland Sanitary and Storm Sewer Improvements Project (2012):**

1. *Sanitary and Storm Sewer Improvements Project Work Plan for Town of Upland, Indiana*, Designated Signatory: Michael Cooper, Town Council President, Engineer: James W. Frazell, P.E., Triad Associates, Inc. (document not dated, document date stamped: Received December 13, 2010).

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**Appendices**

**Appendix A Farmland Conversion Impact Rating Form**

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**Appendix E Environmental Agency Correspondence for Sanitary Sewer Project**

1. IDEM (April 27, 2010, letter) (5 pages)
2. DNR (June 1, 2010, letter) (2 pages)
3. USFWS (May 9, 2010, letter) (2 pages)
4. InDNR (June 18, 2010, Early Coordination/Environmental Assessment) (1 page)
5. Triad Associates, Inc. (April 27, 2010, letter w/enclosures to USFWS) (2 pages, see No. 10 below for enclosures)
6. Triad Associates, Inc. (April 27, 2010, letter w/enclosures to InDNR, Division of Fish and Wildlife) (2 pages, see No. 10 below for enclosures)
7. Triad Associates, Inc. (April 27, 2010, letter w/enclosures to InDNR, Division of Water) (2 pages, see No. 10 below for enclosures)
8. Triad Associates, Inc. (April 27, 2010, letter w/enclosures to State Historic Preservation Officer, InDNR, Division of Historic Preservation and Archeology) (letter 2 pages, see No. 10 below for letter enclosures)
9. Town of Upland, (April 27, 2010, letter to James Glass, SHPO, InDNR, Division of Historic Preservation and Archeology) (1 pages)
10. Town of Upland, (April 27, 2010, letter to James Glass, SHPO, InDNR, Division of Historic Preservation and Archeology) (1 pages)
11. Letter Enclosures: Exhibit 1 (Sanitary Improvements Area), Exhibit 2 (National Wetlands Inventory Map), Exhibit 3 (Floodway Map), Exhibit 4 (Soils Map), Exhibit 5-1 (Proposed Sanitary Improvements North of Tracks), Exhibit 5II (Proposed Sanitary Improvements South of Tracks), Appendix B (Town of Upland Interim Report).

**Appendix F Environmental Correspondence Storm Sewer Projects**

1. IDEM (May 19, 2009, letter) (5 pages)
2. InDNR (June 8, 2009, Early Coordination/Environmental Assessment) (2 pages)
3. USFWS (June 15, 2009, letter) (2 pages)
4. InDNR (June 9, 2009, letter) (1 page)
5. Triad Associates, Inc. (May 18, 2009, letter w/enclosures to InDNR, Division of Fish & Wildlife) (2 pages, see No. ? for enclosures)
6. Triad Associates, Inc. (May 18, 2009, letter w/enclosures to USFWS) (2 pages, see No. 10 below for enclosures)
7. Triad Associates, Inc. (May 18, 2009, letter w/enclosures to InDNR, Division of Water) (2 pages, see No. 10 below for enclosures)

8. Triad Associates, Inc. (May 18, 2009, Revised 5/19/2009 letter w/enclosures to James Glass, SHPO, InDNR, Division of Historic Preservation and Archeology) (2 pages)
9. Town of Upland, (May 29, 2009, letter to James Glass, SHPO, InDNR, Division of Historic Preservation and Archeology) (1 pages)
10. Letter Enclosures: Exhibit 2 (Existing and Future Study Area), Exhibit 4-1 (Proposed System Improvements Project I), Exhibit 4-II (Proposed System Improvements Project II), Exhibit 4-III (Proposed System Improvements Project III), Exhibit 5 (National Wetlands Inventory Map), Appendix B (Town of Upland Interim Report), APPENDIX C – Page 5 (Project Area II – Taylor University Drainage Photo Key).

**Appendix G** Archaeological Field Reconnaissance Survey, Storm Sewer Project  
 - *Archaeological Field Reconnaissance - Two Storm Sewer Corridors, Grant County, Indiana*, Prepared for Triad Associates, Inc., prepared by R. Brad King, Mitchell K. Zoll, Principal Investigator, Pioneer Consulting Services Inc., May 26, 2009, PCS Project# 09FR50.

**Appendix H** Preliminary Design Summary

List of Tables  
 (Tables I, II, III)

2. Additional Documents/Updates for Town of Upland Sanitary and Storm Sewer Improvements Project (2012):
  - a. Letter of Transmittal from TRIAD Associates, Inc. to Amy Henninger (dated 1/28/2011):
    - Cover Letter from Town of Upland to Amy Henninger, IDEM, SRF (dated January 28, 2011), re: Workplan, Sanitary-Storm Improvements Project, Upland, Indiana.
    - [Town of Upland] Responses to [U.S. EPA's] Comments (dated June, 2011) re: wetlands, tree removal, tree mitigation, outfall armament/location, property owner.
  - b. Memo from A. Henninger, State Revolving Fund Loan Program (SRF) to V. Laszewski, EPA, re: Upland Project Information, dated 03/07/2012.
  - c. Email (w/11 file attachments) from A. Henninger, SRF to V. Laszewski, EPA, re: Town of Upland, IN Special Appropriation, (03/15/2012, 02:54 PM).
  - d. Email from V. Laszewski, EPA to A. Henninger, SRF, re: Town of Upland, IN Special Appropriation, (03/19/2012, 12:30 PM).
  - e. Email (w/12 file attachments) from A. Henninger, SRF to V. Laszewski, (EPA, re: Town of Upland, IN Special Appropriation, (03/22/2012, 1:16 PM).
  - f. Email (w/file attachment: Project Summary Update, dated March 26, 2012) from A. Henninger, SRF to V. Laszewski, EPA, (03/26/2012, 12:58 PM).

**PROJECT SUMMARY:  
Town of Upland Sanitary and  
Storm Sewer Improvements  
Special Appropriations Project  
(March 26, 2012 version)**

# **PROJECT SUMMARY**

## **Town of Upland** Sanitary and Storm Sewer Improvements Special Appropriations Project

### **I. PROJECT IDENTIFICATION**

|                           |  |
|---------------------------|--|
| Authorize Representative: | Michael Cooper, Town Council President<br>Town of Upland |
| Project Address:          | 87 North Main Street<br>Upland, IN 46989                 |
| Phone:                    | 765-348-7560   |
| County:                   | Grant  |

### **II. PROJECT LOCATION**

Upland is located in Jefferson Township in Grant County, Indiana. The Town is located in Township 23 North, Range 9 East, Sections 3 and 10 and is shown on the FAs City Quad map. The 20-year study area is the same as the existing service area (Exhibit 2). Project areas include sanitary lines in the area of Urban and Main Street, a sanitary line along Main Street from the railroad tracks to Berry Ave, and a storm sewer replacement line near Taylor University from Main Street to Jefferson Ditch (Exhibit 3).

### **III. DESCRIPTION OF THE PROPOSED PROJECT**

The Town of Upland treatment plant was issued a sewer ban in the mid 1990s because of high flows and overflows in the northeast side wastewater collection system and the main lift station. In addition, a Notice of Violation was issued in August 2005 for overflows and bypasses in the collection system. The violations were caused by heavy rain and power outages. The Town has recently completed projects at the WWTP to increase the dry weather capacity, increase disinfection capacity and provided secondary treatment of 3.13 MGD of wet weather flows.

Investigations have shown that the northeastern part of the Town is prone to significant inflow during rainfall events. Numerous attempts have been made to locate and remove the sources, with marginal success. Increasing the pump capacity in the main lift station has not prevented the sewers from surcharging in the northeast quadrant of Town. Taylor University is currently making improvements to the storm system on campus. Frequent flooding occurs at the corner of Reed and Main Streets, in front of the University. The area contains a low spot that collects water from the surrounding campus. The low area does not drain adequately because the existing

surface water discharge pipe is undersized. The Town has agreed to re-route the pipe from where it is presently located through a privately owned property east of the campus.

The scope of this project is rehabilitation and replacement of existing sanitary sewers and manholes and installation of a storm sewer. Work activities will include lining, replacing, and repairing existing sewer lines and manholes (Exhibit 4A & 4B). This will reduce I/I in critical areas of Town. In addition, a storm line will be installed in an area near Taylor University (Exhibit 4C). The line will be installed to allow discharge to an appropriate storm water outlet.

The manhole and sewer replacement will occur in existing trenches, in and along rights of way and in existing easements. Lining and repair will occur in the existing structures. No land acquisition or tree removal will be necessary for the sanitary sewer improvements. The re-routed storm line will be installed in and adjacent to existing rights of way and in a previously undisturbed easement.

**IV. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING**

A. Selected Plan Estimated Cost Summary

| <u>Construction</u>                     | <u>Estimated Cost</u> |
|---|-----------------------|
| <i>Sanitary Sewer Project:</i>          |                       |
| 8" Pipe Lining                          | \$ 26,838             |
| 10" Pipe Lining                         | 148,580               |
| 8" pipe Replacement                     | 83,810                |
| 10" Pipe Replacement                    | 14,500                |
| 12" Pipe Replacement                    | 36,300                |
| Spot Repairs                            | 7,500                 |
| Manhole Replacement                     | 22,500                |
| Manhole Repair                          | 17,500                |
| Lateral Repairs/ Reinstatement          | 24,000                |
| Temporary Bypass Pumping                | 10,000                |
| Restoration                             | 30,000                |
| <i>Storm Sewer Project:</i>             |                       |
| 30" Pipe                                | 155,790               |
| Manholes                                | 37,500                |
| Headwall                                | 10,000                |
| Fore Bay                                | 27,500                |
| Restoration                             | 10,000                |
| <i>Construction subtotal</i>            | <i>\$ 662,318</i>     |
| <br>                                    |                       |
| <u>Non-Construction</u>                 |                       |
| Administrative                          | \$ 10,000             |
| Engineering – planning & design         | 92,800                |
| Construction Administration             | 5,200                 |
| Inspection                              | 20,000                |
| <i>Non-construction subtotal</i>        | <i>\$ 128,000</i>     |
| <br><b>Estimated Total Project Cost</b> | <br><b>\$ 790,318</b> |

B. The Special Appropriation Program has provided a \$903,750 grant to the Town of Upland for improvements to the town's wastewater treatment plant. This project was approved in an EPA FNSI on July 30, 2007, a copy of the EA-FNSI is attached. As of July 29, 2009 the work of the existing grant was completed and the grant has \$69,960 remaining in unspent federal funds. The above described project will complete the existing grant. The remaining \$720,358 in project costs will be covered by local funds.

The required match for this project will be provided by a separate drinking water project funded through the Indiana State Revolving Fund Loan Program (SRF). The SRF project provides up to \$2,173,600 in non-federal funds.

## V. ENVIRONMENTAL IMPACTS OF THE SELECTED ALTERNATIVE

### a. Direct Impacts of Construction and Operation

**Short-Term Impacts:** The selected actions for this project will result in short-term environmental impacts related to construction activities and tree removal.

**Undisturbed Land:** The sanitary sewer replacement and repair projects will be installed on previously disturbed ground. The stormwater line near Taylor University will be installed in an area that is primarily farmland. The Indiana Department of Historic Preservation and Archaeology (DHPA) confirms that no additional archaeological investigations are necessary.

**Structural Resources:** This project will not affect these resources. The Indiana DHPA concurs with the Town of Upland's finding that there are no historic buildings structures, districts, objects of archaeological resources within the area of potential effects.

**Wetlands (Exhibit 5):** The sanitary sewer lines will not affect wetlands. The proposed storm improvements near Taylor University will be installed to outfall near an existing stream. Stormwater will discharge into an area designated PFOIA which will act as pre-treatment for stormwater prior to entering the stream.

**Floodplains (Exhibit 6):** No portion of this project will be constructed in the 100-year floodplain.

**Prime Farmland:** In correspondence dated May 12, 2010 the Natural Resources Conservation Service stated: *The project to make sanitary sewer improvements in the Town of Upland, Grant County, Indiana ... will not cause a conversion of prime farmland.*

**Air Quality:** Air quality issues will be that of any normal construction project with respect to erosion, dust and noise control. The project should not affect the ozone, airborne pollutants or other air quality concerns.

**Groundwater:** There are no known or anticipated affects that will occur to the groundwater or water table as a result of this project. 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. The proposed project is within the range of the federally endangered Indiana Bat. However the USFW states the project will not eliminate

enough habitat to affect this species. The project will affect 0.45 acres of wooded property.

**Open Space and Recreational Opportunities:** The construction and operation of the proposed project will have no lasting affect on open space and recreational opportunities.

**National Natural Landmarks:** The project will not affect National Natural Landmarks.

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

**Environmental Justice and Public Feedback:** The demographics for the service area (2000 census) indicate there will be no environmental justice concerns. See Figure 1.

Figure 1: (2000 U.S. Census)

|                         | Town of Upland | State of Indiana |
|-------------------------|----------------|------------------|
| Minority population     | 5.6 %          | 9.87 %           |
| Median Household Income | \$ 36,827      | \$ 41,567        |

Billing rates for existing customers will not increase due to this project.

**b. COMMENTS FROM ENVIRONMENTAL REVIEW AUTHORITIES**

Comments on the Sanitary Sewer Projects:

In correspondence dated June 1, 2010, the Department of Historic Preservation and Archaeology stated: *In terms of archaeology, no currently known archaeological resources eligible for inclusion in the National Register of Historic Places have been recorded within the proposed project area. No archaeological investigations appear necessary provided that all project activities remain within areas of previous construction... Based on the information provided to our office, we do not believe that there will be any alterations to the characteristics of the above identified historic properties qualifying them for inclusion in or eligibility for the National Register. Therefore, we see no reason to object with the Town of Upland's April 27, 2010 finding that there are no historic buildings, structures, districts, objects, or archaeological resources within the area of potential effects that will be affected by the above identified project.*

In correspondence dated June 18, 2010 the Department of Natural Resources 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. Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project. 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.*

In correspondence dated May 19, 2009 the United States Fish and Wildlife Service stated:

*The proposed project is within the range of the federally endangered Indiana bat. Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near forested drainage ways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.*

*There is suitable summer habitat for this species present along the forested corridors of the Mississinewa River and its tributaries, including Jefferson Ditch. There are no current records of Indiana bats near the project site but to our knowledge the area has not been surveyed. The project will not eliminate enough habitat to affect this species, but to avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing in Project Area 2 be avoided during the period April 1 – September 30. If this measure is implemented 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.*

In correspondence dated August 13, 2008 the Natural Resources Conservation Service (NRCS) stated: *The proposed project to make sanitary sewer improvements in the Town of Upland, Grant County, Indiana as referred to in your letter of July 21, 2008, will not cause a conversion of prime farmland.*

#### Comments on the Storm Sewer Projects:

In correspondence dated June 9, 2009, the Department of Historic Preservation and Archaeology stated: *Pursuant to Section 106 of the National Historic Preservation Act the staff of the Indiana State Historic Preservation Officer has conducted an analysis of the materials dated May 20, 2009 and received May 27, 2009, for the above indicated project in Upland, Grant County, Indiana. In terms of archaeology, we concur with the archaeological report that no currently known archaeological resources eligible for inclusion in the National Register of Historic Places have been recorded within the proposed project area. No further archaeological investigations appear necessary. We concur with the Town of Upland's May 20, 2009 finding that there are no historic buildings, structures, districts, objects or archaeological resources within the area of potential effects that will be affected by the above indicated project provided that all project activities remain within areas disturbed by previous construction or areas subjected to the archaeological reconnaissance.*

In correspondence dated June 8, 2009 the Department of Natural Resources 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. 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 IAC 10-5 that applies to outfall structures...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. Due to the presence or potential presence of wetlands on site, we recommend contacting and coordinating with the Indiana Department of Environmental Management (IDEM) 401 program and also the United States Army Corps of Engineers (USACOE) 404 program.*

*Consider an alternative route for Project Area 2 that would result in less tree clearing. Option 1 would be to bring the route south approximately 1,200' then east approximately 1,100' through already cleared ground to Jefferson Ditch. Option 2 entails working along the tree line. This includes using the tree line near the originally proposed storm sewer route for approximately 750' to the east, heads north approximately 200', then east approximately 190' along the tree line as it staircases up and over toward Jefferson Ditch. Option 2 would require a shorter diagonal portion through the woods to access the ditch than the original proposal. These options would greatly reduce the amount of tree clearing and any related mitigation requirements.*

*In correspondence dated June 15, 2009 the United States Fish and Wildlife Service stated: The proposed project is within the range of the federally endangered Indiana bat. Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in tress, typically near forested drainage ways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.*

*There is suitable summer habitat for this species present along the forested corridors of the Mississinewa River and its tributaries, including Jefferson Ditch. There are no current records of Indiana bats near the project site but to our knowledge the area has not been surveyed. The project will not eliminate enough habitat to affect this species, but to avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing in Project Area 2 be avoided during the period April 1 – September 30. If this measure is implemented 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.*

*In correspondence dated May 12, 2010 the NRCS states: the project to make sanitary sewer improvements in the Town of Upland, Grant County, Indiana, as referred to in your letter received April 30, 2010, will not cause a conversion of prime farmland.*

## **VI. MITIGATION MEASURES**

*In correspondence dated June 9, 2009 and June 1, 2010, the Department of Historic Preservation and Archaeology stated: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law requires that the discovery must be reported to the Department of Natural Resources within two business days.*

*In correspondence dated June 18, 2010 the Indiana Department of Natural Resources stated: Fish, wildlife, and botanical resource losses as a result of this project can be minimized through implementation of the following measures.*

*Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion. Do not work in the waterway from April 1 through June 30 without prior written approval of the Division of Fish and Wildlife.*

*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.*

*Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction sites; maintain these measures until construction is complete and all disturbed areas are stabilized.  
Install appropriate armament below pipe outfalls  
Do not excavate or place fill in any riparian wetland.*

In correspondence dated May 19, 2010 the United States Fish and Wildlife Service stated: *the National Wetland Inventory maps indicate the presence of a large palustrine emergent wetland north of Washington Street where the northernmost sewer line repair project will occur. Impacts to this wetland should be avoided.*

In correspondence dated June 8, 2009 the Indiana Department of Natural Resources stated: *Fish, wildlife, and botanical resource losses as a result of this project can be minimized through implementation of the following measures.*

*Impacts that remove trees in a non-wetland, riparian area require mitigation. When one or more acres of non-wetland forest are removed, replacement is at a 2:1 ration based on area. If less than 1 acre of non-wetland forest is removed, mitigation includes planting five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height. A native riparian forest planting plan must use at least 5 canopy trees and 5 understory trees, shrubs, or vines selected from the Woody Riparian Vegetation list or an approved equal.*

*Additionally, a native herbaceous seed mixture should be planted consisting of at least 10 species of grasses, sedges, and wildflowers selected from the Herbaceous Riparian Vegetation list or an approved equal. These plants are appropriate for use in forested wetlands or floodway reforestation projects.*

*Impacts to wetland habitat should also be mitigated at the appropriate ration. Please reference information Bulletin #17*

*Restore disturbed areas within forested habitats such that trees are planted as close as possible to the storm sewer right-of-way.*

*Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion. Minimize and contain within the project limits all tree and brush clearing and provide the opportunity to utilize cleared trees of firewood and timber size.*

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

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

*Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction sites; maintain these measures until construction is complete and all disturbed areas are stabilized.*

*Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation or use an appropriate structural armament; seed and apply mulch on all other disturbed areas.*

In correspondence dated June 15, 2009 the United States Fish and Wildlife Service states:

*Install outfalls to minimize stream channel impacts and avoid destabilization of stream banks.*

*Use best management practices during construction to prevent erosion and soil runoff to streams.*

*Install pretreatment structures to prevent untreated storm water from flowing directly to the stream.*

*...To avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing in Project Area 2 be avoided during the period April 1 – September 30.*

*The Town states in their workplan: A portion of the storm project will be installed in a wooded area that is within the range of the federally endangered Indiana Bat... Since tree removal is necessary, it was recommended that tree clearing be avoided from April 1 through September 30<sup>th</sup>. Siltation and erosion will be kept to a minimum. Any mitigation measures mandated by authorized reviewing agencies to reduce or eliminate waterway contamination will be implemented.*

*Mitigative measures to limit erosion and siltation include the following:*

*Erosion and sediment control measures required by the project specifications will require that the contractor provide a schedule for clearing, grading, excavating and restoring disturbed areas, along with a description of measures to be used during construction to ensure erosion/ sediment control. The program shall meet all applicable federal, state, and local requirements.*

*Natural vegetation will be retained wherever feasible*

*Appropriate agronomic practices (sediment basins, seeding, mulching) will be provided to control runoff, including shoreline and stream crossings, if applicable.*

*Drainage systems, including surface and subsurface drainage, will be returned to their natural state as soon as possible, if disturbed.*

*Roadways and parking lots will remain stabilized during construction to the extent possible*

*When possible, construction activities will be scheduled to avoid excessively wet conditions.*

*The existing topsoil will be reused during the restoration process.*

*No more than 100 feet of open trench will be allowed. Where possible, excavated material will be kept to the upland side of the trench. Excess material will be used elsewhere on the project.*

*Discharge from dewatering will be directed to sedimentation basins prior to discharging into surrounding surface waters.*

*Surface water and Wooded Areas:*

*Tree removal will be necessary for parts of the storm project. The storm line will discharge to Jefferson Ditch, which is a perennial stream. Project impacts that result in a removal of trees in a non-wetland, riparian area required mitigation. Mitigation includes planting five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height. See Appendices E and F for additional comments and restoration requirements.*

*Alternative routes for storm project were recommended by IDNR. These options were evaluated but found to be unworkable due to additional cost and land acquisition difficulties. An easement on the proposed ground has been granted to the Town by the property owner. The location of the storm pipe was at the request of the property owner.*

*Dust and Noise*

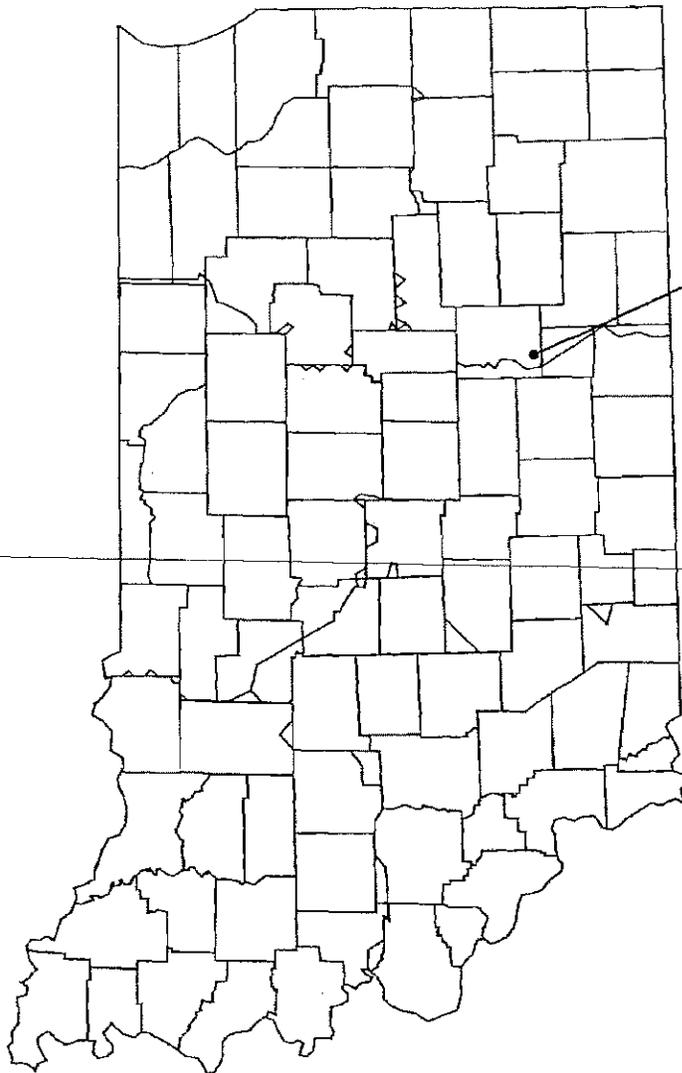
*The adverse impacts caused by dust generated from construction activities will be alleviated by periodically wetting the exposed soil and unpaved roadways to reduce the suspension of dust particles. To reduce noise impacts on the surrounding neighborhood, work activities will be limited to normal daytime hours.*

*In a mitigation statement supplemental to the workplan the Town of Upland states: The Town is committed to completing this project in an environmentally conscious manner, to the extent possible. In order to satisfy the environmental concerns resulting from the removal of trees, tree mitigation will be completed and the plan will be a part of the construction drawings.*

*The initial 730 lineal feet of new storm sewer will be constructed in an open field. The remaining 986 lineal feet will be installed in a 20-foot wide easement in what is considered a non-wetland forest in a rural setting. To construct the new pipe in the wooded area, we will be affecting 0.45 acres... Field investigations have identified three (3) trees that are ten (10) inch diameter or larger*

*at breast height that will be affected by the construction. Therefore, the construction plans will include a mitigation plan that requires planting 15 new trees, at least two (2) inches in diameter at breast height, within the 20-foot wide easement.*

**EXHIBITS  
for Town of Upland  
Sanitary and Storm Sewer  
Improvements Project (2012)**

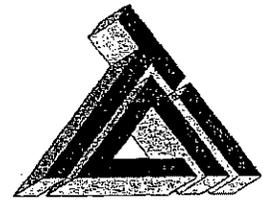


PROJECT LOCATION  
UPLAND, INDIANA

03/27/2012

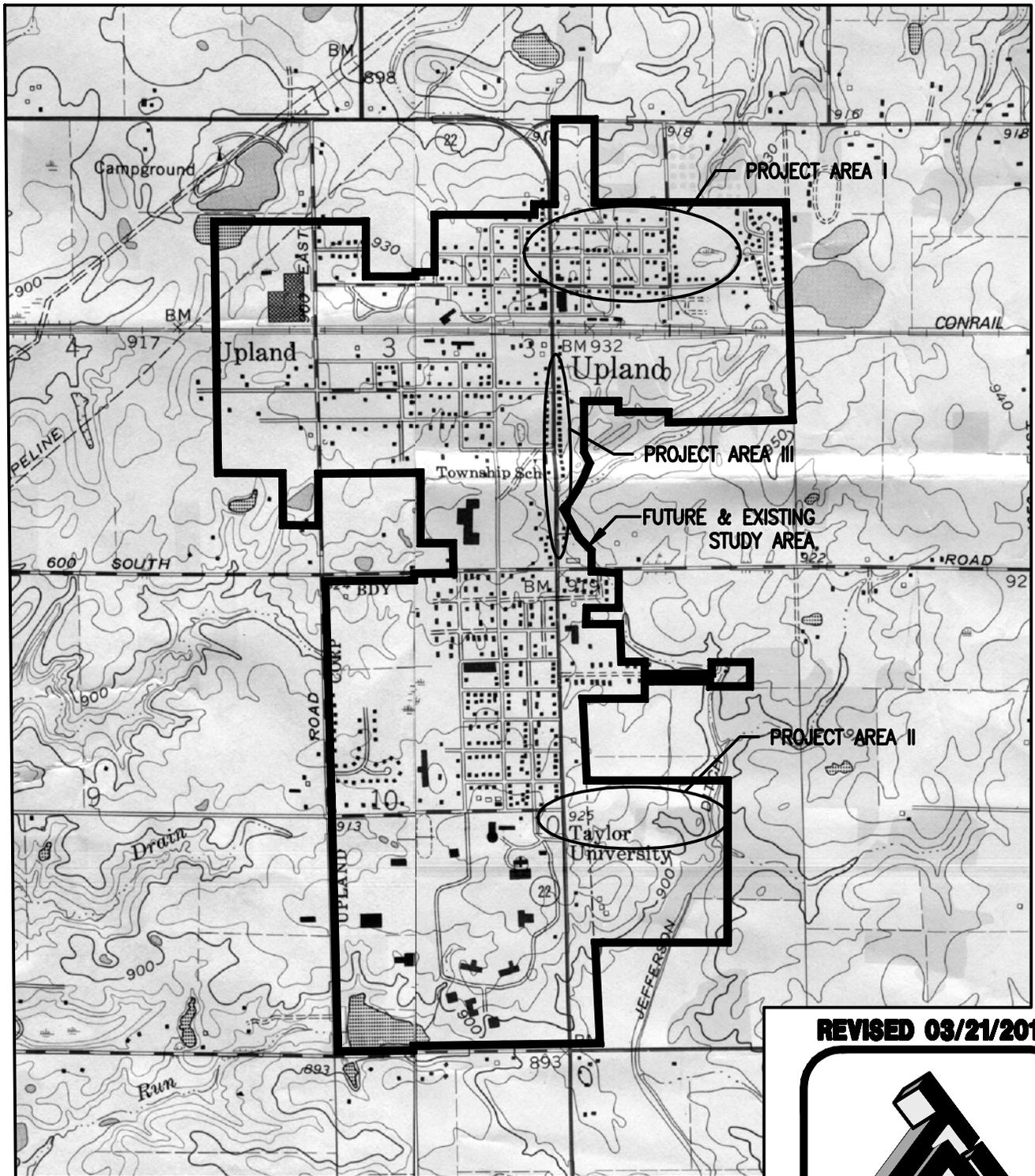
**TOWN OF UPLAND  
PROJECT LOCATION**

SCALE: NONE



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-6230 FAX: 317-377-6241

**EXHIBIT 1**

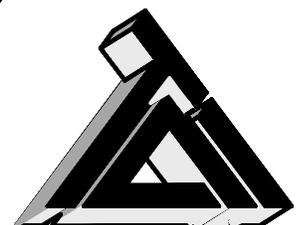


**TOWN OF UPLAND  
 SANITARY & STORM PROJECT  
 EXISTING AND FUTURE STUDY AREA**

SCALE: 1" = 1500'

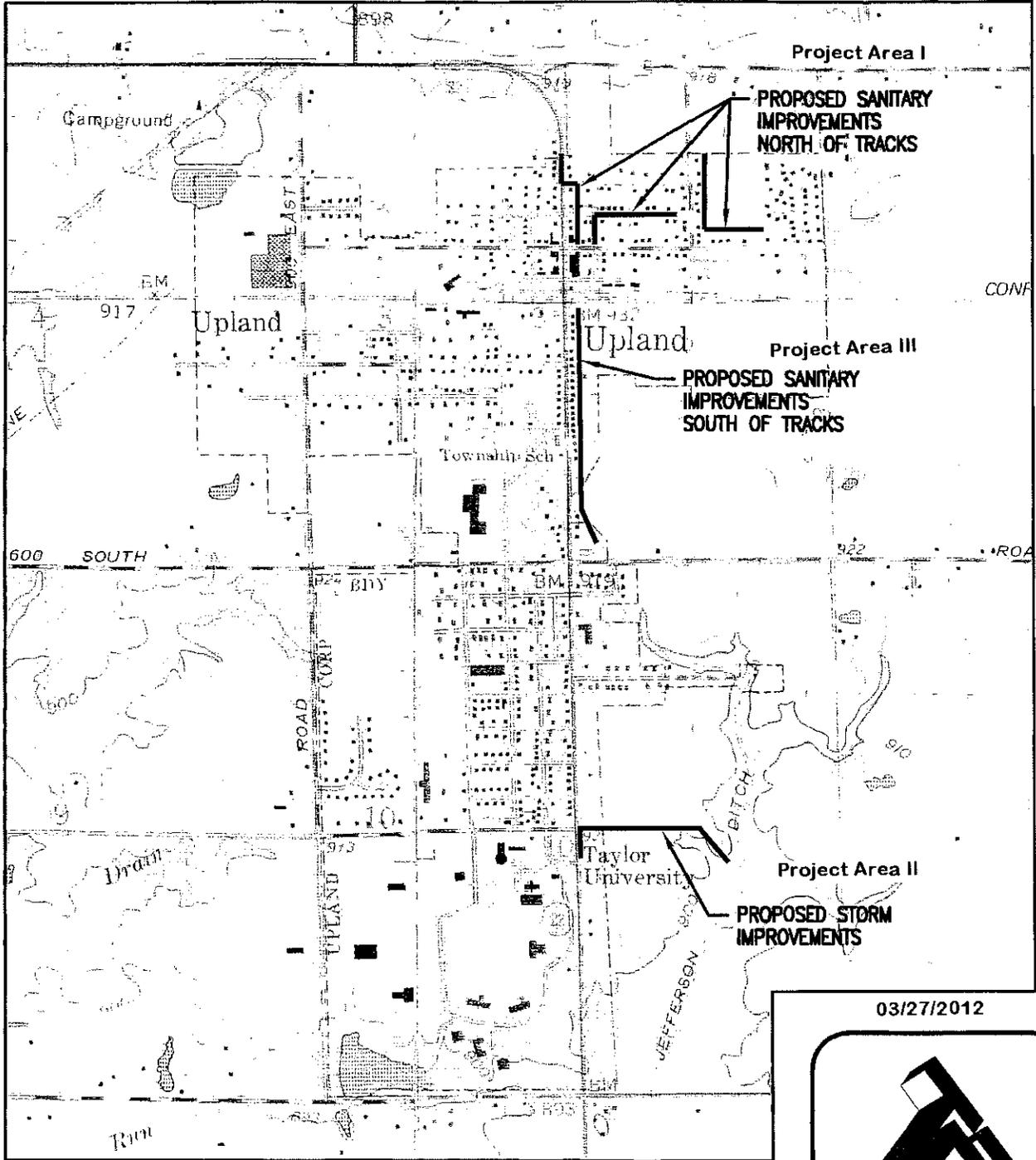


**REVISED 03/21/2012**

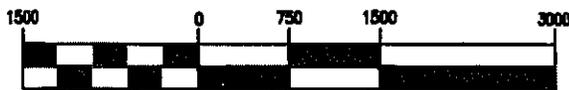


**TRIAD ASSOCIATES INC.**  
 6835 LAWTON LOOP EAST DRIVE  
 INDIANAPOLIS, INDIANA 46216  
 PHONE: 317-677-6860 FAX: 317-677-6841

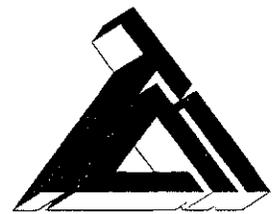
**EXHIBIT 2**



**TOWN OF UPLAND  
PROPOSED SANITARY & STORM IMPROVEMENTS**



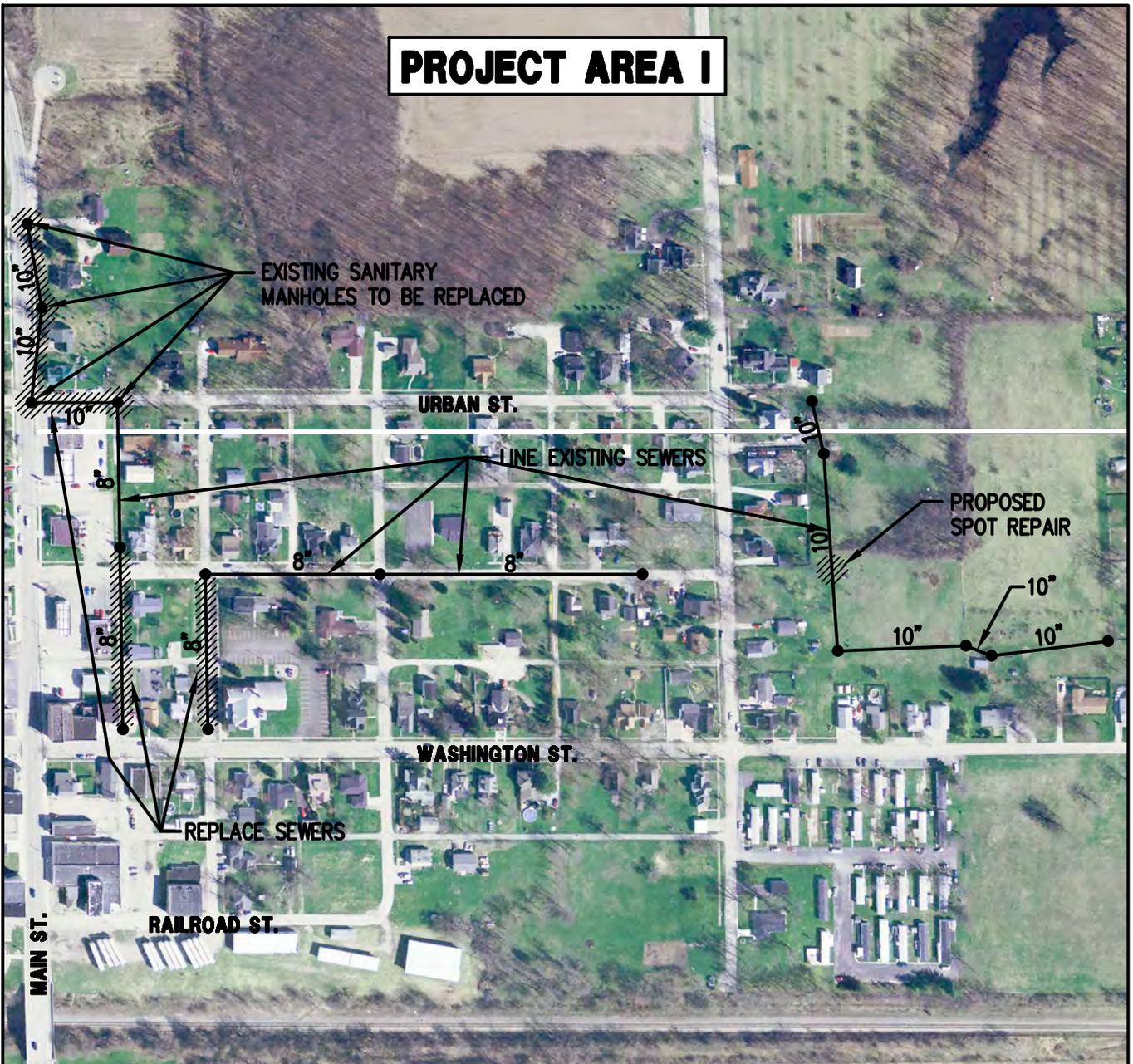
03/27/2012



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 3**

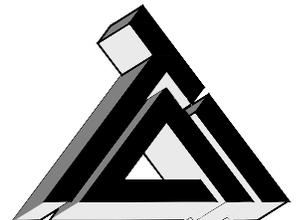
# PROJECT AREA I



REVISED 03/21/2012

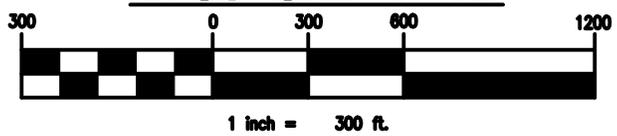
### LEGEND:

 DENOTES ITEMS TO BE REPLACED  
ALL OTHER PIPING IS TO BE LINED IN PLACE.



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

## TOWN OF UPLAND PROPOSED SANITARY IMPROVEMENTS PROJECT AREA I

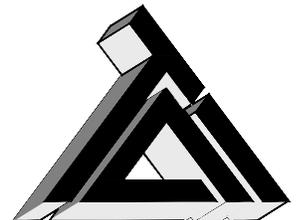


### EXHIBIT 4A



**TOWN OF UPLAND  
PROPOSED SANITARY IMPROVEMENTS  
PROJECT AREA III**

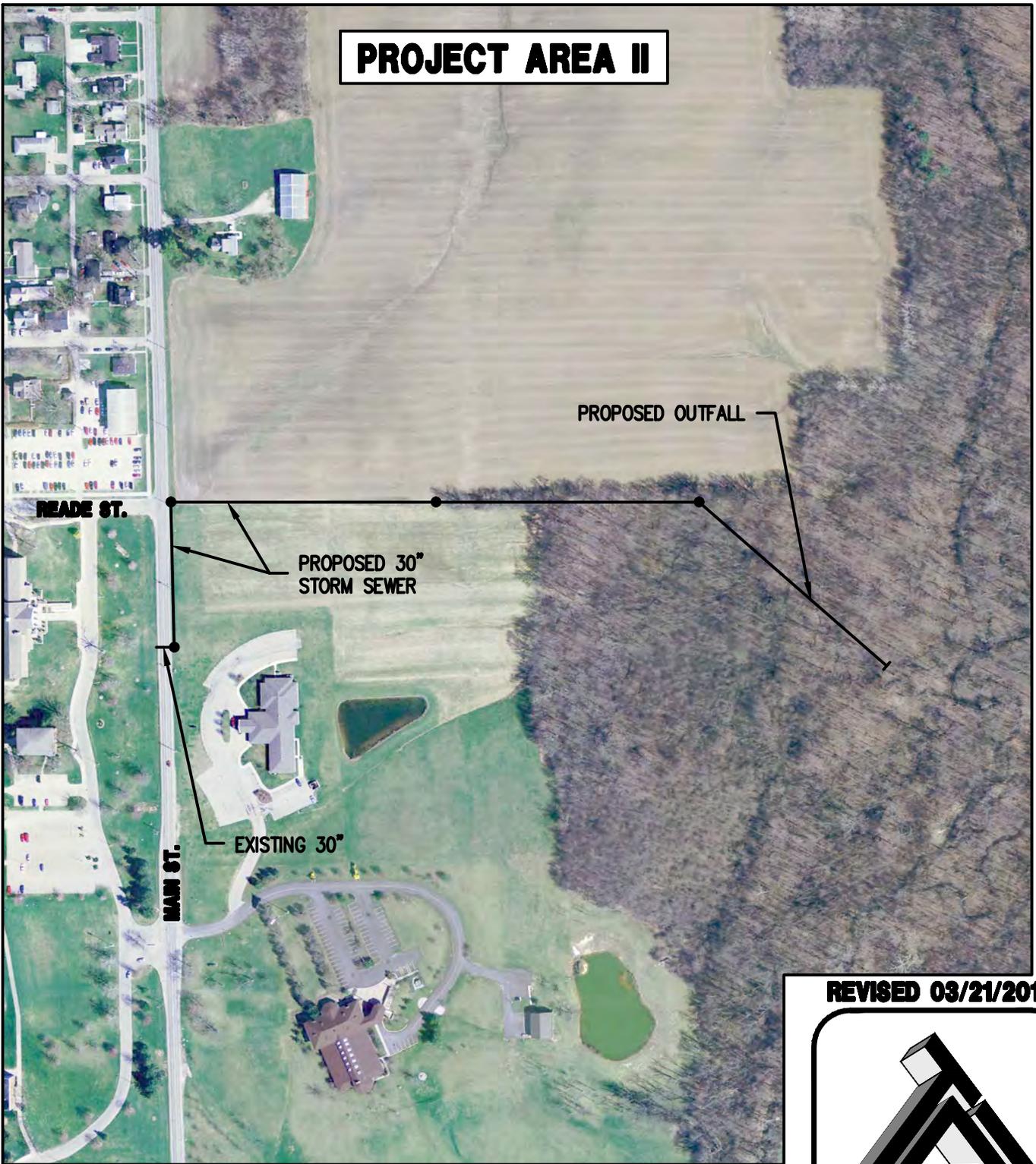
**REVISED 03/21/2012**



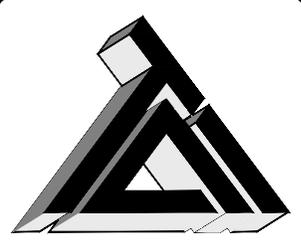
**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 4B**

# PROJECT AREA II

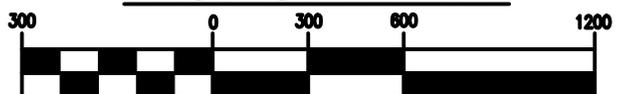


REVISED 03/21/2012



TRIAD ASSOCIATES INC.  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

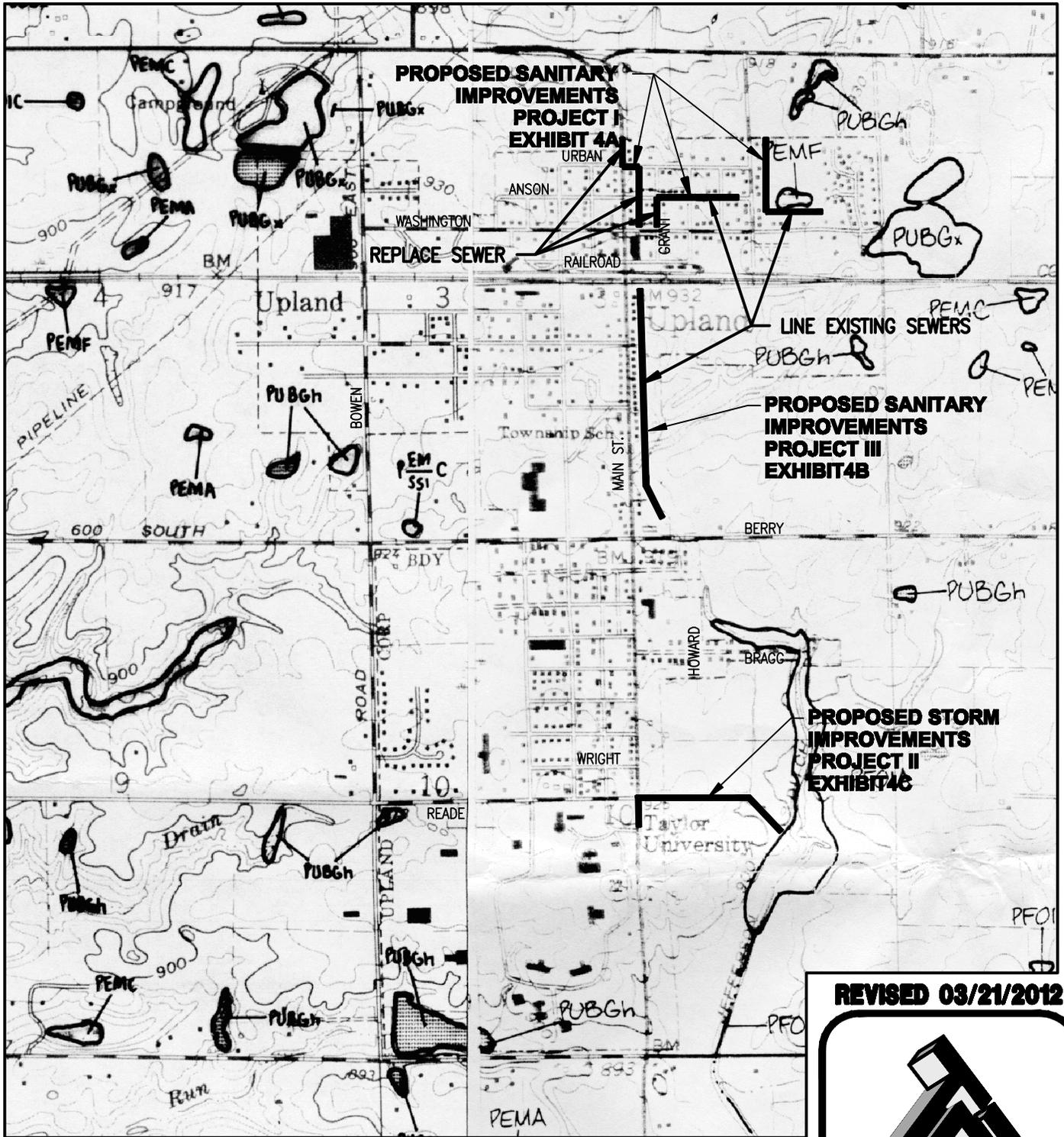
## TOWN OF UPLAND PROPOSED SANITARY IMPROVEMENTS PROJECT AREA II



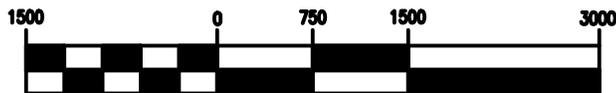
1 inch = 300 ft.



### EXHIBIT 4C



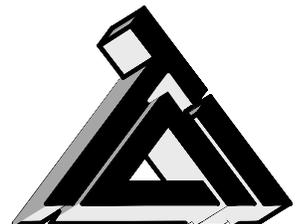
# TOWN OF UPLAND NATIONAL WETLANDS INVENTORY MAP



1 inch = 1500 ft.

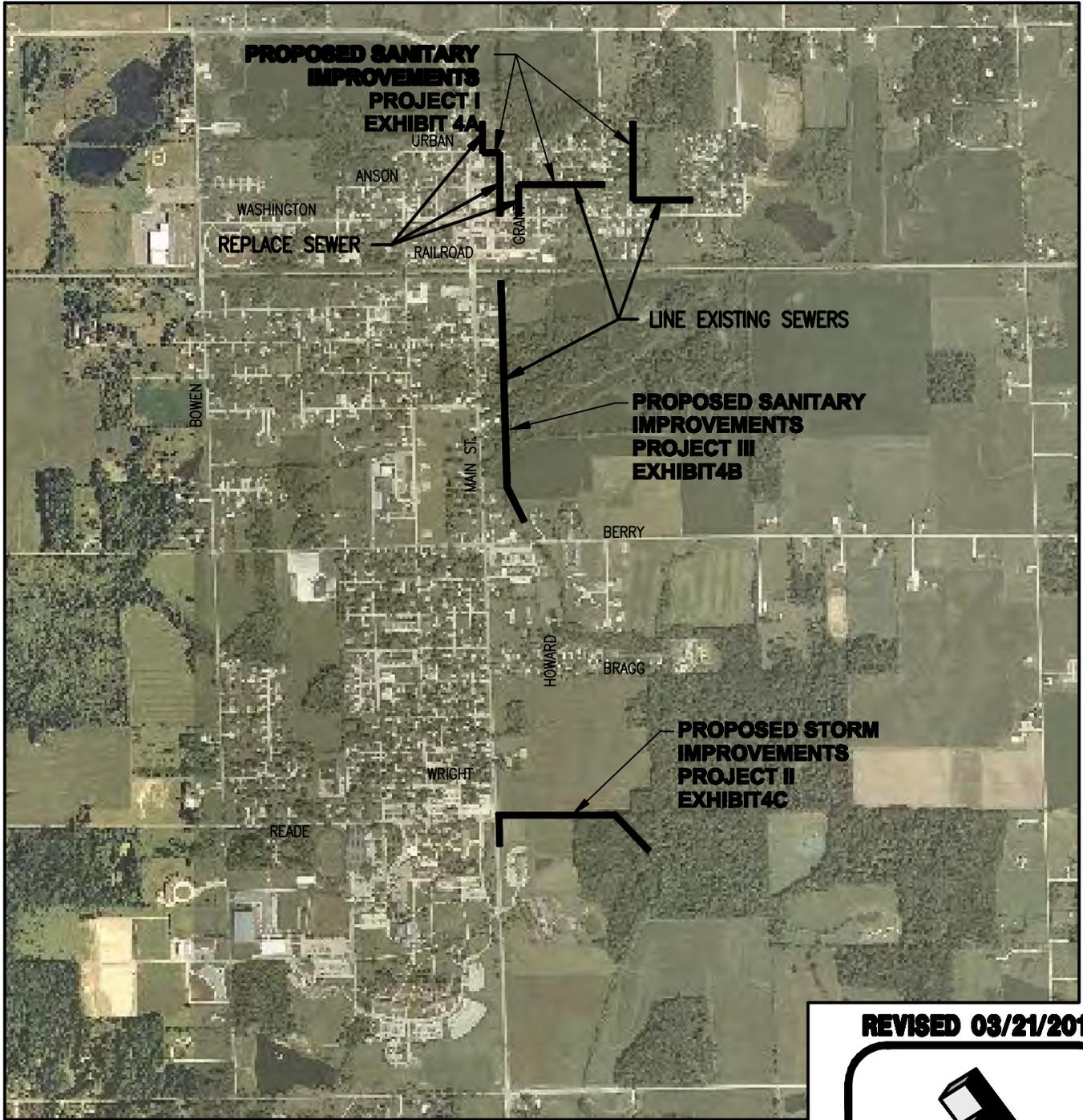


REVISED 03/21/2012



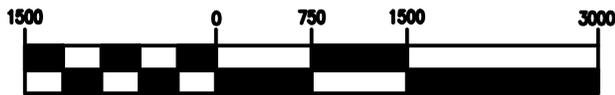
**TRIAD ASSOCIATES INC.**  
888 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-977-8880 FAX: 317-977-8881

**EXHIBIT 5**



**NOTE:**  
NO FLOOD ZONES IN PROJECT AREA

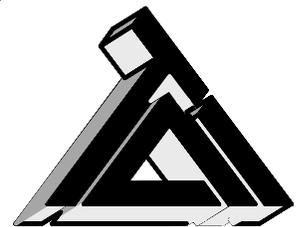
## TOWN OF UPLAND FLOODWAY MAP



1 inch = 1500 ft.



**REVISED 03/21/2012**



**TRIAD ASSOCIATES INC.**  
6825 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-877-8888 FAX: 317-877-8841

**EXHIBIT 6**

**NOTES TO USERS**

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only to areas of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study Report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The projection used in the preparation of this map was Indiana State Plane East Zone (NAD 83 Zone 1301). The horizontal datum was NAD 83, GRS 1983 spheroid. Differences in datum, spherical projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at <http://www.ngs.noaa.gov> or contact the National Geodetic Survey at the following address:

NGS Information Services  
NOAA, NNGS12  
National Geodetic Survey  
SSMC-3, #9202  
1315 East-West Highway  
Silver Spring, Maryland 20910-3282  
(301) 713-3242

To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at <http://www.ngs.noaa.gov>.

Base map information shown on this FIRM was derived from the 2005 Indiana Orthophotography (IndianaMap Framework Data [www.indianamap.org](http://www.indianamap.org)). This information was photogrammetrically compiled at a scale of 1:2400 from aerial photography dated spring 2005.

The profile baselines depicted on this map represent the hydraulic modeling baselines that match the flood profiles in the FIS report. As a result of improved topographic data, the profile baseline, in some cases, may deviate significantly from the channel centerline or appear outside the SFHA.

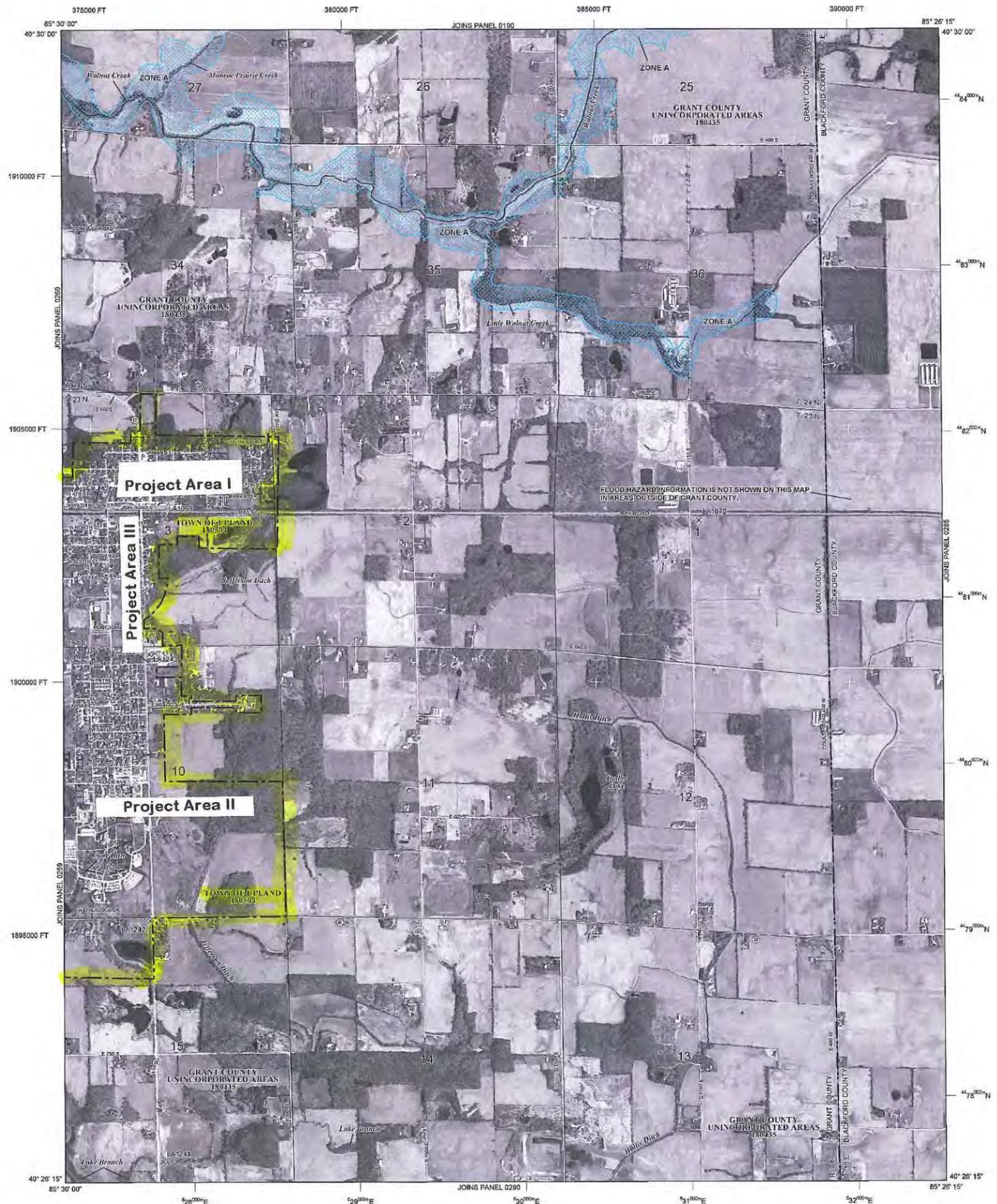
Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the Map Service Center (MSC) website at <http://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have questions about this map, how to order products, or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange (FMIX) at 1-877-FEMA-MAP (1-877-365-9627) or visit the FEMA website at <http://www.fema.gov/business/info>.

**Exhibit 7**  
**Preliminary Floodway Map**  
**Project Areas I, II, III**  
**Town of Upland, IN**  
**(03/28/2012)**



**LEGEND**

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
The 1% annual chance flood (100-year flood, also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, AV, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

**ZONE A** No Base Flood Elevations determined.  
**ZONE AE** Base Flood Elevations determined.  
**ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.  
**ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of elevated flow flooding, velocities also determined.  
**ZONE AR** Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently deteriorated. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.  
**ZONE AV** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.  
**ZONE VE** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.  
**ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**  
The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**OTHER FLOOD AREAS**  
**ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.  
**OTHER AREAS**  
**ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.  
**ZONE D** Areas in which flood hazards are undetermined, but possible.  
**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
**OTHERWISE PROTECTED AREAS (OPAs)**

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% Annual Chance Floodplain Boundary  
 0.2% Annual Chance Floodplain Boundary  
 Floodway boundary  
 Zone D boundary  
 CBRS and OPA boundary  
 Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.  
 Base Flood Elevation line and value; elevation in feet\*  
 Base Flood Elevation value where uniform within zone; elevation in feet\*

\*Referenced to the North American Vertical Datum of 1988

⊕ Cross section line  
 ⊕ Transect line  
 ⊕ Culvert  
 ⊕ Bridge  
 42° 02' 00", 93° 02' 12" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere  
 3100000 FT 500-foot scale: Indiana State Plane East Zone (FIS Zone 1301), Transverse Mercator projection  
 1000-meter Universal Transverse Mercator grid values, zone 16  
 ⊕ DMS10 X Bench mark (see explanation in notes to Users section of this FIRM panel)  
 ⊕ M15 MAP REPOSITORIES  
 Refer to Map Repositories list on Map Index

**EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP**  
May 15, 2002

**EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL**  
(Date of Revision) - to update corporate limits, to add Base Flood Elevations, to add Special Flood Hazard Areas, to add roads and road names and to reflect updated topographic information.  
 For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-438-6620.

**MAP SCALE 1" = 1000'**  
 500 0 1000 2000 FEET  
 300 0 300 600 METERS

**NATIONAL FLOOD INSURANCE PROGRAM**

**PANEL 0280E**

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**GRANT COUNTY,**  
**INDIANA**  
**AND INCORPORATED AREAS**

**PANEL 280 OF 295**  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

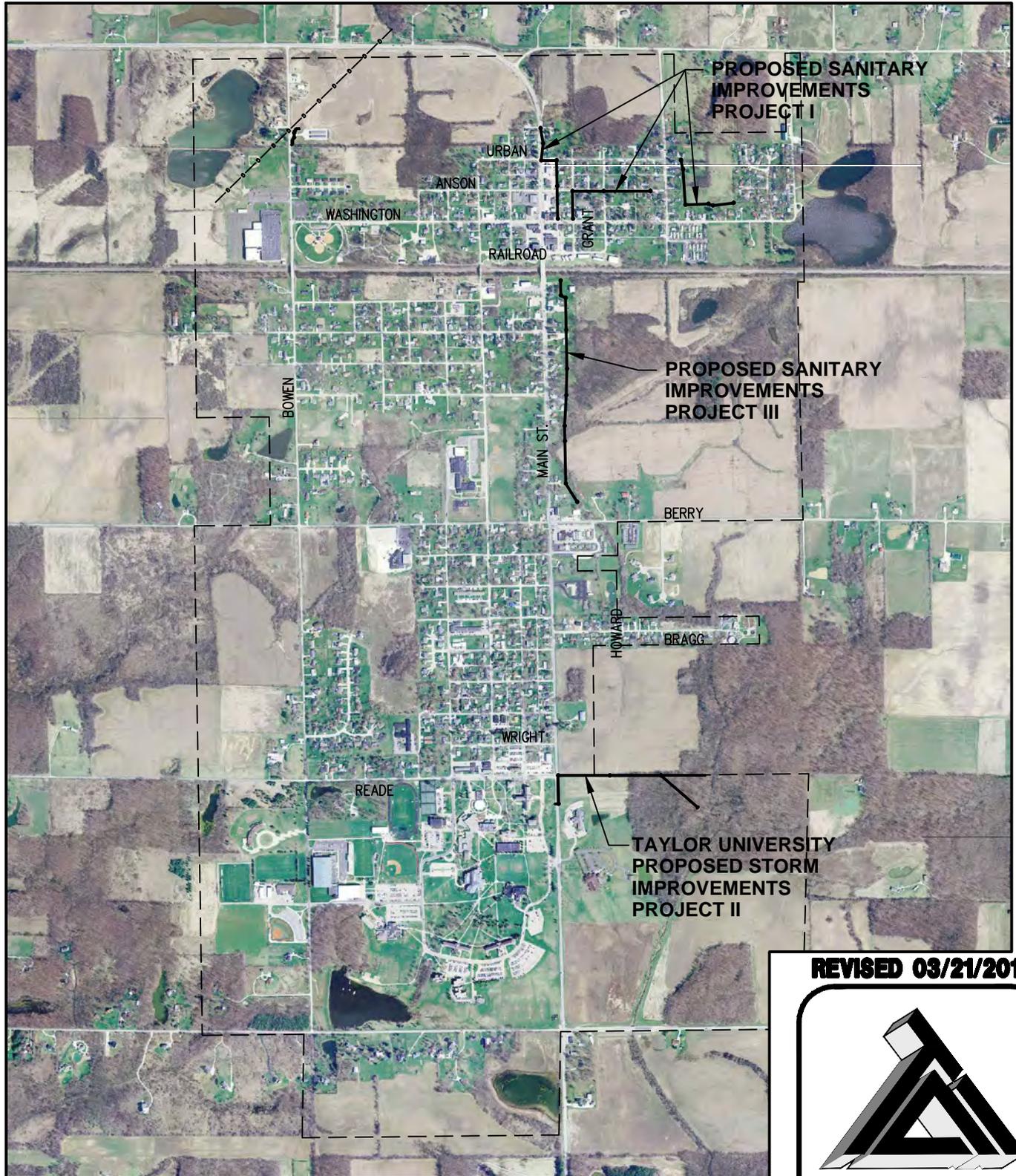
| COMMUNITY       | NUMBER | PANEL | SUFFIX |
|-----------------|--------|-------|--------|
| GRANT COUNTY    | 180435 | 0280  | E      |
| UPLAND, TOWN OF | 180204 | 0280  | E      |

**PRELIMINARY**

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER 18053C0280E**  
**MAP REVISED**

**Federal Emergency Management Agency**

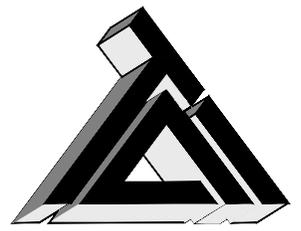


**PROPOSED SANITARY  
IMPROVEMENTS  
PROJECT I**

**PROPOSED SANITARY  
IMPROVEMENTS  
PROJECT III**

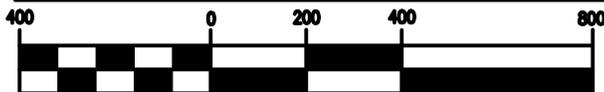
**TAYLOR UNIVERSITY  
PROPOSED STORM  
IMPROVEMENTS  
PROJECT II**

**REVISED 03/21/2012**



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

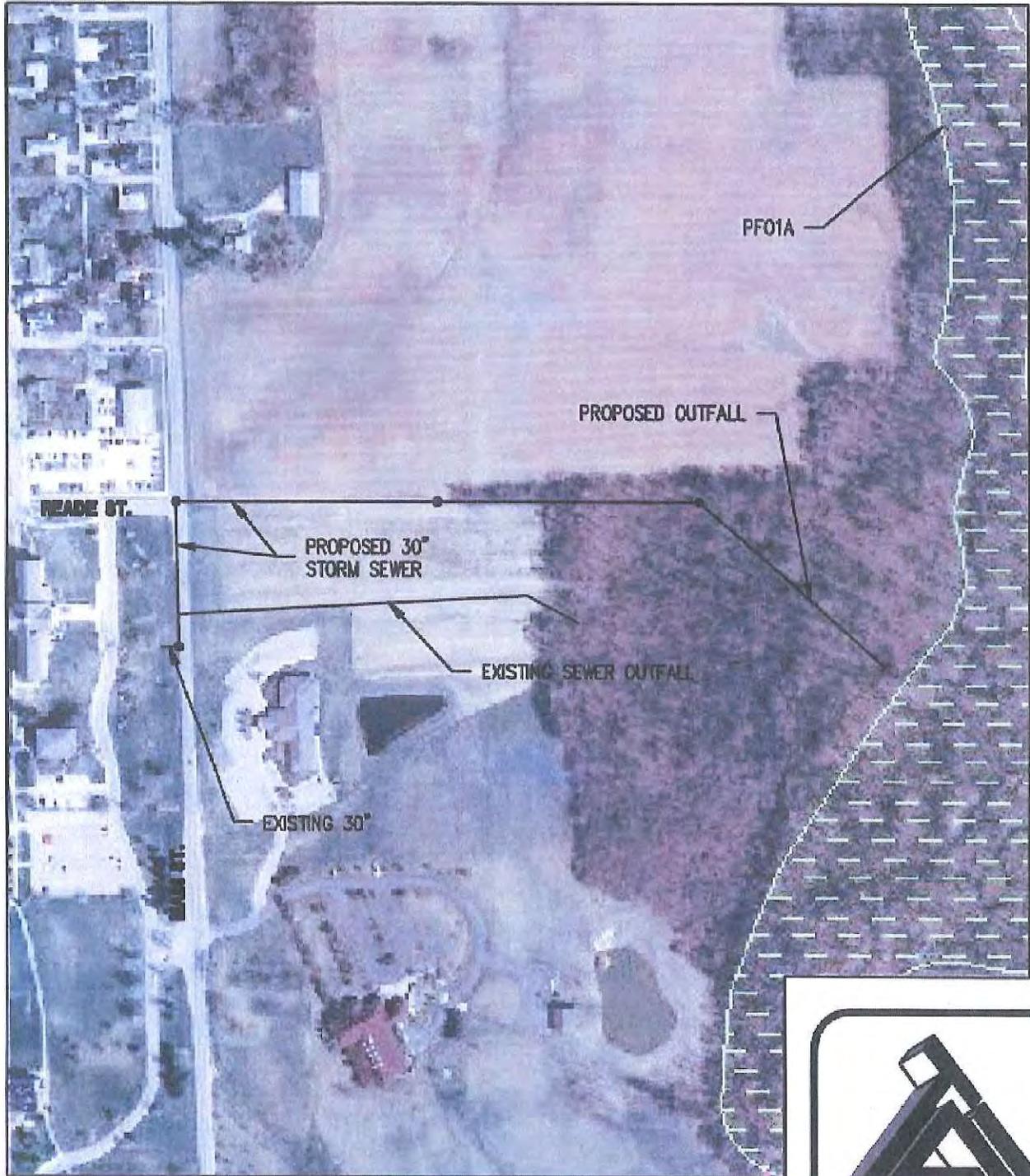
**TOWN OF UPLAND  
PROPOSED IMPROVEMENTS**



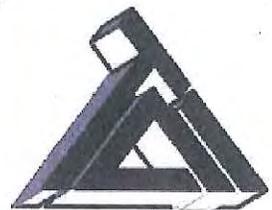
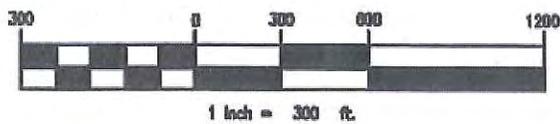
1 inch = 400 ft.



**EXHIBIT 8**



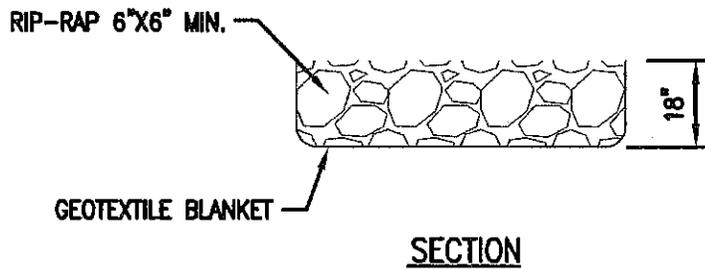
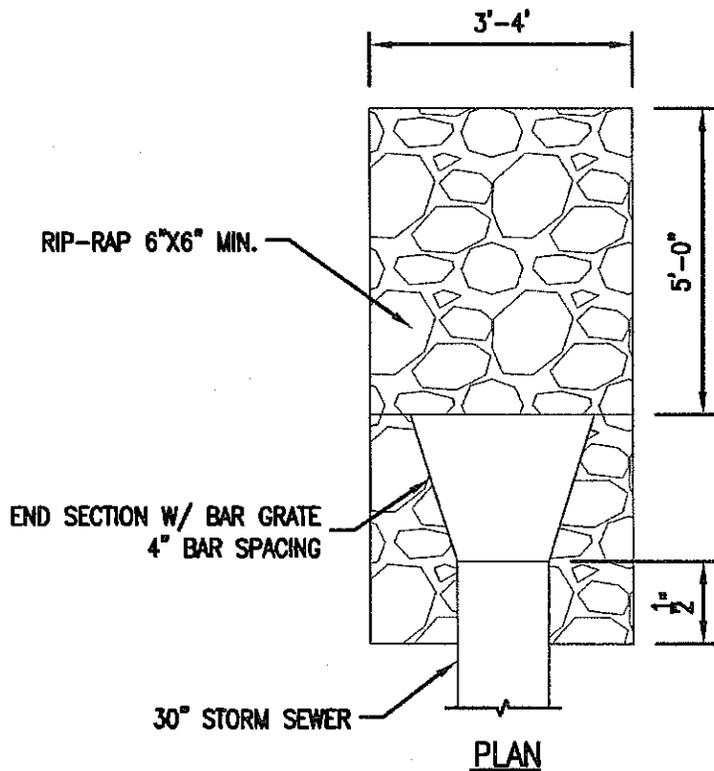
**TOWN OF UPLAND  
EXISTING & PROPOSED OUTFALLS**



**TRIAD ASSOCIATES INC.**  
 2828 LANTON LOOP EAST DRIVE  
 INDIANAPOLIS, INDIANA 46230  
 PHONE: 317-872-8280 FAX: 317-872-8281

**EXHIBIT 9**

**DETAILS**  
**for Town of Upland**  
**Sanitary and Storm Sewer**  
**Improvements Project (2012)**

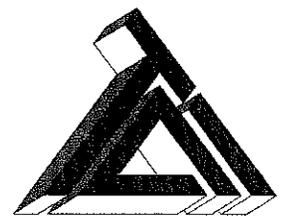


**OUTFALL W/ RIP-RAP**

SCALE: NONE



NORTH



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-6230 FAX: 317-377-5241

**DETAIL A**



**LEGAL DESCRIPTION – EASEMENT**

Beginning at the Northwest Corner of Southeast Quarter of Section 10, Township 23 North, Range 9 East; thence South 89° 20' 16" East 1,069.90 feet, along the North line of said Southeast Quarter of section 10; thence South 45° 04' 21" East 553.06 feet; thence South 44° 55' 39" West 20.00 feet; thence North 45° 04' 21" West 544.93 feet; thence North 89° 20' 16" West parallel to the North line of the Southeast Quarter of Section 10, 1061.54 feet to the West line of said Southeast Quarter; thence North 0° 00' 00" East 20.00 feet to the Point of Beginning and containing 0.74 Acres more or less.

**Mitigation Details**

Mitigation includes planting five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height. A native riparian forest planting plan must use at least 5 canopy trees and 5 understory trees, shrubs, or vines selected from the Woody Riparian Vegetation list or an approved equal. Additionally, a native herbaceous seed mixture should be planted consisting of at least 10 species of grasses, sedges, and wildflowers selected from the Herbaceous Riparian Vegetation list or an approved equal. Restore disturbed areas within forested habitats such that trees are planted as close as possible to the storm sewer.

It has been identified that the construction will affect three (3) trees that are 10 inches in diameter or larger. Therefore the mitigation plan will require a minimum planting of 15 new trees at least 2 inches in diameter-at-breast height.

**TOWN OF UPLAND  
TREE MITIGATION**



**TRIAD ASSOCIATES INC.**  
622 LANTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46210  
PHONE: 317-977-8289 FAX: 317-977-8284

**DETAIL B**

### Woody Riparian Vegetation

| Common name                           | Species name                     | Region 3 status | Type of plant          | Tree, Shrub, Vine | Region (N, C, S) | Coefficient of Conservatism | Comment                            |
|---------------------------------------|----------------------------------|-----------------|------------------------|-------------------|------------------|-----------------------------|------------------------------------|
| Box Elder                             | <i>Acer negundo</i>              | FACW-           | Large Understory Tree  | T                 | N, C, S          | 1                           |                                    |
| Black Maple                           | <i>Acer nigrum</i>               | FAC             | Large Canopy Tree      | T                 | N, C, S          | 6                           |                                    |
| Red Maple                             | <i>Acer rubrum</i>               | FAC             | Large Canopy Tree      | T                 | N, C, S          | 5                           |                                    |
| Silver Maple                          | <i>Acer saccharinum</i>          | FACW            | Large Canopy Tree      | T                 | N, C, S          | 1                           |                                    |
| Sugar Maple                           | <i>Acer saccharum</i>            | FACU            | Large Canopy Tree      | T                 | N, C, S          | 4                           |                                    |
| Ohio Buckeye                          | <i>Aesculus glabra</i>           | FAC+            | Large Understory Tree  | T                 | N, C, S          | 5                           |                                    |
| Indigobush                            | <i>Amorpha fruticosa</i>         | FACW-           | Medium Shrub           | S                 | S                | 3                           |                                    |
| Black Chokeberry                      | <i>Aronia melanocarpa</i>        | FACW-           | Medium Shrub           | S                 | N, C, S          | 8                           |                                    |
| Purple Chokeberry                     | <i>Aronia prunifolia</i>         | FACW            | Medium Shrub           | S                 | N                | 8                           |                                    |
| Common Paw Paw                        | <i>Asimina triloba</i>           | FAC             | Small Understory Tree  | T                 | N, C, S          | 6                           |                                    |
| River Birch                           | <i>Betula nigra</i>              | FACW            | Small Canopy Tree      | T                 | N, S             | 2                           |                                    |
| American Hornbeam                     | <i>Carpinus caroliniana</i>      | FAC             | Medium Understory Tree | T                 | N, C, S          | 5                           |                                    |
| Bitternut Hickory                     | <i>Carya cordiformis</i>         | FAC             | Large Canopy Tree      | T                 | N, C, S          | 5                           |                                    |
| Pecan                                 | <i>Carya illinoensis</i>         | FACW            | Large Canopy Tree      | T                 | S*               | 4                           | Extreme southwestern counties      |
| Shellbark Hickory                     | <i>Carya laciniosa</i>           | FACW            | Large Canopy Tree      | T                 | N, C, S          | 8                           |                                    |
| Shagbark Hickory                      | <i>Carya ovata</i>               | FACU            | Large Canopy Tree      | T                 | N, C, S          | 4                           |                                    |
| Sugarberry                            | <i>Celtis laevigata</i>          | FACW            | Large Understory Tree  | T                 | S                | 7                           |                                    |
| Hackberry                             | <i>Celtis occidentalis</i>       | FAC-            | Large Canopy Tree      | T                 | N, C, S          | 3                           |                                    |
| Burtonbush                            | <i>Cephalanthus occidentalis</i> | OBL             | Medium Shrub           | S                 | N, C, S          | 5                           |                                    |
| Redbud                                | <i>Cercis canadensis</i>         | FACU            | Small Understory Tree  | T                 | N, C, S          | 3                           |                                    |
| Alternate-leaf Dogwood                | <i>Cornus alternifolia</i>       | FACU-           | Small Understory Tree  | T                 | N, C, S          | 8                           |                                    |
| Pale Dogwood (formerly Silky Dogwood) | <i>Cornus obliqua</i>            | FACW+           | Medium Shrub           | S                 | N, C, S          | 5                           |                                    |
| Roughleaf Dogwood                     | <i>Cornus drummondii</i>         | FAC-            | Medium Shrub           | S                 | N, C, S          | 2                           |                                    |
| Flowering Dogwood                     | <i>Cornus florida</i>            | FACU-           | Small Understory Tree  | T                 | N, C, S          | 4                           | Susceptible to dogwood anthracnose |
| Gray Dogwood                          | <i>Cornus racemosa</i>           | FACW-           | Medium Shrub           | S                 | N, C, S          | 2                           |                                    |
| Red-osier Dogwood                     | <i>Cornus sericea</i>            | FACW            | Medium Shrub           | S                 | N                | 4                           |                                    |
| Hazelnut                              | <i>Corylus americana</i>         | FACU-           | Medium Shrub           | S                 | N, C, S          | 4                           |                                    |
| Cockspur Hawthorn                     | <i>Crataegus crus-galli</i>      | FAC             | Small Understory Tree  | T                 | N, C, S          | 4                           |                                    |

| Overcup Oak         | Quercus lyrata         | OBL   | Medium Canopy Tree    | T | S*      | 7  | Extreme southwestern counties  |
|---------------------|------------------------|-------|-----------------------|---|---------|----|--|
| Bur Oak             | Quercus macrocarpa     | FAC-  | Large Canopy Tree     | T | N, C, S | 5  |  |
| Swamp Chestnut Oak  | Quercus michauxii      | FACW  | Med.-Lg. Canopy Tree  | T | S*      | 7  | Far southern and southwestern counties                                       |
| Chinkapin Oak       | Quercus muehlenburgii  | UPL   | Med.-Lg. Canopy Tree  | T | N, C, S | 4  | Also along well-drained riverbanks   |
| Pin Oak             | Quercus palustris      | FACW  | Small Canopy Tree     | T | N, C, S | 3  |  |
| Northern Red Oak    | Quercus rubra          | FACU  | Large Canopy Tree     | T | N, C, S | 4  |  |
| Shumard Oak         | Quercus shumardii      | FACW- | Large Canopy Tree     | T | C, S    | 7  |  |
| Post Oak            | Quercus stellata       | FACU- | Sm.-Med. Canopy Tree  | T | S*      | 5  | Seasonally swampy woods in SW counties                                       |
| Staghorn Sumac      | Rhus typhina           |       | Large Shrub           | S | N       | 2  |  |
| Pasture Gooseberry  | Ribes cynosbati        | FACW  | Small Shrub           | S | N, C, S | 4  |  |
| Carolina Rose       | Rosa carolina          | FACU- | Small Shrub           | S | N, C, S | 4  |  |
| Peachleaf Willow    | Salix amygdaloides     | FACW  | Small Canopy Tree     | T | N       | 4  |  |
| Sandbar Willow      | Salix interior         | OBL   | Medium Shrub          | S | N, C, S | 1  |  |
| Black Willow        | Salix nigra            | OBL   | Large Understory Tree | T | N, C, S | 3  |  |
| Elderberry          | Sambucus canadensis    | FACW- | Medium Shrub          | S | N, C, S | 2  |  |
| Bristly Greenbriar  | Smilax hispida         | FAC   | Vine                  | V | N, C, S | 3  |  |
| American Bladdernut | Staphylea trifolia     | FAC   | Medium Shrub          | S | N, C, S | 5  |  |
| Bald Cypress        | Taxodium distichum     | OBL   | Large Canopy Tree     | T | S*      | 10 | Only in Vanderburgh, Posey, Warrick, Knox, Gibson Co.                        |
| American Basswood   | Tilia americana        | FACU  | Large Canopy Tree     | T | N, C, S | 5  |  |
| American Elm        | Ulmus americana        | FACW- | Large Canopy Tree     | T | N, C, S | 3  | Susceptible to Dutch elm disease; typically grows as a small understory tree |
| Slippery Elm        | Ulmus rubra            | FAC   | Large Canopy Tree     | T | N, C, S | 3  |  |
| Nannyberry          | Viburnum lentago       | FAC+  | Medium Shrub          | S | N       | 5  |  |
| Black Haw           | Viburnum prunifolium   | FACU  | Medium Shrub          | S | N, C, S | 4  |  |
| Riverbank Grape     | Vitis riparia          | FACW- | Vine                  | V | N, C, S | 1  |  |
| Prickly ash         | Zanthoxylum americanum |       | Medium Shrub          | S | N       | 3  |  |

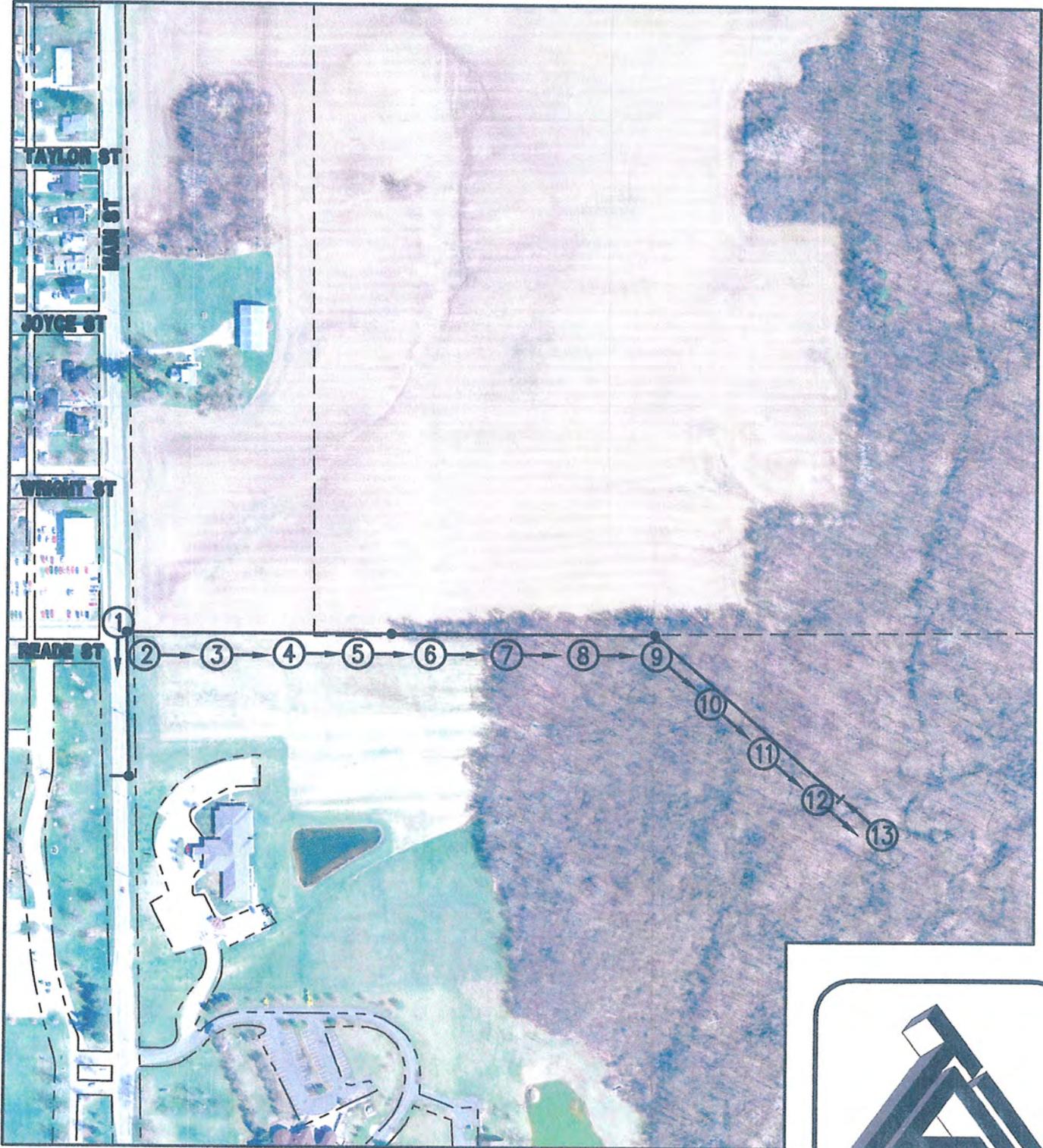
|                          |                                    |       |                        |   |         |   |   |
|--------------------------|------------------------------------|-------|------------------------|---|---------|---|---|
| Downy Hawthorn           | <i>Crataegus mollis</i>            | FACW- | Small Understory Tree  | T | N, C, S | 2 |   |
| Dotted hawthorn          | <i>Crataegus punctata</i>          |       | Small Understory Tree  | T | N, C, S | 2 | Okay in floodplains; not in extreme southwestern counties |
| Persimmon                | <i>Diospyros virginiana</i>        | FAC   | Medium Understory Tree | T | S       | 2 |   |
| American Beech           | <i>Fagus grandifolia</i>           | FACU  | Large Canopy Tree      | T | N, C, S | 8 |   |
| Honey Locust             | <i>Gleditsia triacanthos</i>       | FAC   | Small Canopy Tree      | T | N, C, S | 1 |   |
| Kentucky Coffeetree      | <i>Gymnocladus dioicis</i>         | FACU  | Large Canopy Tree      | T | N, C, S | 4 |   |
| Witch Hazel              | <i>Hamamelis virginiana</i>        | FACU  | Small Understory Tree  | T | N, C, S | 5 |   |
| Smooth Hydrangea         | <i>Hydrangea arborescens</i>       | FACU- | Small Shrub            | S | N, C, S | 7 |   |
| Common Winterberry       | <i>Ilex verticillata</i>           | FACW+ | Medium Shrub           | S | N, C, S | 8 |   |
| Butternut (White Walnut) | <i>Juglans cinerea</i>             | FACU+ | Small Canopy Tree      | T | N, C, S | 5 | Scattered within range; susceptible to butternut canker   |
| Black Walnut             | <i>Juglans nigra</i>               | FACU  | Large Canopy Tree      | T | N, C, S | 2 |   |
| Spicebush                | <i>Lindera benzoin</i>             | FACW- | Medium Shrub           | S | N, C, S | 5 |   |
| Sweet Gum                | <i>Liquidambar styraciflua</i>     | FACW  | Large Canopy Tree      | T | S       | 4 |   |
| Tuliptree                | <i>Liriodendron tulipifera</i>     | FACU+ | Large Canopy Tree      | T | N, C, S | 4 |   |
| Wild Sweet Crabapple     | <i>Malus coronaria</i>             |       | Medium Understory Tree | T | N, C, S |   |   |
| Common Moonseed          | <i>Menispermum canadense</i>       | FAC   | Low Vine               | V | N, C, S | 3 |   |
| Black Gum                | <i>Nyssa sylvatica</i>             | FAC   | Large Understory Tree  | T | N, C, S | 5 |   |
| Hop Hornbeam             | <i>Ostrya virginiana</i>           | FACU- | Medium Understory Tree | T | N, C, S | 5 |   |
| Virginia Creeper         | <i>Parthenocissus quinquefolia</i> | FAC-  | Vine                   | V | N, C, S | 2 |   |
| Common Ninebark          | <i>Physocarpus opulifolius</i>     | FACW- | Small Shrub            | S | N, C, S | 7 |   |
| American Sycamore        | <i>Platanus occidentalis</i>       | FACW  | Large Canopy Tree      | T | N, C, S | 3 |   |
| Eastern Cottonwood       | <i>Populus deltoides</i>           | FAC+  | Large Canopy Tree      | T | N, C, S | 1 |   |
| Swamp Cottonwood         | <i>Populus heterophylla</i>        | OBL   | Large Canopy Tree      | T | N, S    | 8 | Scattered within its range                                |
| Quaking Aspen            | <i>Populus tremuligides</i>        | FAC   | Small Canopy Tree      | T | N       | 2 |   |
| American Plum            | <i>Prunus americana</i>            | UPL   | Small Understory Tree  | T | N, C, S | 4 | Also along riverbanks                                     |
| Black Cherry             | <i>Prunus serotina</i>             | FACU  | Small Canopy Tree      | T | N, C, S | 1 |   |
| Common Hop-tree          | <i>Ptelea trifoliata</i>           | FACU+ | Medium Shrub           | S | N, C, S | 4 |   |
| White Oak                | <i>Quercus alba</i>                | FACU  | Large Canopy Tree      | T | N, C, S | 5 |   |
| Swamp-White Oak          | <i>Quercus bicolor</i>             | FACW+ | Large Canopy Tree      | T | N, C, S | 7 |   |
| Southern Red Oak         | <i>Quercus falcata</i>             | FACU- | Med.-Lg. Canopy Tree   | T | S*      | 5 | Far southern and southwestern counties                    |
| Shingle Oak              | <i>Quercus imbricaria</i>          | FAC-  | Medium Canopy Tree     | T | N, C, S | 3 |   |

## Herbaceous Riparian Vegetation

| Common Name                | Scientific Name                 | Size / Class    | Indicator |
|----------------------------|---------------------------------|-----------------|-----------|
| Hog-Peanut                 | <i>Amphicarpaea bracteata</i>   | herbaceous vine | FAC       |
| Ground-Nut                 | <i>Apios americana</i>          | herbaceous vine | FACW      |
| Panicled Aster             | <i>Aster lanceolatus</i>        | wildflower      | FACW      |
| Side-Flowering Aster       | <i>Aster lateriflorus</i>       | wildflower      | FACW-     |
| False Nettle               | <i>Boehmeria cylindrica</i>     | wildflower      | OBL       |
| Blue-Joint Grass           | <i>Calamagrostis canadensis</i> | grass           | OBL       |
| Emory's Sedge              | <i>Carex emoryi</i>             | sedge           | OBL       |
| Shoreline Sedge            | <i>Carex hyalinolepis</i>       | sedge           | OBL       |
| Lakebank Sedge             | <i>Carex lacustris</i>          | sedge           | OBL       |
| Larger Straw Sedge         | <i>Carex normalis</i>           | sedge           | FACW      |
| Hairy-Fruit Sedge          | <i>Carex trichocarpa</i>        | sedge           | OBL       |
| Fox Sedge                  | <i>Carex vulpinoidea</i>        | sedge           | OBL       |
| Wild or Streambank Chervil | <i>Chaerophyllum procumbens</i> | wildflower      | FAC+      |
| Wood-Reed                  | <i>Cinna arundinacea</i>        | grass           | FACW      |
| Honewort                   | <i>Cryptotaenia canadensis</i>  | wildflower      | FAC       |
| American Beakgrass         | <i>Diarrhena americana</i>      | grass           | FACU      |
| Wild Cucumber              | <i>Echinocystis lobata</i>      | herbaceous vine | FACW-     |
| Canada Wild Rye            | <i>Elymus canadensis</i>        | grass           | FAC-      |
| Virginia Wild Rye          | <i>Elymus virginicus</i>        | grass           | FACW-     |
| Riverbank Wild Rye         | <i>Elymus riparius</i>          | grass           | FACW      |
| Spotted Joe-Pye-Weed       | <i>Eupatorium maculatum</i>     | wildflower      | OBL       |
| Boneset                    | <i>Eupatorium perfoliatum</i>   | wildflower      | FACW+     |
| White Snakeroot            | <i>Eupatorium rugosum</i>       | wildflower      | FACU      |
| White Avens                | <i>Geum canadense</i>           | wildflower      | FAC       |
| Fowl Manna Grass           | <i>Glyceria striata</i>         | grass           | OBL       |
| False Sunflower            | <i>Helopsis helianthoides</i>   | wildflower      | FAC-      |
| Bottlebrush Grass          | <i>Hystrix patula</i>           | grass           | FACU      |
| Orange Jewelweed           | <i>Impatiens capensis</i>       | wildflower      | FACW      |
| Yellow Jewelweed           | <i>Impatiens pallida</i>        | wildflower      | FACW      |
| Soft Rush                  | <i>Juncus effusus</i>           | rush            | OBL       |
| Wood Nettle                | <i>Laportea canadensis</i>      | wildflower      | FACW      |
| Rice Cut Grass             | <i>Leersia oryzoides</i>        | grass           | OBL       |
| White Grass                | <i>Leersia virginica</i>        | grass           | FACW      |
| Great Blue Lobelia         | <i>Lobelia siphilitica</i>      | wildflower      | FACW+     |
| American Bugleweed         | <i>Lycopus americanus</i>       | wildflower      | OBL       |
| Virginia Blue Bells        | <i>Mertensia virginica</i>      | wildflower      | FACW      |
| Hairy Sweet-Cicely         | <i>Osmorhiza claytonii</i>      | wildflower      | FACU      |
| Switch Grass               | <i>Panicum virgatum</i>         | grass           | FAC+      |
| Wild Blue Phlox            | <i>Phlox divaricata</i>         | wildflower      | FACU      |
| Clearweed                  | <i>Pilea pumila</i>             | wildflower      | FACW      |
| Green-Headed Coneflower    | <i>Rudbeckia laciniata</i>      | wildflower      | FACW+     |
| Three-Lobed Coneflower     | <i>Rudbeckia triloba</i>        | wildflower      | FAC-      |
| Clustered Black-Snakeroot  | <i>Sanicula odorata</i>         | wildflower      | FAC+      |
| Dark Green Bulrush         | <i>Scirpus atrovirens</i>       | bulrush         | OBL       |

|                    |                               |            |       |
|--------------------|-------------------------------|------------|-------|
| Wool-Grass         | <i>Scirpus cyperinus</i>      | bulrush    | OBL   |
| River Bulrush      | <i>Scirpus fluviatilis</i>    | bulrush    | OBL   |
| Drooping Bulrush   | <i>Scirpus pendulus</i>       | bulrush    | OBL   |
| Soft-Stem Bulrush  | <i>Scirpus validus</i>        | bulrush    | OBL   |
| Cup-Plant          | <i>Silphium perfoliatum</i>   | wildflower | FACW- |
| Late Goldenrod     | <i>Solidago gigantea</i>      | wildflower | FACW  |
| Prairie Cordgrass  | <i>Spartina pectinata</i>     | grass      | FACW+ |
| American Germander | <i>Teucrium canadense</i>     | wildflower | FACW- |
| Blue Vervain       | <i>Verbena hastata</i>        | wildflower | FACW+ |
| Wingstem           | <i>Verbesina alternifolia</i> | wildflower | FACW  |

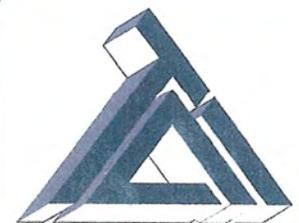
**PHOTOS  
for Town of Upland  
Sanitary and Storm Sewer  
Improvements Project (2012)**



**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTO KEY**



1 inch = 300 ft.



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**APPENDIX C  
PAGE 1**



① LOOKING SOUTH FROM READE ST ON MAIN ST



② LOOKING EAST ON MAIN ST @ READE ST

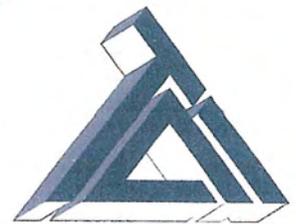


③ LOOKING EAST



④ LOOKING EAST

**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTOGRAPHS**



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**APPENDIX C  
PAGE 2**



⑤ LOOKING EAST



⑥ LOOKING EAST

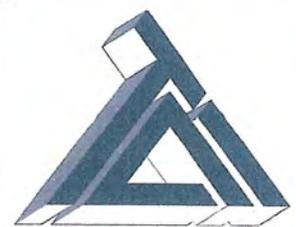


⑦ LOOKING EAST



⑧ LOOKING EAST

**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTOGRAPHS**



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**APPENDIX C  
PAGE 3**



⑨ LOOKING EAST



⑩ LOOKING SOUTHEAST

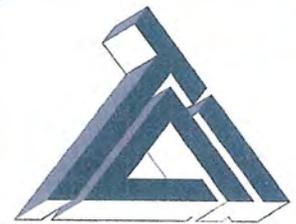


⑪ LOOKING SOUTHEAST



⑫ LOOKING SOUTHEAST

**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTOGRAPHS**



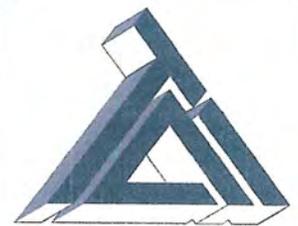
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**APPENDIX C  
PAGE 4**



⑬ LOOKING NORTHWEST

**TOWN OF UPLAND  
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**APPENDIX C  
PAGE 5**

## **APPENDIX A**

**APPENDIX A -  
SUPPORTING ENVIRONMENTAL  
CORRESPONDENCE  
for Town of Upland  
Sanitary and Storm Sewer  
Improvements Project (2012)**

**Appendix A**  
**1. Sanitary and Storm Sewer**  
**Improvements Project Work Plan**  
**for Town of Upland, Indiana,**

***Sanitary and Storm Sewer  
Improvements Project  
Work Plan  
for the  
Town of Upland, Indiana***

**Project Name:** Sanitary and Storm Sewer Improvements Project  
Upland, Indiana

**Designated Signatory:** Michael Cooper, Town Council President  
Town of Upland  
87 North Main Street  
Upland, Indiana 46989  
(765) 348-7560

**Engineer:** James W. Frazell, P.E.  
Triad Associates, Inc.  
5835 Lawton Loop E. Drive  
Indianapolis, Indiana 46216  
(317) 377-5230

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**Town of Upland, Indiana**  
**Work Plan**

|  |           |
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| Chapter 1: Project Location                    | 1         |
| Chapter 2: Current Situation                   | 1         |
| Chapter 3: Evaluation of Environmental Impacts | 3         |
| Chapter 4: Selected Plan                       | 8         |

**Graphics, List of Exhibits**

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| Exhibit 2       | ..... | Study Area (Existing and Future)           |
| Exhibit 3       | ..... | Proposed System Improvements, Overall View |
| Exhibit 4A - 4C | ..... | Proposed System Improvements               |
| Exhibit 5       | ..... | National Wetlands Inventory Map            |
| Exhibit 6       | ..... | Floodway Map                               |
| Exhibit 7       | ..... | Soils Map                                  |
| Exhibit 8       | ..... | Proposed Improvements, Aerial Map          |

**Appendices**

|            |   |
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| Appendix B | Excerpt, Grant County Interim Report                            |
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| Appendix D | IDEM Enforcement  |
| Appendix E | Environmental Agency Correspondence for Sanitary Sewer Project  |
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Additional docs include response to review comments and supplemental mitigation plan (ah)

**Sanitary and Storm Sewer Improvements Project  
Work Plan  
Town of Upland, Indiana**

**PREFACE: Project Need and Scope**

This Work Plan has been prepared for the Town of Upland for submittal to the Indiana Department of Environmental Management (IDEM) as a requirement of the State Revolving Fund (SRF) loan and Special Appropriations Grant Programs. The Work Plan provides information necessary for IDEM to determine the technical, economic, and environmental adequacy of the proposed improvements. A Special Appropriations Planning meeting was held with the Town's representatives, consulting engineer, and IDEM on October 7, 2008 to review the funding requirements, and procedures.

The wastewater collection system in the Town contains 100% separated sewers, which were separated in the mid 1980's. A Sewer Ban was issued by IDEM after wastewater flows exceeded 90% of the plant's capacity. During wet weather the increased flows were causing back-ups in the northeast side collection system, overflows at the northeast side main lift station and surcharging in downstream sewers. As a result, the town was issued a Notice of Violation and an Agreed Order (AO).

A wastewater improvements project was recently completed as part of the approved Compliance Plan. However, the system is still experiencing infiltration and inflow (I/I), mainly in the northeast quadrant of Town. A storm water drainage issue on the southern end of Town near Taylor University is also included as part of this project.

Field investigations were conducted to assess specific problem areas. Alternatives for improvements were evaluated and discussed with Town representatives. Preliminary cost estimates were then prepared and priorities established. This allowed the Town to determine the financial practicality of the recommended improvements.

Generally, the scope of work consists of lining, replacing, and repairing existing sewers and manholes. This will reduce I/I in critical areas of Town. In addition, a storm line will be constructed to drain a portion of the Taylor University campus. Presently, there is an existing storm drain outfall pipe that handles surface water from a major part of the campus. The Town has agreed to increase and re-route the line from where it is currently located through a privately owned property.

The sanitary sewer work will occur in existing trenches, in and along rights of way and in existing easements. No land acquisition or tree removal will be necessary. The storm line will be installed in and adjacent to existing rights of way and in an easement granted by the private property owner. The location of the easement is on previously undeveloped land. Tree removal is necessary and is being handled by the private property owner since the storm pipe relocation is being made at the owner's request.

The estimated project cost is \$790,318 dollars, including non-construction costs. An itemization of costs for the proposed plan is presented in Tables I and II. The project will be funded through funds available from the Special Appropriations Grant (STAG).

This project will decrease I/I in the sanitary collection system, which will reduce or eliminate surcharging in some areas of Town. A drainage problem near Taylor University will also be corrected. Completion of the project is necessary for continued compliance with the Town's Agreed Order.

The project is not located in a floodplain and/or floodway. Construction will not entail destruction of wetlands. Minor negative environmental impacts are anticipated during construction as a result of noise, dust, and sedimentation carry. These disturbances will be controlled in order to minimize the impact on the area.

**Work Plan  
Wastewater Improvements Project  
Upland, Indiana**

**CHAPTER 1: PROJECT LOCATION**

**A. Description of Existing and Future Study/Project Area**

Upland is located in Jefferson Township in Grant County, Indiana. A location map is provided as Exhibit 1. The study area is shown on Exhibit 2. The Town is located in Township 23 North, Range 9 East, Sections 3 and 10 and is shown on the Gas City Quad map. The 20-year study area is the same as the existing service area. Proposed work will be completed within and adjacent to the rights of way and in existing and proposed easements. A portion of the construction will occur on previously undisturbed land.

**CHAPTER 2: CURRENT SITUATION**

**A. Existing Wastewater Collection System**

The wastewater collection system contains 100% separated sanitary sewers, which were separated in 1984. Lines range in size from 8" to 15" in diameter. Several lift stations assist in transporting flows throughout the system. The North Lift Station is the collection point for all services north of the railroad tracks. The force main discharges directly to the WWTP.

**B. Existing Storm Water System**

The existing storm water system consists of separated storm sewers, ditches, and various sized drain pipes. Lines range in size from 8" to 42" in diameter. The land in the west and southwest drains west to the Mississinewa River. The southeast part flows to the Mississinewa via Jefferson Ditch. The north part of Town drains north to Walnut Creek.

### **C. Existing System Condition, Problems, Needs**

1. A Sewer Ban was issued by IDEM in the mid 1990's because of high flows and overflows in the northeast side wastewater collection system and the main lift station.
2. A Notice of Violation (NOV) was issued in August 2005 for overflows and bypasses in the collection system. The violations were caused by heavy rain and power outages. As a result, the Town entered into an Agreed Order with IDEM (Case No. 2005-14697-W). Improvements to the wastewater system was a requirement of the approved Compliance Plan. Appendix D includes copies of IDEM correspondence and enforcement issues.
3. Wastewater improvements were recently completed. The project increased the dry weather capacity of the plant to 0.95 MGD, increased the disinfection capacity and provided for secondary treatment of 3.13 MGD of wet weather flows. The main lift station was also increased and VFD's were added to facilitate better flow regulation.
4. The northeastern part of Town is prone to significant inflow during rainfall events. Numerous attempts have been made to locate and remove the sources, with marginal success. Increasing the pump capacity in the main lift station has not prevented the sewers from surcharging in the northeast quadrant of Town.
5. Field investigation and testing was conducted on the northeast sewers. Previous separation plans were also reviewed. The evaluation revealed that many of the problems were in the sewers that were not replaced during the 1984 separation project.
6. Taylor University is currently making improvements to the storm system on campus. Frequent flooding occurs at the corner of Reed and Main Streets, in front of the University. The area contains a low spot that collects water from the surrounding campus. The low area does not drain adequately because the existing surface water discharge pipe is undersized. The Town has agreed to re-route the pipe from where it is presently located through a privately owned property east of the campus. The capacity of the new line will be increased.

#### **D. Population**

According to the 2000 Census, the existing population in Upland is 3,803, which is an increase of 15% from the 1990 population of 3,295. The Town's population is expected to continue to increase. Presently there are 834 residential, institutional and commercial users.

### **CHAPTER 3: EVALUATION OF ENVIRONMENTAL IMPACTS**

Environmental impacts can be classified as either direct or indirect. Direct impacts result from the construction, operation, and maintenance processes. Indirect impacts are those that are made possible by the project, whereby creating a change which ultimately effects the environment.

Environmental agencies have been contacted regarding the proposed improvements. Copies of correspondence related to the sanitary sewer portion is provided in Appendix E and Appendix F for the storm project. Appendix G contains the Archaeological Field Reconnaissance Survey, which was conducted for the proposed storm line.

#### **A. Disturbed and Undisturbed Land**

Construction activities related to the sanitary sewer projects will occur in and adjacent to previously disturbed rights of way and easements. The sewers and manholes to be replaced will occur in the existing trenches, which are located in pavement and grassed streets and alleys. The sewers and manholes to be lined and repaired will occur in the existing structures. All areas have been disturbed. No tree removal will be necessary.

A portion of the storm sewer will be installed in and along S.R. 22. Another section will affect previously undisturbed ground that is presently grassed. The remaining part will be installed in a partially cleared wooded area that borders the intended discharge stream. Additional tree removal is being accomplished by the private property owner.

## **B. Historic and Architectural Resources**

There are no known historic, architectural or archaeological sites which would be impacted by this project. An excerpt from the Grant County Interim Report showing the locations of the proposed improvements is provided in Appendix B. Correspondence from IDNR is provided in Appendices E and F.

## **C. Wetlands**

The storm line will discharge to Jefferson Ditch, which is a wetlands as shown on Exhibit 5. 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.

## **D. Hydrology**

### **1. Surface Waters**

There are no stream crossings. 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).

### **2. Floodway and Floodplain**

The project is not situated in a known floodplain or floodway. Upland does not participate in the Flood Insurance Rate program. See Exhibit 6.

### **3. Groundwater**

The high seasonal groundwater level for the Blount/Glynwood soil types ranges from 1.0' to 3.5' deep, and is over 5.0' for Pewamo soils. Construction will not permanently affect the groundwater table or local wells. If necessary, dewatering will be employed during construction with the flow directed to a sedimentation basin prior to being discharged to surrounding surface waters. The project will not impact a drinking water supply or sole source aquifer.

## **E. Plants and Animals**

A portion of the storm project will be installed in a wooded area that is within the range of the federally endangered Indiana Bat. U.S. Fish & Wildlife noted that there is suitable summer habitat for this species along the forest. The agency further noted that there are no current records of Indiana bats near the project site. In addition, due to the size of the project, not enough habitat will be eliminated to adversely affect this species. Since tree removal is necessary, it was recommended that tree clearing be avoided from April 1 through September 30th.

The construction and operation of the other areas in 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. Mitigation measures cited in comment letters from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Services will be implemented. (See Appendix E and F)

## **F. Prime Farmland and Geology**

Soil types in the project area are predominantly Blount and Glynwood. A minor soil type in the area is Pewamo, which is mainly along stream banks and drainageways. A Soils Map is provided as Exhibit 7. Soil types do not include karst or bedrock. Pewamo is classified as hydric. See Section L for siltation and erosion mitigation measures. The Farmland Conversion Impact Rating Forms are provided in Appendix A. Appendices E and F contain INRCS correspondence.

## **G. Air Quality**

Construction activities may generate some noise, odors, and dust normally resulting from such activity. The dust, fumes and noise are short term impacts, lasting only during the construction phase. See Section L for mitigation measures. Construction activities and future operation should not impact ozone, airborne pollutants or other current or future air quality concerns.

## **H. Open Space and Recreational Opportunities**

Installation of the storm line will affect open space. Construction and operation of the remaining project will neither create nor destroy open space and recreational opportunities.

## **I. Lake Michigan coastal Program**

The project will not affect the Lake Michigan Coastal Zone.

## **J. Natural National Landmarks**

The construction and operation of the proposed project will not impact National Natural Landmarks.

## **K. Induced Impacts**

The Town, to the extent possible, through the authority of its Council, planning commission, or other means will ensure that future development, as well as future collection system or storm management 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 Town will require new development and storm water projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.

## **L. Mitigation Measures**

### **1. Siltation and erosion**

Siltation and erosion will be kept to a minimum. Any mitigation measures mandated by authorized reviewing agencies to reduce or eliminate waterway contamination will be implemented. Mitigative measures to limit erosion and siltation include the following:

- a. Erosion and sediment control measures required by the project specifications will require that the contractor provide a schedule for clearing, grading, excavating and restoring disturbed areas, along with a description of measures to be used during construction to ensure erosion/ sediment control. The program shall meet all applicable federal, state, and local requirements.
- b. Natural vegetation will be retained wherever feasible.
- c. Appropriate agronomic practices (sediment basins, seeding, mulching) will be provided to control runoff, including shoreline and stream crossings, if applicable.
- d. Drainage systems, including surface and subsurface drainage, will be returned to their natural state as soon as possible, if disturbed.
- e. Roadways and parking lots will remain stabilized during construction to the extent possible.
- f. When possible, construction activities will be scheduled to avoid excessively wet conditions.
- g. The existing topsoil will be reused during the restoration process.
- h. No more than 100 feet of open trench will be allowed. Where possible, excavated material will be kept to the upland side of the trench. Excess material will be used elsewhere on the project.
- i. Discharge from dewatering will be directed to sedimentation basins prior to discharging into surrounding surface waters.

## 2. Surface Water and Wooded Areas

Tree removal will be necessary for parts of the storm project. The storm line will discharge to Jefferson Ditch, which is a perennial stream. Project impacts that result in a removal of trees in a non-wetland, riparian area requires mitigation. Mitigation includes planting five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height. See Appendices E and F for additional comments and restoration requirements.

Alternative routes for the storm project were recommended by IDNR. These options were evaluated but found to be unworkable due to additional cost and land acquisition difficulties. An easement on the proposed ground has been granted to the Town by the property owner. The location of the storm pipe was at the request of the property owner.

### 3. Dust and Noise

The adverse impacts caused by dust generated from construction activities will be alleviated by periodically wetting the exposed soil and unpaved roadways to reduce the suspension of dust particles. To reduce noise impacts on the surrounding neighborhood, work activities will be limited to normal daytime hours.

## **CHAPTER 4: SELECTED PLAN**

The scope of this project is rehabilitation and replacement of existing sanitary sewers and manholes and installation of a storm sewer. Work activities will include lining, replacing, and repairing existing sewer lines and manholes. This will reduce I/I in critical areas of Town. In addition, a storm line will be installed in an area near Taylor University. The line will be installed to allow discharge to an appropriate storm water outlet.

The manhole and sewer replacement will occur in existing trenches, in and along rights of way and in existing easements. Lining and repair will occur in the existing structures. No land acquisition or tree removal will be necessary for the sanitary sewer improvements. The re-routed storm line will be installed in and adjacent to existing rights of way and in a previously undisturbed easement

The Preliminary Design Summary is provided in Appendix C. The proposed system improvements are shown on Exhibits 3 and 4A through 4C.

**A. Proposed System Improvements**

|                            |            |
|----------------------------|------------|
| Line 8" Sanitary Sewer     | 639 l.f.   |
| Line 10" Sanitary Sewer    | 3,230 l.f. |
| Replace 8" Sanitary Sewer  | 986 l.f.   |
| Replace 10" Sanitary Sewer | 145 l.f.   |
| Replace 12" Sanitary Sewer | 330 l.f.   |
| Manhole Replacement        | 3 ea.      |
| Manhole Repair             | 1 ea.      |

**B. Cost Summary**

An itemized cost estimate for the proposed improvements is shown on Table I, Project Component Costs and Table II, the Selected Plan Cost Summary. The remaining grant funds total \$791,010 dollars, of which \$69,960 needs to be re-appropriated. The estimated project cost is \$790,318 dollars.

**C. Project Schedule**

|               |                                |
|---------------|--------------------------------|
| December 2010 | Submit Work Plan to IDEM       |
| March 2011    | IDEM Approval of Work Plan     |
| April 2011    | Submit Plans & Specs to IDEM   |
| May 2011      | IDEM Approval of Plans & Specs |
| June 2011     | Bid Opening                    |
| July 2011     | Initiation of Construction     |
| December 2011 | Substantial Completion         |

**D. Land Acquisition**

An easement has been granted by the property owner for relocation and installation of the storm sewer.

**Project Component Costs**  
**Proposed Sanitary and Storm Sewer Improvements Project**  
**Town Of Upland, Indiana**

| ITEM                                 | Quantity | Unit | Unit Cost                 | Ext. Cost        |
|--------------------------------------|----------|------|---------------------------|------------------|
| <b><u>SANITARY SEWER PROJECT</u></b> |          |      |                           |                  |
| 8" Pipe Lining                       | 639      | lf   | \$42                      | \$26,838         |
| 10" Pipe Lining                      | 3230     | lf   | \$46                      | \$148,580        |
| 8" Pipe Replacement                  | 986      | lf   | \$85                      | \$83,810         |
| 10" Pipe Replacement                 | 145      | lf   | \$100                     | \$14,500         |
| 12" Pipe Replacement                 | 330      | lf   | \$110                     | \$36,300         |
| Spot Repairs                         | 1        | ea   | \$7,500                   | \$7,500          |
| Manhole Replacement                  | 3        | ea   | \$7,500                   | \$22,500         |
| Manhole Repair                       | 5        | ea   | \$3,500                   | \$17,500         |
| Lateral Repairs/Reinstatement        | 32       | ea   | \$750                     | \$24,000         |
| Temporary Bypass Pumping             | 1        | ls   | \$10,000                  | \$10,000         |
| Restoration                          | 1        | ls   | <u>\$30,000</u>           | <u>\$30,000</u>  |
| <b>Total Project I Construction</b>  |          |      |                           | <b>\$421,528</b> |
| <b><u>STORM SEWER PROJECT</u></b>    |          |      |                           |                  |
| 36" Pipe                             | 1731     | lf   | \$90                      | \$155,790        |
| Manholes                             | 5        | ea   | \$7,500                   | \$37,500         |
| Headwall                             | 1        | ea   | \$10,000                  | \$10,000         |
| Fore Bay                             | 1        | ls   | \$27,500                  | \$27,500         |
| Restoration                          | 1        | ls   | <u>\$10,000</u>           | <u>\$10,000</u>  |
| <b>Total Project II Construction</b> |          |      |                           | <b>\$240,790</b> |
|                                      |          |      | <b>Total Construction</b> | <b>\$662,318</b> |

**SELECTED PLAN COST SUMMARY**  
**Proposed Sanitary and Storm Sewer Improvements Project**  
**Town of Upland, Indiana**

|  | <b>Total Cost</b> |
|--|-------------------|
| <b>Non-Construction Costs</b>                        |                   |
| Administrative                                       | \$10,000          |
| Land & Right-of-way Acquisition                      | \$0               |
| Relocation   | \$0               |
| Engineering Fees                                     |                   |
| Design   | \$72,800          |
| Construction Admin Permits                           | \$5,200           |
| Other (Workplan)                                     | \$20,000          |
| Part-time Inspection                                 | <u>\$20,000</u>   |
| <b>Non-Construction Cost Subtotal</b>                | <b>\$128,000</b>  |
| <br>   |                   |
| <b>Construction and Equipment Subtotal (Table I)</b> | <b>\$662,318</b>  |
| <br>   |                   |
| <b>Total Project Cost</b>                            | <b>\$790,318</b>  |

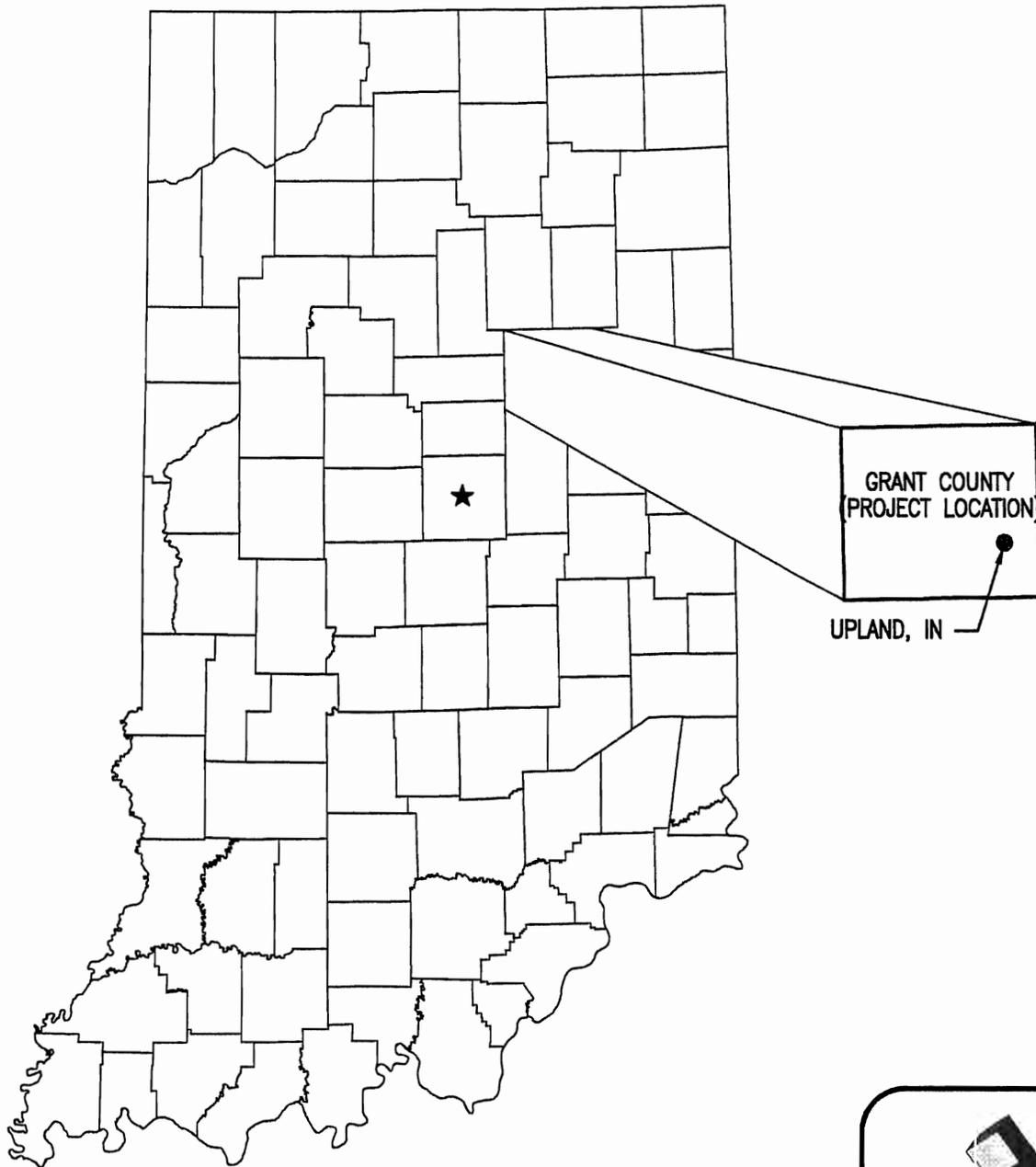
Upland\Sanitary-Storm Workplan\tabII

**TABLE III  
PROJECT FINANCING INFORMATION  
Town of Upland, Indiana**

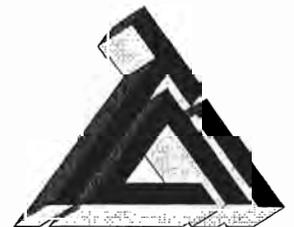
|    |  |                               |
|----|--|-------------------------------|
| 1. | Project Cost Summary   |                               |
|    | a. Collection/transport system cost  | <u>\$ 421,528</u>             |
|    | b. Treatment system cost   | <u>                    </u>   |
|    | c. Storm system cost   | <u>\$ 240,790</u>             |
|    | <b><u>Subtotal Construction Cost</u></b>   | <b><u>\$ 662,318</u></b>      |
|    | d. Capacity Reservation Fees   | <u>                    </u>   |
|    | e. Contingencies<br>(should not exceed 10% of construction costs)  | <u>\$                    </u> |
|    | f. Non-construction costs  | <u>\$ 128,000</u>             |
|    | e.g., engineering/design services, field exploration<br>studies, project management & construction<br>inspection, legal & administrative services, land costs<br>(including capitalized costs of leased lands, ROWs,<br>and easements), start-up costs (e.g., O & M manual,<br>operator training.) |                               |
|    | g. <b>Total Project Cost</b> (lines a+b+c+d+e+f)   | <u>\$ 790,318</u>             |
|    | h. Total ineligible SRF costs*<br>(Total ineligible SRF costs will not be covered by the SRF loan.)  | <u>\$                    </u> |
|    | i. Other funding sources (list other grant/loan sources and amounts)   |                               |
|    | (1) Local Funds (hook-on fees, connection fees, capacity fees etc.)  | <u>                    </u>   |
|    | (2) Cash-on-hand   | <u>                    </u>   |
|    | (3) STAG Grant to be Re-obligated  | <u>\$ 69,960</u>              |
|    | (4) STAG Grant (Remaining Funds)   | <u>\$ 721,050</u>             |
|    | (5) Other  | <u>                    </u>   |
|    | <b>Total Available Funds</b>   | <b><u>\$ 791,010</u></b>      |

The following costs are not eligible for grant reimbursement:

1. Land cost (unless it's for sludge application) \$ \_\_\_\_\_  
Only the actual cost of the land is not eligible; associated costs such as attorney fees, site title opinion and the like **are eligible**.
  
2. Materials and work done on private property \$ \_\_\_\_\_  
(installation/repair of laterals, including disconnection of inflow into laterals; abandonment of on-site systems (septic tank or mound systems)). Grinder pumps, vacuum stations and other appurtenances/installations on private property to treat/transport ARE fundable IF owned and maintained by the participant.
  
3. Grant applications and income surveys done for other agencies. \$ \_\_\_\_\_  
(i.e. OCRA, RUS, etc.)
  
4. Any project designed to promote economic development and growth is ineligible.
  
5. Costs incurred for preparing NPDES permit applications and other tasks unrelated to the SRF project. \$ \_\_\_\_\_
  
6. Cleaning of equipment, such as digesters, sand filters, grit tanks and settling tanks. These items should have been maintained through routing operation, maintenance and replacement by the political subdivision. Sewer cleaning is **ineligible** for SRF *unless* the cleaning is required for sewer rehabilitation such as sliplining and cured in place piping (CIPP) \$ \_\_\_\_\_

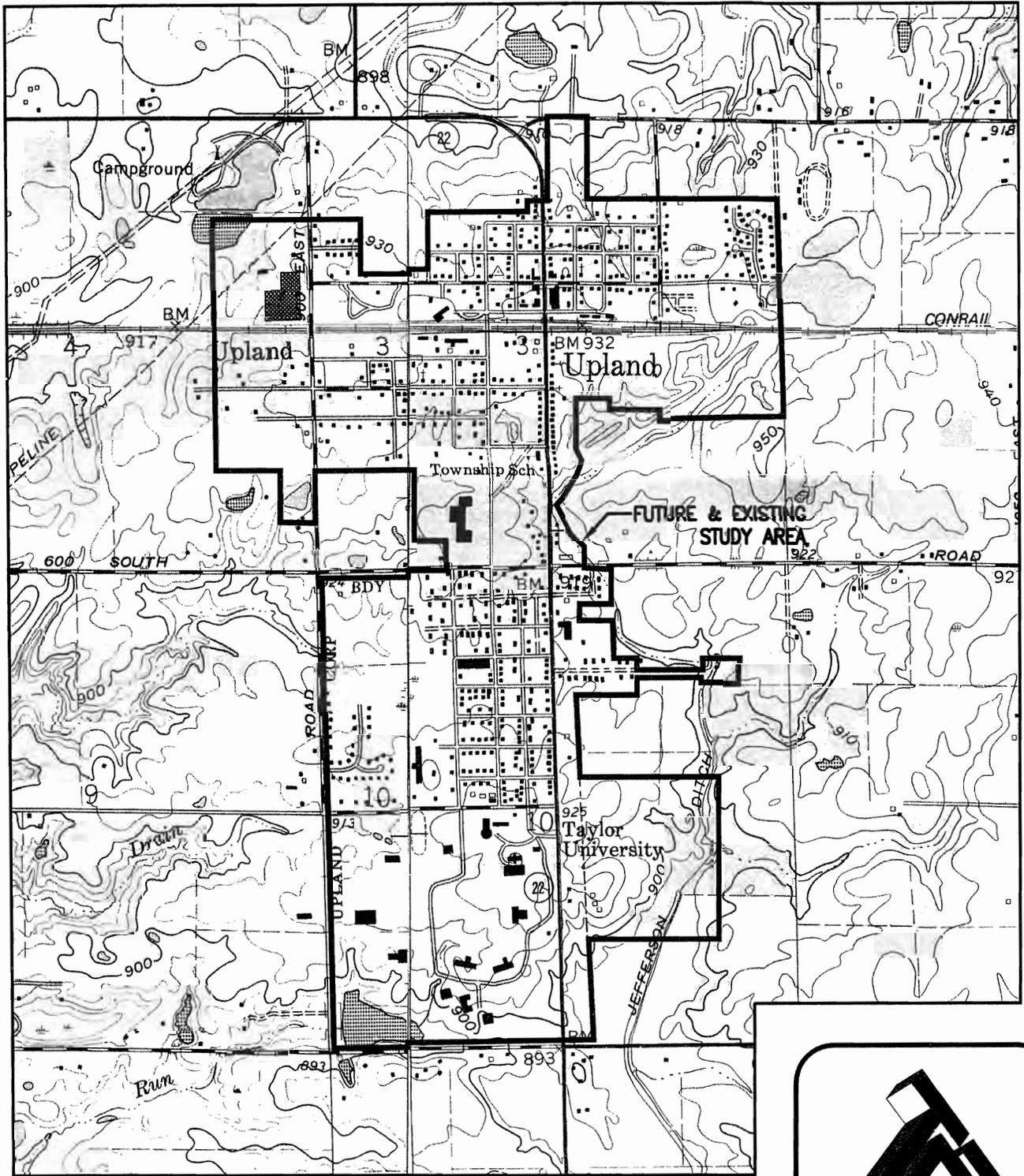


**TOWN OF UPLAND  
PROJECT LOCATION MAP**



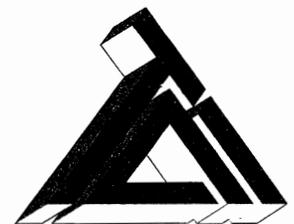
**TRIAD ASSOCIATES INC.**  
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**EXHIBIT 1**



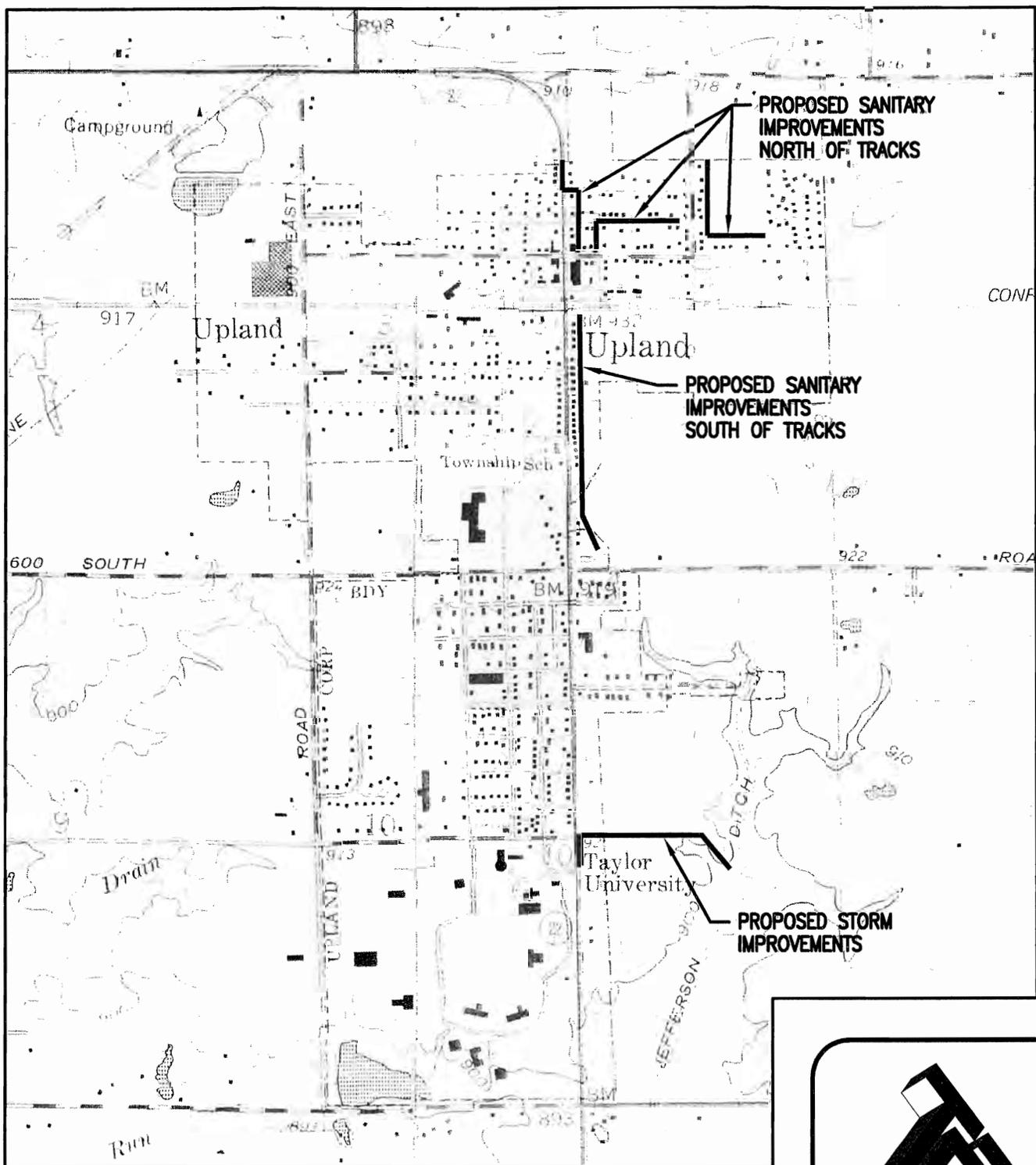
**TOWN OF UPLAND  
 SANITARY & STORM PROJECT  
 EXISTING AND FUTURE STUDY AREA**

SCALE: 1" = 1500'

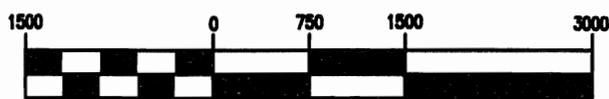


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**EXHIBIT 2**



**TOWN OF UPLAND  
PROPOSED SANITARY & STORM IMPROVEMENTS**

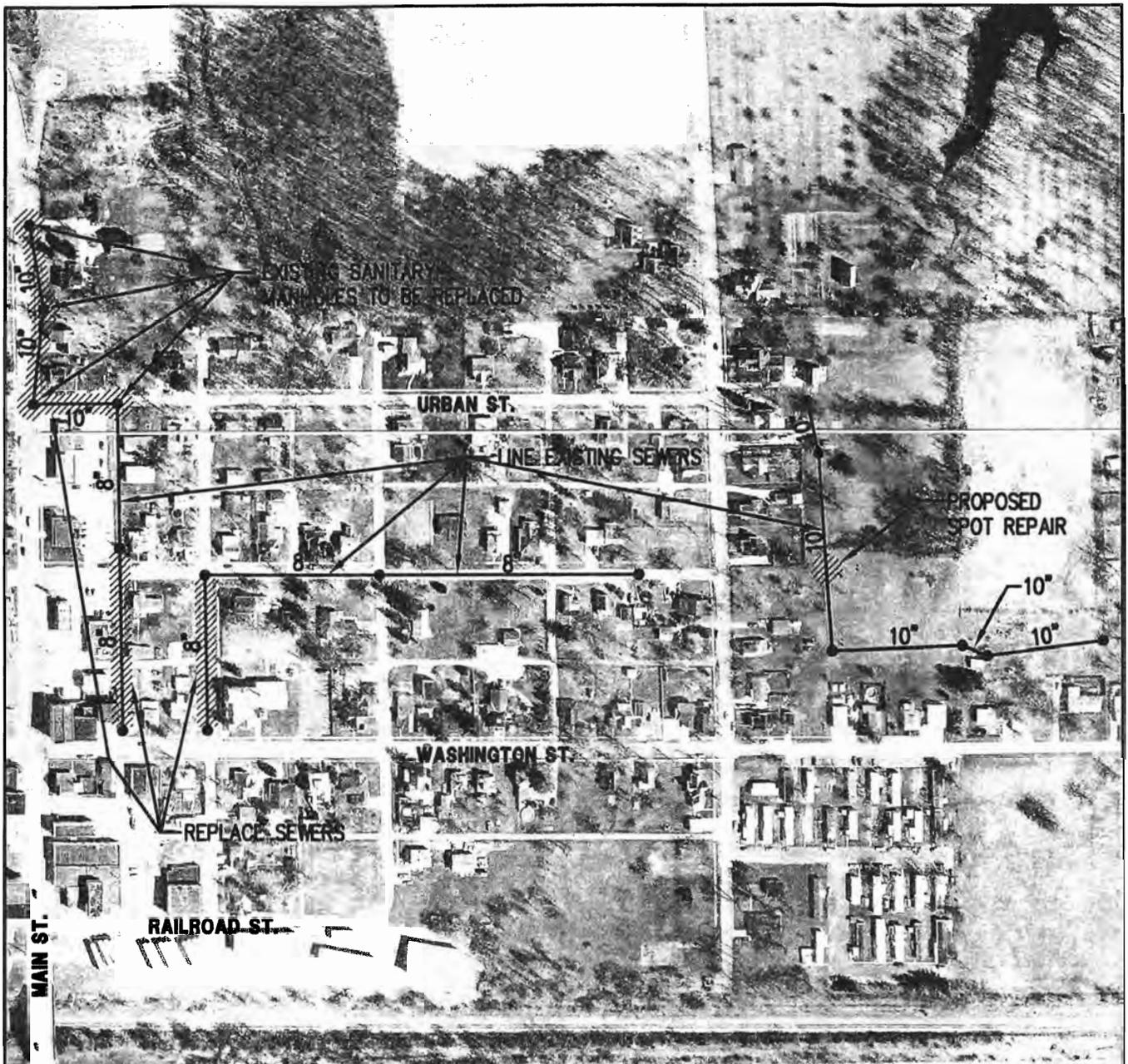


1 inch = 1500 ft.



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

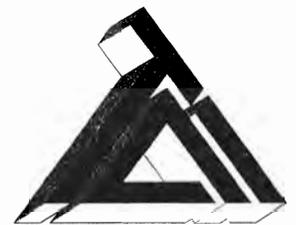
**EXHIBIT 3**



**LEGEND:**

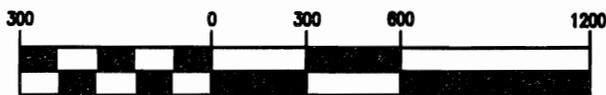


DENOTES ITEMS TO BE REPLACED  
ALL OTHER PIPING IS TO BE  
LINED IN PLACE.



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**TOWN OF UPLAND  
PROPOSED SANITARY IMPROVEMENTS**



1 inch = 300 ft.

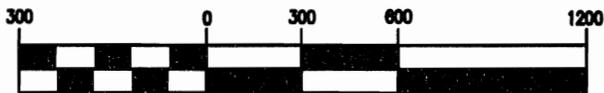


**EXHIBIT 4A**

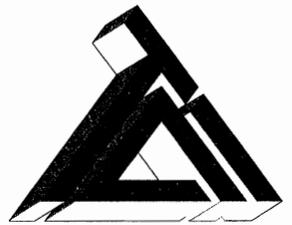


**NOTE:**  
 ALL SANITARY SEWERS  
 ON THIS SHEET TO BE  
 LINED ONLY

**TOWN OF UPLAND  
 PROPOSED SANITARY IMPROVEMENTS**

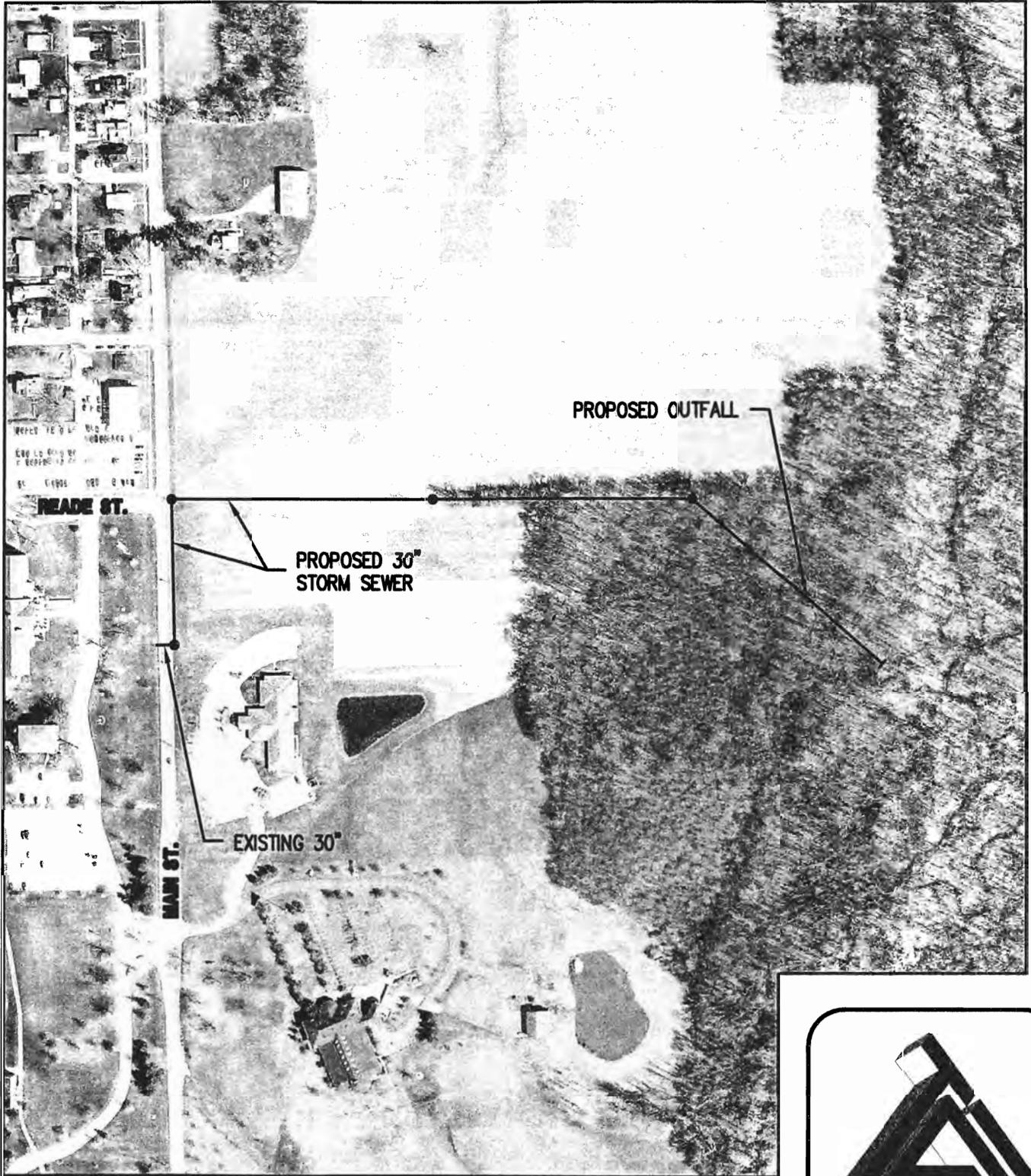


1 inch = 300 ft.

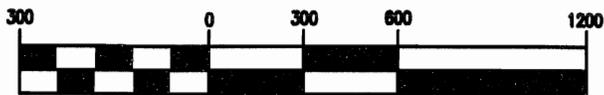


**TRIAD ASSOCIATES INC.**  
 5835 LAWTON LOOP EAST DRIVE  
 INDIANAPOLIS, INDIANA 46216  
 PHONE: 317-377-5230 FAX: 317-377-5241

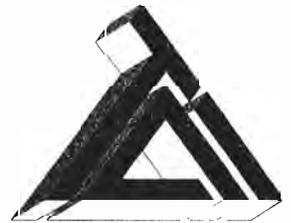
**EXHIBIT 4B**



**TOWN OF UPLAND  
PROPOSED STORM IMPROVEMENTS**

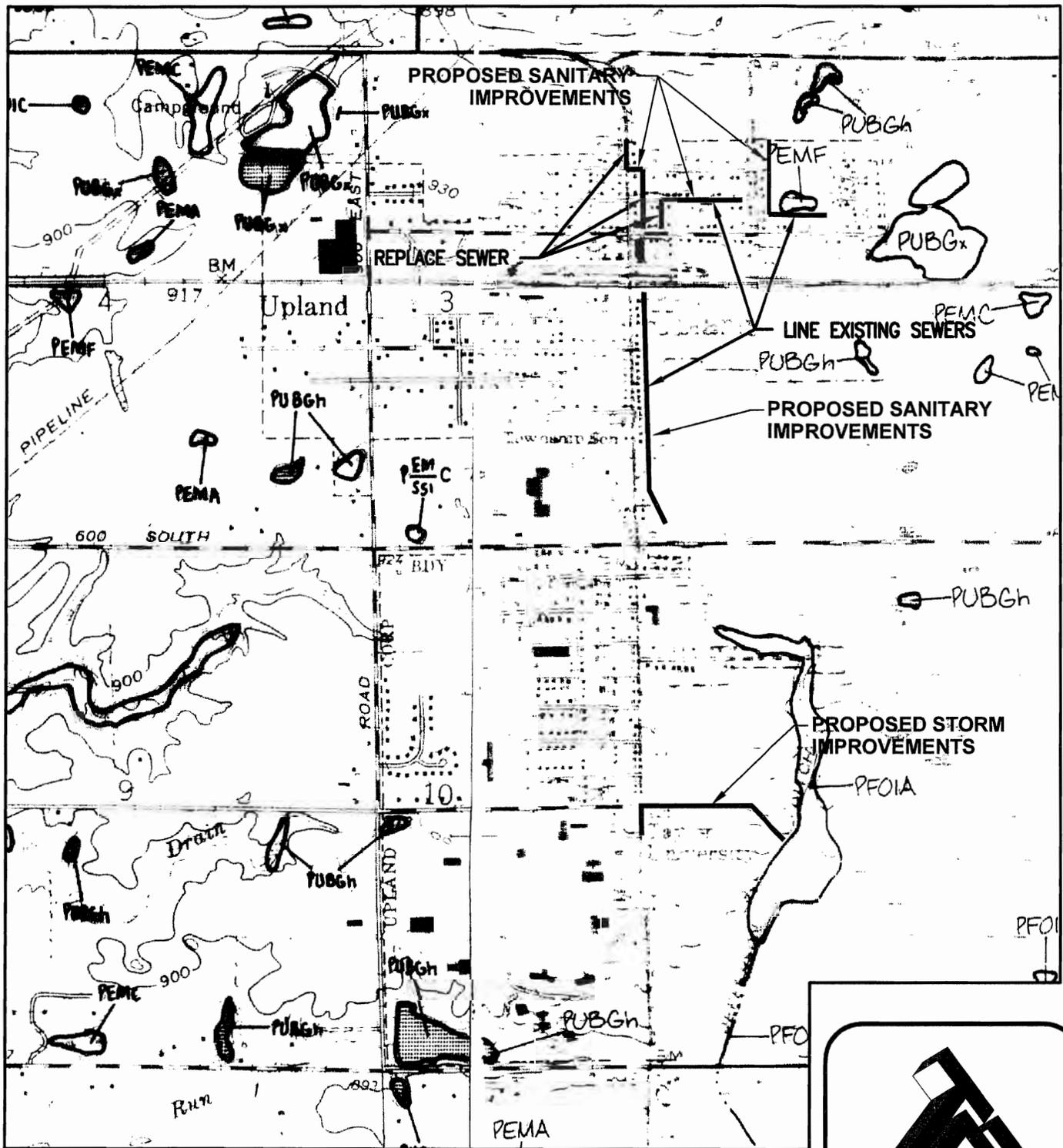


1 inch = 300 ft.

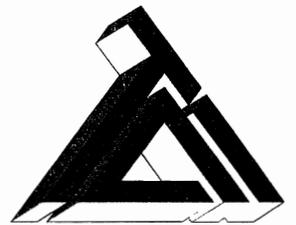
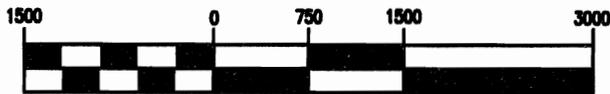


**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 4C**

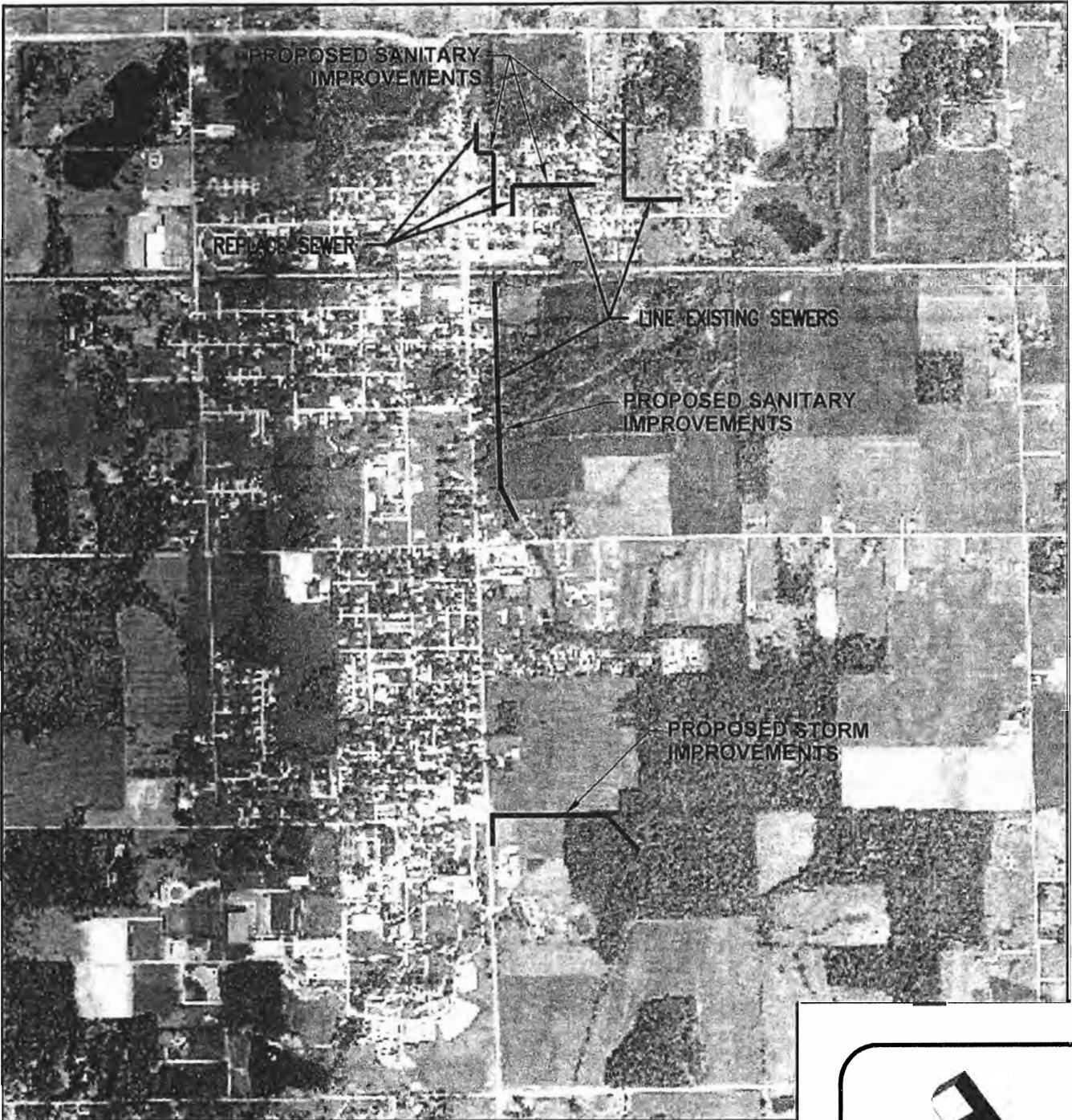


# TOWN OF UPLAND NATIONAL WETLANDS INVENTORY MAP



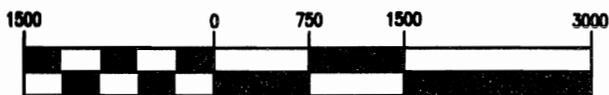
**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 5**

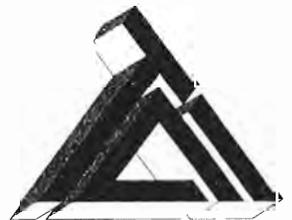


**NOTE:**  
NO FLOOD ZONES IN PROJECT AREA

## TOWN OF UPLAND FLOODWAY MAP

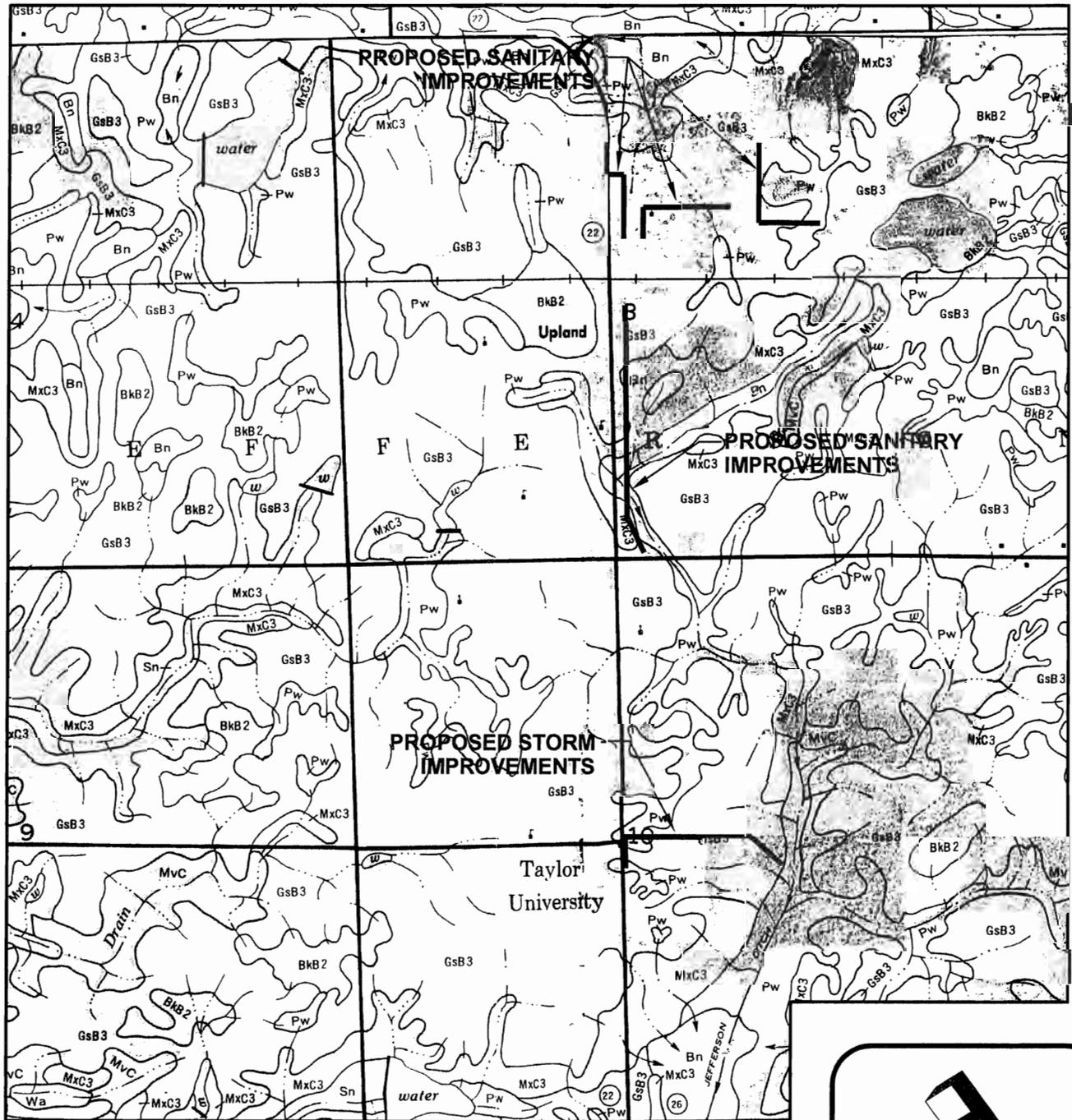


1 inch = 1500 ft.



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 6**



## TOWN OF UPLAND SOILS MAP

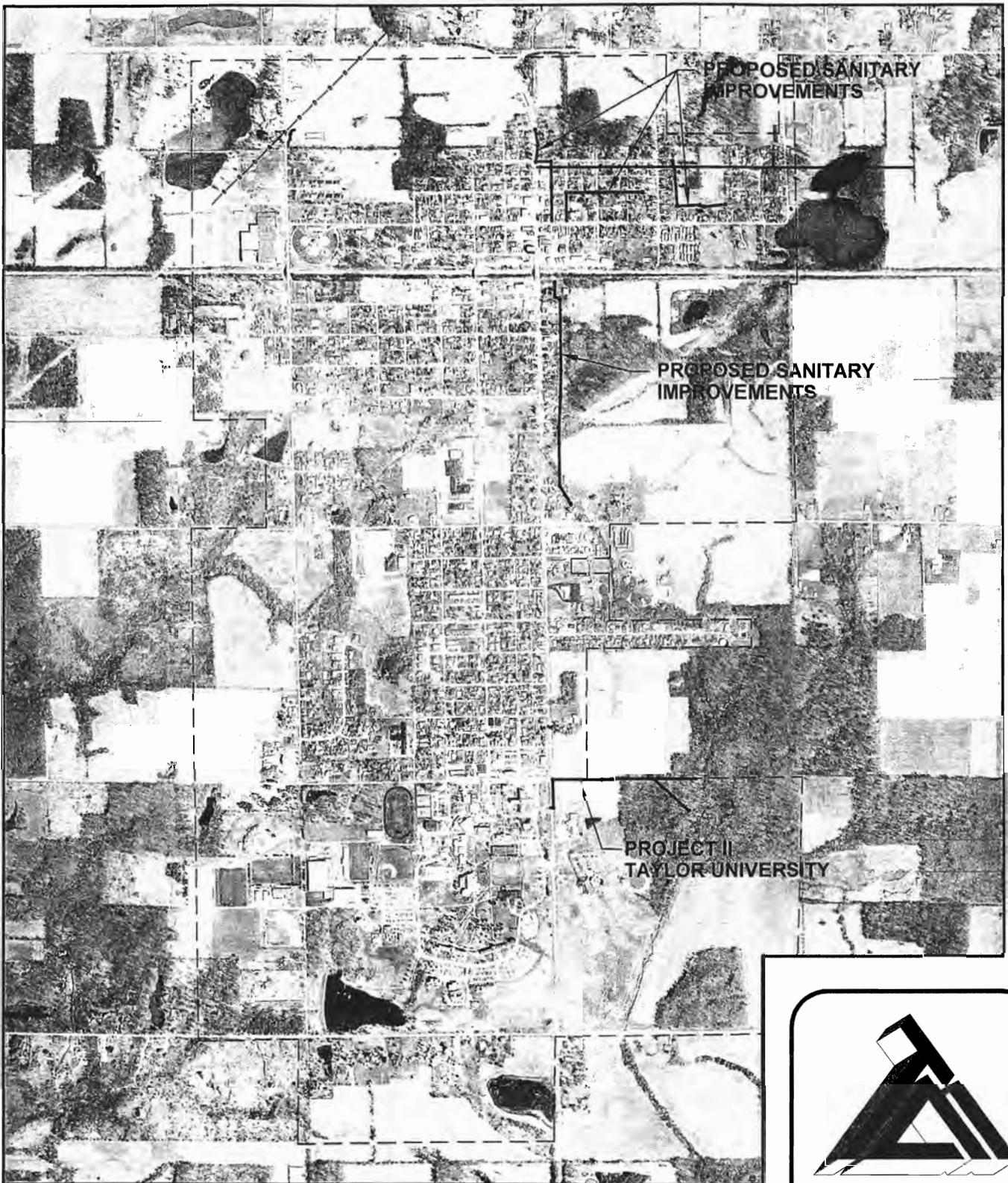


1 inch = 1500 ft.

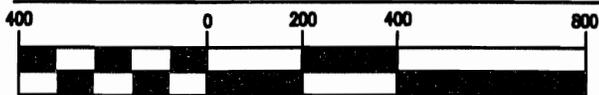


**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

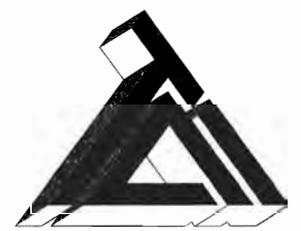
**EXHIBIT 7**



## TOWN OF UPLAND PROPOSED IMPROVEMENTS



1 inch = 400 ft.



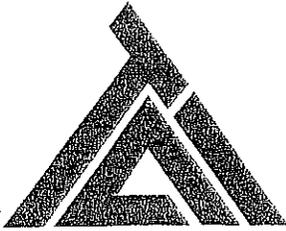
**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

### EXHIBIT 8

**Appendix A**

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**Farmland Conversion Impact Rating Form**



**TRIAD ASSOCIATES, INC.**  
ENGINEERING • ARCHITECTURE

5835 LAWTON LOOP EAST DRIVE, INDIANAPOLIS, IN 46216-1064  
(317) 377-5230 • FAX: (317) 377-5241  
REIFERS CENTER • 839 MAIN STREET • SUITE 519 • LAFAYETTE, IN 47901  
VOICE/FAX: (765) 428-8282  
WEBSITE: [www.triadassociates.info](http://www.triadassociates.info) • E-MAIL: [triad@triadassoc.net](mailto:triad@triadassoc.net)

July 21, 2008

Ms. Jane E. Hardisty, State Conservationist  
Natural Resources Conservation Service  
6013 Lakeside Boulevard  
Indianapolis, Indiana 46278

Re: Town of Upland, Storm Water Improvements Project

Dear Ms. Hardisty:

Attached is Form AD-1006, Farmland Conversion Impact Rating, which needs to be completed for a storm water improvements project proposed for the Town of Upland, Indiana. Funding for the project will be obtained from the Indiana State Revolving Fund (SRF) Loan program. Completion of this form is required as part of the Indiana Department of Environmental Management's (IDEM) review process.

The project entails making improvements to the storm system to improve drainage in several areas of Town. The sites for two of the areas are existing rights of way. The third area contains land that is presently farmed. A 15' wide easement, approximately 1,000 feet in length, will be needed. The proposed improvements are located in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map.

Enclosed are USGS and soils maps showing the locations of the improvements. Triad Associates Inc. is representing the Town and preparing the Preliminary Engineering Report (PER) for submittal to IDEM. Correspondence should be directed to our office. Please contact me at 317/377-5230 if additional information is needed. Thank-you for your assistance.

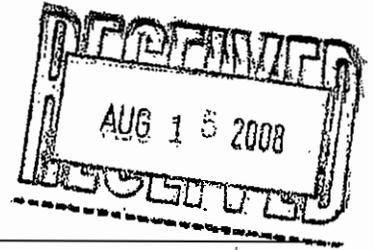
Sincerely,

Dee A. Revnyak, Project Manager

Attachments



Natural Resources Conservation Service  
P.O. Box 2890  
Washington, D.C. 20013



August 13, 2008

Dee Revnyak  
Project Manager  
Triad Associates, Inc.  
5835 Lawton Loop East Drive  
Indianapolis, Indiana 46216

Dear Ms. Revynak:

The project to make storm water improvements in the Town of Upland, Wabash County, Indiana, as referred to in your letter of July 21, 2008, will not cause a conversion of prime farmland.

If you need more information, please contact Lisa Bolton at 317-290-3200, extension 342.

Sincerely,

A handwritten signature in cursive script that reads "Jane E. Hardisty".

JANE E. HARDISTY  
State Conservationist

Enclosures

# FARMLAND CONVERSION IMPACT RATING

|  |   |  |
|--|---|--|
| PART I (To be completed by Federal Agency)                 |   | Date Of Land Evaluation Request<br>7/23/08 |
| Name Of Project<br>Town of Upland Storm Water Improvements | Federal Agency Involved<br>IDEM/UPLAND/TRIAD ASSOCIATES |  |
| Proposed Land Use<br>Storm & Drainage Management           | County And State<br>Grant County, Indiana               |  |

|  |  |   |
|--|--|---|
| PART II (To be completed by SCS)   |  | Date Request Received By SCS<br>7-28-08                             |
| Does the site contain prime, unique, statewide or local important farmland?<br>(If no, the FPPA does not apply -- do not complete additional parts of this form) |  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Major Crop(s)  | Farmable Land In Govt. Jurisdiction<br>Acres % | Acres Irrigated Average Farm Size                                   |
| Name Of Land Evaluation System Used  | Name Of Local Site Assessment System           | Amount Of Farmland As Defined In FPPA<br>Acres %                    |
|  |  | Date Land Evaluation Returned By SCS<br>8-13-08                     |

| PART III (To be completed by Federal Agency) | Alternative Site Rating |        |        |        |
|--|-------------------------|--------|--------|--------|
|  | Site A                  | Site B | Site C | Site D |
| A. Total Acres To Be Converted Directly      | 0.34                    |        |        |        |
| B. Total Acres To Be Converted Indirectly    | -0-                     |        |        |        |
| C. Total Acres In Site                       | 5                       |        |        |        |

| PART IV (To be completed by SCS) Land Evaluation Information                       | Site A | Site B | Site C | Site D |
|--|--------|--------|--------|--------|
| A. Total Acres Prime And Unique Farmland   |        |        |        |        |
| B. Total Acres Statewide And Local Important Farmland                              |        |        |        |        |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted            |        |        |        |        |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value |        |        |        |        |

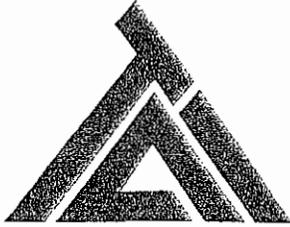
| PART V (To be completed by SCS) Land Evaluation Criterion             | Site A | Site B | Site C | Site D |
|---|--------|--------|--------|--------|
| Relative Value Of Farmland To Be Converted (Scale Of 0 To 100 Points) |        |        |        |        |

| ART VI (To be completed by Federal Agency)                                | Maximum Points | Site A | Site B | Site C | Site D |
|---|----------------|--------|--------|--------|--------|
| Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b)) |                |        |        |        |        |
| 1. Area In Nonurban Use   |                |        |        |        |        |
| 2. Perimeter In Nonurban Use  |                |        |        |        |        |
| 3. Percent Of Site Being Farmed   |                |        |        |        |        |
| 4. Protection Provided By State And Local Government                      |                |        |        |        |        |
| 5. Distance From Urban Builtup Area                                       |                |        |        |        |        |
| 6. Distance To Urban Support Services                                     |                |        |        |        |        |
| 7. Size Of Present Farm Unit Compared To Average                          |                |        |        |        |        |
| 8. Creation Of Nonfarmable Farmland                                       |                |        |        |        |        |
| 9. Availability Of Farm Support Services                                  |                |        |        |        |        |
| 10. On-Farm Investments   |                |        |        |        |        |
| 11. Effects Of Conversion On Farm Support Services                        |                |        |        |        |        |
| 12. Compatibility With Existing Agricultural Use                          |                |        |        |        |        |
| <b>TOTAL SITE ASSESSMENT POINTS</b>                                       | <b>160</b>     |        |        |        |        |

| PART VII (To be completed by Federal Agency)                          | Maximum Points | Site A | Site B | Site C | Site D |
|---|----------------|--------|--------|--------|--------|
| Relative Value Of Farmland (From Part V)                              | 100            |        |        |        |        |
| Total Site Assessment (From Part VI above or a local site assessment) | 160            |        |        |        |        |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                          | <b>260</b>     |        |        |        |        |

|                |                   |   |
|----------------|-------------------|---|
| Site Selected: | Date Of Selection | Was A Local Site Assessment Used?<br>Yes <input type="checkbox"/> No <input type="checkbox"/> |
|----------------|-------------------|---|

Reason For Selection:



**TRIAD ASSOCIATES, INC.**  
ENGINEERING • ARCHITECTURE

5835 LAWTON LOOP EAST DRIVE, INDIANAPOLIS, IN 46216-1064  
(317) 377-5230 • FAX: (317) 377-5241  
REIFERS CENTER • 839 MAIN STREET • SUITE 519 • LAFAYETTE, IN 47901  
VOICE/FAX: (765) 428-8282  
WEBSITE: [www.triadassociates.info](http://www.triadassociates.info) • E-MAIL: [triad@triadassoc.net](mailto:triad@triadassoc.net)

April 27, 2010

Ms. Jane E. Hardisty, State Conservationist  
Natural Resources Conservation Service  
6013 Lakeside Boulevard  
Indianapolis, Indiana 46278

Re: Town of Upland, Sanitary Sewer Improvements Project

Dear Ms. Hardisty:

The Town of Upland is in the process of submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs. As such, an environmental review pursuant to the National Environmental Policy Act is needed in order to assess the environmental impacts of a proposed sanitary sewer improvements project. **Due to the strict timelines to apply for and receive Disaster Recovery Funds, the Town is respectfully requesting your assistance in expediting the approval process through your Department.**

The proposed improvements are located in Grant County, in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to selected sanitary sewers in order to decrease infiltration and inflow (I/I) in the system. Work will include lining, replacing, and repairing existing sewer lines and manholes. All work will occur in the existing trenches, rights of way, and easements. No land acquisition or tree removal will be necessary.

Enclosed is a U.S. Geological Survey map and other associated maps showing the proposed locations. We are requesting that your office review the proposed project for any State and Federally-listed threatened and endangered species, sensitive areas, historic or archaeological sites and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts, if applicable.

Triad Associates, Inc. is the engineering consultant and is assisting the Town with the environmental review process. Correspondence should be directed to our office. If possible, we would greatly appreciate a response within 30 days. Please contact me at (317) 377-5230 or [drevnyak@triadassoc.net](mailto:drevnyak@triadassoc.net) if you need further information or wish to discuss the project. Thank you for your assistance.

United States Department of Agriculture



Natural Resources Conservation Service  
6013 Lakeside Blvd.  
Indianapolis, IN 46278

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May 12, 2010

Dee Revnyak  
Project Manager  
Triad Associates, Inc.  
5835 Lawton Loop East Drive  
Indianapolis, Indiana 46216

Dear Ms. Revynak:

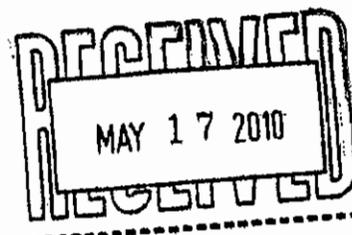
The project to make sanitary sewer improvements in the Town of Upland, Grant County, Indiana, as referred to in your letter received April 30, 2010, will not cause a conversion of prime farmland.

If you need more information, please contact Lisa Bolton at 317-290-3200, extension 342.

Sincerely,

A handwritten signature in cursive script that reads "Jane E. Hardisty".

JANE E. HARDISTY  
State Conservationist



*Helping People Help the Land*

An Equal Opportunity Provider and Employer

# FARMLAND CONVERSION IMPACT RATING

|  |  |  |  |                 |                   |
|--|--|--|--|-----------------|-------------------|
| PART I (To be completed by Federal Agency)   |  | Date Of Land Evaluation Request <b>12-2-10</b>         |  |                 |                   |
| Name Of Project<br><b>SANITARY-STORM IMPROVEMENTS PROJECT</b>  |  | Federal Agency Involved<br><b>TOWN OF UPLAND</b>       |  |                 |                   |
| Proposed Land Use<br><b>WASTEWATER + STORM WATER COLLECTION</b>  |  | County And State<br><b>GRANT COUNTY, INDIANA</b>       |  |                 |                   |
| PART II (To be completed by SCS)   |  | Date Request Received By SCS<br><b>12-7-10</b>         |  |                 |                   |
| Does the site contain prime, unique, statewide or local important farmland?<br>(If no, the FPPA does not apply - do not complete additional parts of this form). |  | Yes <input type="checkbox"/>                           | No <input checked="" type="checkbox"/> | Acres Irrigated | Average Farm Size |
| Major Crop(s)  | Farmable Land In Govt. Jurisdiction<br>Acres % | Amount Of Farmland As Defined In FPPA<br>Acres %       |  |                 |                   |
| Name Of Land Evaluation System Used  | Name Of Local Site Assessment System           | Date Land Evaluation Returned By SCS<br><b>12-7-10</b> |  |                 |                   |
| PART III (To be completed by Federal Agency)   |  | Alternative Site Rating                                |  |                 |                   |
|  |  | Site A   | Site B                                 | Site C          | Site D            |
| A. Total Acres To Be Converted Directly  |  | 0  |  |                 |                   |
| B. Total Acres To Be Converted Indirectly  |  | 0  |  |                 |                   |
| C. Total Acres In Site   |  | 0.67   |  |                 |                   |
| PART IV (To be completed by SCS) Land Evaluation Information   |  |  |  |                 |                   |
| A. Total Acres Prime And Unique Farmland   |  |  |  |                 |                   |
| B. Total Acres Statewide And Local Important Farmland  |  |  |  |                 |                   |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted  |  |  |  |                 |                   |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value   |  |  |  |                 |                   |
| PART V (To be completed by SCS) Land Evaluation Criterion<br>Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)                               |  |  |  |                 |                   |
| PART VI (To be completed by Federal Agency)<br>Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))   |  | Maximum Points   |  |                 |                   |
| 1. Area In Nonurban Use  |  |  |  |                 |                   |
| 2. Perimeter In Nonurban Use   |  |  |  |                 |                   |
| 3. Percent Of Site Being Farmed  |  |  |  |                 |                   |
| 4. Protection Provided By State And Local Government   |  |  |  |                 |                   |
| 5. Distance From Urban Builtup Area  |  |  |  |                 |                   |
| 6. Distance To Urban Support Services  |  |  |  |                 |                   |
| 7. Size Of Present Farm Unit Compared To Average   |  |  |  |                 |                   |
| 8. Creation Of Nonfarmable Farmland  |  |  |  |                 |                   |
| 9. Availability Of Farm Support Services   |  |  |  |                 |                   |
| 10. On-Farm Investments  |  |  |  |                 |                   |
| 11. Effects Of Conversion On Farm Support Services   |  |  |  |                 |                   |
| 12. Compatibility With Existing Agricultural Use   |  |  |  |                 |                   |
| TOTAL SITE ASSESSMENT POINTS   |  | 160  |  |                 |                   |
| PART VII (To be completed by Federal Agency)   |  |  |  |                 |                   |
| Relative Value Of Farmland (From Part V)   |  | 100  |  |                 |                   |
| Total Site Assessment (From Part VI above or a local site assessment)  |  | 160  |  |                 |                   |
| TOTAL POINTS (Total of above 2 lines)  |  | 260  |  |                 |                   |

|                |                   |   |
|----------------|-------------------|---|
| Site Selected: | Date Of Selection | Was A Local Site Assessment Used?<br>Yes <input type="checkbox"/> No <input type="checkbox"/> |
|----------------|-------------------|---|

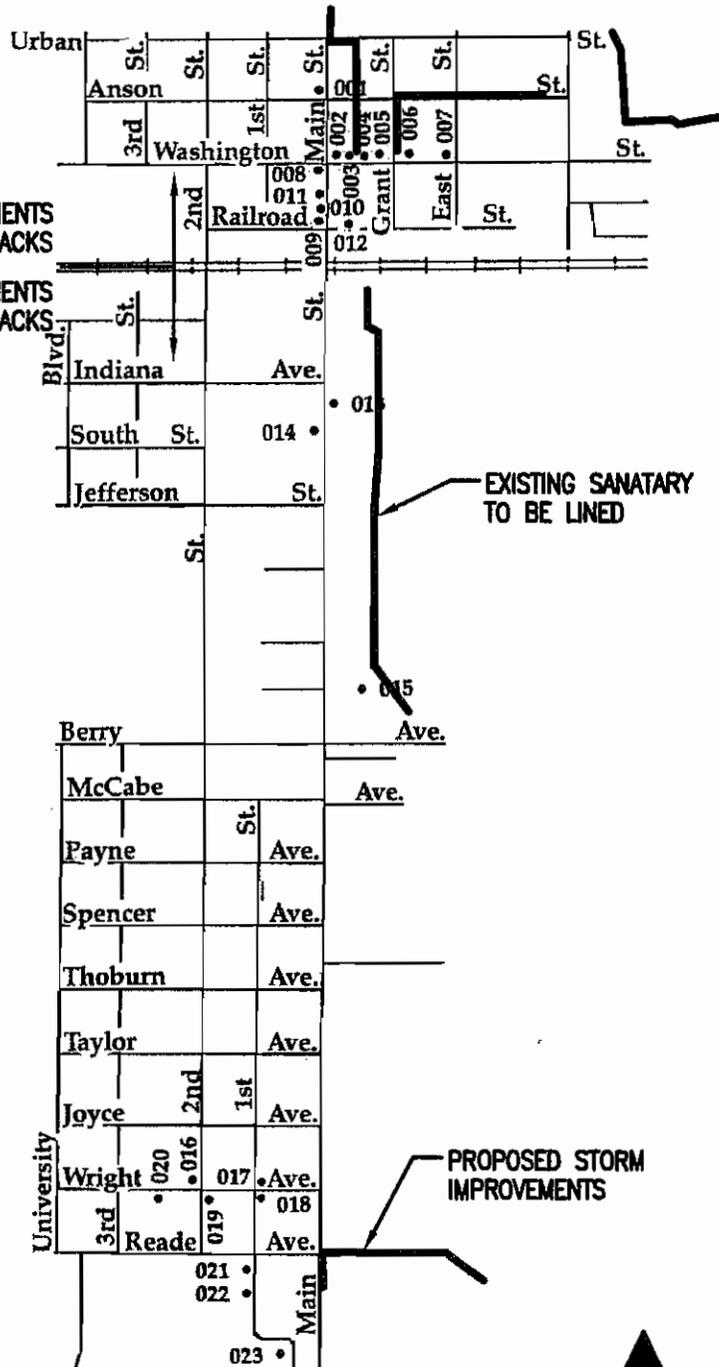
Reason For Selection:

**Appendix B**  
**Excerpt, Grant County Interim Report**

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SANITARY IMPROVEMENTS  
NORTH OF THE TRACKS

SANITARY IMPROVEMENTS  
SOUTH OF THE TRACKS



UPLAND SCATTERED SITES (45001-023)

GRANT COUNTY  
JEFFERSON TOWNSHIP (45)  
GAS CITY QUADRANGLE

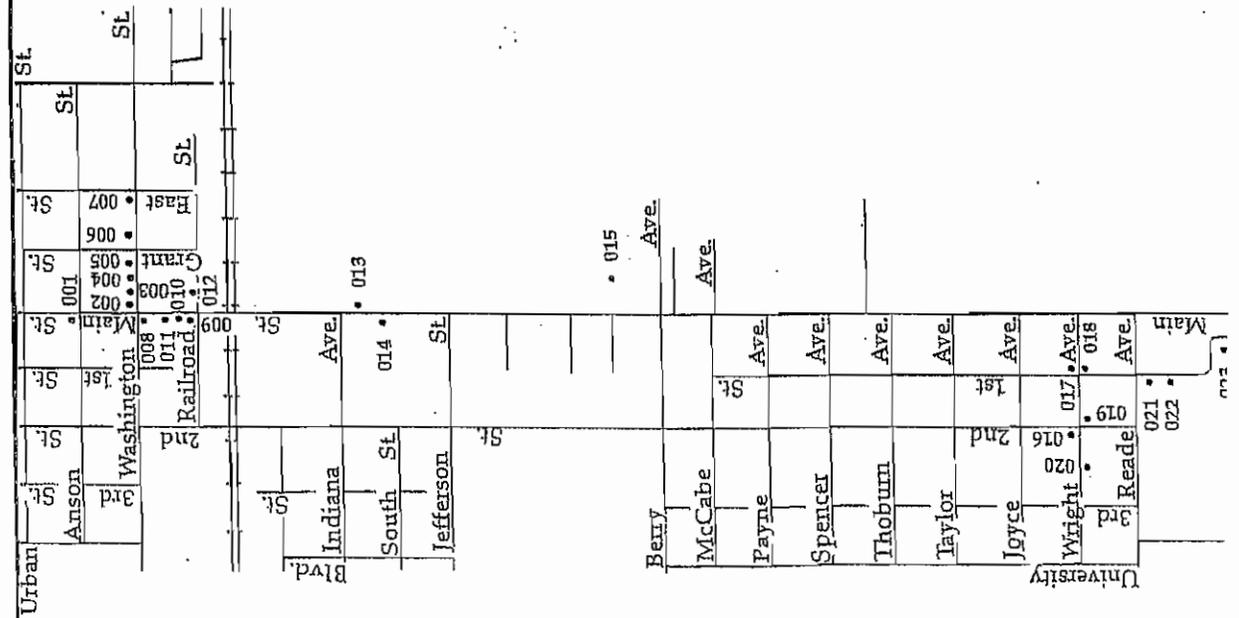
# TOWN OF UPLAND INTERIM REPORT

SCALE: N.T.S.

**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

## APPENDIX B

# Upland Scattered Sites (46001-023)



Upland was laid out in September 1867 by Jacob Burgher along the Union and Logansport Railroad line. With the line's arrival in Jefferson Township, logging and woodworking joined agriculture as the township's main industries. These industries were to remain prominent until the discovery of natural gas in 1887. Reflecting this period of prosperity is the Thomas Deeven House (46007), built in 1884.

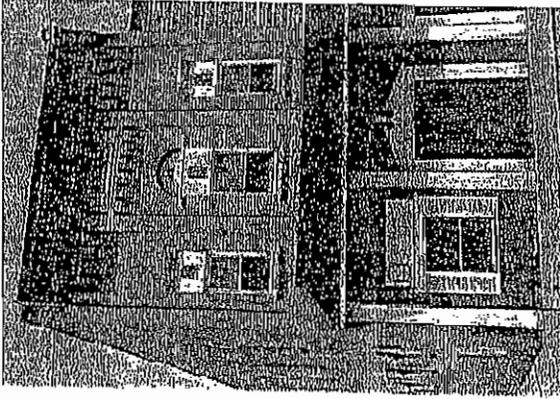
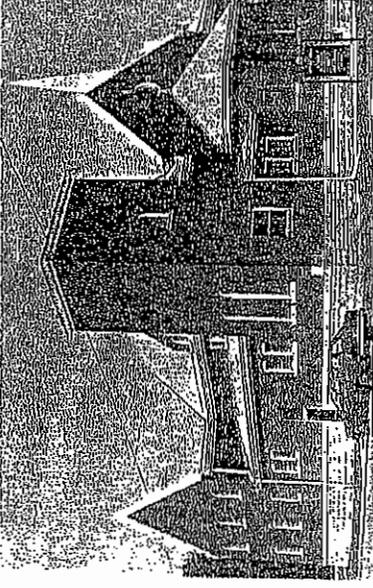
The discovery of natural gas brought dramatic changes to the area's economy. The gas and oil interests leased large tracts of land and glass manufacturing became the major industry from 1887 through the early twentieth century when the supply of gas was exhausted.

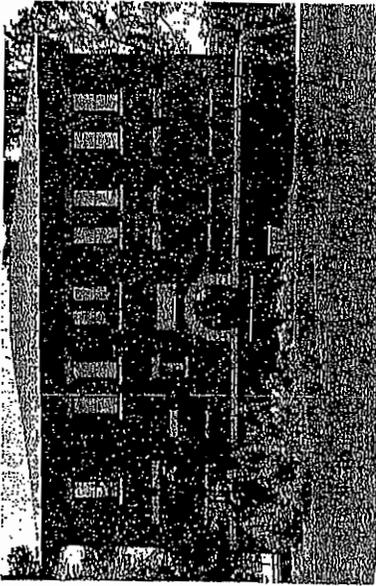
At the "gas boom's" peak, Upland began to prosper and expand. The town's commercial district developed with two and three story brick buildings lining North Main Street. The Robert Building (46002) and the commercial building at 105-107 East Washington Street (46004) are typical of the period.

It was also during this time that Taylor University moved to Upland from Fort Wayne. Founded in 1846 as the Fort Wayne Female College, it was later known as the Fort Wayne College from 1855 to 1890. In 1890 the school was renamed Taylor University after the Methodist Bishop, William Taylor. In 1893 the Upland Land Company provided ten acres of land and \$10,000 for the university to establish itself in Upland. The 1911 Helena Memorial Hall (46023), Sickler Memorial Hall (46022) built in 1902 and Swallow Robin Hall (46021) built in 1916 still stand on the school's campus.

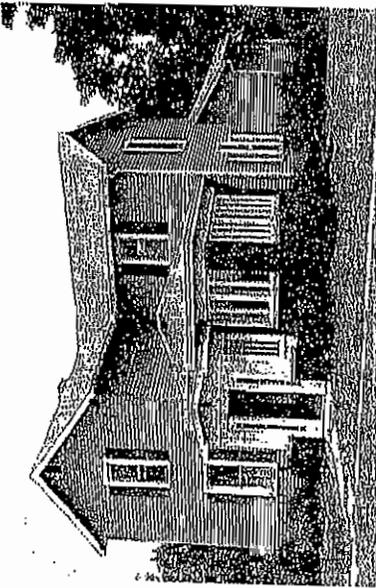
After the end of the gas boom era, agriculture reemerged as the town's primary industry. Modest bungalows such as the house on South First Street (46016) are typical of the period.



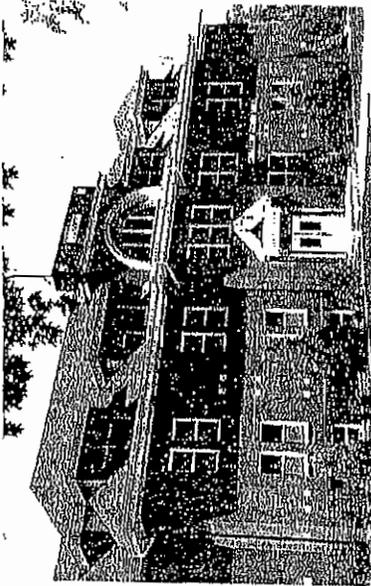
| No. | Rtg. | Description  | No. | Rtg.  | Description   |   |   |
|-----|------|--|-----|---|---|---|---|
| 001 | C    | House, 301 N. Main Street; Free Classic, c.1900; Architecture (265)  | 006 | N   | Upland First Methodist Episcopal Church, E. Washington Street; Romanesque Revival, 1904; Architecture, Religion (265) |   |   |
| 002 | C    | Roberds Building, 101 E. Washington Street; Commercial Vernacular, c.1890; Commerce, Vernacular/Construction (265) | 007 | O   | Thomas Deeven House, E. Washington Street; Free Classic, 1884; Architecture (265)                                     |   |   |
|     |      |                                |     |   |                                     |   |   |
|     |      | 002  |     | 006   |   |   |   |
|     |      | 003  | C   | Commercial Building, 103 E. Washington Street; Commercial Vernacular, c.1900; Commerce, Vernacular/Construction (265)     | 007   | C | Commercial Building, 123 N. Main Street; Commercial Vernacular, c.1900; Commerce, Vernacular/Construction (265)                                   |
|     |      | 004  | C   | Commercial Building, 105-107 E. Washington Street; Commercial Vernacular, c.1910; Commerce, Vernacular/Construction (265) | 008   | C | Commercial Building, 101 N. Main Street; Commercial Vernacular, 1900; Commerce, Vernacular/Construction (265)                                     |
|     |      | 005  | C   | A. D. Freese Building, 109 E. Washington Street; Commercial Vernacular, c.1923; Commerce, Vernacular/Construction (265)   | 009   | C | Commercial Building, 304 Wright Street; Cottage, 1924 (Merritt Abbey, builder); Vernacular/Construction (265)                                     |
|     |      |  |     |   | 010   | C | Commercial Building, 105-107 N. Main Street; Commercial Vernacular, 1900; Commerce, Vernacular/Construction (265)                                 |
|     |      |  |     |   | 011   | C | Commercial Building, N. Main Street; Commercial Vernacular, c.1900; Committee, Social History, Vernacular/Construction (265)                      |
|     |      |  |     |   | 012   | C | Gas Station, N. Main Street; Commercial Vernacular, c.1920; Commerce, Transportation, Vernacular/Construction (265)                               |
|     |      |  |     |   | 013   | C | Upland Christian Church, S. Main Street; Romanesque Revival, c.1900; Architecture, Religion (265)   |
|     |      |  |     |   | 014   | C | House, 306 S. Main Street; T-plan, c.1880; Vernacular/Construction (265)  |
|     |      |  |     |   | 015   | C | Farm, Berry Avenue; House: double-pen, c.1860; Outbuildings: Mid west three-penal barns, silo, garage; Agriculture, Vernacular/Construction (265) |
|     |      |  |     |   | 016   | C | House, S. First Street; Bungalow, c.1920; Architecture (265)  |
|     |      |  |     |   | 017   | C | House, S. First Street; Gable-front, c.1910; Vernacular/Construction (265)  |
|     |      |  |     |   | 018   | C | House, S. First Street; Gabled-ell, c.1899; Vernacular/Construction (265)   |
|     |      |  |     |   | 019   | C | Abbey House, 213 Wright Avenue; Gabled-ell, c.1900; Vernacular/Construction (265)   |
|     |      |  |     |   | 020   | C | Fenstermacher House, 304 Wright Street; Cottage, 1924 (Merritt Abbey, builder); Vernacular/Construction (265)                                     |
|     |      |  |     |   | 021   | N | Swallow Robin Hall, Reade Avenue, Taylor University; Vernacular, 1916; Education, Religion (265)  |



023



018

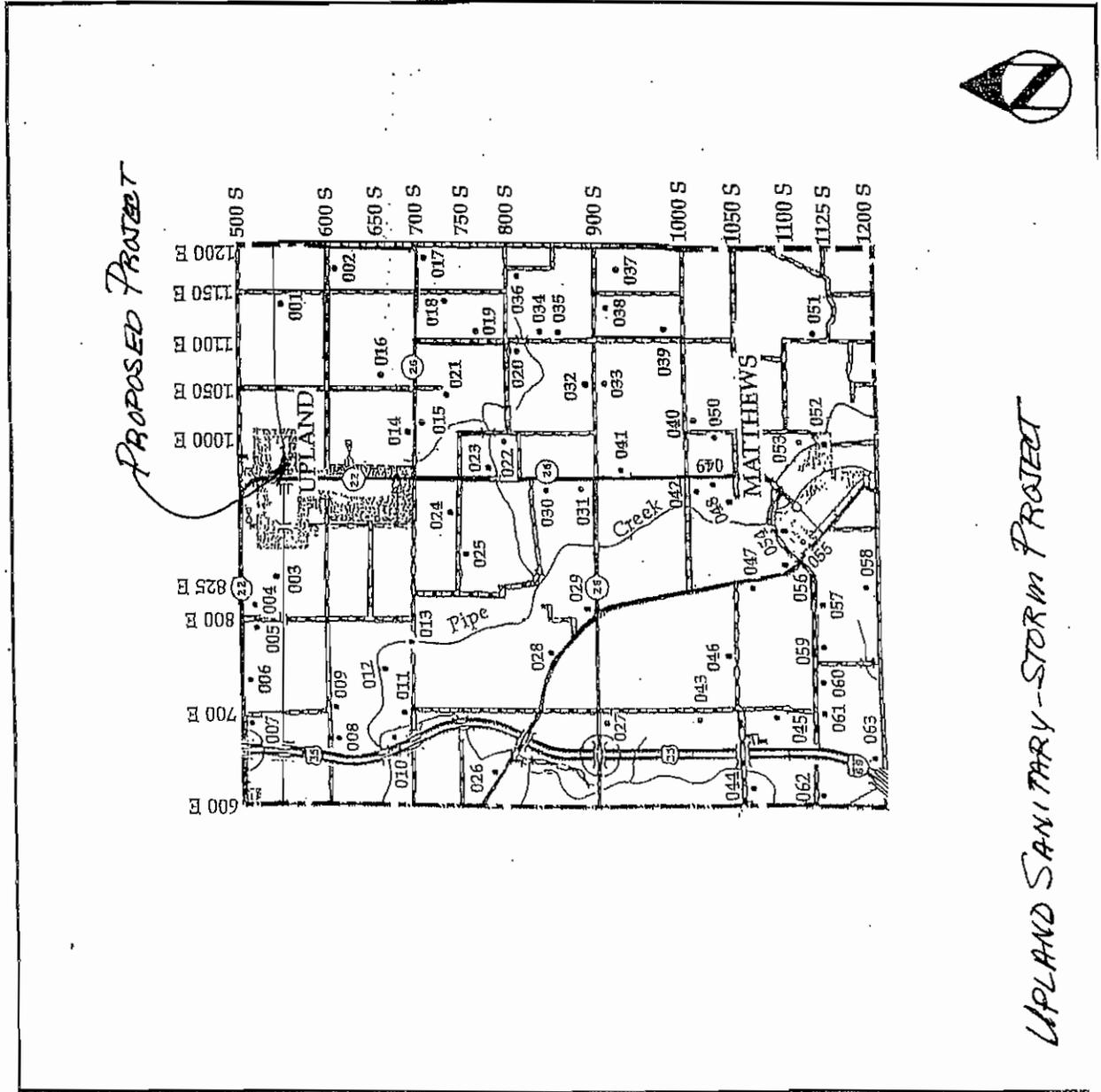


021

022 N Sickler Memorial Hall, Reade Avenue, Taylor University; Queen Anne/ Colonial Revival, 1902; Architecture, Education, Religion, Vernacular/ Construction (233)

023 N Helena Memorial Hall, off Reade Avenue/ Taylor University, Renaissance Revival, 1911; Architecture, Education, Entertainment/ Recreation, Religion (233)

# Jefferson Township (45001-063)



Jefferson Township was organized in 1831. The area's topography is varied with rolling hills in the northeastern sections. The Mississinewa River bisects the area with numerous small creeks and springs scattered throughout the township.

Jefferson Township's earliest settlers came to the area around Matthews, formerly known as New Cumberland. John Richards built the township's first sawmill in 1838. Another early industry in the township was pearl fishing along the banks of the Mississinewa River.

Three communities are found in Jefferson Township. Trask, established in 1846 and named for a local doctor, was the site of the township's first post office. New Cumberland, now known as Matthews, is the third oldest settlement in Grant County, laid out in 1833. Upland, the township's largest town, was laid out by Jacob Burcher in 1867 along the Union and Logansport Railroad line.

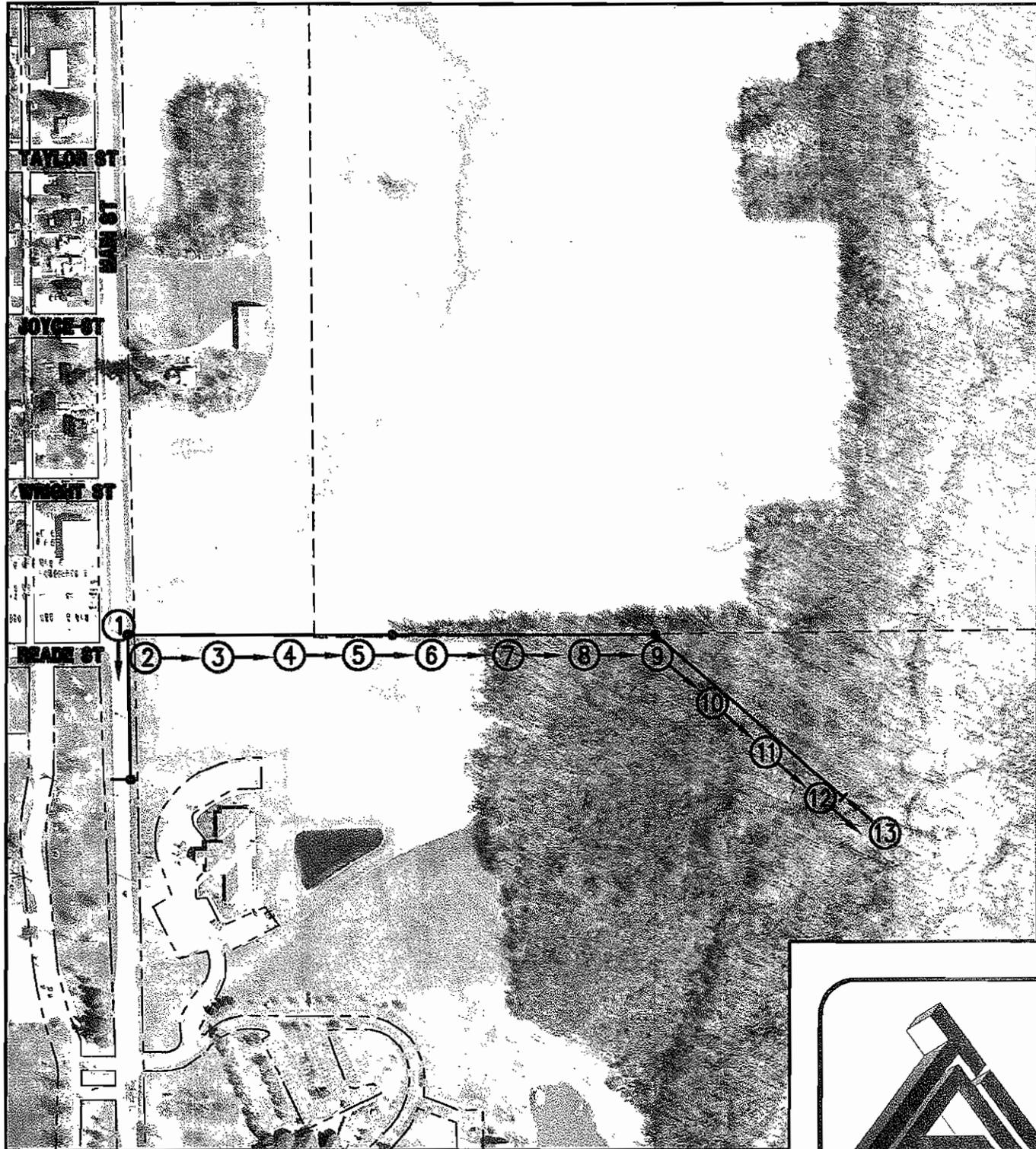
Agriculture has always played an important role in the economy of Jefferson Township evidenced by the large number of farms scattered throughout the area. The Asa Marine Farm (45012), the Dunn Farm (45057) and the Abraham Richards Farm (45060) all feature prominent houses surrounded by fine collections of ancillary buildings.

Other reminders of agriculture's prominence are seen in the many canneries that once flourished in the township. These centers processed and shipped out vast amounts of tomatoes and tomato products. Only the Marshal Cannery (45034) stands as a reminder of this once important industry.

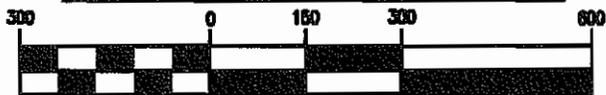
The discovery of natural gas during the late nineteenth and early twentieth centuries brought the greatest period of growth to the township. Natural gas and oil drilling as well as associated industries such as glass manufacturing were the area's largest employers. The

**Appendix C**  
**Photographs**

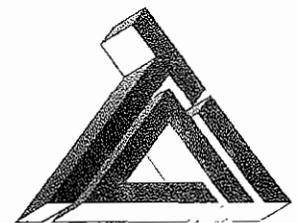
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**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTO KEY**

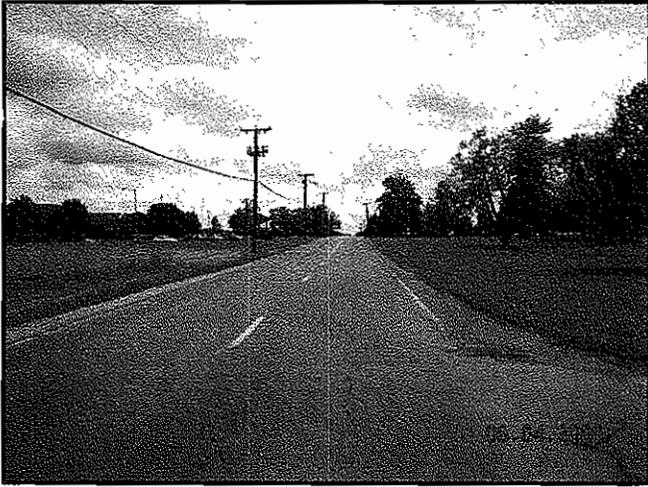


1 inch = 300 ft.



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**APPENDIX C  
PAGE 1**



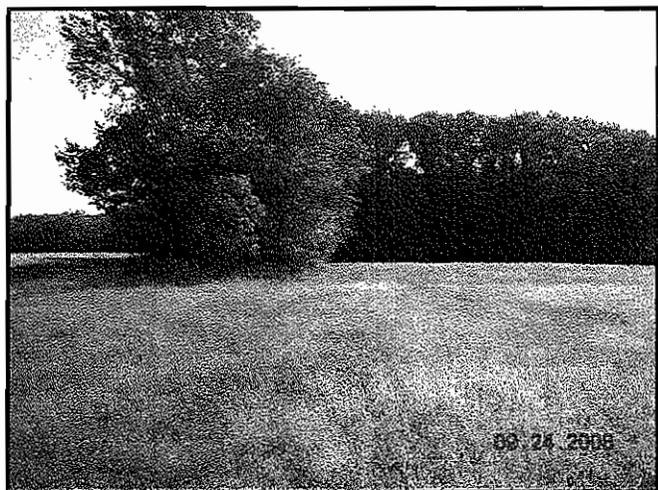
① LOOKING SOUTH FROM READE ST ON MAIN ST



② LOOKING EAST ON MAIN ST @ READE ST

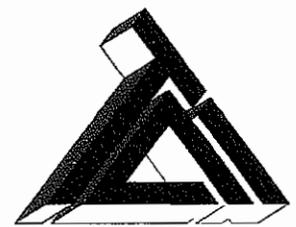


③ LOOKING EAST



④ LOOKING EAST

**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTOGRAPHS**



**TRIAD ASSOCIATES INC.**  
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INDIANAPOLIS, INDIANA 46216  
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**APPENDIX C  
PAGE 2**



⑤ LOOKING EAST



⑥ LOOKING EAST

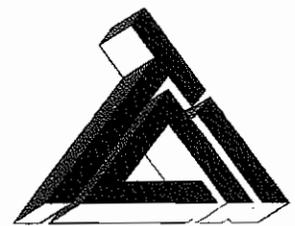


⑦ LOOKING EAST



⑧ LOOKING EAST

**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTOGRAPHS**



**TRIAD ASSOCIATES INC.**  
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**APPENDIX C  
PAGE 3**



⑨ LOOKING EAST



⑩ LOOKING SOUTHEAST

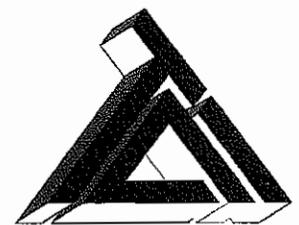


⑪ LOOKING SOUTHEAST



⑫ LOOKING SOUTHEAST

**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTOGRAPHS**



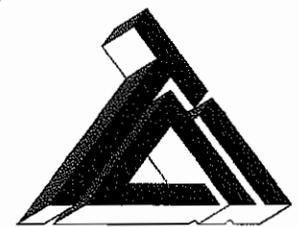
**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**APPENDIX C  
PAGE 4**



⑬ LOOKING NORTHWEST

**TOWN OF UPLAND  
TAYLOR UNIVERSITY  
DRAINAGE PHOTOGRAPHS**



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**APPENDIX C  
PAGE 5**

**Appendix D**

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**IDEM Enforcement**



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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---

Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

May 24, 2004

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

Mr. Chip Long, Town Manager  
Town of Upland  
87 North Main Street  
Upland, Indiana 46989

Re: Town of Upland, Amended Agreed Order  
Cause No. B-1248

Dear Mr. Long:

A recent inspection and a record review indicate that the Town of Upland's lift stations and wastewater treatment plant are continuing to experience wet weather overflows and bypasses. The inspection conducted on May 18, 2004, indicated that 8 unpermitted sanitary sewer overflows have occurred this year. The record review indicates that from January of 2003 through May 19, 2004, the Town reported that bypasses occurred at the wastewater treatment plant during 16 days, sanitary sewer overflows occurred at the north lift station during 19 days, and sanitary sewer overflows occurred at the west lift station during 5 days (see enclosed summary from IDEM's overflow/bypass report database). These overflows and bypasses are prohibited by environmental rules and the Town of Upland's NPDES permit.

Under the Amended Agreed Order, Cause No. B-1248, adopted on January 17, 2001, after completion of the corrective actions undertaken under the Compliance Plan, the Town was to demonstrate no unpermitted overflows for a 6 month period. That time period was to contain sufficient wet weather periods of rainfall events so as to demonstrate permit compliance during wet weather. The Town was not able to make this demonstration.

In a letter IDEM sent you on December 16, 2002, the status of that Agreed Order was outlined, and the Town was requested to submit the additional actions Upland was going to take to cease the bypasses and overflows. Your January 3, 2003 response outlined additional actions that the Town was taking, including working with Taylor University to identify and correct potential sources of inflow and infiltration (I/I) into Taylor campus sewer system.

You recently indicated that flow monitoring of the discharge from Taylor University sewer system to the Town of Upland's sewers was conducted, and some sources of I/I were identified and corrected. However, you indicated that you recently attempted to televise some of the sewers on the Taylor campus to evaluate the condition of those sewers and found that some of those sewers were so clogged that you were unable to complete the evaluation. You also indicated that a mobile home park's sewers that discharge to Town's sanitary sewer appears to have sources of I/I.



NPDES FACILITY VERIFICATION OF INSPECTION

State Form 47989 (R4/6-04)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Facility and Inspection Information

NPDES Permit #: IN 0036978 Facility Type Code: 1 = Municipality 2 = Industry/Semi-Public 3 = Agricultural 4 = State/Federal Major Minor

This is to verify that on 2-1-05 (MM/DD/YY) an inspection of the specified facility was conducted by the undersigned representative of the Indiana Department of Environmental Management, Office of Water Quality.

TYPE OF INSPECTION: Compliance Evaluation Inspection (C) Reconnaissance Inspection (R) Industrial User Inspection (I) Sanitary Sewer Overflow (V) Multimedia Screening Evaluation (M) Combined Sewer Overflow Inspection (Y) Compliance Sampling Inspection (S) Other

Name and Location of Facility Inspected: Upland ITP Bragg Ave. Receiving Waters/POTW: Jefferson Detel Permit Expiration Date: 2-28-04

Name(s) of On-Site Representatives: Brad Felver Title(s): Certified Operator Phone: (765) 998-7287

Certified Operator: Brad Felver Number: 16229 Class: II Full Time Part Time Renewal Effective Date: 7-1-04 Expiration Date: 6-30-06 Hours per Week: 40+

Name and Address of Responsible Official: Mr. Chip Long 20 Bore 428 Card In. 46987 Title: Senior Manager Phone: (765) 998-7287

Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated, NA = Not Applicable)

Table with 4 columns: Receiving Waters Appearance, Facility/Site, Self-Monitoring Program, Compliance Schedules, Effluent Appearance, Operation, Flow Measurement, Pretreatment, Permit, Maintenance, Laboratory, Effluent Limits Violations, CSO/SSO (Sewer Overflow), Sludge Disposal, Records/Reports, Other.

Preliminary Inspection/Screening Findings

\*These findings are considered preliminary and include specific matters discovered during the inspection that the designated agent of the department believes may be a violation of law or a permit issued by the department.

Single Media Inspection: No violations were discovered with respect to the particular items observed during the inspection. (5) Potential violations were discovered but corrected during the inspection. (4) Potential violations were discovered and require a submittal and/or follow-up inspection. (2) Potential violations were observed and may be referred to our Office of Enforcement. (1) Additional information/review is required to evaluate overall compliance. Other (3)

Comments Regarding Marginal and Unsatisfactory Ratings - Including Rule or Permit Citation(s): 1. The facility experienced 14 BOD/bypass events in 2004. These bypasses are prohibited and are a violation of Part II.B.2 of the permit. 25 reported events in 2003 2. The facility has a severe F/I problem which directly relates to bypass events. This is a violation of Part II.B.1 of the permit.



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 Governor

Thomas W. Easterly  
 Commissioner

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 Indianapolis, Indiana 46204  
 (317) 232-8603  
 (800) 451-6027  
 www.IN.gov/idem

March 16, 2005

VIA CERTIFIED MAIL

7002 0510 0004 2581 1587

Mr. Chip Long, Town Manager  
 Town of Upland  
 P.O. Box 428  
 Upland, IN 46987

Re: **Inspection Summary Letter/Referral to the Office  
 of Enforcement**  
 Upland STP  
 NPDES Permit No. IN0036978  
 Upland, Grant County

Dear Mr. Long:

On February 1, 2005, a representative of the Indiana Department of Environmental Management, Office of Water Quality, conducted an inspection of the Upland STP, located at the east end of Bragg Avenue, Upland, Indiana. This inspection was conducted pursuant to IC 13-14-2-2. For your information, and in accordance with IC 13-14-5, a summary of the inspection is provided below:

Type of Inspection:       X       Reconnaissance

Results of Inspection:              Violations were observed but corrected during the inspection.  
        Violations were observed.  
                                     X       Violations were observed and will be referred to the Office of Enforcement.

The following violations were identified:

- IC 13-30-2-1 states, in part, that a person may not discharge, emit, cause, allow, or threaten to discharge, emit, cause, or allow any contaminant or waste, including any noxious odor either alone or in combination with contaminants from other sources, into the environment in any form that causes or would cause pollution that violates or would violate rules, standards, or discharge or emission requirements adopted by the appropriate board under the environmental management laws.

327 IAC 5-2-8(8) states, in part, that the permittee shall at all times maintain in good working order and efficiently operate all facilities and systems (and related appurtenances) for collection and treatment which are installed or used by the permittee and which are necessary for achieving compliance with the terms and conditions of the permit.

Attachment A of the permit expressly prohibits overflow points in the sanitary sewer system from discharging at any time.

Part II. B. 2 of the permit states, in part, that pursuant to 327 IAC 5-2-8(11) bypasses are prohibited, and the Commissioner may take enforcement action against a permittee, unless specific conditions are met. Wet weather inflow and infiltration contributing to a bypass is not one of the allowed conditions.



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mitchell E. Daniels, Jr.  
Governor

August 18, 2005

100 North Senate Avenue  
Indianapolis, Indiana 46204

Thomas W. Easterly  
Commissioner

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(800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

## NOTICE OF VIOLATION

*Via Certified Mail #:*  
7000 0600 0027 2042 3827

To: Mike Cooper, President  
Town Board of Upland  
87 North Main Street  
Upland, Indiana 46989

Case No. 2005-14697-W

Based on an investigation, the Indiana Department of Environmental Management (IDEM) has reason to believe the Town of Upland (Respondent) has violated environmental statutes, rules, and its National Pollutant Discharge Elimination System (NPDES) permit. The violations are based on the following:

1. Respondent owns and operates a Publicly Owned Treatment Works (POTW) which includes a sewage collection system and a wastewater treatment plant (WWTP) located at 593 East Bragg Avenue, Upland, in Grant County, Indiana with NPDES permit number IN 0036978 (the Permit).
2. Pursuant to 327 IAC 5-2-8(1) and Part II.A.1 of the Permit, the Respondent is required to comply with all conditions of the Permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and IC 13 and is grounds for an enforcement action.
3. Pursuant to 327 IAC 5-2-2, any discharge of pollutants into waters of the State as a point source discharge, except for exclusions made in 327 IAC 5-2-4, is prohibited unless in conformity with a valid NPDES permit obtained prior to the discharge.
4. Pursuant to IC 13-30-2-1, a person may not discharge, emit, cause, allow, or threaten to discharge, emit, cause, or allow any contaminant or waste, including any noxious odor either alone or in combination with contaminants from other sources, into the environment in any form that causes or would cause pollution that violates or would violate rules, standards, or discharge or emission requirements adopted by the appropriate board under the management laws.

Town of Upland  
Notice of Violation, Case No. 2005-14697-W  
Page 3

The bypasses from Outfall #101 are without a valid NPDES Permit and are in violation of 327 IAC 5-2-8(1), Part II.A.1 of the Permit, 327 IAC 5-2-2, 327 IAC 5-2-8(11), and Part II.B.2 of the Permit, and thus also violate IC 13-30-2-1.

8. Pursuant to 327 IAC 5-2-8(8) and Part II.B.1 of the Permit, the Respondent is required to, at all times, maintain in good working order and efficiently operate all waste collection, control, treatment, and disposal facilities.
9. During IDEM inspections of the Respondent's POTW conducted on May 18, 2004, and February 1, 2005, the Respondent's sanitary sewer collection system was evaluated as unsatisfactory based on the sanitary sewer overflow events and the Respondent's failure to address the inflow and infiltration (I/I) problems which are causing the sanitary sewer overflow and bypass events.

The Respondent's failure to maintain in good working order and efficiently operate all waste collection, control, treatment, and disposal facilities, is in violation of 327 IAC 5-2-8(1), Part II.A.1 of the Permit, 327 IAC 5-2-8(8), and Part II.B.1 of the Permit.

In accordance with IC 13-30-3-3, the Commissioner is required to notify an alleged violator in writing that a violation may exist and offer an opportunity to enter into an Agreed Order providing for the actions required to correct the violations and for the payment of a civil penalty. The Commissioner is not required to extend this offer for more than 60 days.

Entering into an Agreed Order will prevent the issuance of a Notice and Order of the Commissioner under IC 13-30-3-4, or the filing of a civil court action under IC 13-14-2-6. IDEM encourages settlement by Agreed Order, thereby saving time and resources. Timely settlement by Agreed Order may result in a reduced civil penalty. Settlement discussions will also allow the opportunity to present any mitigating factors that may be relevant to the violations. In addition, as provided in IC 13-30-3-3, an alleged violator may enter into an Agreed Order without admitting that the violation occurred.

If settlement is not reached within 60 days of receipt of this Notice of Violation, the Commissioner may issue a Notice and Order containing the actions that must be taken to achieve compliance, the required time frames, and an appropriate civil penalty. Pursuant to IC 13-30-4-1, the Commissioner may assess penalties of up to \$25,000 per day for each violation.

To discuss this matter further, please contact Terry Ressler at 317/232-8433 within 15 days after receipt of this Notice to request a conference. If settlement is reached, an Agreed Order will be prepared and sent for review and signature.

For the Commissioner:

Date: *August 16, 2005*

  
\_\_\_\_\_  
Matthew T. Klein  
Assistant Commissioner  
for Compliance and Enforcement

cc: Grant County Health Department

STATE OF INDIANA ) BEFORE THE INDIANA DEPARTMENT

) SS: OF ENVIRONMENTAL MANAGEMENT

COUNTY OF MARION )

COMMISSIONER OF THE DEPARTMENT )

OF ENVIRONMENTAL MANAGEMENT, )

)

Complainant, )

)

v. ) CAUSE NO. B-1248

)

TOWN OF UPLAND, )

)

Respondent. )

**AMENDED AGREED ORDER**

The Complainant and the Respondent desire to settle and compromise this action without hearing or adjudication of any issue of fact or law, and consent to the entry of the following Findings of Fact and Order.

**I. FINDINGS OF FACT**

1. Complainant is the Commissioner ("Complainant") of the Indiana Department of Environmental Management, a department of the State of Indiana created by IC 13-13-1-1.
2. Respondent is the Town of Upland ("Respondent"), which owns and operates a wastewater treatment plant and discharges to receiving waters named Jefferson Ditch as authorized by NPDES Permit No. IN 0036978 located in Grant County, Indiana.
3. The Indiana Department of Environmental Management ("IDEM") has jurisdiction over the parties and subject matter of this action.
4. Pursuant to IC 13-7-11-2(b) (currently IC 13-30-3-3) IDEM cited prior violations of the Permit which had occurred in a Notice of Violation dated January 5, 1990, and sent via Certified Mail to:

Mr. John Bragg, President

13. The Respondent waives its right to Notice of Violation and sixty (60) day settlement period pursuant to IC 13-30-3-3 for the additional violations included in this Amended Agreed Order.
14. In recognition of the settlement reached, Respondent waives any right to administrative and judicial review of this Amended Agreed Order.

***II. ORDER***

Terry Ressler, Case Manager, Water Enforcement Section

Office of Enforcement, IGCN, Rm. 1315

Indiana Department of Environmental Management

100 N. Senate Avenue

P. O. Box 6015

Indianapolis, IN 46206-6015

6. In the event the terms and conditions of the following paragraphs are violated, the Complainant may assess and the Respondent shall pay a stipulated penalty in the following amount:

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11. The Respondent shall provide a copy of this Agreed Order, if in force, to any subsequent owners or successors before ownership rights are transferred. Respondent shall ensure that all contractors, firms and other persons performing work under this Agreed Order comply with the terms of this Agreed Order.

12. This Agreed Order shall remain in effect until Respondent has complied with all terms and conditions of this Agreed Order.

Signed 1/12/01

**Appendix E**

---

**Environmental Correspondence**

**Sanitary Sewer Projects**



**Indiana Department of Environmental Management**

*We make Indiana a cleaner, healthier place to live.*

Mitchell E. Daniels, Jr.  
Governor

100 North Senate Avenue  
Indianapolis, Indiana 46206

Thomas W. Easterly  
Commissioner

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Town of Upland  
Chip Long  
87 N. Main Street  
Upland, IN 46989

Triad Associates, Inc.  
Dee Revnyak  
5835 Lawton Loop E. Drive  
Indianapolis, IN 46250

Tuesday, April 27, 2010

Dear Grant Administrator or Other Finance Approval Authority:

RE: The proposed improvements are located in Grant County, in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to selected sanitary sewers in order to decrease infiltration and inflow (I/I) in the system. Work will include lining, replacing, and repairing existing sewer lines and manholes. All work will occur in the existing trenches, rights of way, and easements. No land acquisition or tree removal will be necessary.

The Indiana Department of Environmental Management (IDEM) is aware that many local government or not-for-profit entities are seeking grant monies, a bond issuance, or another public funding mechanism to cover some portion of the cost of a public works, infrastructure, or community development project. IDEM also is aware that in order to be eligible for such funding assistance, applicants are required to first evaluate the potential impacts that their particular project may have on the environment. In order to assist applicants seeking such financial assistance and to ensure that such projects do not have an adverse impact on the environment, IDEM has prepared the following list of environmental issues that each applicant must consider in order to minimize environmental impacts in compliance with all relevant state laws.

IDEM recommends that each applicant consider the following issues when moving forward with their project. IDEM also requests that, in addition to submitting the information requested above, each applicant also sign the attached certification, attesting to the fact that they have read the letter in its entirety, agree to abide by the recommendations of the letter, and to apply for any permits required from IDEM for the completion of their project.

IDEM recommends that any person(s) intending to complete a public works, infrastructure, or community development project using any public funding consider each of the following applicable recommendations and requirements:

**WATER AND BIOTIC QUALITY**

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before

discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE Permits and Public Notices (<http://www.lrl.usace.army.mil/orf/default.asp>) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.

Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana) are served by the USACE Louisville District Office (502-315-6733).

Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm>. IDEM recommends that impacts to wetlands and other water resources be avoided to the fullest extent.

2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality. To learn more about the water quality certification program, visit: <http://www.in.gov/idem/4384.htm>.
3. If the USACE determines that a wetland or other body of water is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana. A state isolated wetland permit from IDEM's Office of Water Quality is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the Office of Water Quality at 317-233-8488.
4. If your project will impact more than 0.5 acres of wetland, stream relocation, or other large-scale alterations to bodies of water such as the creation of a dam or a water diversion, you should seek additional input from the Office of Water Quality, Wetlands staff at 317-233-8488.
5. Work within the one-hundred year floodway of a given body of water is regulated by the Department of Natural Resources, Division of Water. Contact this agency at 317-232-4160 for further information.
6. The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.
7. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for a Rule 5 Storm Water Runoff Permit. Visit the following Web page
  - o <http://www.in.gov/idem/4902.htm>

To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/idem/4917.htm#constreg>), and as described in 327 IAC 15-5-6.5 (<http://www.in.gov/legislative/iac/T03270/A00150> [PDF], pages 16 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/isda/soil/contacts/map.html>).

Upon receipt of the construction plan, personnel of the SWCD or the Indiana Department of Environmental Management will review the plan to determine if it meets the requirements of 327 IAC 15-5. Plans that are deemed deficient will require re-submittal. If the plan is sufficient you will be notified and instructed to submit the verification to IDEM as part of the Rule 5 Notice of Intent (NOI) submittal. Once construction begins, staff of the SWCD or Indiana Department of Environmental Management will perform inspections of activities at the site for compliance with the regulation.

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm>.

If your project is located in an IDEM-approved MS4 area, please contact the local MS4 program about meeting their storm water requirements. Once the MS4 approves the plan, the NOI can be submitted to IDEM.

Regardless of the size of your project, or which agency you work with to meet storm water requirements, IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM.

8. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317-232-4080) for additional project input.
9. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.
10. For projects involving effluent discharges to waters of the State of Indiana, contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.
11. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

## AIR QUALITY

The above-noted project (see page 1) should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

1. Regarding open burning, and disposing of organic debris generated by land clearing activities; some types of open burning are allowed under specific conditions (<http://www.in.gov/idem/4148.htm>). You also can seek an open burning variance from IDEM.

IDEM generally recommends that you take vegetative wastes to a registered yard waste composting facility or that the waste be chipped or shredded with composting on-site. You must register with IDEM if more than 2,000 pounds is to be composted; contact 317-232-0066. The finished compost can then be used as a mulch or soil amendment. You also may bury any vegetative wastes (such as leaves, twigs, branches, limbs, tree trunks and stumps) on-site, although burying large quantities of such material can lead to subsidence problems.

2. Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized.

If construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for three to five years, precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is caused by the fungus *Histoplasma capsulatum*, which stems from bird or bat droppings that have accumulated in one area for three to five years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at 317-233-7272.

3. The U.S. EPA and the U.S. Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. For a county-by-county map of predicted radon levels in Indiana, visit <http://www.in.gov/idem/4267.htm>.

The U.S. EPA further recommends that all homes and apartments (within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L or higher, then U.S. EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L or higher, then U.S. EPA recommends the installation of radon-reduction measures. For a list of qualified radon testers and radon mitigation (or reduction) specialists, visit [http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon\\_testers\\_mitigators\\_list.pdf](http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf). Also, it is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure, visit <http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>, <http://www.in.gov/idem/4145.htm>, or <http://www.epa.gov/radon/index.html>.

4. With respect to asbestos removal, all facilities slated for renovation or demolition (except residential buildings that have four (4) or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of

RACM off of pipes, less than 160 square feet of RACM off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.

For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.

In all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at [www.in.gov/icpr/webfile/formsdiv/44593.pdf](http://www.in.gov/icpr/webfile/formsdiv/44593.pdf).

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. Billings will occur on a quarterly basis.

For more information about IDEM policy regarding asbestos removal and disposal, visit: <http://www.in.gov/idem/4983.htm>.

5. With respect to lead-based paint removal, IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal, visit <http://www.in.gov/idem/permits/guide/waste/leadabatement.html>.
6. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months of April through October. See 326 IAC 8-5-2, Asphalt Paving Rule (<http://www.ai.org/legislative/iac/T03260/A00080.PDF>).
7. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 ([www.ai.org/legislative/iac/t03260/a00020.pdf](http://www.ai.org/legislative/iac/t03260/a00020.pdf)). New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
8. For more information on air permits, visit <http://www.in.gov/idem/4223.htm>, or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or oamprod at idem.in.gov.

## LAND QUALITY

In order to maintain compliance with all applicable laws regarding contamination and/or proper waste disposal, IDEM recommends that:

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm>.
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If Polychlorinated Biphenyls (PCBs) are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes. (Asbestos removal is addressed above, under Air Quality.)
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317-308-3039 (<http://www.in.gov/idem/4999.htm>).

## FINAL REMARKS

Should the applicant need to obtain any environmental permits in association with this proposed project, please be mindful that IC 13-15-8 requires that they notify all adjoining property owners and/or occupants within ten days of your submittal of each permit application. Applicants seeking multiple permits, may still meet the notification requirement with a single notice if all required permit applications are submitted with the same ten day period.

Please note that this letter does not constitute a permit, license, endorsement, or any other form of approval on the part of either the Indiana Department of Environmental Management or any other Indiana state agency.

Should you have any questions relating to the content or recommendations of this letter, or if you have additional questions about whether a more complete environmental review of your project should be conducted, please feel free to contact Brad Baughn at (317) 233-3835, BBAughn@idem.in.gov.

Sincerely,



Thomas W. Easterly  
Commissioner

### Signature(s) of the Applicant

I acknowledge that I am seeking grant monies, a bond issuance, or other public funding mechanism to cover some portion of the cost of the public works, infrastructure, or community development project as described herein, which I am working (possibly with others) to complete.

### Project Description

The proposed improvements are located in Grant County, in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to selected sanitary sewers in order to decrease infiltration and inflow (I/I) in the system. Work will include lining, replacing, and repairing existing sewer lines and manholes. All work will occur in the existing trenches, rights of way, and easements. No land acquisition or tree removal will be necessary.

With my signature, I do hereby affirm that I have read the letter from the Indiana Department of Environmental Management that appears directly above. In addition, I understand that in order to complete the project in which I am interested, with a minimum impact to the environment, I must consider all the issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Dated Signature of the Public Owner  
Contact/Responsible Elected Official



Chip Long

Dated Signature of the Project  
Planner/Consultant Contact Person



Dee Revnyak



Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739  
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov



June 1, 2010

Chip Long  
Town of Upland  
87 North Main Street  
Upland, Indiana 46989

Federal Agency: Town of Upland as the delegatee of the U.S. Department of Housing and Urban Development

Re: Project information and notification of the Town of Upland's finding of "no historic properties affected" regarding sanitary sewer improvements using Disaster Recovery funds through the Indiana Office of Community and Rural Affairs (DHPA #9804)

Dear Mr. Long:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated April 27, 2010 and received on May 3, 2010 for the above indicated project in Upland, Grant County, Indiana.

In terms of archaeology, no currently known archaeological resources eligible for inclusion in the National Register of Historic Places have been recorded within the proposed project area. No archaeological investigations appear necessary provided that all project activities remain within areas disturbed by previous construction.

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. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

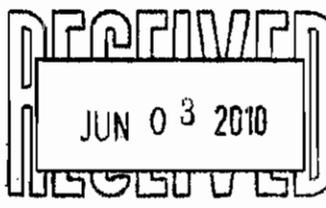
In regard to buildings and structures, we have identified the following properties within the probable area of potential effects, and we believe that they may meet the criteria of eligibility for inclusion in the National Register of Historic Places:

Upland First Methodist Episcopal Church, Site #053-265-46006 per the 1993 Grant County Interim Report

Thomas Deeven House, Site #053-265-46007 per the 1993 Grant County Interim Report

However, based on the information provided to our office, we do not believe that there will be any alterations to the characteristics of the above identified historic properties qualifying them for inclusion in or eligibility for the National Register (*see* 36 C.F.R. § 800.16[i]).

Therefore we see no reason to object with the Town of Upland's April 27, 2010 finding that there are no historic buildings, structures, districts, objects, or archaeological resources within the area of potential effects that will be affected by the above indicated project.



A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004, may be found on the Internet at [www.achp.gov](http://www.achp.gov) for your reference. If you have questions about archaeological issues please contact Cathy Draeger-Williams at (317) 234-3791 or [cdraeger-williams@dnr.IN.gov](mailto:cdraeger-williams@dnr.IN.gov). If you have questions about buildings or structures please contact Miriam Widenhofer at (317) 233-3883 or [mwidenhofer@dnr.IN.gov](mailto:mwidenhofer@dnr.IN.gov). Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA #9804.

Very truly yours,



James A. Glass, Ph.D.

Deputy State Historic Preservation Officer

JAG:MLW:CDW:cdw

cc: Dee Revnyak, Triad Associates, Inc.  
Amy Miller, Cornerstone Grants  
emc: Dave Hacker, Indiana Office of Community and Rural Affairs



United States Department of the Interior  
Fish and Wildlife Service



Bloomington Field Office (ES)  
620 South Walker Street  
Bloomington, IN 47403-2121  
Phone: (812) 334-4261 Fax: (812) 334-4273

May 19, 2010

Ms. Dee Revnyak  
Triad Associates, Inc.  
5835 Lawton Loop East Drive  
Indianapolis, Indiana 46216-1064

Dear Ms. Revnyak:

This responds to your letter of April 27, 2010 requesting U.S. Fish and Wildlife Service (FWS) review of proposed sewer system improvements for the Town of Upland in Grant County, Indiana.

These comments are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

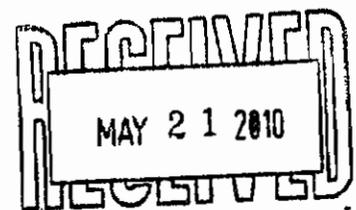
Your letter states that the project consists of replacing or repairing sewers in several locations, with all work at existing locations and no tree removal required. We do not anticipate significant impacts on wildlife habitat from this project, however the National Wetland Inventory maps indicate the presence of a large palustrine emergent wetland north of Washington Street where the northeasternmost sewer line repair project would occur. Impacts to this wetland should be avoided.

Wetland or stream impacts may require permits from the U.S. Army Corps of Engineers, the Indiana Department of Environmental Management's Water Quality Certification program and/or the Indiana Department of Natural Resources.

#### 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.

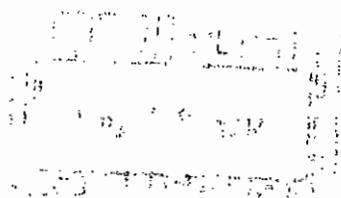
This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. If project plans are changed significantly, please contact our office for further consultation.



For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,

*for*   
Scott E. Pruitt  
Field Supervisor



THIS IS NOT A PERMIT

State of Indiana  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water

Early Coordination/Environmental Assessment

DNR #: ER-14956 Request Received: April 28, 2010

Requestor: Triad Associates Incorporated  
Dee A Revnyak  
5835 Lawton Loop East Drive  
Indianapolis, IN 46216-1064

Project: Town of Upland, sanitary sewer improvements project

County/Site info: Grant

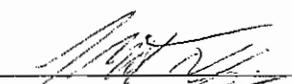
The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

Regulatory Assessment: Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

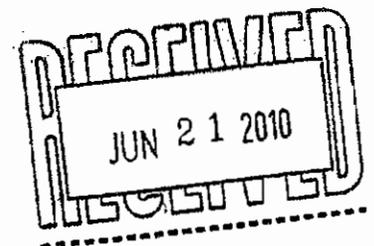
Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments: Fish, wildlife, and botanical resource losses as a result of this project can be minimized through implementation of the following measures.  
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.  
Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.  
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.  
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.  
Install appropriate armament below pipe outfalls.  
Do not excavate or place fill in any riparian wetland.

Contact Staff: Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife  
Our agency appreciates this opportunity to be of service. Please do not hesitate to contact the above staff member at (317) 232-4160 or 1-877-928-3755 (toll free) if we can be of further assistance.

  
\_\_\_\_\_  
J. Matthew Buffington  
Environmental Supervisor  
Division of Fish and Wildlife

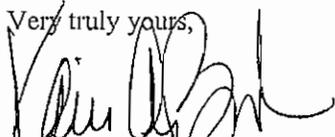
Date: June 18, 2010



Chip Long  
June 1, 2010  
Page 2

*A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004, may be found on the Internet at [www.achp.gov](http://www.achp.gov) for your reference. If you have questions about archaeological issues please contact Cathy Draeger-Williams at (317) 234-3791 or [cdraeger-williams@dnr.IN.gov](mailto:cdraeger-williams@dnr.IN.gov). If you have questions about buildings or structures please contact Miriam Widenhofer at (317) 233-3883 or [mwidenhofer@dnr.IN.gov](mailto:mwidenhofer@dnr.IN.gov). Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA #9804.*

Very truly yours,



James A. Glass, Ph.D.

Deputy State Historic Preservation Officer

JAG:MLW:CDW:cdw

cc: Dee Revnyak, Triad Associates, Inc.  
Amy Miller, Cornerstone Grants  
emc: Dave Hacker, Indiana Office of Community and Rural Affairs



**TRIAD ASSOCIATES, INC.**  
ENGINEERING • ARCHITECTURE

5835 LAWTON LOOP EAST DRIVE, INDIANAPOLIS, IN 46216-1064  
(317) 377-5230 • FAX: (317) 377-5241  
REIFERS CENTER • 839 MAIN STREET • SUITE 519 • LAFAYETTE, IN 47901  
VOICE/FAX: (765) 428-8282  
WEBSITE: [www.triadassociates.info](http://www.triadassociates.info) • E-MAIL: [triad@triadassoc.net](mailto:triad@triadassoc.net)

April 27, 2010

Mr. Scott Pruitt  
U.S. Department of Interior, Fish & Wildlife Services  
620 South Walker Street  
Bloomington, IN 47403-2121

Re: Town of Upland, Indiana, Sanitary Sewer Improvements Project

Dear Mr. Pruitt:

The Town of Upland is in the process of submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs. As such, an environmental review pursuant to the National Environmental Policy Act is needed in order to assess the environmental impacts of a proposed sanitary sewer improvements project. **Due to the strict timelines to apply for and receive Disaster Recovery Funds, the Town is respectfully requesting your assistance in expediting the approval process through your Department.**

The proposed improvements are located in Grant County, in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to selected sanitary sewers in order to decrease infiltration and inflow (I/I) in the system. Work will include lining, replacing, and repairing existing sewer lines and manholes. All work will occur in the existing trenches, rights of way, and easements. No land acquisition or tree removal will be necessary.

Enclosed is a U.S. Geological Survey map and other associated maps showing the proposed locations. We are requesting that your office review the proposed project for any State and Federally-listed threatened and endangered species, sensitive areas, historic or archaeological sites and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts, if applicable.

Triad Associates, Inc. is the engineering consultant and is assisting the Town with the environmental review process. Correspondence should be directed to our office. If possible, we would greatly appreciate a response within 30 days. Please contact me at (317) 377-5230 if you need further information or wish to discuss the project. Thank you for your assistance.

Sincerely,

  
Dee A. Revnyak  
Project Manager

enclosures

cc: Town of Upland  
Cornerstone Grants



**TRIAD ASSOCIATES, INC.**  
ENGINEERING • ARCHITECTURE

5835 LAWTON LOOP EAST DRIVE, INDIANAPOLIS, IN 46216-1064  
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WEBSITE: [www.triadassociates.info](http://www.triadassociates.info) • E-MAIL: [triad@triadassoc.net](mailto:triad@triadassoc.net)

April 27, 2010

Dept. of Natural Resources  
Division of Fish & Wildlife  
402 W. Washington Street, Room W273  
Indianapolis, IN 46204-2748

Re: Town of Upland, Sanitary Sewer Improvements Project

To Whom It May Concern:

The Town of Upland is in the process of submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs. As such, an environmental review pursuant to the National Environmental Policy Act is needed in order to assess the environmental impacts of a proposed sanitary sewer improvements project. **Due to the strict timelines to apply for and receive Disaster Recovery Funds, the Town is respectfully requesting your assistance in expediting the approval process through your Department.**

The proposed improvements are located in Grant County, in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to selected sanitary sewers in order to decrease infiltration and inflow (I/I) in the system. Work will include lining, replacing, and repairing existing sewer lines and manholes. All work will occur in the existing trenches, rights of way, and easements. No land acquisition or tree removal will be necessary.

Enclosed is a U.S. Geological Survey map and other associated maps showing the proposed locations. We are requesting that your office review the proposed project for any State and Federally-listed threatened and endangered species, sensitive areas, historic or archaeological sites and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts, if applicable.

Triad Associates, Inc. is the engineering consultant and is assisting the Town with the environmental review process. Correspondence should be directed to our office. If possible, we would greatly appreciate a response within 30 days. Please contact me at (317) 377-5230 or [drevnyak@triadassoc.net](mailto:drevnyak@triadassoc.net) if you need further information or wish to discuss the project. Thank you for your assistance.

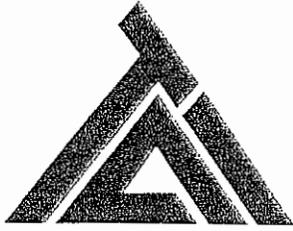
Sincerely,

A handwritten signature in cursive script, appearing to read "Dee Revnyak".

Dee A. Revnyak  
Project Manager

enclosures

cc: Town of Upland  
Cornerstone Grants



**TRIAD ASSOCIATES, INC.**  
ENGINEERING • ARCHITECTURE

5835 LAWTON LOOP EAST DRIVE, INDIANAPOLIS, IN 46216-1064  
(317) 377-5230 • FAX: (317) 377-5241  
REIFERS CENTER • 839 MAIN STREET • SUITE 519 • LAFAYETTE, IN 47901  
VOICE/FAX: (765) 428-8282  
WEBSITE: [www.triadassociates.info](http://www.triadassociates.info) • E-MAIL: [triad@triadassoc.net](mailto:triad@triadassoc.net)

April 27, 2010

Ms. Christie Stanifer  
Environmental Coordinator  
Department of Natural Resources - Division of Water  
402 West Washington Street, Room W264  
Indianapolis, IN 46204-2641

Re: Town of Upland, Sanitary Sewer Improvements Project

Dear Ms. Stanifer:

The Town of Upland is in the process of submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs. As such, an environmental review pursuant to the National Environmental Policy Act is needed in order to assess the environmental impacts of a proposed sanitary sewer improvements project. **Due to the strict timelines to apply for and receive Disaster Recovery Funds, the Town is respectfully requesting your assistance in expediting the approval process through your Department.**

The proposed improvements are located in Grant County, in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to selected sanitary sewers in order to decrease infiltration and inflow (I/I) in the system. Work will include lining, replacing, and repairing existing sewer lines and manholes. All work will occur in the existing trenches, rights of way, and easements. No land acquisition or tree removal will be necessary.

Enclosed is a U.S. Geological Survey map and other associated maps showing the proposed locations. We are requesting that your office review the proposed project for any State and Federally-listed threatened and endangered species, sensitive areas, historic or archaeological sites and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts, if applicable.

Two (2) sets are included with this correspondence. A copy under separate cover has been sent to the Division of Historic Preservation. Triad Associates, Inc. is the engineering consultant and is assisting the Town with the environmental review process. Correspondence should be directed to our office. If possible, we would greatly appreciate a response within 30 days. Please contact me at (317) 377-5230 or [drevnyak@triadassoc.net](mailto:drevnyak@triadassoc.net) if you need further information or wish to discuss the project. Thank you for your assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Dee Revnyak". The signature is fluid and cursive, written in a professional style.

Dee A. Revnyak  
Project Manager

enclosures

cc: Town of Upland  
Cornerstone Grants



**TRIAD ASSOCIATES, INC.**  
ENGINEERING • ARCHITECTURE

5835 LAWTON LOOP EAST DRIVE, INDIANAPOLIS, IN 46216-1064  
(317) 377-5230 • FAX: (317) 377-5241  
REIFERS CENTER • 839 MAIN STREET • SUITE 519 • LAFAYETTE, IN 47901  
VOICE/FAX: (765) 428-8282  
WEBSITE: [www.triadassociates.info](http://www.triadassociates.info) • E-MAIL: [triad@triadassoc.net](mailto:triad@triadassoc.net)

April 27, 2010

Mr. James Glass Ph.D., State Historic Preservation Officer  
DNR Division of Historic Preservation and Archaeology  
402 West Washington Street, Room W274  
Indianapolis, IN 46204-2741

Re: Town of Upland, Sanitary Sewer Improvements Project

Dear Mr. Glass:

The Town of Upland is in the process of submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs. As such, an environmental review pursuant to the National Environmental Policy Act is needed in order to assess the environmental impacts of a proposed sanitary sewer improvements project. **Due to the strict timelines to apply for and receive Disaster Recovery Funds, the Town is respectfully requesting your assistance in expediting the approval process through your Department.**

The proposed improvements are located in Grant County, in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to selected sanitary sewers in order to decrease infiltration and inflow (I/I) in the system. Work will include lining, replacing, and repairing existing sewer lines and manholes. All work will occur in the existing trenches, rights of way, and easements. No land acquisition or tree removal will be necessary.

The areas of potential effects are completely contained within the existing easements and rights of way. No historic sites or structures will be impacted. Therefore, it is the Town's opinion that no historic properties are within the areas of potential effects.

Enclosed is a U.S. Geological Survey map and other associated maps showing the proposed locations. The project components have also been transposed on applicable pages from the Grant County Interim Report. We are requesting that your office review the proposed project for any State and Federally-listed threatened and endangered species, sensitive areas, historic or archaeological sites and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts, if applicable.

A letter from the Town indicating the proposed funding source and verifying that Triad Associates, Inc. is the consultant and authorized representative for the Town in the environmental review process is provided with this submittal. Correspondence should be directed to our office. If possible, we would greatly appreciate a response within 30 days. Please contact me at (317) 377-5230 or [drevnyak@triadassoc.net](mailto:drevnyak@triadassoc.net) if you need further information or wish to discuss the project. Thank you for your assistance.

Sincerely,



Dee A. Revnyak  
Project Manager

enclosures

cc: Town of Upland  
Cornerstone Grants

*Town of Upland, Indiana*

*Jane S. Rockwell*  
Clerk Treasurer

*Bruce "Chip" Long*  
Town Manager

April 27, 2010

Mr. James Glass Ph.D., SHPO  
DNR, Division of Historic Preservation & Archaeology  
402 West Washington Street, Room W274  
Indianapolis, IN 46204-2739

Re: Town of Upland, Storm Water Improvements, **No Historic Properties Affected**

Dear Mr. Glass:

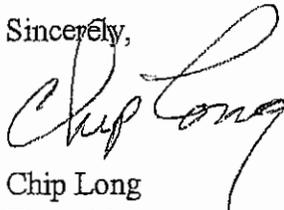
This letter is to inform the Indiana SHPO that the Town of Upland has determined that "no historic properties will be affected" accurately reflects our assessment of the above referenced project. The Town is pursuing Disaster Recovery CDBG Grant Funds for this project and will be advertising their "Finding of No Significant Impact and Request for Release of Funds" as soon as they receive your response to this letter. All documents relating to this review are available to the public and all consulting parties. Please provide our consulting engineer and grant administrator with a letter of concurrence with our findings so that it may be included with the grant application that will be submitted to the Office of Community and Rural Affairs. Their addresses are:

Triad Associates, Inc.  
Attn: Ms. Dee Revnyak  
5835 Lawton Loop East Drive  
Indianapolis, Indiana 46216

Cornerstone Grants  
Attn: Ms. Amy Miller  
1584 Doe Lane  
Greenwood, Indiana 46142

Should you have any questions or need additional information, please contact Ms. Dee Revnyak at 317/377-5230 or [drevnyak@triadassoc.net](mailto:drevnyak@triadassoc.net). Thank-you for your assistance.

Sincerely,



Chip Long  
Town Manager

cc: Cornerstone Grants  
Triad Associates, Inc.

*Town of Upland, Indiana*

*Janis E. Rockwell*  
Clerk Treasurer

*Bruce "Chip" Long*  
Town Manager

April 27, 2010

Mr. James Glass Ph.D., SHPO  
DNR, Division of Historic Preservation & Archaeology  
402 West Washington Street, Room W274  
Indianapolis, IN 46204-2739

Re: Town of Upland, Sanitary Sewer Improvements

Dear Mr. Glass:

The Town of Upland will be submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs. Since federal funds will be involved, an environmental review must be conducted to determine the effects of the project on the project site.

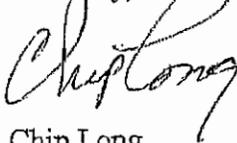
Please be advised that this letter will act as confirmation that Cornerstone Grants and Triad Associates, Inc. will be retained by the Town to represent them during the environmental review process. As such, correspondence or requests for information relating to this project should be directed to their attention. Their addresses and phone numbers are as follows:

Triad Associates, Inc.  
5835 Lawton Loop East Drive  
Indianapolis, Indiana 46216  
Phone: 317-377-5230  
Contact: Dee Revnyak

Cornerstone Grants  
1584 Doe Lane  
Greenwood, Indiana 46142  
Phone: 317-881-4854  
Contact: Amy Miller

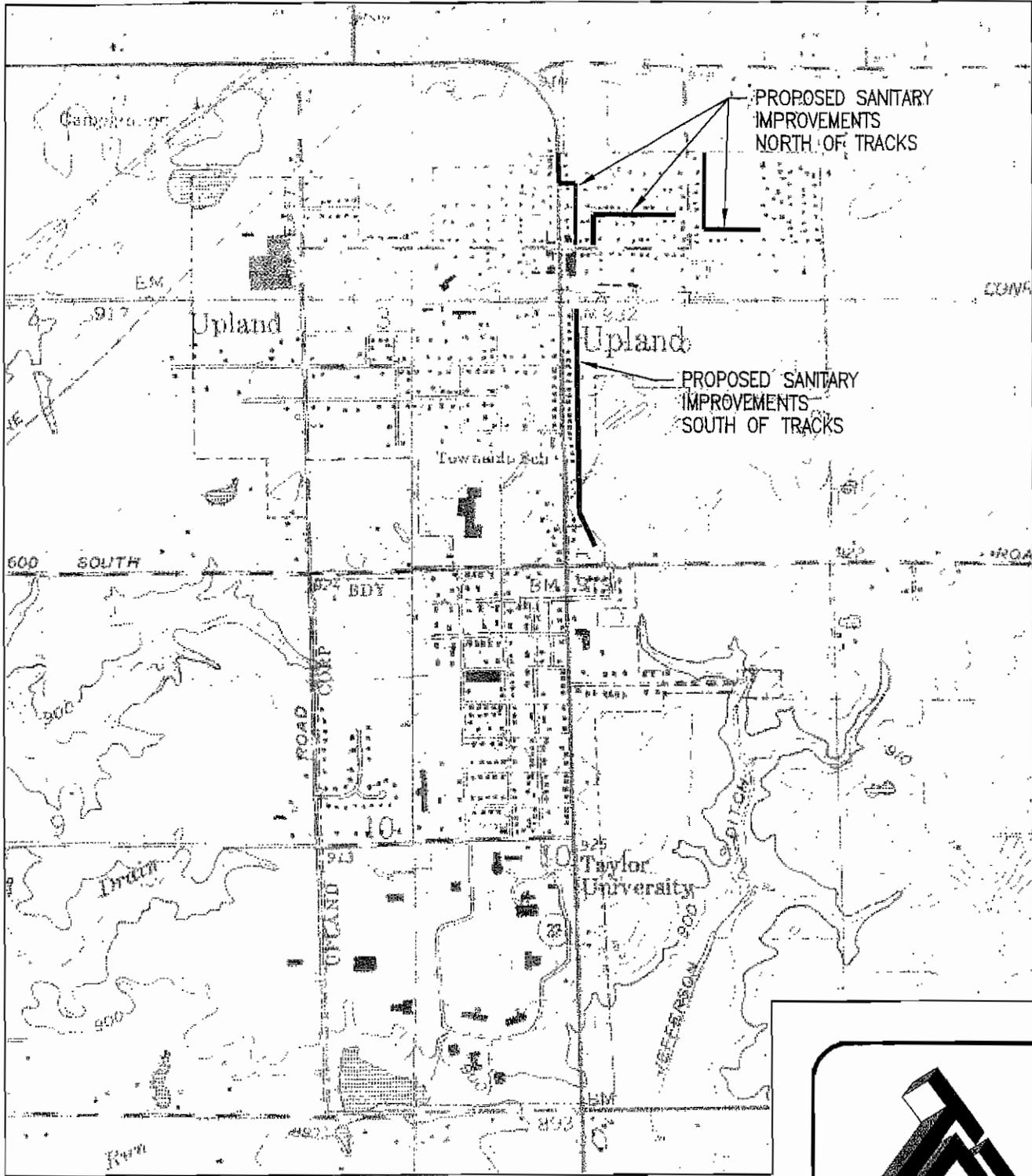
Should you have any questions or need additional information, please contact Ms. Dee Revnyak at Triad Associates, Inc.

Sincerely,



Chip Long  
Town Manager

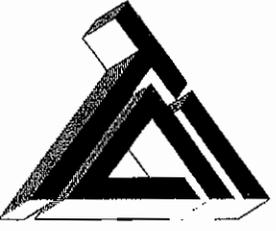
cc: Cornerstone Grants  
Triad Associates, Inc.



**TOWN OF UPLAND  
SANITARY IMPROVEMENTS AREA**



1 Inch = 1500 ft.

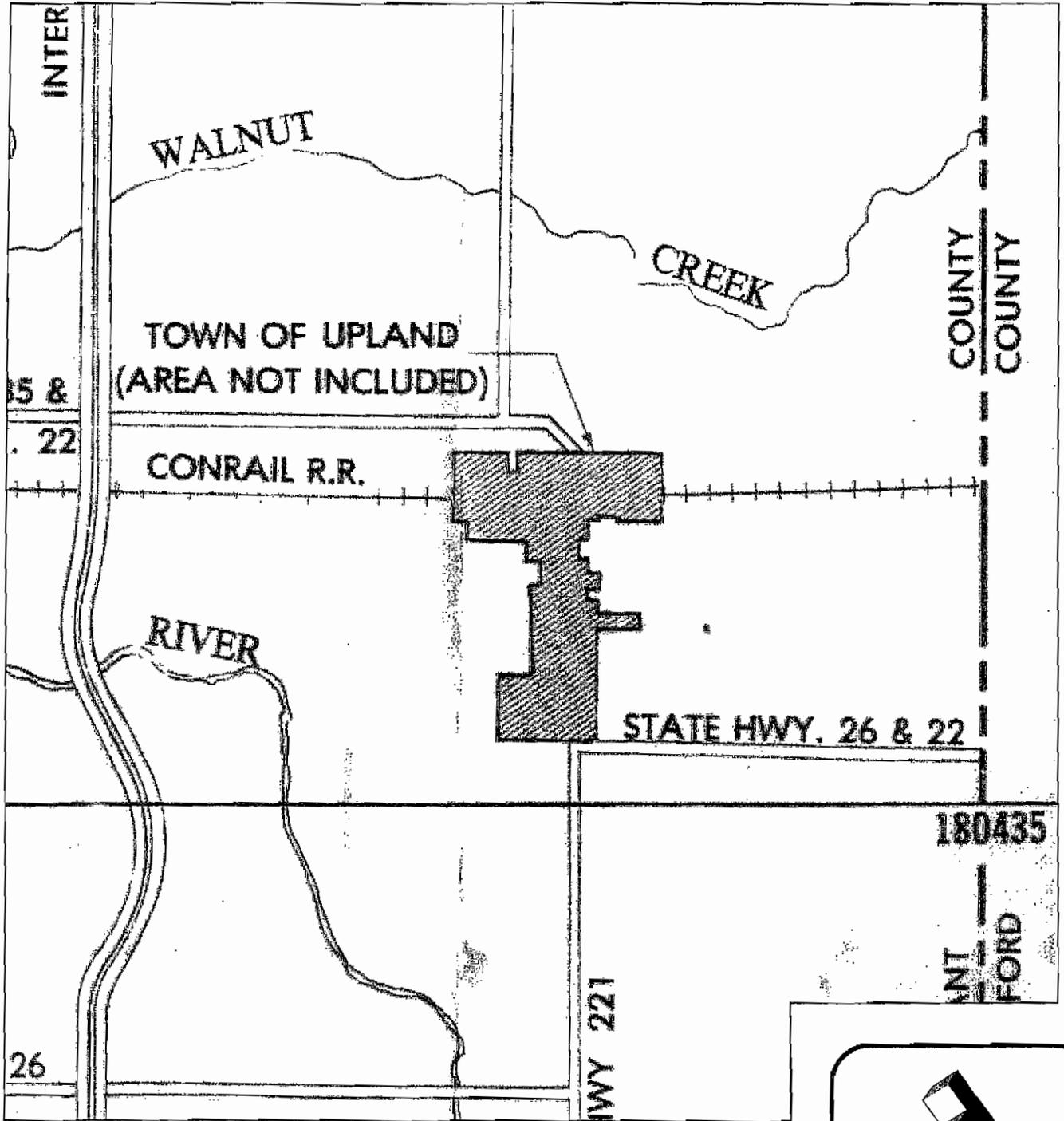



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 1**



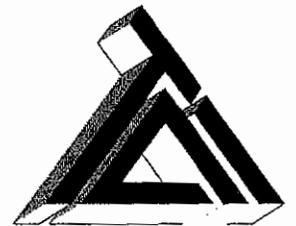
G:\2009\Upland\200906B\Exhibits\Exh. 3 Joiend.dwg. Layout1 26/2010 2:14:29 PM Doug



### TOWN OF UPLAND FLOODWAY MAP

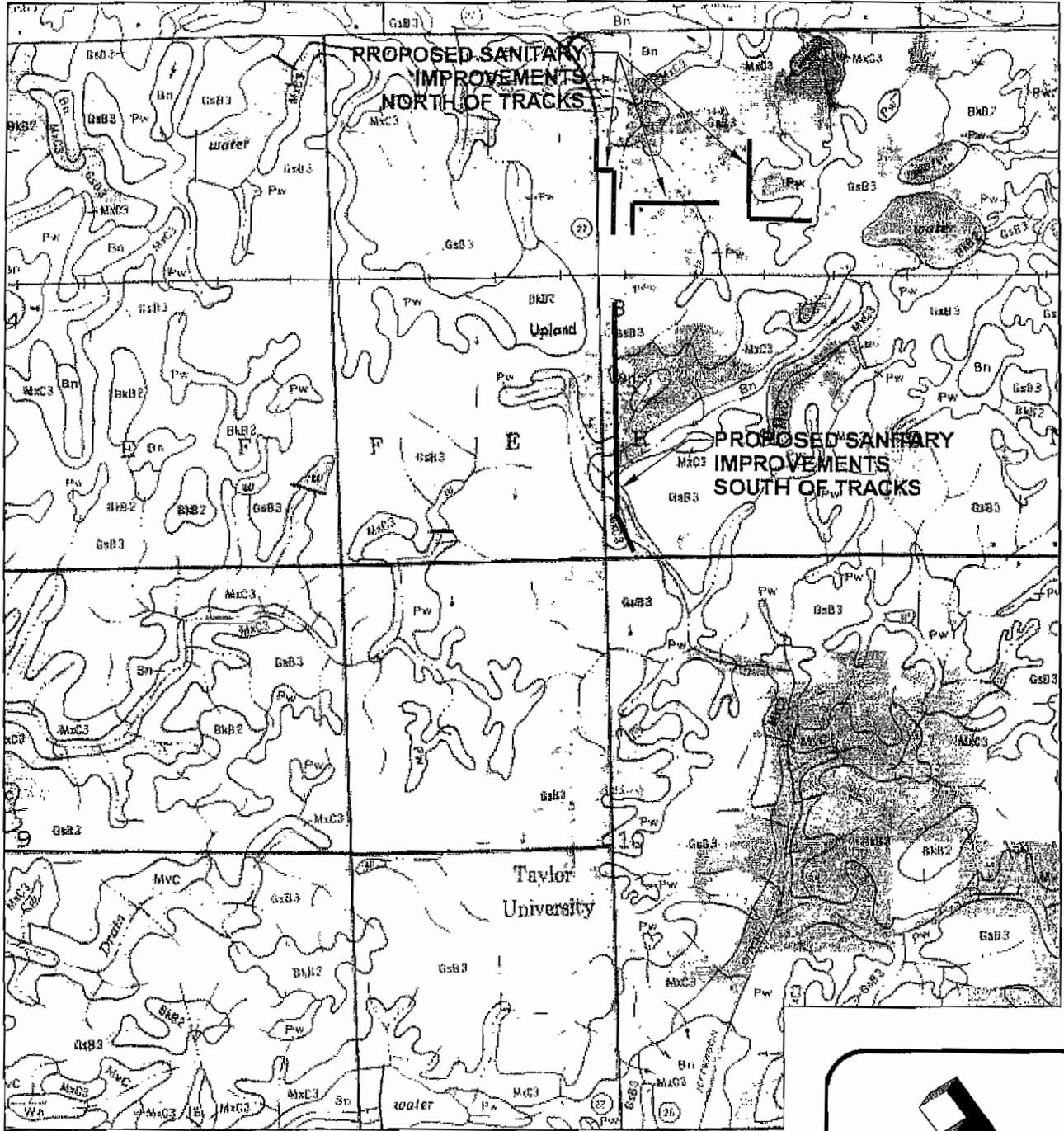


1 Inch = 5000 ft.

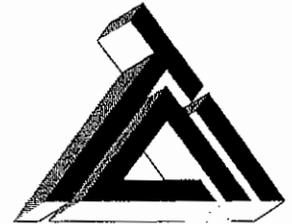


**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 3**



**TOWN OF UPLAND  
SOILS MAP**

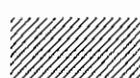


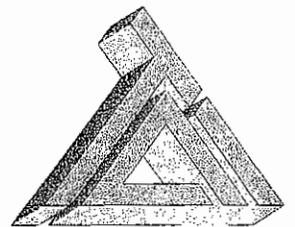
**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 4**



**LEGEND:**

 DENOTES ITEMS TO BE REPLACED  
ALL OTHER PIPING IS TO BE LINED IN PLACE.



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**TOWN OF UPLAND  
PROPOSED SANITARY IMPROVEMENTS  
NORTH OF TRACKS**



1 Inch = 300 ft.

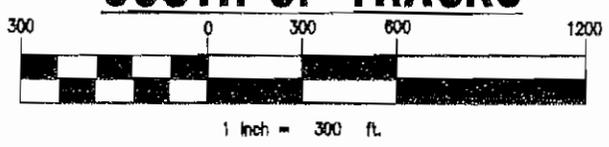


**EXHIBIT 5-1**



NOTE:  
 ALL SANITARY SEWERS  
 ON THIS SHEET TO BE  
 LINED ONLY

**TOWN OF UPLAND  
 PROPOSED SANITARY IMPROVEMENTS  
 SOUTH OF TRACKS**

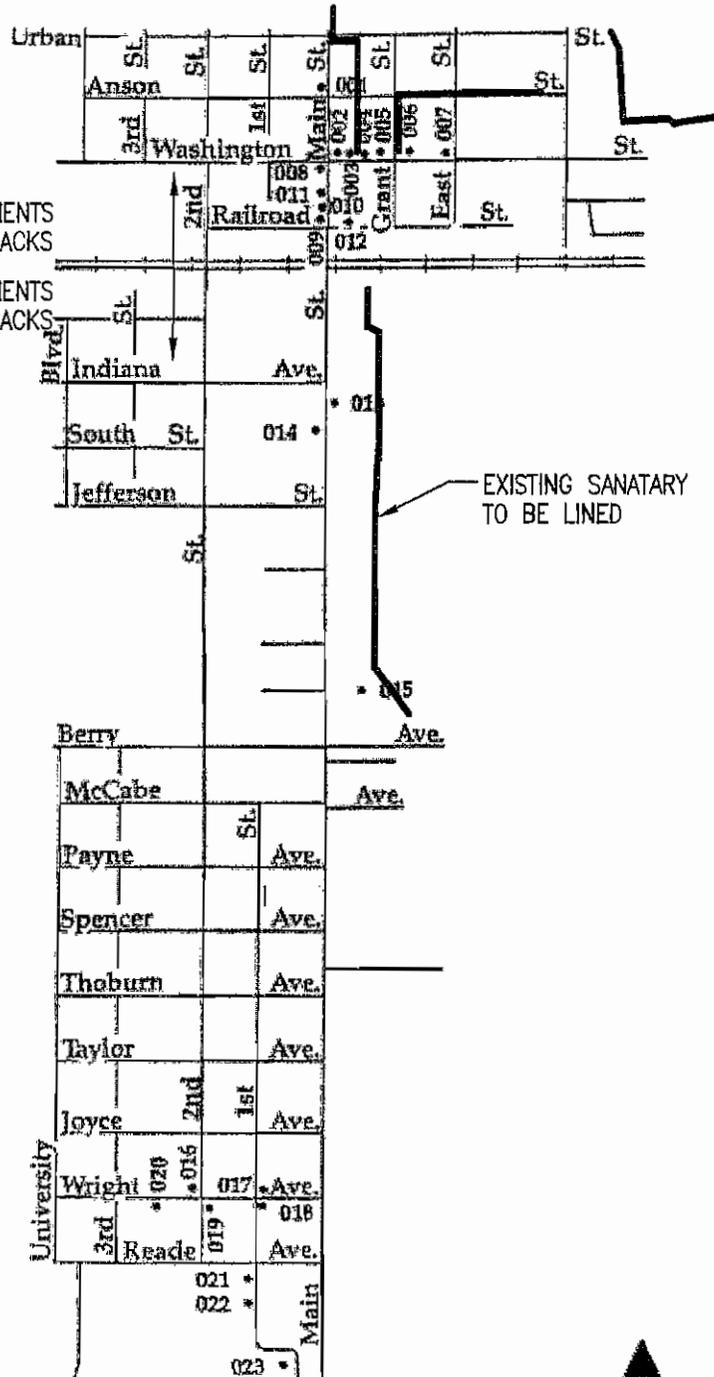


**TRIAD ASSOCIATES INC.**  
 5835 LAWTON LOOP EAST DRIVE  
 INDIANAPOLIS, INDIANA 46216  
 PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 5-II**

SANITARY IMPROVEMENTS  
NORTH OF THE TRACKS

SANITARY IMPROVEMENTS  
SOUTH OF THE TRACKS

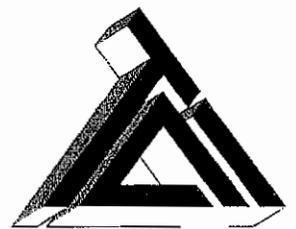


UPLAND SCATTERED SITES (45001-023)

GRANT COUNTY  
JEFFERSON TOWNSHIP (45)  
GAS CITY QUADRANGLE

# TOWN OF UPLAND INTERIM REPORT

SCALE: N.T.S.



TRIAD ASSOCIATES INC.  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

## APPENDIX B

**Appendix F**

---

**Environmental Correspondence**

**Storm Sewer Projects**



**Indiana Department of Environmental Management**

*We make Indiana a cleaner, healthier place to live.*

Mitchell E. Daniels, Jr.  
Governor

100 North Senate Avenue  
Indianapolis , Indiana 46206

Thomas W. Easterly  
Commissioner

(317) 232-8603  
800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

Town of Upland  
Michael Cooper  
87 North Main Street  
Upland, IN 46989

Triad Associates, Inc.  
Dee Revnyak  
5835 Lawton Loop E. Drive  
Indianapolis, IN 46216

Tuesday, May 19, 2009

Dear Grant Administrator or Other Finance Approval Authority:

RE: The proposed improvements are located in the Town of Upland, Grant County, in T23N, R9E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to the storm system to improve drainage in three areas of Town. Disaster Recovery Funding is being requested through the Office of Community and Rural Affairs Project Area I, Bragg and Howard, will occur in a residential area. Storm lines will be installed in an existing utility easement, along a platted but unconstructed right of way, and in an existing easement that presently contains a storm sewer, which will be replaced. No land acquisition is needed. Some tree/brush removal will be necessary. Project Area II, Taylor University, will occur in rights of way and undisturbed areas. One segment will be installed in the row, adjacent to the roadway. Another portion will be constructed in ground that is presently farmed. The remaining part will be installed in a wooded area that borders the intended discharge stream. Land acquisition is being finalized. Tree removal will be necessary. Project Area III, Bowen and Washington, will occur adjacent to roadways within previously disturbed rights of way. No land acquisition or tree removal will be necessary

The Indiana Department of Environmental Management (IDEM) is aware that many local government or not-for-profit entities are seeking grant monies, a bond issuance, or another public funding mechanism to cover some portion of the cost of a public works, infrastructure, or community development project. IDEM also is aware that in order to be eligible for such funding assistance, applicants are required to first evaluate the potential impacts that their particular project may have on the environment. In order to assist applicants seeking such financial assistance and to ensure that such projects do not have an adverse impact on the environment, IDEM has prepared the following list of environmental issues that each applicant must consider in order to minimize environmental impacts in compliance with all relevant state laws.

IDEM recommends that each applicant consider the following issues when moving forward with their project. IDEM also requests that, in addition to submitting the information requested above, each applicant also sign the attached certification, attesting to the fact that they

have read the letter in its entirety, agree to abide by the recommendations of the letter, and to apply for any permits required from IDEM for the completion of their project.

IDEM recommends that any person(s) intending to complete a public works, infrastructure, or community development project using any public funding consider each of the following applicable recommendations and requirements:

## WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE Permits and Public Notices (<http://www.lrl.usacc.army.mil/orf/default.asp>) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.

Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana) are served by the USACE Louisville District Office (502-315-6733).

Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm>. IDEM recommends that impacts to wetlands and other water resources be avoided to the fullest extent.

2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality. To learn more about the water quality certification program, visit: <http://www.in.gov/idem/4384.htm>.
3. If the USACE determines that a wetland or other body of water is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana. A state isolated wetland permit from IDEM's Office of Water Quality is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the Office of Water Quality at 317-233-8488.
4. If your project will impact more than 0.5 acres of wetland, stream relocation, or other large-scale alterations to bodies of water such as the creation of a dam or a water diversion, you should seek additional input from the Office of Water Quality, Wetlands staff at 317-233-8488.
5. Work within the one-hundred year floodway of a given body of water is regulated by the Department of Natural Resources, Division of Water. Contact this agency at 317-232-4160 for further information.
6. The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.
7. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for of a Rule 5 Storm Water Runoff Permit. Visit the following Web page
  - o <http://www.in.gov/idem/4902.htm>

To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/idem/4917.htm#constrreq>), and as described in 327 IAC 15-5-6.5 (<http://www.in.gov/legislative/iac/T03270/A00150> [PDF], pages 16 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/isda/soil/contacts/map.html>).

Upon receipt of the construction plan, personnel of the SWCD or the Indiana Department of Environmental Management will

review the plan to determine if it meets the requirements of 327 IAC 15-5. Plans that are deemed deficient will require re-submittal. If the plan is sufficient you will be notified and instructed to submit the verification to IDEM as part of the Rule 5 Notice of Intent (NOI) submittal. Once construction begins, staff of the SWCD or Indiana Department of Environmental Management will perform inspections of activities at the site for compliance with the regulation.

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm>.

If your project is located in an IDEM-approved MS4 area, please contact the local MS4 program about meeting their storm water requirements. Once the MS4 approves the plan, the NOI can be submitted to IDEM.

Regardless of the size of your project, or which agency you work with to meet storm water requirements, IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM.

8. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317-232-4080) for additional project input.
9. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.
10. For projects involving effluent discharges to waters of the State of Indiana, contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.
11. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

## AIR QUALITY

The above-noted project (see page 1) should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

1. Regarding open burning, and disposing of organic debris generated by land clearing activities; some types of open burning are allowed under specific conditions (<http://www.in.gov/idem/4148.htm>). You also can seek an open burning variance from IDEM.

IDEM generally recommends that you take vegetative wastes to a registered yard waste composting facility or that the waste be chipped or shredded with composting on-site. You must register with IDEM if more than 2,000 pounds is to be composted; contact 317-232-0066. The finished compost can then be used as a mulch or soil amendment. You also may bury any vegetative wastes (such as leaves, twigs, branches, limbs, tree trunks and stumps) on-site, although burying large quantities of such material can lead to subsidence problems.

2. Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized.

If construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for three to five years, precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is caused by the fungus *Histoplasma capsulatum*, which stems from bird or bat droppings that have accumulated in one area for three to five years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at 317-233-7272.

3. The U.S. EPA and the U.S. Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. For a county-by-county map of predicted radon levels in Indiana, visit <http://www.in.gov/idem/4267.htm>.

The U.S. EPA further recommends that all homes and apartments (within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L or higher, then U.S. EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L or higher, then U.S. EPA recommends the installation of radon-reduction measures. For a list of qualified radon testers and radon mitigation (or reduction) specialists, visit [http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon\\_testers\\_mitigators\\_list.pdf](http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf). Also, it is recommended that radon reduction measures be built

into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure, visit <http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>, <http://www.in.gov/idem/4145.htm>, or <http://www.epa.gov/radon/index.html>.

4. With respect to asbestos removal, all facilities slated for renovation or demolition (except residential buildings that have four (4) or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of RACM off of pipes, less than 160 square feet of RACM off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.

For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.

In all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at [www.in.gov/icpr/webfile/formsdiv/44593.pdf](http://www.in.gov/icpr/webfile/formsdiv/44593.pdf).

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. Billings will occur on a quarterly basis.

For more information about IDEM policy regarding asbestos removal and disposal, visit: <http://www.in.gov/idem/4983.htm>.

5. With respect to lead-based paint removal, IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal, visit <http://www.in.gov/idem/permits/guide/waste/leadabatement.html>.
6. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months of April through October. See 326 IAC 8-5-2, Asphalt Paving Rule (<http://www.ai.org/legislative/iac/T03260/A00080.PDF>).
7. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 ([www.ai.org/legislative/iac/t03260/a00020.pdf](http://www.ai.org/legislative/iac/t03260/a00020.pdf)). New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
8. For more information on air permits, visit <http://www.in.gov/idem/4223.htm>, or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or [oamprod@idem.in.gov](mailto:oamprod@idem.in.gov).

## LAND QUALITY

In order to maintain compliance with all applicable laws regarding contamination and/or proper waste disposal, IDEM recommends that:

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm>.
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If Polychlorinated Biphenyls (PCBs) are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes. (Asbestos removal is addressed above, under Air Quality.)

- 6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317-308-3039 (<http://www.in.gov/idein/4999.htm>).

**FINAL REMARKS**

Should the applicant need to obtain any environmental permits in association with this proposed project, please be mindful that IC 13-15-8 requires that they notify all adjoining property owners and/or occupants within ten days of your submittal of each permit application. Applicants seeking multiple permits, may still meet the notification requirement with a single notice if all required permit applications are submitted with the same ten day period.

Please note that this letter does not constitutes a permit, license, endorsement, or any other form of approval on the part of either the Indiana Department of Environmental Management or any other Indiana state agency.

Should you have any questions relating to the content or recommendations of this letter, or if you have additional questions about whether a more complete environmental review of your project should be conducted, please feel free to contact Michael Sullivan at (317) 233-3835, [msullivan@idem.in.gov](mailto:msullivan@idem.in.gov).

Sincerely,



Thomas W. Easterly  
Commissioner

---

**Signature(s) of the Applicant**

I acknowledge that I am seeking grant monies, a bond issuance, or other public funding mechanism to cover some portion of the cost of the public works, infrastructure, or community development project as described herein, which I am working (possibly with others) to complete.

**Project Description**

The proposed improvements are located in the Town of Upland, Grant County, in T23N, R9E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to the storm system to improve drainage in three areas of Town. Disaster Recovery Funding is being requested through the Office of Community and Rural Affairs Project Area I, Bragg and Howard, will occur in a residential area. Storm lines will be installed in an existing utility easement, along a platted but unconstructed right of way, and in an existing easement that presently contains a storm sewer, which will be replaced. No land acquisition is needed. Some tree/brush removal will be necessary. Project Area II, Taylor University, will occur in rights of way and undisturbed areas. One segment will be installed in the row, adjacent to the roadway. Another portion will be constructed in ground that is presently farmed. The remaining part will be installed in a wooded area that borders the intended discharge stream. Land acquisition is being finalized. Tree removal will be necessary. Project Area III, Bowen and Washington, will occur adjacent to roadways within previously disturbed rights of way. No land acquisition or tree removal will be necessary

With my signature, I do hereby affirm that I have read the letter from the Indiana Department of Environmental Management that appears directly above. In addition, I understand that in order to complete the project in which I am interested, with a minimum impact to the environment, I must consider all the issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Dated Signature of the Public Owner  
Contact/Responsible Elected Official



Michael Cooper

THIS IS NOT A PERMIT

State of Indiana  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water

Early Coordination/Environmental Assessment

DNR #: ER-14051 Request Received: May 22, 2009

Requestor: Triad Associates, Inc.  
Dee A. Revnyak  
5835 Lawton Loop East Drive  
Indianapolis, IN 46216-1064

Project: Storm water improvement project, Town of Upland

County/Site info: Grant

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 IAC 10-5 that applies to outfall structures (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:** Fish, wildlife, and botanical resource losses as a result of this project can be minimized through implementation of the following measures.

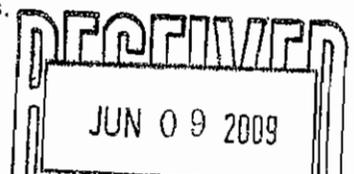
Due to the presence or potential presence of wetlands on site, we recommend contacting and coordinating with the Indiana Department of Environmental Management (IDEM) 401 program and also the United States Army Corps of Engineers (USACOE) 404 program.

Consider an alternative route for Project Area 2 that would result in less tree clearing. Option 1 (preferred) would be to bring the route south approximately 1,200' then east approximately 1,100' through already cleared ground to Jefferson Ditch. Option 2 (acceptable) entails working along the tree line. This includes using the tree line near the originally proposed storm sewer route for approximately 750' feet to the east, heads north approximately 200', then east approximately 190' along the tree line as it staircases up and over toward Jefferson Ditch. Option 2 would require a shorter diagonal portion through the woods to access the ditch than the original proposal. These options would greatly reduce the amount of tree clearing and any related mitigation requirements.

Impacts that remove trees in a non-wetland, riparian area require mitigation. When one or more acres of non-wetland forest are removed, replacement is at a 2:1 ratio based on area. If less than 1 acre of non-wetland forest is removed, mitigation includes planting five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height. A native riparian forest planting plan must use at least 5 canopy trees and 5 understory trees, shrubs, or vines selected from the Woody Riparian Vegetation list (copy enclosed) or an approved equal.

Additionally, a native herbaceous seed mixture should be planted consisting of at least 10 species of grasses, sedges, and wildflowers selected from the Herbaceous Riparian Vegetation list (copy enclosed) or an approved equal. These plants are appropriate for use in forested wetlands or floodway reforestation projects.

Attachments: A - Outfall Exemption Criteria  
B - General Information



THIS IS NOT A PERMIT

State of Indiana  
DEPARTMENT OF NATURAL RESOURCES  
Division of Water

Early Coordination/Environmental Assessment

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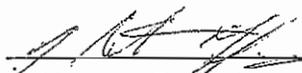
Impacts to wetland habitat should also be mitigated at the appropriate ratio. Please reference Information Bulletin #17 (<http://www.in.gov/legislative/register/20061213-IR-312060562NRA.xml.pdf>) for guidelines on appropriate ratios.

Restore disturbed areas within forested habitats such that trees are planted as close as possible to the storm sewer right-of-way.

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.  
Minimize and contain within the project limits all tree and brush clearing and provide the opportunity to utilize cleared trees of firewood and timber size.  
Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.  
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.  
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.  
Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation) or use an appropriate structural armament; seed and apply mulch on all other disturbed areas.

**Contact Staff:**

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife  
Our agency appreciates this opportunity to be of service. Please do not hesitate to contact the above staff member at (317) 232-4160 or 1-877-928-3755 (toll free) if we can be of further assistance.

  
\_\_\_\_\_  
J. Matthew Buffington  
Environmental Supervisor  
Division of Fish and Wildlife

**Date:** June 8, 2009

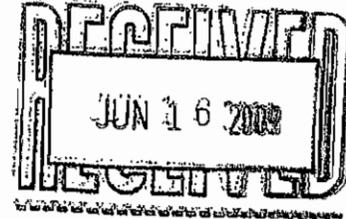


# United States Department of the Interior Fish and Wildlife Service



Bloomington Field Office (ES)  
620 South Walker Street  
Bloomington, IN 47403-2121  
Phone: (812) 334-4261 Fax: (812) 334-4273

June 15, 2009



Ms. Dee Revnyak  
Triad Associates, Inc.  
5835 Lawton Loop East Drive  
Indianapolis, Indiana 46216-1064

Dear Ms. Revnyak:

This responds to your letter of May 18, 2009 requesting U.S. Fish and Wildlife Service (FWS) review of proposed storm water improvements for the Town of Upland in Grant County, Indiana.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The proposed project contains 3 components including installations of storm sewer and outfalls. We have no comments on Project Area 3. Project Area 2 is in a residential area but the storm sewer outfall line will pass through a short wooded area to an intermittent reach of Jefferson Ditch, which is a tributary of the Mississinewa River. We recommend locating the sewer line to avoid or minimize removal of mature trees.

At Project Area 2 the outfall sewer line would pass through over 1000 feet of a wide expanse of riparian along a perennial reach of Jefferson Ditch. Approximately half of that segment passes along the north edge of the forest and the remainder passes directly through it to a proposed outfall at the stream. This proposed sewer line would eliminate and fragment riparian forest and would potentially act as a pathway for invasive plant species to enter the forest. We recommend that this storm sewer line segment and outfall be relocated further north or south to an area where only minimal tree removal would be required.

## General Recommendations

1. Install outfalls to minimize stream channel impacts and avoid destabilization of stream banks.
2. Use best management practices during construction to prevent erosion and soil runoff to streams.

3. Install pretreatment structures to prevent untreated storm water from flowing directly to the stream.

#### Endangered Species

The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalis*). Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and foraging. Young are raised in nursery colony roosts in trees, typically near forested drainageways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.

There is suitable summer habitat for this species present along the forested corridors of the Mississinewa River and its tributaries, including Jefferson Ditch. There are no current records of Indiana bats near the project site but to our knowledge the area has not been surveyed. The project will not eliminate enough habitat to affect this species, but to avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing in Project Area 2 be avoided during the period April 1 - September 30. If this measure is implemented 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.

For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,

A handwritten signature in black ink that reads "Michael S. Pruitt". The signature is written in a cursive style with a large initial "M".

Scott E. Pruitt  
Field Supervisor

cc: Christie Stanifer, Indiana Division of Fish and Wildlife, Indianapolis, IN



Indiana Department of Natural Resources

Mitchell E. Daniels, Jr., Governor  
Robert E. Garter, Jr., Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739  
Phone 317-232-1646 • Fax 317-232-0693 - dhpa@dnr.IN.gov



June 9, 2009

Chip Long  
Town Manager, Town of Upland  
87 N. Main Street  
Upland, IN 46989

Federal Agency: Town of Upland as the delegatee of the U.S. Department of Housing and Urban Development

Re: Project information, archaeological field reconnaissance report (King/Zoll, 5/26/09) and notification of the Town of Upland's finding of "no historic properties affected" concerning a storm water sewer improvement project using Disaster Relief #2 funds from the Indiana Office of Community and Rural Affairs (DHPA #6437)

Dear Mr. Long:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated May 20, 2009 and received on May 27, 2009, for the above indicated project in Upland, Grant County, Indiana.

In terms of archaeology, we concur with the archaeological report that no currently known archaeological resources eligible for inclusion in the National Register of Historic Places have been recorded within the proposed project area. No further archaeological investigations appear necessary.

We concur with the Town of Upland's May 20, 2009 finding that there are no historic buildings, structures, districts, objects, or archaeological resources within the area of potential effects that will be affected by the above indicated project provided that all project activities remain within areas disturbed by previous construction or areas subjected to the archaeological reconnaissance (King/Zoll, 5/26/09).

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. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

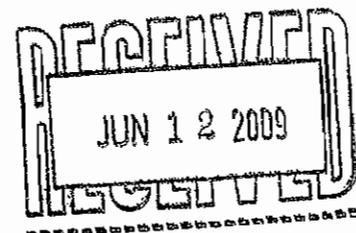
If you have questions about archaeological issues please contact Cathy Draeger at (317) 234-3791 or [cdraeger@dnr.IN.gov](mailto:cdraeger@dnr.IN.gov). If you have questions about buildings or structures please contact Ashley Thomas at (317) 234-7034 or [asthomas@dnr.IN.gov](mailto:asthomas@dnr.IN.gov).

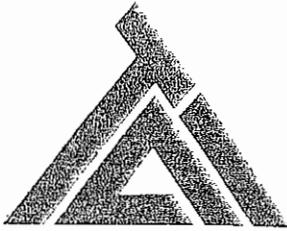
Very truly yours,

James A. Glass, Ph.D.  
Deputy State Historic Preservation Officer

JAG:ADT:CLD:cld

cc: Dee Revnyak, Triad Associates  
Mitch Zoll, Pioneer Consulting Services  
emc: Dave Hacker, Indiana Office of Community and Rural Affairs





**TRIAD ASSOCIATES, INC.**  
ENGINEERING • ARCHITECTURE

5835 LAWTON LOOP EAST DRIVE, INDIANAPOLIS, IN 46216-1064  
(317) 377-5230 • FAX: (317) 377-5241  
REIFERS CENTER • 839 MAIN STREET • SUITE 519 • LAFAYETTE, IN 47901  
VOICE/FAX: (765) 428-8282  
WEBSITE: [www.triadassociates.info](http://www.triadassociates.info) • E-MAIL: [triad@triadassoc.net](mailto:triad@triadassoc.net)

May 18, 2009

Dept. of Natural Resources  
Division of Fish & Wildlife  
402 W. Washington Street, Room W273  
Indianapolis, IN 46204-2748

Re: Town of Upland, Storm Water Improvements Project

To Whom It May Concern:

The Town of Upland is in the process of submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs for a storm water improvements project. As such, an environmental review pursuant to the National Environmental Policy Act is needed in order to assess the environmental impacts of the proposed project. **Due to the strict timelines to apply for and receive Disaster Recovery Funds, the Town and County are respectfully requesting your assistance in expediting the approval process through your Department.**

The proposed improvements are located in Grant County, in T.23 N, R.9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to the storm system to improve drainage in several areas of Town. For reporting purposes, the project has been broken up into 3 areas.

Project Area I, Bragg and Howard, will occur in a residential area. One segment of storm line will be installed in an existing utility easement behind homes and adjacent to a farm field. Another will be installed along a platted but unconstructed right of way (Howard Street), which presently contains a utility line. The remaining segment will occur in an existing easement that presently contains a storm sewer, which will be replaced with a larger sized line. No land acquisition is needed. Some tree/brush removal will be necessary.

Project Area II, Taylor University, will occur in rights of way and undisturbed areas. One segment will be installed in the right of way, adjacent to the roadway. Another portion will be constructed in ground that is presently farmed. The remaining part will be installed in a wooded area that borders the intended discharge stream. Land acquisition is being finalized. Tree removal will be necessary.

Project Area III, Bowen and Washington, will occur adjacent to roadways within previously disturbed rights of way. No land acquisition or tree removal will be necessary.

Enclosed are U.S. Geological Survey maps and aeriels showing the proposed installations. We are requesting that your office review the proposed project for any State and Federally-listed threatened and endangered species, sensitive areas, historic or archaeological sites and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts, if applicable.

Triad Associates, Inc is the engineering consultant and is assisting the Town with the environmental review process. Correspondence should be directed to our office. If possible, we would appreciate a response within 30 days. Please contact me at (317) 377-5230 if you need further information or wish to discuss the project. Thank you for your assistance.

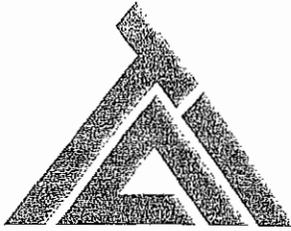
Sincerely,



Dee A. Revnyak  
Project Manager

cc: Town of Upland

Enclosures



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ENGINEERING • ARCHITECTURE

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VOICE/FAX: (765) 428-8282  
WEBSITE: [www.triadassociates.info](http://www.triadassociates.info) • E-MAIL: [triad@triadassoc.net](mailto:triad@triadassoc.net)

May 18, 2009

Mr. Scott Pruitt  
U.S. Department of Interior, Fish & Wildlife Services  
620 South Walker Street  
Bloomington, IN 47403-2121

Re: Town of Upland, Indiana, Storm Water Improvements Project

Dear Mr. Pruitt:

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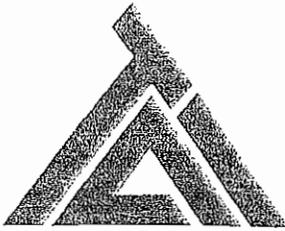
Sincerely,



Dee A. Revnyak  
Project Manager

cc: Town of Upland

Enclosures



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May 18, 2009

Ms. Christie Stanifer  
Environmental Coordinator  
Department of Natural Resources - Division of Water  
402 West Washington Street, Room W264  
Indianapolis, IN 46204-2641

Re: Town of Upland, Storm Water Improvements Project

Dear Ms. Stanifer:

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Project Area III, Bowen and Washington, will occur adjacent to roadways within previously disturbed rights of way. No land acquisition or tree removal will be necessary.

Enclosed are U.S. Geological Survey maps and aerials showing the proposed installations. We are requesting that your office review the proposed project for any State and Federally-listed threatened and endangered species, sensitive areas, historic or archaeological sites and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts, if applicable.

Two sets are included with this correspondence. **A copy under separate cover has been sent to the Division of Historic Preservation.** Triad Associates, Inc is the engineering consultant and is assisting the Town with the environmental review process. Correspondence should be directed to our office. If possible, we would greatly appreciate a response within 30 days. Please contact me at (317) 377-5230 if you need further information or wish to discuss the project. Thank you for your assistance.

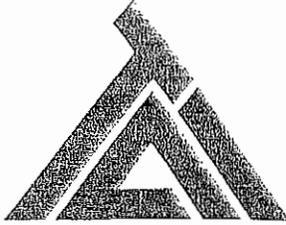
Sincerely,



Dee A. Revnyak  
Project Manager

cc: Town of Upland

Enclosures



**TRIAD ASSOCIATES, INC.**  
ENGINEERING • ARCHITECTURE

5835 LAWTON LOOP EAST DRIVE, INDIANAPOLIS, IN 46216-1064  
(317) 377-5230 • FAX: (317) 377-5241  
REIFERS CENTER • 839 MAIN STREET • SUITE 519 • LAFAYETTE, IN 47901  
VOICE/FAX: (765) 428-8282  
WEBSITE: www.triadassociates.info • E-MAIL: triad@triadassoc.net

May 18, 2009

Mr. James Glass Ph.D., State Historic Preservation Officer  
DNR Division of Historic Preservation and Archaeology  
402 West Washington Street, Room W274  
Indianapolis, IN 46204-2741

Re: **REVISED LETTER 5/29/09 [1]** Town of Upland, Storm Water Improvements Project

Dear Mr. Glass:

The Town of Upland is in the process of submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs for a storm water improvements project. As such, an environmental review pursuant to the National Environmental Policy Act is needed in order to assess the environmental impacts of the proposed project.

**Due to the strict timelines to apply for and receive Disaster Recovery Funds, the Town and County are respectfully requesting your assistance in expediting the approval process through your Department. As such a letter from the Town stating that "no historic properties will be affected" has been included. In addition two (2) original Archaeological Field Reconnaissance reports are being provided.**

The proposed improvements are located in Grant County, in T 23 N, R 9 E, Sections 3 and 10, and can be seen on the Gas City Quad map. The project entails making improvements to the storm system to improve drainage in several areas of Town. For reporting purposes, the project has been broken up into 3 areas.

Project Area I, Bragg and Howard, will occur in a residential area. One segment of storm line will be installed in an existing utility easement behind homes and adjacent to a farm field. Another will be installed along a platted but unconstructed right of way (Howard Street), which presently contains a utility line. The remaining segment will occur in an existing easement that presently contains a storm sewer, which will be replaced with a larger sized line. No land acquisition is needed. Some tree/brush removal will be necessary.

Project Area II, Taylor University, will occur in rights of way and undisturbed areas. One segment will be installed in the right of way, adjacent to the roadway. Another portion will be constructed in ground that is presently farmed. The remaining part will be installed in a wooded area that borders the intended discharge stream. Land acquisition is being finalized. Tree removal will be necessary.

Project Area III, Bowen and Washington, will occur adjacent to roadways within previously disturbed rights of way. No land acquisition or tree removal will be necessary.

*The areas of potential effects are completely contained within the easements and rights of way. No historic sites or structures will be impacted. Therefore, it is the Town's opinion that no historic properties are within the areas of potential effects.*

Enclosed are U.S. Geological Survey, wetlands, and flood maps of the project areas. Aerials and photographs of the construction areas are also provided as well as an excerpt from the County Interim Report. We are requesting that your office review the proposed project for any State and Federally-listed threatened and endangered species, sensitive areas, historic or archaeological sites and any other important State natural resources that may occur in the project area. Please provide any recommendations you may have to mitigate or avoid these impacts, if applicable.

*A letter from the Town indicating the proposed funding source and verifying that Triad Associates, Inc. is the consultant and authorized representative for the Town in the environmental review process is provided with this submittal. Correspondence should be directed to our office.*

**If possible, we would greatly appreciate a response prior to June 25th.** Please contact me at (317) 377-5230 or [drevnyak@triadassoc.net](mailto:drevnyak@triadassoc.net) if you need further information or wish to discuss the project. Thank you for your assistance.

Sincerely,



Dee A. Revnyak  
Project Manager

cc: Town of Upland

Enclosures

*[1] Letter revisions are bolded and italicized and include language specifying the area of potential effects and verification of the authorized representative for the Town.*

*Town of Upland, Indiana*

*Jana E. Reshwell*  
*Bank Treasurer*

*Chris "Chip" Long*  
*Town Manager*

May 29, 2009

Mr. James Glass Ph.D., SHPO  
DNR, Division of Historic Preservation & Archaeology  
402 West Washington Street, Room W274  
Indianapolis, IN 46204-2739

Re: Town of Upland, Storm Water Improvements

Dear Mr. Glass:

The Town of Upland will be submitting an application for Disaster Recovery Funding through the Indiana Office of Community and Rural Affairs. Since federal funds will be involved, an environmental review must be conducted to determine the effects of the project on the project site.

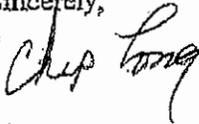
Please be advised that this letter will act as confirmation that Cornerstone Grants and Triad Associates, Inc. will be retained by the Town to represent them during the environmental review process. As such, correspondence or requests for information relating to this project should be directed to their attention. Their addresses and phone numbers are as follows:

Triad Associates, Inc.  
5835 Lawton Loop East Drive  
Indianapolis, Indiana 46216  
Phone: 317-377-5230  
Contact: Dee Revnyak

Cornerstone Grants  
1584 Doe Lane  
Greenwood, Indiana 46142  
Phone: 317-881-4854  
Contact: Amy Miller

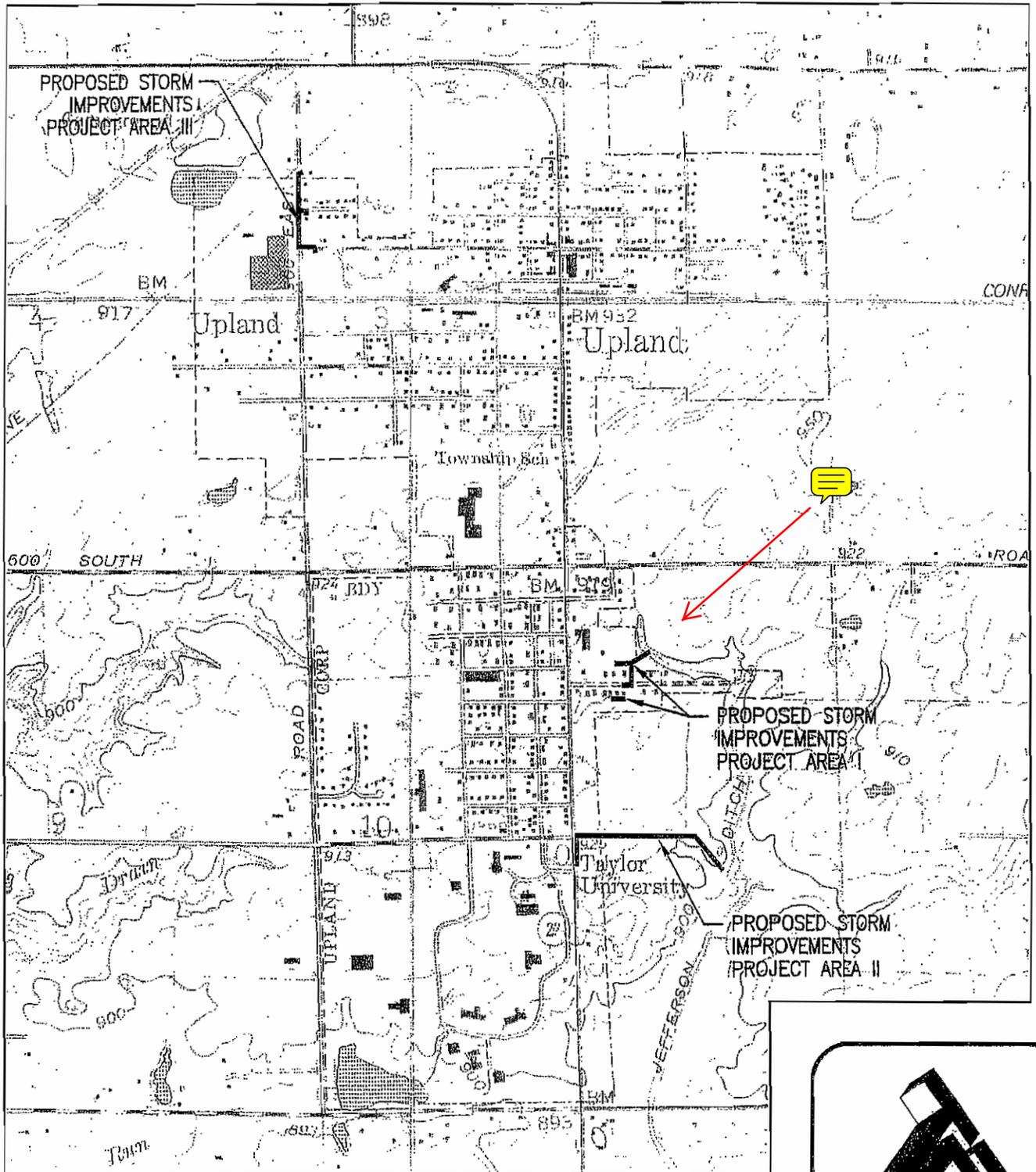
Should you have any questions or need additional information, please contact Ms. Dee Revnyak at Triad Associates, Inc.

Sincerely,

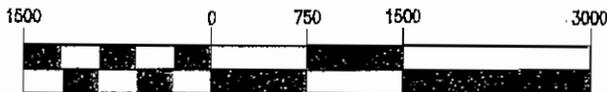


Chip Long  
Town Manager

cc: Cornerstone Grants  
Triad Associates, Inc.



## TOWN OF UPLAND EXISTING AND FUTURE STUDY AREA



1 Inch = 1500 ft.

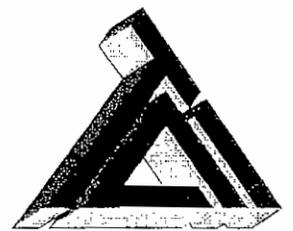
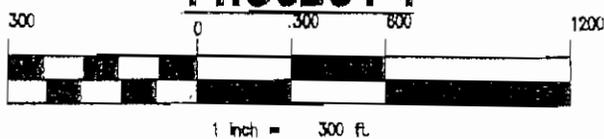


**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 2**



**TOWN OF UPLAND  
 PROPOSED SYSTEM IMPROVEMENTS  
 PROJECT I**

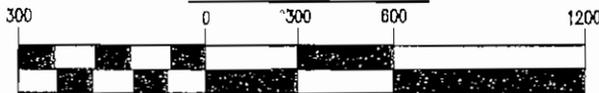


**TRIAD ASSOCIATES INC.**  
 5835 LAWTON LOOP EAST DRIVE  
 INDIANAPOLIS, INDIANA 46216  
 PHONE: 317-377-5230 FAX: 317-377-5241

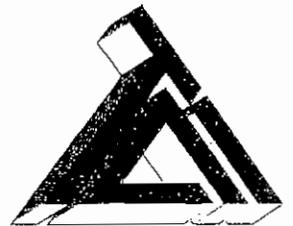
**EXHIBIT 4-1**



**TOWN OF UPLAND  
 PROPOSED SYSTEM IMPROVEMENTS  
 PROJECT II**

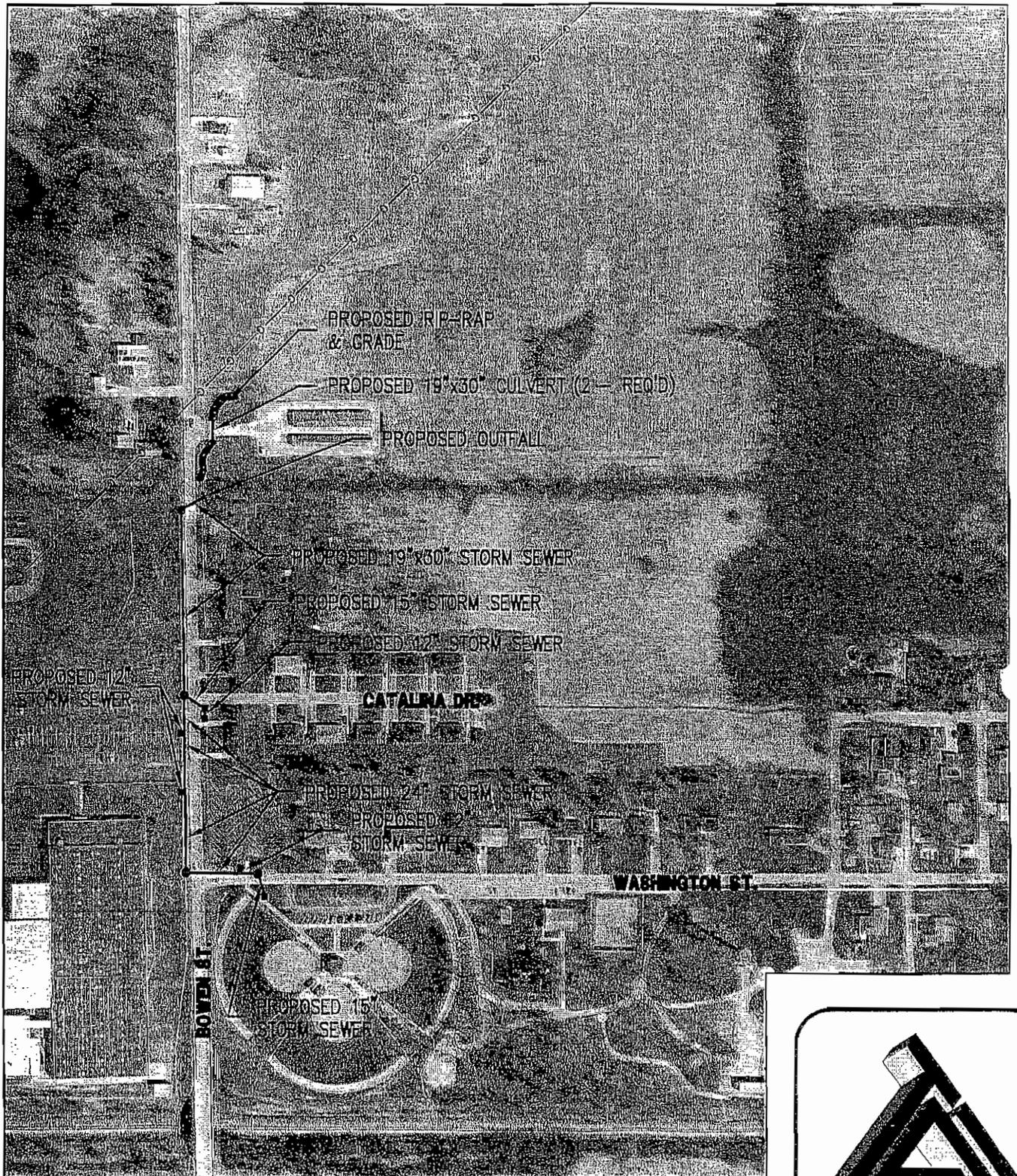


1 inch = 300 ft.

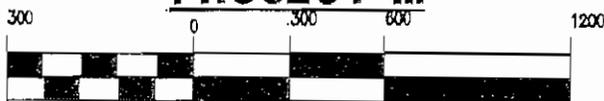


**TRIAD ASSOCIATES INC.**  
 5835 LAWTON LOOP EAST DRIVE  
 INDIANAPOLIS, INDIANA 46216  
 PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 4-II**

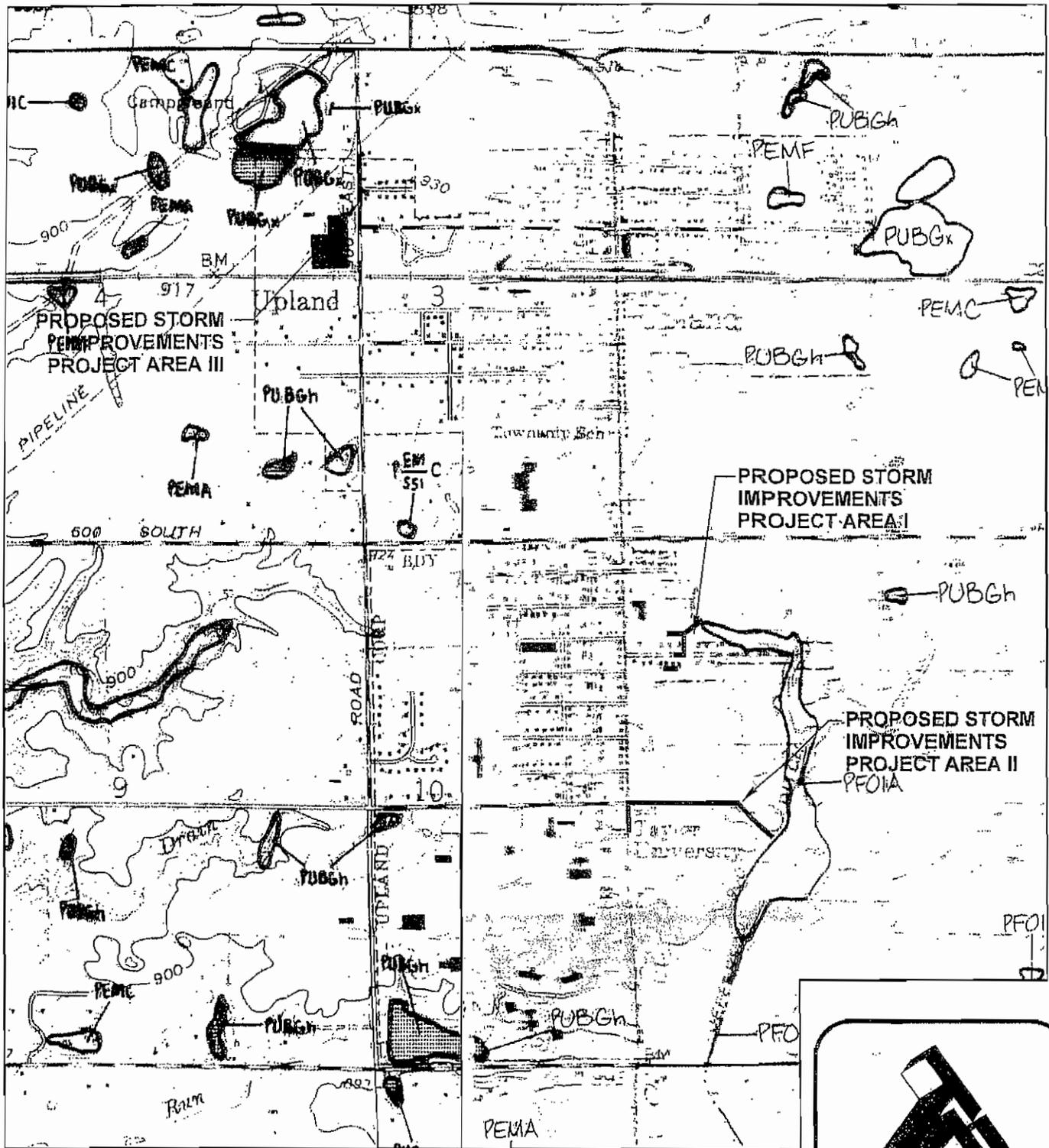


**TOWN OF UPLAND  
 PROPOSED SYSTEM IMPROVEMENTS  
 PROJECT III**

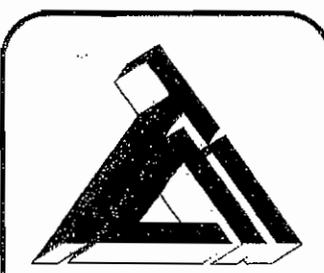


**TRIAD ASSOCIATES INC.**  
 5835 LAWTON LOOP EAST DRIVE  
 INDIANAPOLIS, INDIANA 46216  
 PHONE: 317-377-5230 FAX: 317-377-5241

**EXHIBIT 4-III**

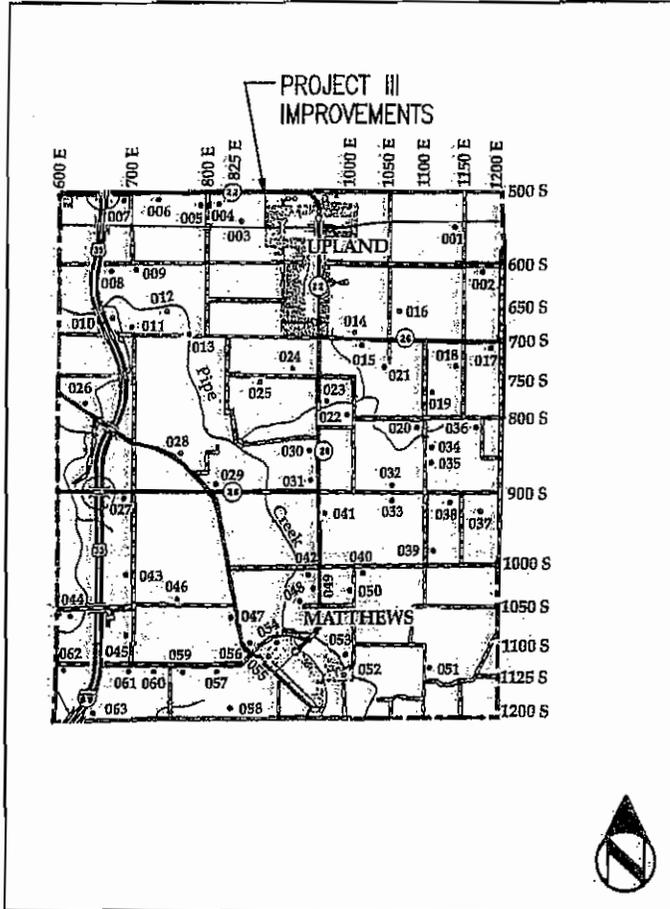


# TOWN OF UPLAND NATIONAL WETLANDS INVENTORY MAP

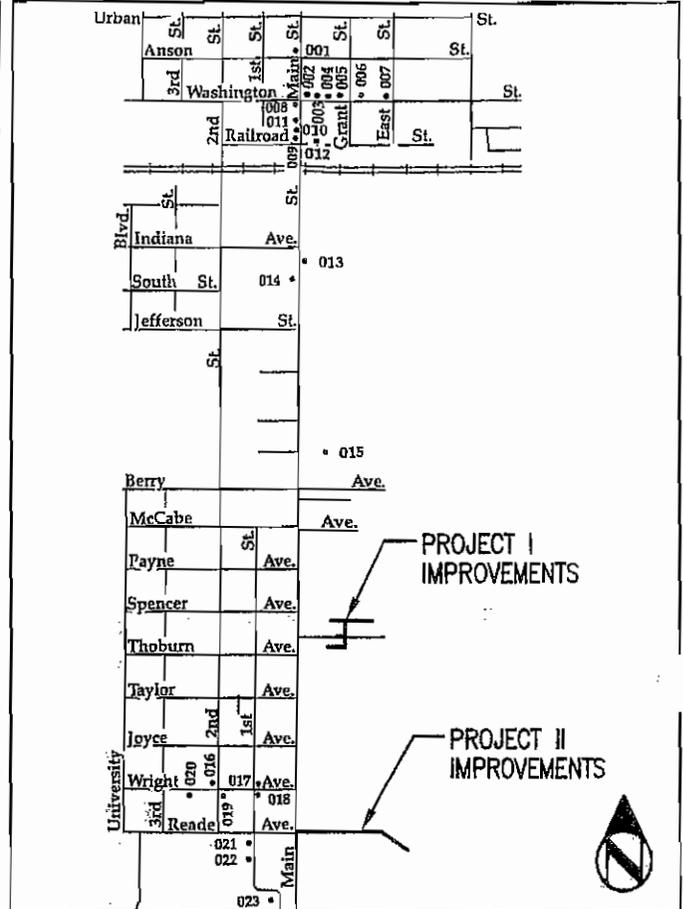


**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-8230 FAX: 317-377-5241

EXHIBIT 5



JEFFERSON TOWNSHIP (45001-063)



UPLAND SCATTERED SITES (45001-023)

GRANT COUNTY  
JEFFERSON TOWNSHIP (45)  
GAS CITY QUADRANGLE

# TOWN OF UPLAND INTERIM REPORT

SCALE: N.T.S.

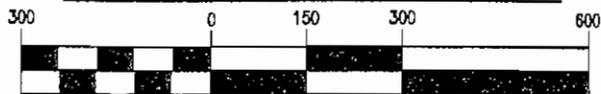


**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46218  
PHONE: 317-377-5230 FAX: 317-377-5241

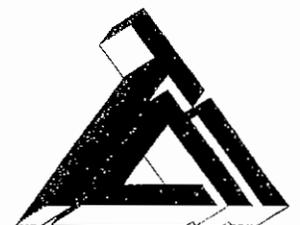
**APPENDIX B**



**TOWN OF UPLAND  
PROJECT AREA II - TAYLOR UNIVERSITY  
DRAINAGE PHOTO KEY**



1 inch = 300 ft.



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**APPENDIX C  
PAGE 5**

**Appendix G**

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**Archaeological Field Reconnaissance  
Survey, Storm Sewer Project**

**Archaeological Field Reconnaissance  
Two Storm Sewer Corridors  
Grant County, Indiana**

*Prepared for:*  
Triad Associates, Inc.  
5835 Lawton Loop Drive East  
Indianapolis, Indiana 46216

*prepared by:*  
R. Brad King

Mitchell K. Zoll  
*Principal Investigator*

Pioneer Consulting Services, Inc.  
2620 West Kilgore Avenue  
Muncie Indiana 47304  
(765) 284-0459  
[mzoll2@gmail.com](mailto:mzoll2@gmail.com)

May 26, 2009

PCS Project # 09FR50

## Abstract

An archaeological reconnaissance was conducted for two storm water lines in Grant County at the request of Triad Associates, Inc. No archaeological resources were discovered during the survey. Due to the lack of archaeological sites it was recommended that the project be allowed to proceed without additional archaeological assessment.

## Introduction

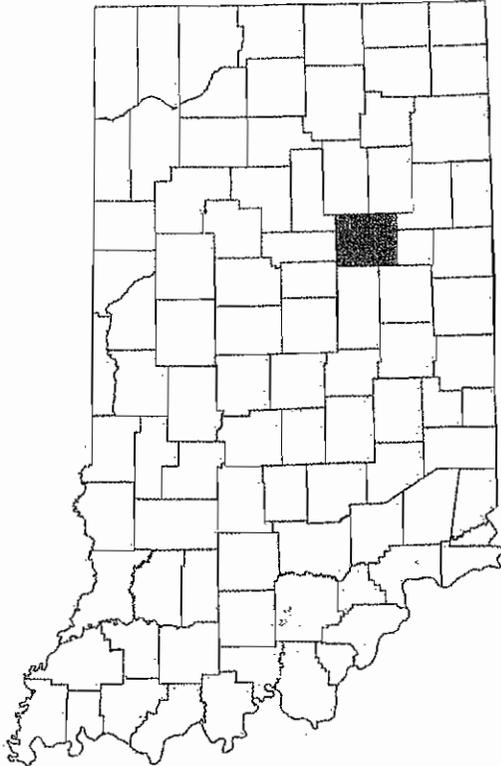


Figure 1: Map of Indiana showing the location of Grant County.

In response to a request from Triad Associates, Inc., an archaeological records review and field reconnaissance have been completed for two proposed storm water lines located in Jefferson Township, Grant County, Indiana (Figure 1).

The proposed project corridor #1 starts in the SE  $\frac{1}{4}$  of the SW  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of the NE  $\frac{1}{4}$  of Section 10, and ends in the NE  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of the NE  $\frac{1}{4}$  of Section 10, Township 23N, Range 9E as shown on the USGS 7.5' West Hartford City, Indiana Quadrangle (Figure 2).

The proposed project corridor #2 starts in the NW  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of Section 10, and ends in the SE  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of the NE  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of Section 10, Township 23N, Range 9E as shown on the USGS 7.5' West Hartford City, Indiana Quadrangle (Figure 2).

The proposed project corridor #1 involves the installation of a storm water line along the existing Bragg Street right-of-way for 1,850 linear feet in Upland, Grant County, Indiana. The proposed project corridor #2 involves the installation of a storm water line along a platted but undeveloped right-of-way for 1526 linear feet in Upland, Grant County, Indiana. Land within the project area corridor #1 is presently residential and roadway right-of-way and within project area corridor #2 is undeveloped right-of-way, agricultural, grass and wooded. Existing right of way is approximately 30 feet from centerline of Bragg Street, all of which appears to be disturbed from roadway construction. Approximately 3376 linear feet of land will be required for this project.

The records check used site records, maps and materials on file at the Division of Historic Preservation and Archaeology to locate, identify and evaluate the known and expected

archaeological resources within the project area. The records search was conducted to evaluate the potential impact of the project upon archaeological resources.

An archaeological field reconnaissance of the project area was completed in compliance with the guidelines provided by the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology. The goals of the field reconnaissance were to locate archaeological sites that would be affected by the storm water lines and to evaluate their potential eligibility for nomination to the State and National Registers of Historic Places.

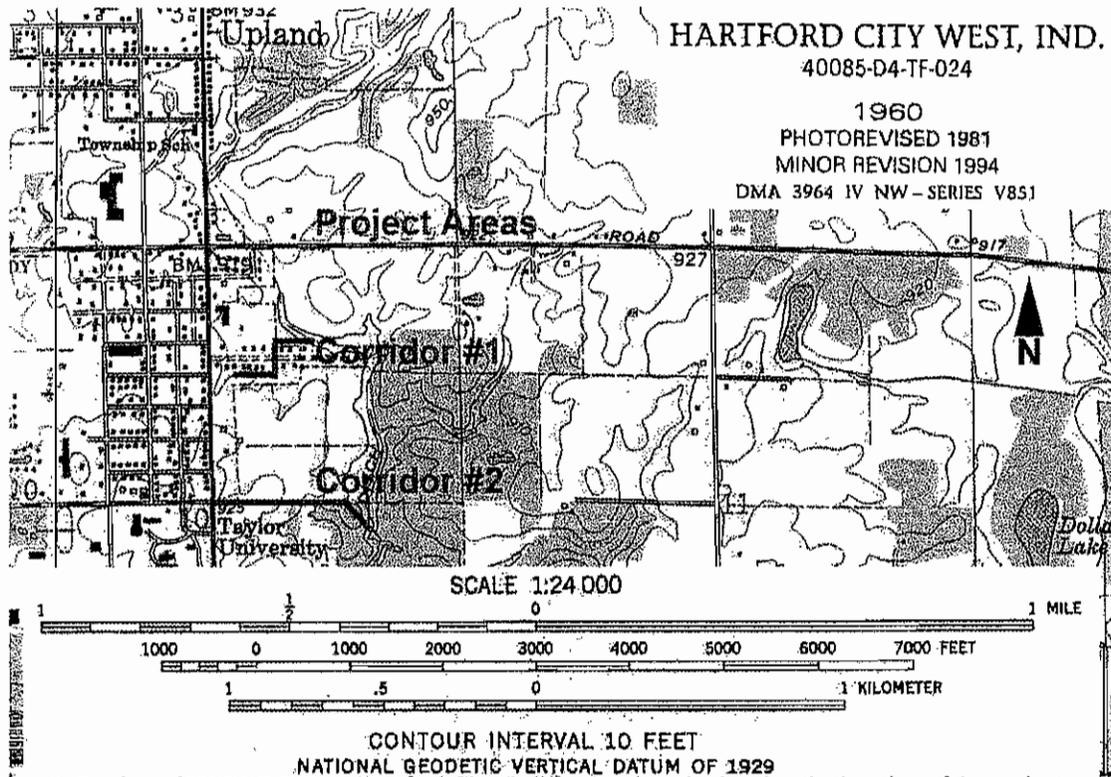


Figure 2: Portion of USGS 7.5' West Hartford City, Indiana Quadrangle showing the location of the project area.

### Setting

The project area is within the general physiographic unit known as the Bluffton Till Plain, an area of large till plain with concentric series of end moraines (Gray 2000). Surface deposits in the area are within the New Holland members of the Largo Formation (Wayne 1966: 26) and in the bedrock physiographic unit known as the Bluffton Plain (Schneider 1966: 54). There are no recorded chert sources near the project area, but gravel cherts would have been available (Cantin 2005: 19). The topography of Grant County was affected by the advance and retreat of the Illinois and Wisconsin glaciers (Schneider 1966: 54). Grant County is characterized by nearly level to moderately sloping, well drained, end and ground moraines, on terraces and in bottom lands and rugged lands along the Mississinewa River (Jensen 1988: 2). The project area is in the Mississinewa River watershed, as shown on the Indiana Department of Natural Resources

Hydrologic basins map. The project is located in the moraine (Qte) environmental zone (Burger 1971). The presettlement vegetation of the area was predominantly beech maple forest (Petty and Jackson 1966:280). Climate, the main determinate of plant and animal life, has varied in Grant County since the retreat of the glaciers from Indiana about 12,000 years ago.

The project is in the Glynwood-Morley soil association, which contains deep, gently sloping to strongly sloping, moderately well drained and well drained, fine textured to medium textured soils formed in silt material over glacial till and in glacial till, on till plains and moraines (Jensen 1988: General Soils Map). Specific soils in the project area include: the Glynwood silty clay (GsB3), with 2-6% slopes, severely eroded; and the Pewamo silty clay loam (Pw) (NRCS 2009: web soil survey). There are no alluvial soils, which may contain buried archaeological deposits (NRCS 2009: web soil survey).



Figure 3: Aerial photograph showing the location of specific soils within the project area.

## Background

Information on file at Pioneer Consulting Services and DHPA show archaeological sites have been recorded in similar topographic settings within the region. Information on file at the DHPA shows that at least 212 archaeological sites have been recorded for Grant County. Six previously recorded archaeological sites, 12G69, 12G70, 12G71, 12G72, 12G89, 12G90, 12G168 are within a mile of the proposed project areas. No previously record cultural resources are within the project areas. Our records show that the area under consideration has not been covered by an archaeological reconnaissance.

There are several pre-existing culture histories for Indiana (eg., Kellar 1983; Hicks 1992; Jones and Johnson 2003; Stafford 1997; Swartz 1981). Each one lays out an order of human activity in Indiana from the end of the Wisconsin glacier to now. The prehistoric culture material varies from region to region within Indiana, while settlement patterns, distribution and cognitive systems vary by local group.

The Paleoindian period (ca. 12,000-10,000 BP) is generally characterized as small family bands wandering over large territories in search of game animals. Paleoindian technology is represented by the fluted point. These points occur in low density from most counties in Indiana (Tankersley, Smith & Cochran 1990). The Early Archaic period (ca. 10,000-8,000 BP) is characterized by more frequently found sites throughout environmental zones, chipped stone technology, and few burials within the state (Cochran et al. 1997; Tomak 1979). The Middle Archaic period (ca. 8,000-5,500 BP) sites occur in valleys and on terraces more frequently than on the uplands. Activities such as hunting, environment, and trade continue with chipped stone technology and mortuary sites becoming more varied (Cochran et al. 1997; Tomak 1979). The Late Archaic period (ca. 5,500-3,000 BP) sites are widely distributed across all landforms and in many environmental zones. By this time the environment encountered by early European explorers begins to emerge in Indiana. Sites include habitations, shell mounds, and cemeteries with distinct examples such as the Riverton phase (Winters 1969). Chipped stone technology is more appropriate, while cemeteries and ground stone tools occur more frequently (Cochran et al. 1997; Tomak 1979).

The Early Woodland period (ca. 3,000-2,220 BP) is marked by the introduction of ceramics and horticulture subsistence. Although Early Woodland people still depend on hunting and gathering for subsistence. Cultures, such as Adena, specify ceremonialism through the construction of earthworks in East Central Indiana (Cochran & McCord 2001). The Middle Woodland (ca. 2,200-1,500 BP) period sees a climax in ceremonial mortuary behavior and evidence of cultigens. The Mann site in Posey County is an example of the complexity of Middle Woodland culture in the region (Kellar 1979). Ohio Valley Hopewell is a well known culture in the region, during this period. Corn horticulture begins to spread across the Midwest and enters into Indiana approximately 1100 BP (Cochran & McCord 2001). Besides more horticulture, varied ceramics the bow and arrow appear approximately 1200 BP. The construction of earthworks continues across Indiana with local variances. The Allison-LaMotte culture represents the transition between the Middle and Late Woodland periods (Kellar 1983; Tomak

1983). The Late Woodland (ca.1500-1000 BP) period is marked by a decline in the Early and Middle Woodland mound building traditions. Mound building did continue and the wide arrange of exotic burial materials examples a wide ranging trade system (Kellar 1983; Hicks 1992; Stafford 1997; Swartz 1981).

The Mississippian (1000-300 BP) period is characterized by villages located in large river valleys, flat-top mounds and a dependence on cultivation the southwest corner of the state, along the Ohio River, near the Falls of the Ohio in Clarke County, and along the south end of Lake Michigan (Barth 1991; Black 1936, 1967; Faulkner 1972; Heilgeman 1992; Munson 1995; Munson and McCullough 2004; Reidhead 1981). Elaborate varied ceramics and clearly defined social stratification is evident in the Mississippian period. It was the Mississippian peoples that early European settlers encountered in the southeastern U.S. (Kellar 1983; Hicks 1992; Stafford 1997; Swartz 1981).

The archaeological record does not link historical groups such as the Miami and the Potawatomi with prehistoric cultures throughout Indiana (Cochran 1990). Pollack & Henderson (1992) indicate that the Shawnee and Ft. Ancient cultures are related while there is also some evidence that the Miami may be related to Upper Mississippian groups in northern Indiana (Brown & Sasso 2001:205-228; Faulkner 1972).

The historic period of Indiana encompasses only approximately 400 years with four distinct periods: Colonial (1600-1800), Pioneer (1800-1850), Industrial (1850-1915), and the Twentieth Century (1915-1950) (Seiber & Munson 1992:7). Sites include industrial sites, urban sites, farmsteads, submerged sites, cemeteries and historic landscapes (Jones 1997). Wepler (1980, 1984) shows 1 Delaware and 5 Miami sites within Grant County.

Historically, Grant County was first settled in 1825 when Martin Boots established the areas first saw gristmill along the Mississinewa River (Davis 1993: xiii). Guernsey (1932) shows no cultural resources near the project area. The map of Grant County in Maps of Indiana counties in 1876 (Andreas 1968) shows the town of Upland near the project area. The map of Grant County in A New Map of Indiana with Roads and Distances (Tanner 1833) shows no cultural resources within, or around the project area. The map of Grant County in A Map of Indiana Showing its History, Points of Interest (Anonymous 1984) shows no cultural resources within or near the project area. A review of the Indiana Historic Sites and Structures Inventory (Davis 1993: 101-110) for the county shows 96 historic structures in Jefferson Township. No historic structures are in close proximity to the project area.

## **Archaeological Field Reconnaissance**

### **Methodology**

The author surveyed the project area on Monday, May 25, 2009. The author used an Oakfield Soil Probe to determine the depth of the surface before shovel tests were used. The undisturbed areas with less than 30% visibility and under 25% slope were examined through

shovel test probes spaced approximately ten meters apart. The undisturbed areas with more than 30% visibility and under 25% slope were examined through pedestrian survey with transects spaced approximately ten meters apart. Shovel test probes were approximately 25cm in diameter and excavated until the subsoil was encountered, approximately 25cm below the ground surface. Excavated soil was trowel-sorted in an effort to locate cultural artifacts. Shovel tests were then backfilled.

The author used a Magellan eXplorist 210 series handheld GPS unit to record project specifics. Digital photographs showing field conditions of the areas were taken (Appendix A). A sketch map of the project area was made, noting the location of disturbed areas, ground cover and visibility, and transects and transferred to an aerial photograph (Figure 4).

## **Results**

The archaeological reconnaissance found no archaeological artifacts, features, or sites. Approximately 3376 linear feet of land was investigated for this project.

The project area corridor #1 was grass and wooded residential area with a surface visibility estimated to be approximately 0%. Contributing factors to the visibility of project area was grass, hardwood vegetation and roadway. Topography was found to be gently sloping with approximately 5% slope. The reconnaissance determined the soils in the project area were well drained. The closest water source to project area is immediately north and east, Jefferson Ditch. Portions of project area were previously disturbed by the installation of utilities, and residential and roadway construction. A portion of the project area was located adjacent to an agricultural field with approximately 50% surface visibility, this area was walked. No artifacts, features or cultural resources were encountered in project area corridor #1.

The project area corridor #2 was grass and wooded property line with a surface visibility estimated to be approximately 0%. Contributing factors to the visibility of project area was grass and hardwood vegetation. Topography was found to be gently sloping with approximately 5% slope. The reconnaissance determined the soils in the project area were well drained. The closest water source to project area is immediately east, Jefferson Ditch. Portions of project area were previously disturbed by the installation of utilities, the natural erosion along the property line. A portion of the project area was located adjacent to an agricultural field with approximately 50% surface visibility, this area was walked. No artifacts, features or cultural resources were encountered in project area corridor #2.

## **Conclusions and Recommendations**

An archaeological field reconnaissance conducted for Triad Associates, Inc. in Grant County, found no archaeological sites. It is our recommendation that the project be allowed to proceed without additional archaeological assessment. In the unlikely event that subsurface archaeological deposits are encountered during construction, the project must be halted and the Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology

contacted for an evaluation before the project resumes.



Figure 4: Google aerial showing the location of disturbed areas, ground cover and visibility, and transects.

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44. Archaeological Resources Management Service, Ball State University, Muncie.

Cochran, Donald R., Kris D. Ritchie, Lisa A. Maust

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Cree, Donald W.

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Davis, Ann C.

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Division of Historic Preservation and Archaeology (DHPA)

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# Appendix A

**Appendix A**

**Digital Photographs**

**Brad King**

**2009**

**Pioneer Consulting Service  
Muncie, Indiana 47304**



A-1: Digital photograph facing west from the northeast project terminus showing field conditions in wooded residential area within project area corridor #1.



A-2: Digital photograph facing west from A-1 showing field conditions in wooded residential area within project area corridor #1.



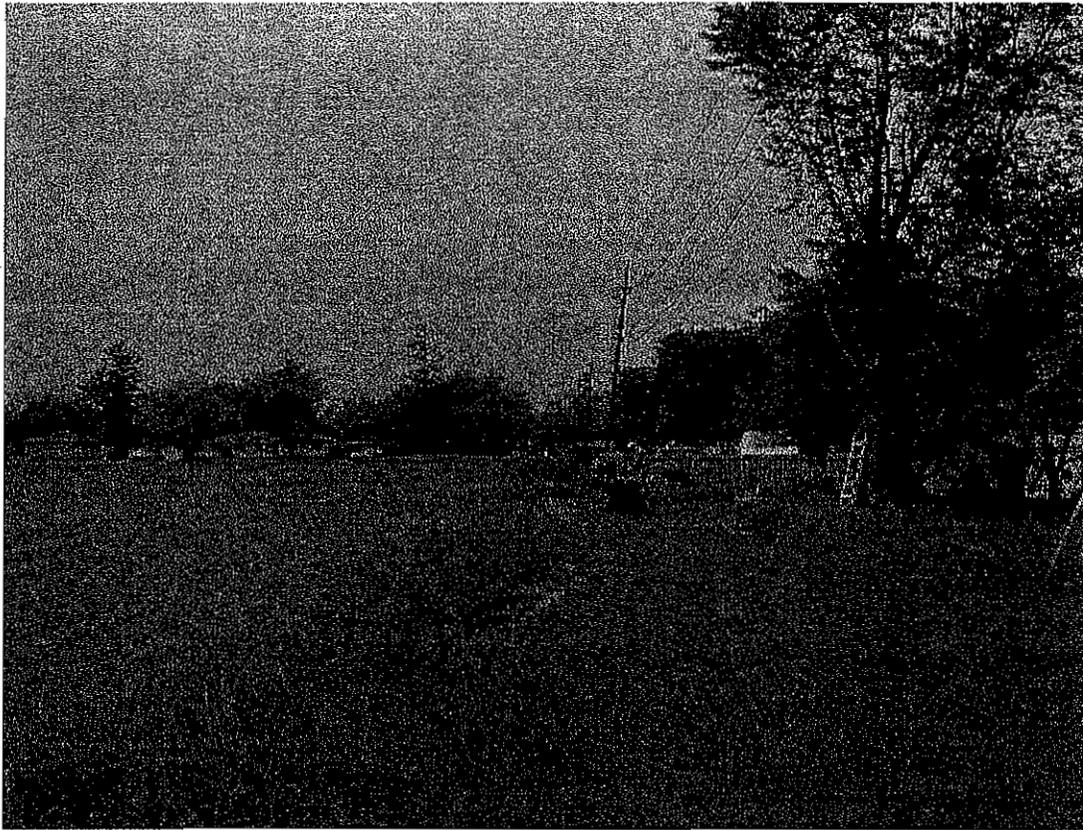
A-3: Digital photograph facing west from A-2 showing field conditions in grassy residential area within project area corridor #1.



A-4: Digital photograph facing south from A-3 showing field conditions in grassy residential area within project area corridor #1.



A-5: Digital photograph facing south from A-4 showing field conditions in grassy residential area and across Bragg Road within project area corridor #1.



A-6: Digital photograph facing west from A-5 showing field conditions along grassy residential area property line and agricultural field to the southwest terminus within project area corridor #1.



A-7: Digital photograph facing east from western terminus showing field conditions along property line and agricultural field within project area corridor #2.



A-8: Digital photograph facing east from A-7 showing field conditions along wooded areas within project area corridor #2.



A-9: Digital photograph facing east from A-8 showing field conditions along wooded areas within project area corridor #2.



A-10: Digital photograph facing east by southeast from A-9 showing field conditions along wooded areas within project area corridor #2.



A-11: Digital photograph facing southeast from A-10 showing field conditions along wooded areas within project area corridor #2.



A-12: Digital photograph facing southeast from A-11 showing field conditions along wooded areas at the southeastern terminus within project area corridor #2.

## Appendix H

### **Preliminary Design Summary**

## Preliminary Design Summary

### Upland, Indiana

#### I. General

1. Applicant: Town of Upland
2. Project Name: Upland Wastewater Treatment Plant Improvements
3. Location: 87 North Main Street, Upland, Indiana
4. Engineer: Triad Associates, Inc.
5. NPDES Permit Number: IN 0036978
  - A. Date of final Permit Issuance:
  - B. Expiration Date:
6. Remarks:
  - A. Description of Present Situation: Continued infiltration and inflow (I/I) in the collection system. Inadequate drainage in selected area of Town.
  - B. Description of Proposed Facilities: Rehabilitation of selected sanitary sewers and manholes using lining, replacement, repairs. Installation of a new storm sewer to route storm water to an appropriate outlet.
  - C. Inspection During Construction to be Provided by: Triad Associates, Inc.
7. Estimated Project Costs:
  - A. Total Cost: \$790,318 Dollars
  - B. Source of Funding: Stag Grant
8. Certification Seal of Engineer:

## II. Design Data

1. Current Population: 3,300
2. Design Year and population: Design Year 2025/5,800
3. Design Population Equivalent: 8,585 @ 0.17 #/capita/day
4. Design Flow:
 

|                           | <u>Dry Weather</u> | <u>Wet Weather</u> |
|---------------------------|--------------------|--------------------|
| A. Domestic:              | 0.58 MGD           | 0.58 MGD           |
| B. Industrial/Commercial: |                    |                    |
| C. Infiltration/Inflow:   | 0.37 MGD           | 2.55 MGD           |
5. Design Average Flow: 0.95 MGD      3.13 MGD
6. Maximum Plant Flow Capacity: 3.13 MGD
7. Design Waste Strength: @ DAF
 

|          |          |          |
|----------|----------|----------|
| A. CBOD5 | 184 mg/l | 56 mg/l  |
| B. TSS   | 180 mg/l | 55 mg/l  |
| C. NH3-N | 22 mg/l  | 6.7 mg/l |
| D. P     | 5 mg/l   | 1.5 mg/l |
| E. Other |          |          |
8. NPDES Permit Limitation on Effluent Quality:
 

|                       | <u>0.70 MGD</u> | <u>0.95 MG</u> |
|-----------------------|-----------------|----------------|
| A. CBOD5:             | 25/40 mg/l      | 198/317#       |
| B. TSS:               | 30/45 mg/l      | 238/357#       |
| C. NH3-N:             | 1.2/1.85 mg/l   | 9.5/14.7#      |
| D. P:                 | 1               |                |
| E. E-coli:            | 125/235         |                |
| F. Chlorine Residual: | 0.01/0.02 mg/l  |                |
| G. pH:                | 6-9             |                |
| H. D.O.:              | 6/5 mg/l        |                |

9. Receiving Stream:

- A. Name: Jefferson Ditch
- B. Tributary To: Mississinewa River
- C. Stream Uses: General Use
- D. 7-day, 1 in 10 year low flow: 0.0 cfs

I. Treatment Units

**I. Headworks**

**A. Plant Site Lift Station:** (Existing)

- 1. Location: Headworks
- 2. Type of Pump: Submersible
- 3. Constant or Variable Speed: Constant (variable flow-hydrostal)
- 4. Number and Capacity of Pumps: 3 ea., 400-800 gpm ea., (2 pumps = 1.7 MGD)  
(3 pumps = 2.13 MGD)
- 5. Bypasses or Overflows: High level storm pump to equalization tank
- 6. RPM and TDH: 1,750/40'±
- 7. Volume of the wet well:
- 8. Detention time in the wet well:
- 9. A plug valve and check valve in the discharge line: Yes
- 10. Gate valve on suction line: N/A
- 11. Ventilation: Natural draft
- 12. Standby Power: Existing Plant Generator
- 13. Alarm: Yes
- 14. Breakwater tank: N/A

**B. Flow Equalization:** (Existing)

- 1. Number and Size of Units: 1 ea. @ 1.4 MG
- 2. Method of Flow Diversion to Unit: Pump
- 3. Air and Mixing Provided: Yes
- 4. Method and control of flow return: Gravity w/modulating valve
- 5. Lagoon Lining: N/A
- 6. Method of sludge removal: Manual clean

**C. Flow Meters** (existing)

1. Type: Magnetic
2. Location: Raw sewage pump discharge
3. Indicating, recording and totalizing: Yes

**D. Grit Chamber** (existing)

1. Type of Grit Chamber: Gravity settling w/aeration
2. Number of Units: One
3. Size of Units: 23' x 2'
4. Method of velocity (aeration) control: 2 cfm air/lf of channel
5. Velocity (aeration) in the chamber: 2 fps @ 2.0 MGD
6. Drain provided: No
7. Flow restrictions: No
8. Facilities to isolate: No

**E. Comminutors** N/A

1. Type:
2. Maximum Capacity:
3. Bypass (overflow) Bar Screen:

**F. Screens** (existing)

1. Type: Mechanical bar
2. Number and Capacity: One @ 3.5 MGD
3. Bar spacing and slope:
4. Method of Cleaning: Automatic mechanical rake
5. Disposal of Screenings: Landfill

**2. Primary Treatment**

**A. Primary Settling** N/A

1. Type of Clarifier:
2. Number and Size of Units:
3. Surface Settling Rate
  - a. At the design flow:
  - b. at the influent pumping rate:

c. at the equalization flow rate:

4. Detention Time (hours):
5. Weir Overflow Rate:

### 3. Secondary Treatment

#### A. Activated Sludge N/A

1. Type of Activated Sludge Process:
2. Number and Size of Units:
3. Detention Time (hours):
4. Organic Loading (lbs. BOD5 /1000 c.f.):
5. Type of Aeration Equipment:
6. Type and Size of Blowers:
7. Air Required:
8. Number and capacity of return sludge pumps:
9. Method of return sludge rate control:
10. Return sludge rate as % of design flow:
11. Provisions for return rate metering:
12. Location of return sludge discharge:
13. Facilities to isolate units:
14. Facilities for flow split control:

#### B. Oxidation Ditch (existing)

1. Number and Size of Units: Three rings
2. Detention Time (hours): 18.5 hr.
3. Organic Loading (lbs. BOD5 /1000 c.f.): 14.8#
4. Type and Efficiency of Aeration Equipment: Rotors @ 2.6#/hp/hr.
5. Oxygen Required: 2,988/D (w/nitrification)
6. Oxygen Provided: 3,585/D
7. Flow Velocity in ditch: 2 FPS, min.
8. Number and capacity of return sludge pump: 2 ea. @ 500 gpm, 1.4 MGD w/room for additional pump

9. Method of return sludge rate control: Pumps w/VFD
10. Return sludge rate as % of design flow: 50% - 150%
11. Provisions for return sludge metering: Yes
12. Location of return sludge discharge: Oxidation ditch
13. Facilities to isolate units: Yes
14. Facilities for flow split control: Yes

**C. Trickling Filters** N/A

1. Number and Size of Units:
2. Type of Media:
3. Hydraulic Loading (gpm/sf):
4. Organic Loading:

**D. Lagoons** N/A

1. Type of Lagoons:
2. Number and Size of Lagoons:
3. Organic Loading (lbs. BOD5 /1000 c.f.):
4. Type of Aeration Equipment:
5. Type and Size of Blowers:
6. Air Required:
  - a. carbonaceous:
  - b. nitrification:
7. Controlled Discharge Facilities:
8. Maximum Water Level:
9. Freeboard:
10. Soil Boring Data and Permeability Data:
11. Detention Time (days):
12. Stream Gage:
13. Lagoon Liner:

**F. Secondary Clarifiers** (existing)

1. Type of Clarifiers: Circular
2. Number and Size of Units: 2 ea., 50' dia.

3. Surface Settling Rate (gpd/sf):
  - a. at the average design flow: 249
  - b. at the influent pumping rate: 797 @ 3.13 MGD peak
  - c. at the equalization flow rate: Same (equalization basin is side stream)
4. Detention Time @ DAF: 9 hrs. @ 0.95 MGD
5. Weir Overflow Rate: 11,054 gal/ft/day @ 3.13 MGD
6. Type of sludge removal mechanism: Mechanical scraper
7. Disposal of scum: Yes
8. Facilities for unit isolation: Yes
9. Facilities for flow split control: Yes

#### **4. Miscellaneous Treatment System**

##### **A. Post- Aeration (Existing)**

1. Type of Aeration: Cascade
2. Number of Units: One
3. Size of Units:
4. Aeration Provided:
5. Expected Effluent DO: 6.0

##### **B. Nitrification System (existing)**

1. Type of Nitrification System: Oxidation ditch
2. Ammonia Loading: 174#/D (22 mg/l @ 0.95 MGD)
3. Additional Oxygen Demand: 802 #/Day
4. Air Supply System: Rotor aeration
5. Hydraulic Detention Time: 18.5 Hr.
6. Mean Cell Residence Time (days): 15.85

##### **C. Phosphorus Removal Facilities (existing)**

1. Type of Chemical to be Used: Ferric chloride
2. Location of chemical injection: Oxidation ditch
3. Number and size of chemical feed pumps: One
4. Size of chemical; storage tank: 5,250 gal.

5. Capacity of spill storage space: 5,400 gal.
6. Chemical Dosage: Variable
7. Daily chemical consumption expected: Variable
8. Rapid mix tank: N/A
9. Slow mixing equipment: N/A

## **5. Disinfection System (Existing)**

### **A. Disinfection**

1. Type of Disinfectant Used: Chlorine
2. Size of Contact Tank: **Expand to 36,000 gal.**
3. Contact Time: 16.6 min. @ 3.13 MGD
4. Disinfectant Dosage: 6 mg/l
5. Type of disinfectant feeders: Gas chlorine
6. Capacity of the feeders: 150#/Day
7. Scum control baffle: Yes
8. Source of the disinfectant feed water: Plant water
9. Breakwater for the feed water: Non-potable
10. Bypass: No
11. Drain for tank: Yes
12. Ventilation in chlorine room: Yes
13. Safety equipment: Yes

## **6. De-Chlorination (existing)**

1. Chemical used: Sulfur dioxide
2. Type of feeders: Gas
3. Capacity of feeders: 150#/Day
4. Type of diffuser: Perforated pipe
5. Diffuser location: Contact tank
6. Equipment location: Disinfection building
7. Ventilation provided: Yes
8. Safety equipment: Yes
9. Dosage: Varies

**7. UV Disinfection N/A**

1. Type:
2. Location:
3. Size of channel:
4. Contact time:
5. Dosage:
6. Bypass:

**8. Sludge Handling**

**A. Sludge Thickening N/A**

1. Number and Size of Thickeners:
2. Type of Sludge Thickeners:
3. Hydraulic Loading (gpd/s.f.):
4. Solids Loading (lbs sq.ft./day):

**B. Anaerobic Digesters N/A**

1. Number and Size of Units:
2. Total Volume:
3. Hydraulic Detention Time (days):
4. Solids Loading:
5. Volume per Capita:
6. Type of Mixing:
7. Heating: internal or external:
8. Sludge Produced (lbs/day):

**C. Aerobic Digesters (Existing)**

1. Number and Size of Units: Two tanks = 393,337 gal.
2. Detention Time (days): 136 days
3. Organic Loading: 915# VSS/D
4. Air Supply: Diffused air @ 30 CFM/1,000 cf
5. Decanting Method: Telescoping valve

**D. Sludge Drying Beds N/A**

1. Number and Size of Drying Beds:

2. Filter Area per Capita:
3. Under-Drain System:
4. Discharge location of filtrate:
5. Accessibility of dry sludge removal equipment:

**E. Mechanical Dewatering**    N/A

1. Type of Dewatering Units:
2. Number and Size of Dewatering Units:
3. Capacity of Dewatering Units:
4. Daily Solids Production for Dewatering:
5. Type of Chemicals to be Used:

**F. Sludge Disposal**    (Existing)

1. Ultimate disposal Method of Sludge: Contract - land application
2. Expected Solids Content of Sludge: 3% +
3. Location of Disposal Sites: Contract hauler
4. Ownership of Disposal Sites: pemitted sites, owner unknown
5. Availability of Sludge Transport Equipment: On-call

**II. Sewer Collection System**

**A. Lift Stations:**    (Existing)

1. Location: North side
2. Type/Number of Pumps: Submersible, 2
3. Capacity of Pumps: 700 gpm each
4. Constant or variable speed: Variable
5. RPM and TDH: Variable, 80'
6. Ventilation: Yes
7. Standby power: Yes, Proposed Generator
8. Alarm: Yes
9. Bypass or overflow: No
10. Type of force main: PVC
11. Diameter/Length of force main: 12"; 6,800 lf (proposed)

## **B. Sewer (Existing - Proposed Rehabilitation)**

1. Type of Sewer Material: Sanitary - PVC; Storm - RCP
2. Diameter and Length of Sewer:

|                      |          |
|----------------------|----------|
| 8" pipe lining       | 639 lf   |
| 10" pipe lining      | 3,230 lf |
| 8" Pipe replacement  | 986 lf   |
| 10" pipe replacement | 145 lf   |
| 12" pipe replacement | 330 lf   |
| 36" Storm pipe (new) | 1,731 lf |
3. Stream, Highway, and Railroad Crossing: None
4. Separation of Combined Sewer or New Sewer: Rehabilitation, New Storm Sewer
5. Number of Manholes: 3 New Sanitary; 5 repairs; 5 new storm
6. Water Main Protection: 10' horizontal; 18" vertical

## **III. Miscellaneous**

- A. Laboratory Equipment: Yes
- B. Safety Equipment: Yes
- C. Plant Site Fence: Yes
- D. Handrail for the tanks: Yes
- E. Units, unit operation and plant bypasses: None
- F. Relationship to Flood Elevation: 1 ft above 100 year
- G. Provisions to maintain the same degree of treatment during construction: Yes
- H. Standby Power Equipment: Yes
- I. Septage Receiving Facilities:
- J. Structural Work Proposed on Buildings (Including Rehabilitation):
- K. Site inspection:
- L. Statement in the specifications as to the protection against any adverse environmental effect (e.g., dust, noise, soil erosion) during construction: Yes
- M. Hoists for removing heavy equipment: Yes
- N. Adequate sampling facilities: Yes
- O. Hydraulic gradient: Yes
- P. Septage receiving facilities: None

# Town of Upland

Clerk Treasurer  
Jane Rockwell

Town Manager  
Bruce "Chip" Long

87 North Main Street  
Upland Indiana  
46989

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March 13, 2009

Mr. Terry Ressler, Case Manager  
IDEM, Office of Enforcement  
Mail Code 60-02  
100 North Senate Avenue  
Indianapolis, Indiana 46204

**Re: Town of Upland – Case No. 2005-14697-W**

Dear Mr. Ressler,

As you know, the Town of Upland completed the Wastewater Improvements Project on September 19, 2008. The project consisted of upgrades to the north lift station which handles all of the flow north of the railroad tracks in town. The pumps were replaced, VFD controls were also installed and the force main from this station was re-directed from its connection point to a 10-inch gravity line south of the railroad tracks directly to the wastewater treatment plant. The pump capacity of the north lift station was increased by approximately 450 gallons-per-minute. Improvements were also made at the wastewater treatment facility to increase our permitted flow to .950 MGD from .700 MGD with the ability to handle maximum flows of 3.13 MGD.

Based on information and data known at that time, we were confident that the upgrade to the north lift station would handle the flows. The north side collection system consists of 307 EDU's and a population equivalent of 814. Under normal conditions, we would expect under 100,000 gallons per day from this portion of the system. Even adding in 30% Inflow/Infiltration into the equation would warrant 450 gallon-per-minute pumping capacity at the north side lift station.

On December 18/19, the town received 1.7 inches of rain coupled with melting snow under frozen ground conditions which resulted in an overflow at the north lift station. The same occurred on the 26<sup>th</sup> and 27<sup>th</sup> of December under frozen ground conditions resulting in an overflow. Two (2") inches of rain came down on February 11 resulting in an overflow.

## **ACTION PLAN**

Personnel were on site for several hours during the rain event on February 11 to investigate conditions under duress. Several areas of the town's storm sewer system experienced difficulty taking in surface water and draining it to the proper ditch/creek outfalls. This resulted in several areas and intersections on the northeast side of town with flooding and standing water. This obviously is compounding the I/I problems of the sanitary sewer collection system.

On March 5, our consultant and town personnel checked manholes and lines under normal conditions. We did an extensive site check of the main storm sewer collection system in this area as well. We have identified large storm sewers that need extensive cleaning to remove silt, sand and small gravels in order to allow the storm system to operate properly. Some of the pipes appear to be 2/3rds full of this debris. We have also identified improper storm inlet conditions that will have to be rectified.

Since December 19<sup>th</sup>, we have also been able to procure a set of As-Built drawings from a 1984 sewer separation project. We've also reviewed videotapes of previously televised sewer lines. While we have seen some lines on video that need some corrective action, we have not been able to pinpoint the actual location of the line segments videotaped. The manhole numbering system has been changed, the exact location was not identified on the video log and the company that performed the videotaping no longer has records to help us.

We have identified clay pipe line segments that were not replaced in the 1984 project in the northeast sector of the system. We are currently in the process of preparing an itemized take-off of all of these lines. We are also preparing the same for storm sewer segments that need to be cleaned and the debris removed. We will be seeking quotes from able contractors for the cleaning and televising of these lines. A contractor will be hired to clean all of the lines and televise the pipe segments identified. We will then review all of the videotapes and determine a course of action that will be reported to you.

### **Schedule**

|   |                       |
|---|-----------------------|
| <b>Request for Cleaning &amp; Televising Quotes</b> | <b>W/E March 27</b>   |
| <b>Issue P.O. for Cleaning &amp; Televising</b>     | <b>W/E April 17</b>   |
| <b>Cleaning &amp; Televising</b>                    | <b>April/May 2009</b> |
| <b>Review Video and Prepare Report</b>              | <b>June 2009</b>      |
| <b>Determine Work &amp; Identify Financing</b>      | <b>June 2009</b>      |

An update and report will be forwarded to your attention once the above work has been completed. We will continue to communicate as we work toward corrective action.

Very Truly Yours,

Bruce "Chip" Long  
Town Manager

**Sanitary and Storm Sewer Report**  
**Northeast Quadrant – Upland, Indiana**  
**Prepared September 2009**

This report has been prepared due to continued inflow and infiltration being experienced in the northeast quadrant of the Town. Field investigation in combination with cleaning and televising of selected lines in the area are the basis for this report.

Two separate field visits were made in February and March of 2009 with town personnel.

February 11, 2009 during heavy rains, we accessed manholes to view the system under duress. The system was experiencing heaving inflow and infiltration resulting in full pipes, backed-up manholes, etc. The actual locations of the I/I were not found although it was clear that compounding these problems was the inability of the existing storm sewer network in key areas to adequately remove the storm water. Removing debris from inlet castings only resulted in storm water coming up through manholes at key intersections in this quadrant. It was evident that storm water was not getting to the larger diameter storm sewer lines and thence to the storm water outlets due to some forms of blockage. The lack of storm water drainage was certainly compounding the problems and contributing to the I/I in the sanitary sewer system.

A field visit was performed subsequently on March 5, 2009 under dry conditions. Manholes were again opened to view flows under normal conditions. The storm sewer lines were tracked as well. Dye testing was performed in areas where the pipe network was suspect particularly in some of the main storm lines.

As a result of the field investigations as well as the review of the as-built plans of a 1984 project to separate storm and sanitary sewer lines, it was determined that sewer mains in this quadrant not replaced during the 1984 project should be cleaned and televised. It was also determined that cleaning and removal of debris in sections of the storm sewer pipes should be accomplished as well.

Culy Construction was contracted by the Town of Upland for the work. Copies of the video report sheets have been included in this report.

Based on the videos received, we have compiled a recommended project scope that includes lining and replacement of sanitary sewer mains, some point repairs, and service lateral re-connects.

## Recommended Project Scope

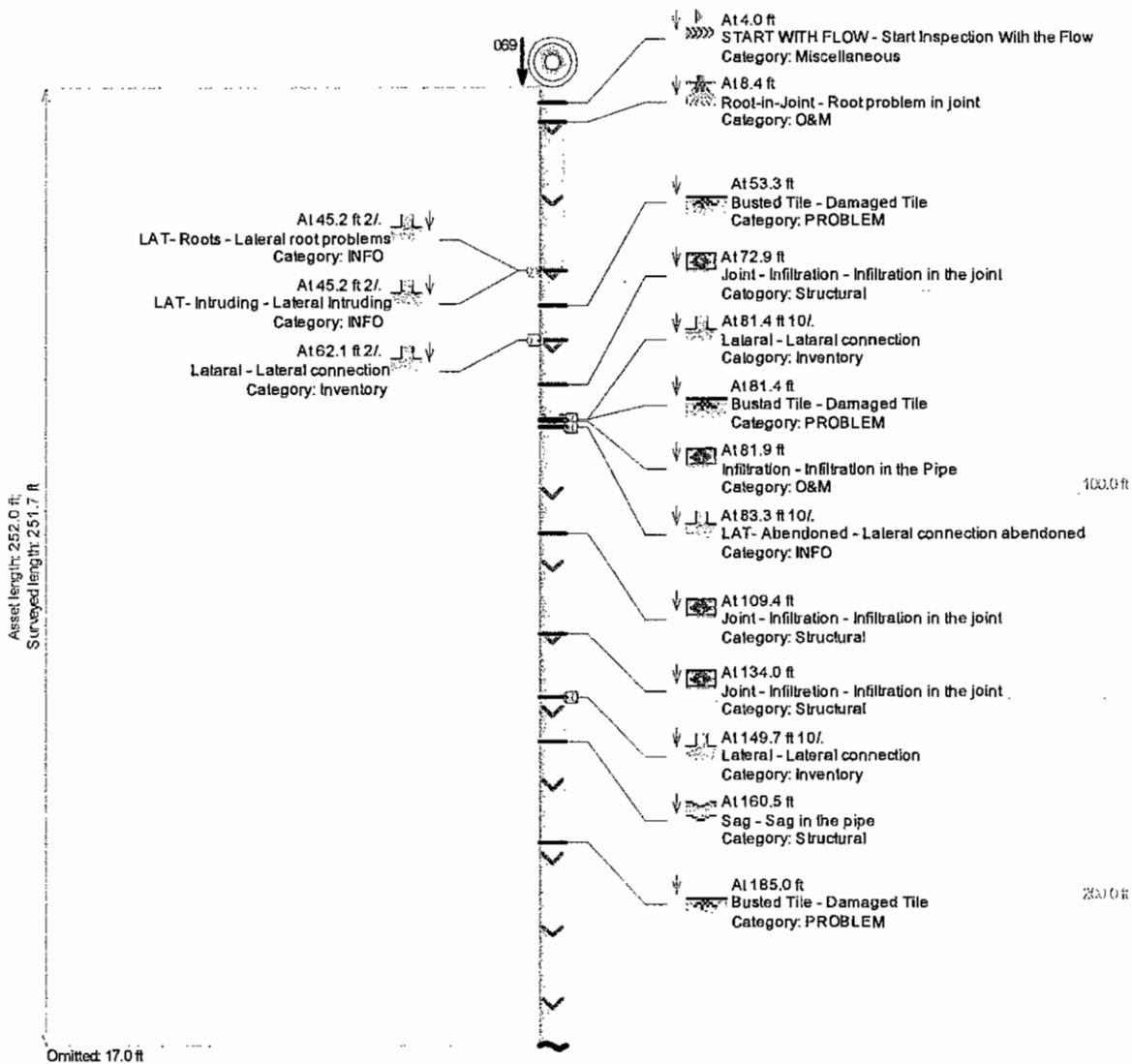
### Sanitary Sewers

| <u>Segment</u> | <u>Pipe</u> | <u>Quantity</u> | <u>Recommendation</u> |
|----------------|-------------|-----------------|-----------------------|
| 067-067A       | 8"          | 300 LF          | Line                  |
| 016-014        | 10" VCP     | 145 LF          | Replace               |
| 014-007        | 12" VCP     | 330 LF          | Replace               |
| MH's           | 12"         | 3               | Replace               |
| 069-070        | 8" VCP      | 252 LF          | Replace               |
| 048-049        | 10" VCP     | 150 LF          | Line                  |
| 049-050        | 10" VCP     | 20 LF           | Line                  |
| 050-051        | 10" VCP     | 300 LF          | Line                  |
| 051-051A       | 10" VCP     | 400 LF          | Line                  |
| 051-051A       | 10" VCP     | Unknown         | Spot Repair @ 119'    |
| 333-063        | 8" VCP      | 476 LF          | Replace               |
| 063-070        | 8" VCP      | 339 LF          | Line                  |
| 067-071        | 8" VCP      | 258 LF          | Replace               |
| 325-316        | 10" VCP     | 2,250 LF        | Line                  |
| 325-316        | MH's        | 5 EA            | Repair                |



Culy Construction  
 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509

|                  |                   |              |  |
|------------------|-------------------|--------------|--|
| Project Name:    | Mainline ID:      | City:        | Address:                               |
| 09041T Upland    | 069 - 070         | Upland       | West Side of Methodist Church on Grant |
| Start date/time: | Pipe width:       | Pipe height: | Pipe type:                             |
| 5/6/2009         | 8                 | 8            | VCP                                    |
| Direction:       | Surveyed footage: | Weather:     | Surface condition:                     |
| Downstream       | 251.7             | Dry          | Asphalt                                |
|                  |                   |              | MediaLabel                             |



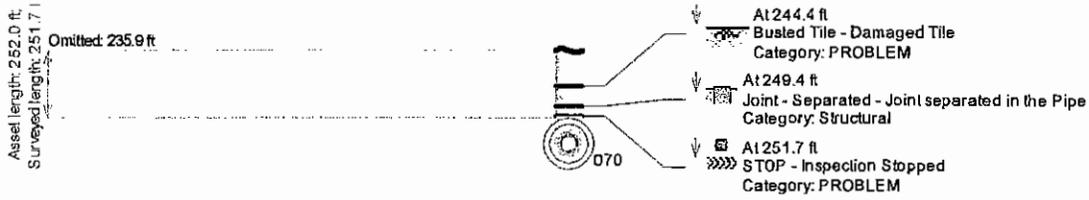


Culy Construction  
 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509

Project Name: **09041T Upland**      Mainline ID: **069 - 070**      City: **Upland**      Address: **West Side of Methodist Church on Grant**

Start date/time: **5/6/2009**      Pipe width: **8**      Pipe height: **8**      Pipe type: **VCP**      Surface condition: **Asphalt**

Direction: **Downstream**      Surveyed footage: **251.7**      Weather: **Dry**      MediaLabel



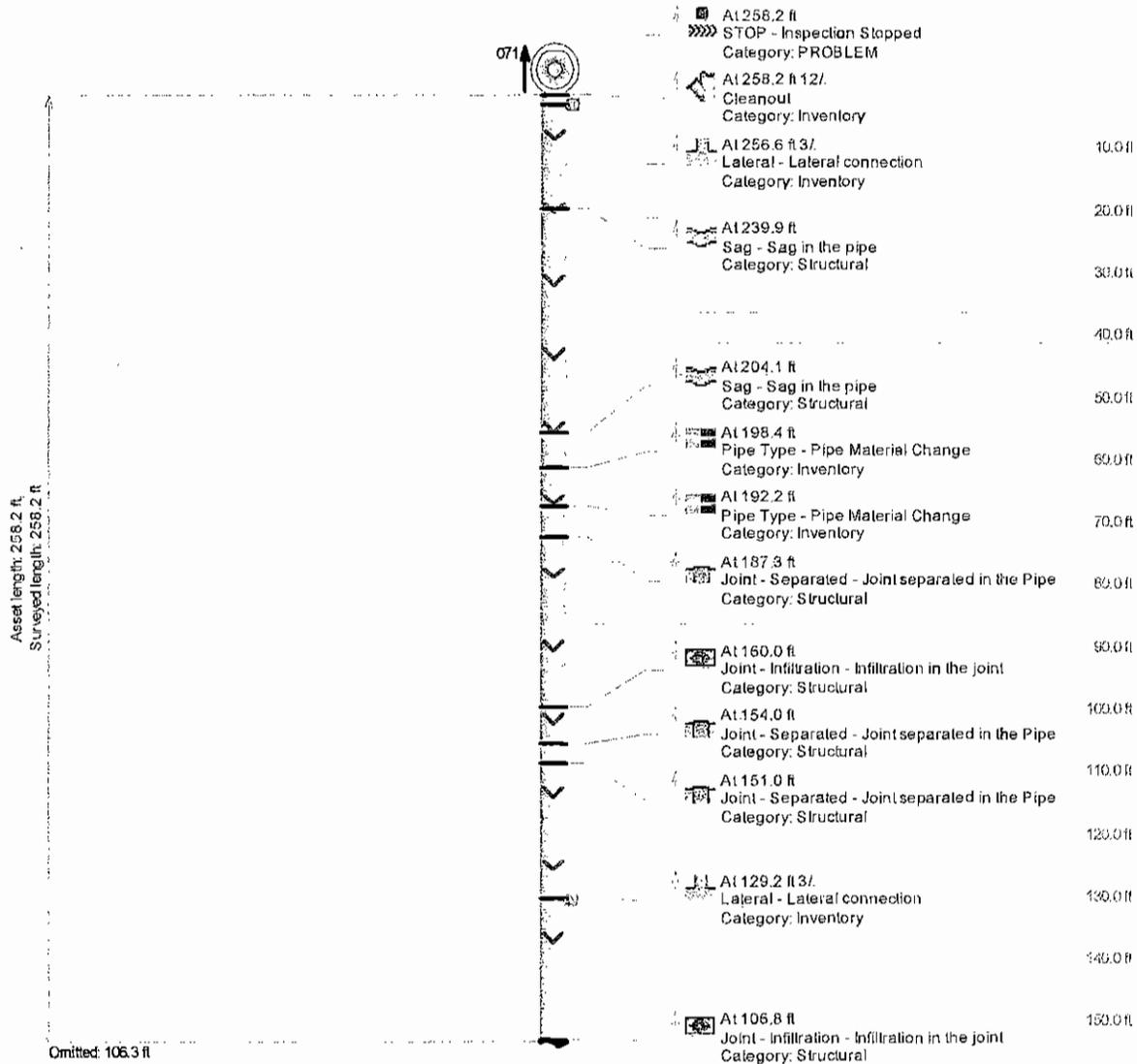


Culy Construction  
 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509

Project Name: 09041T Upland Mainline ID: 067 - 071 City: Upland Address: 61 E. Anson

Start date/time: 5/6/2009 Pipe width: 8 Pipe height: 8 Pipe type: VCP Surface condition: Alley

Direction: Upstream Surveyed footage: 258.2 Weather: Dry MediaLabel



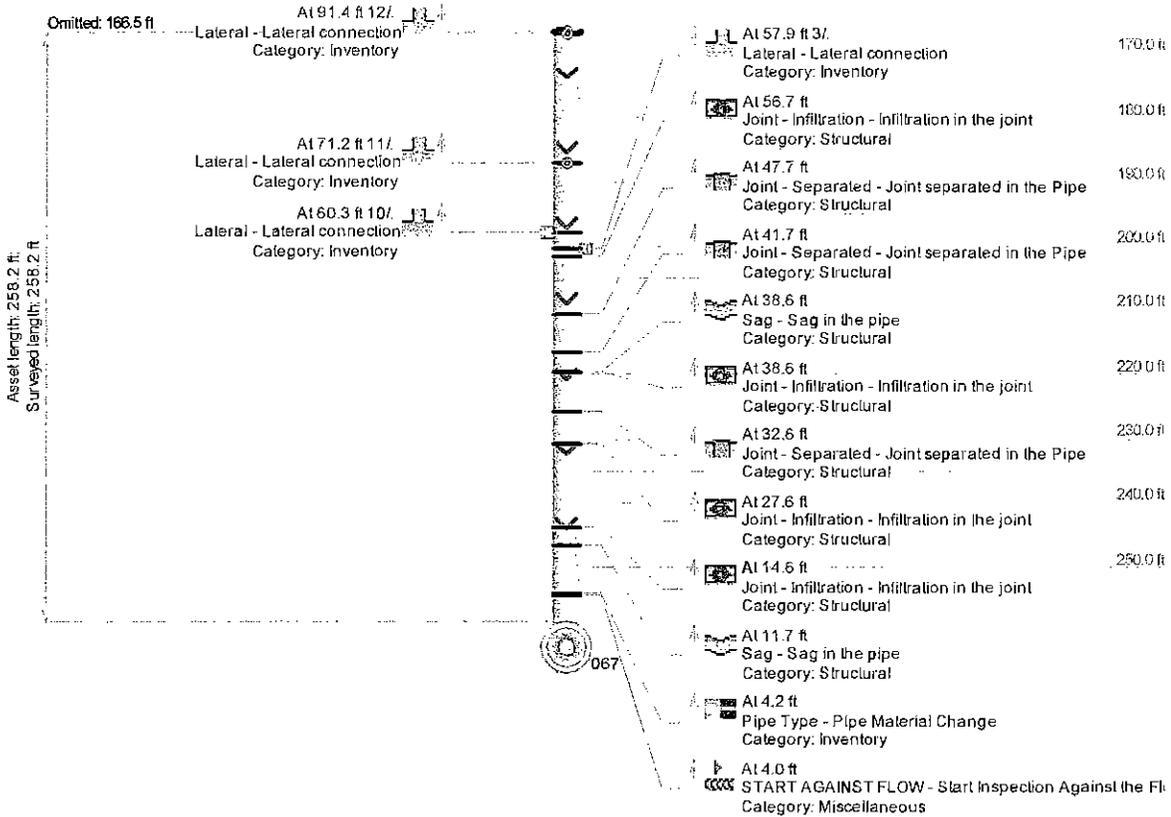


Culy Construction  
 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509

Project Name: 09041T Upland      Mainline ID: 067 - 071      City: Upland      Address: 61 E. Anson

Start date/time: 5/6/2009      Pipe width: 8      Pipe height: 8      Pipe type: VCP      Surface condition: Alley

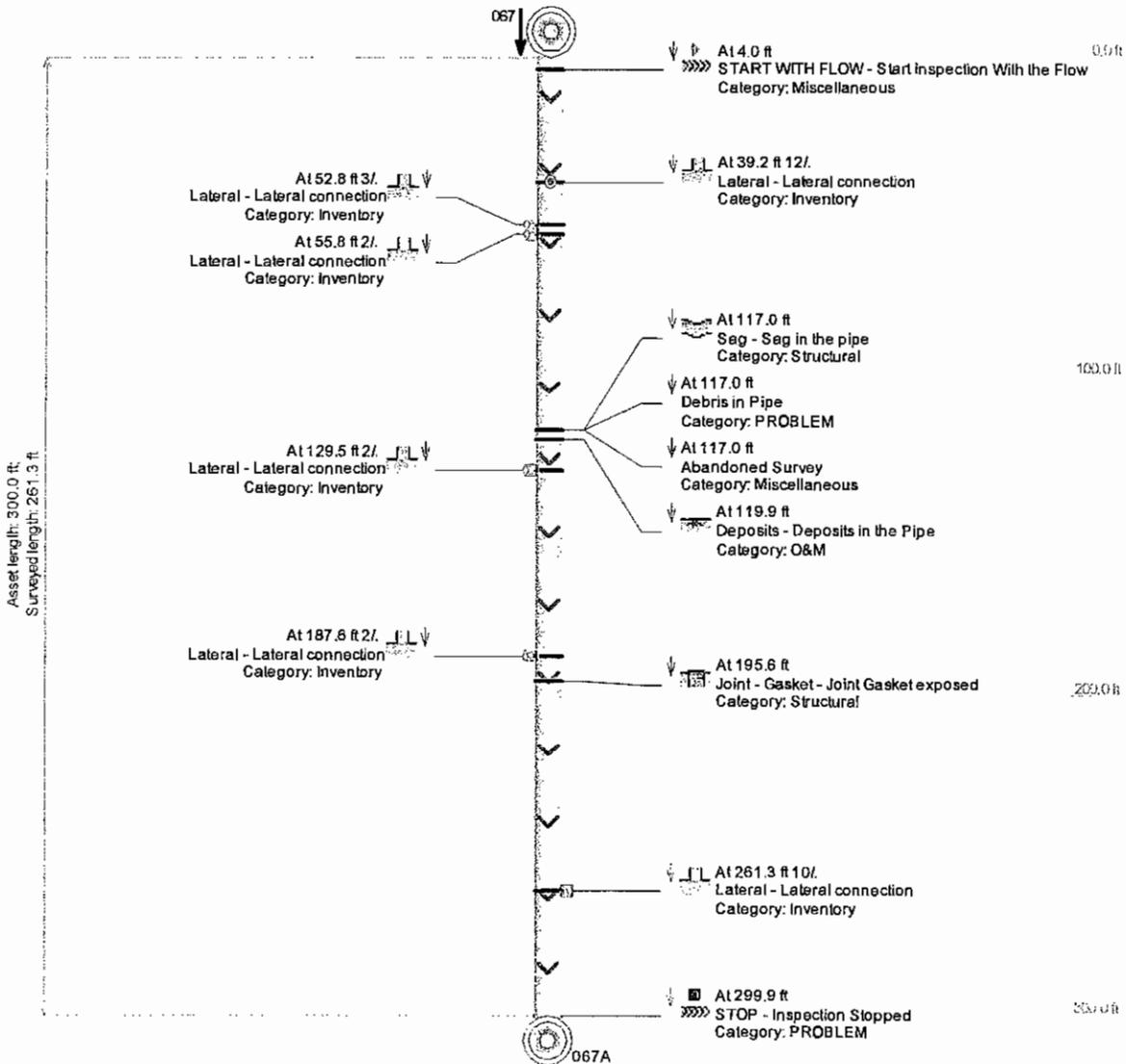
Direction: Upstream      Surveyed footage: 258.2      Weather: Dry      MediaLabel





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610 North 100 East  
Winchester, IN 47394  
765-584-8509

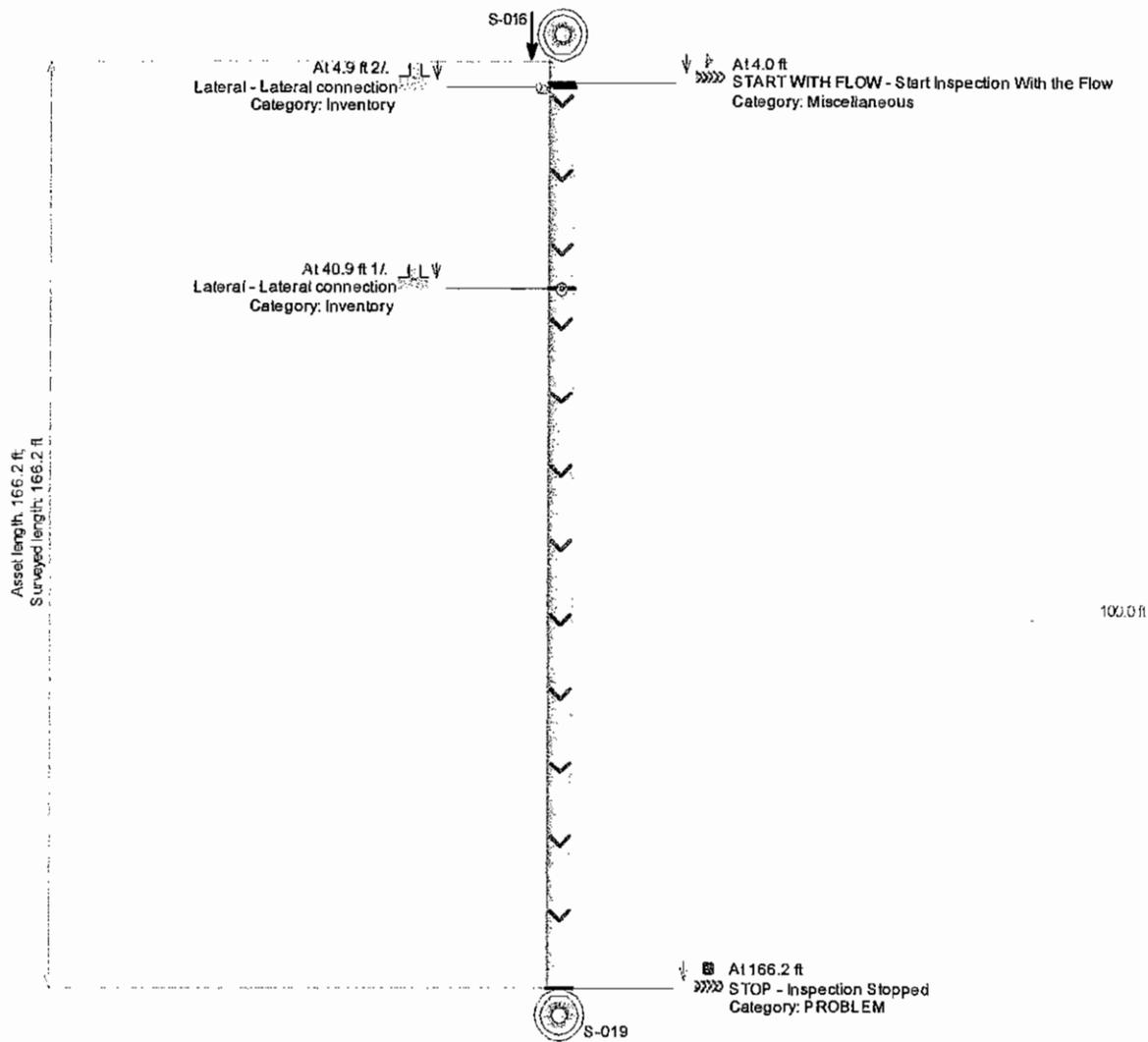
|                  |                   |              |                    |
|------------------|-------------------|--------------|--------------------|
| Project Name:    | Mainline ID:      | City:        | Address:           |
| 09041T Upland    | 067 - 067A        | Upland       | 61 Anson           |
| Start date/time: | Pipe width:       | Pipe height: | Pipe type:         |
| 5/6/2009         | 8                 | 8            | SDR35              |
| Direction:       | Surveyed footage: | Weather:     | Surface condition: |
| Downstream       | 261.3             | Showers      | Easement           |
|                  |                   |              | MediaLabel         |





Culy Construction  
610 North 100 East  
Winchester, IN 47394  
765-584-8509

|                  |                   |              |                  |                    |
|------------------|-------------------|--------------|------------------|--------------------|
| Project Name:    | Mainline ID:      | City:        | Address:         |                    |
| 09041T Upland    | S-019 - S-016     | Upland       | Grant & E. Urban |                    |
| Start date/time: | Pipe width:       | Pipe height: | Pipe type:       | Surface condition: |
| 4/27/2009        | 10                | 10           | SDR35            | Asphalt            |
| Direction:       | Surveyed footage: | Weather:     | MediaLabel       |                    |
| Downstream       | 166.2             | Dry          |                  |                    |

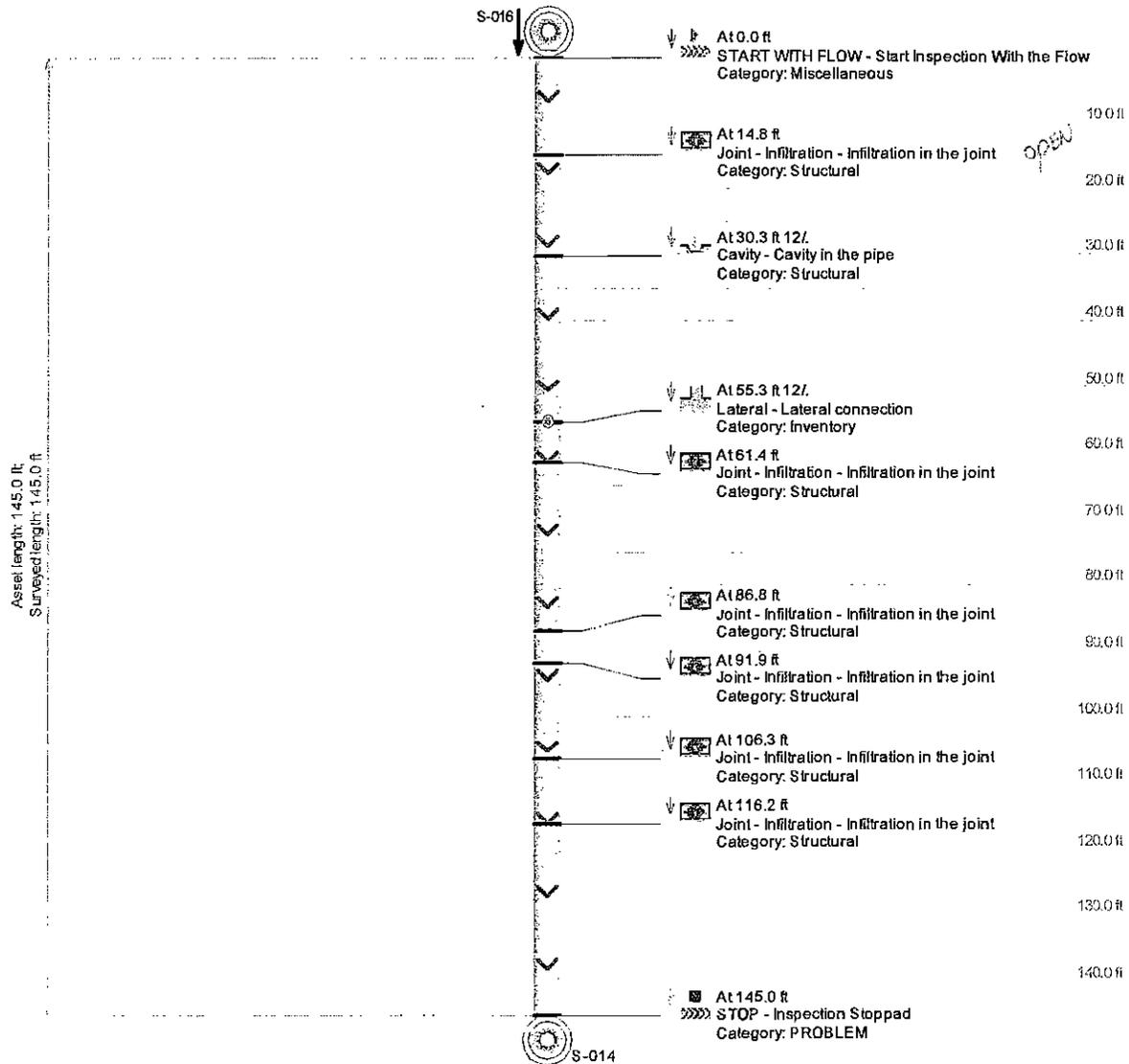


Culy Construction  
 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509

REVIEW  
 TAPE



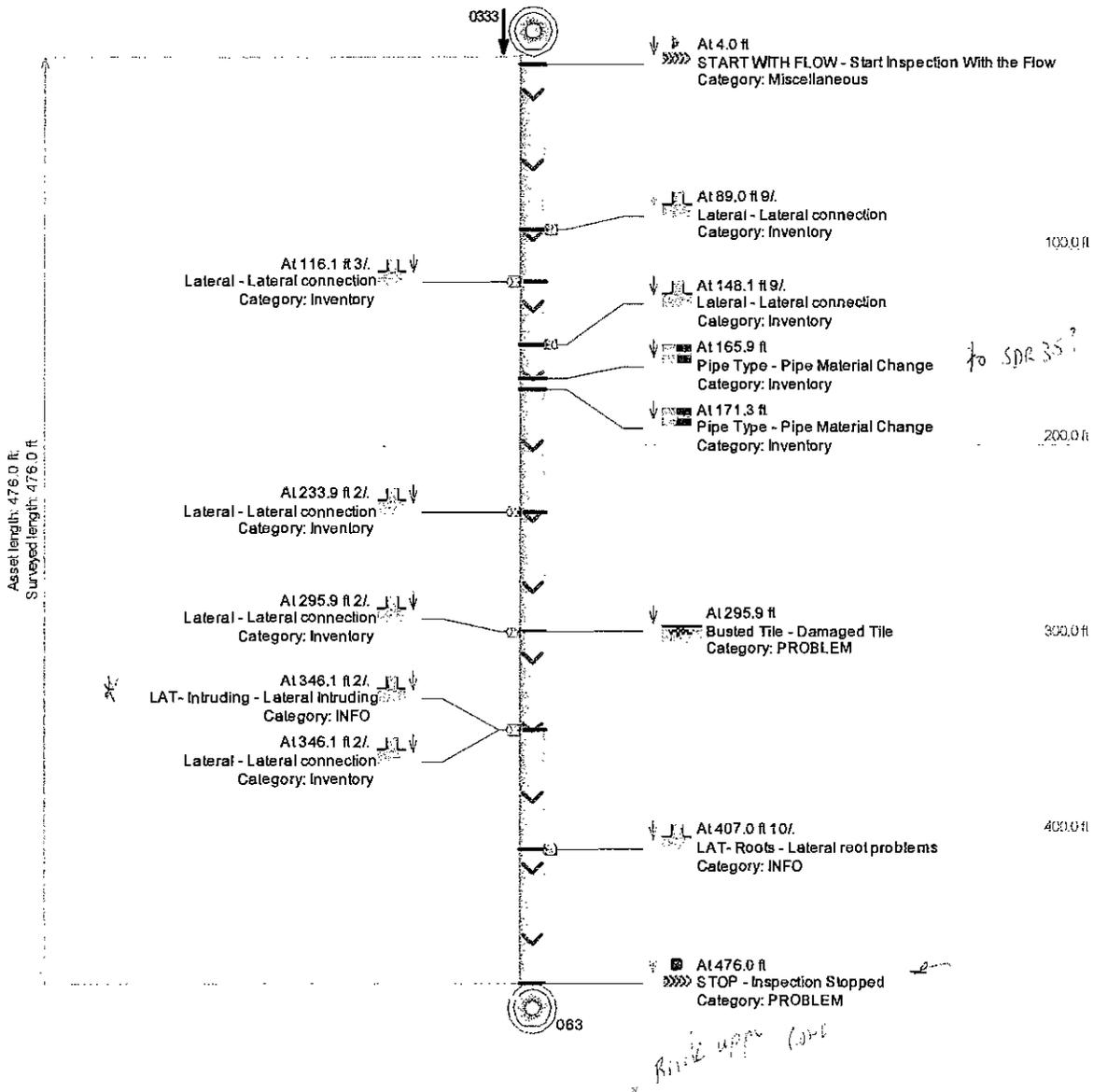
|                    |               |                   |            |
|--------------------|---------------|-------------------|------------|
| Project Name:      | Mainline ID:  | City:             | Address:   |
| 09041T Upland      | S-016 - S-014 | Upland            | E Urban    |
| Start date/time:   | Pipe width:   | Pipe height:      | Pipe type: |
| 4/27/2009          | 10            | 10                | VCP        |
| Surface condition: | Direction:    | Surveyed footage: | Weather:   |
| Asphalt            | Downstream    | 145.0             | Dry        |
| MediaLabel         |               |                   |            |





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 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509

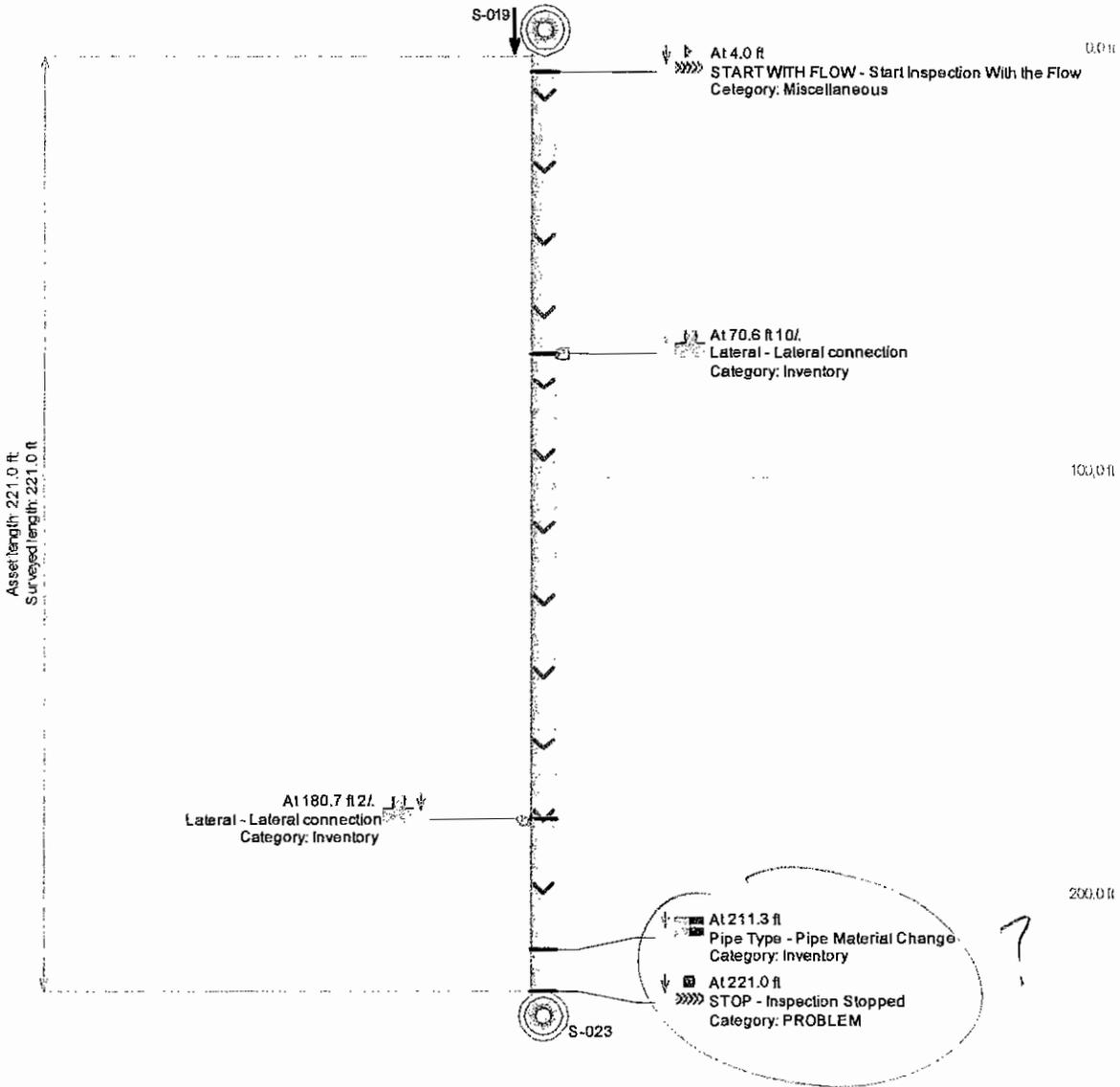
|                  |                   |              |                    |
|------------------|-------------------|--------------|--------------------|
| Project Name:    | Mainline ID:      | City:        | Address:           |
| 09041T Upland    | 0333 - 063        | Upland       | 329 Anson          |
| Start date/time: | Pipe width:       | Pipe height: | Pipe type:         |
| 5/5/2009         | 8                 | 8            | VCP                |
| Direction:       | Surveyed footage: | Weather:     | Surface condition: |
| Downstream       | 476.0             | Dry          | Asphalt            |
|                  |                   |              | MediaLabel         |





Culy Construction  
610 North 100 East  
Winchester, IN 47394  
765-584-8509

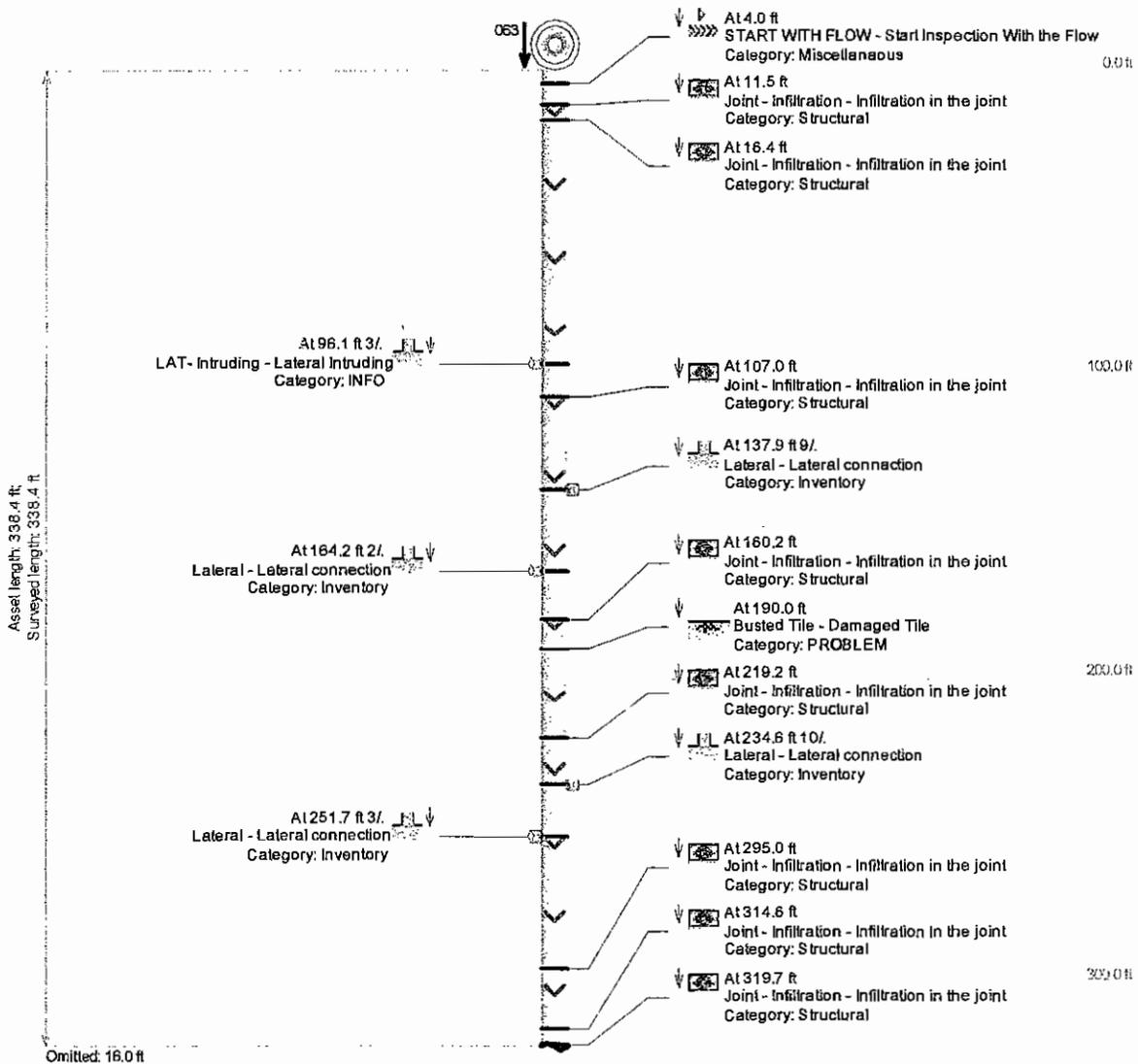
|                  |                   |              |              |                    |
|------------------|-------------------|--------------|--------------|--------------------|
| Project Name:    | Mainline ID:      | City:        | Address:     |                    |
| 09041T Upland    | S-023 - S-019     | Upland       | 181 E. Urban |                    |
| Start date/time: | Pipe width:       | Pipe height: | Pipe type:   | Surface condition: |
| 4/27/2009        | 10                | 10           | VCP          | Asphalt            |
| Direction:       | Surveyed footage: | Weather:     | MediaLabel   |                    |
| Downstream       | 221.0             | Dry          |              |                    |





Culy Construction  
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 Winchester, IN 47394  
 765-584-8509

|                    |                   |              |              |
|--------------------|-------------------|--------------|--------------|
| Project Name:      | Mainline ID:      | City:        | Address:     |
| 09041T Upland      | 063 - 070         | Upland       | Anson & East |
| Start date/time:   | Pipe width:       | Pipe height: | Pipe type:   |
| 5/6/2009           | 8                 | 8            | VCP          |
| Surface condition: |                   |              |              |
| Asphalt            |                   |              |              |
| Direction:         | Surveyed footage: | Weather:     | MediaLabel   |
| Downstream         | 338.4             | Dry          |              |



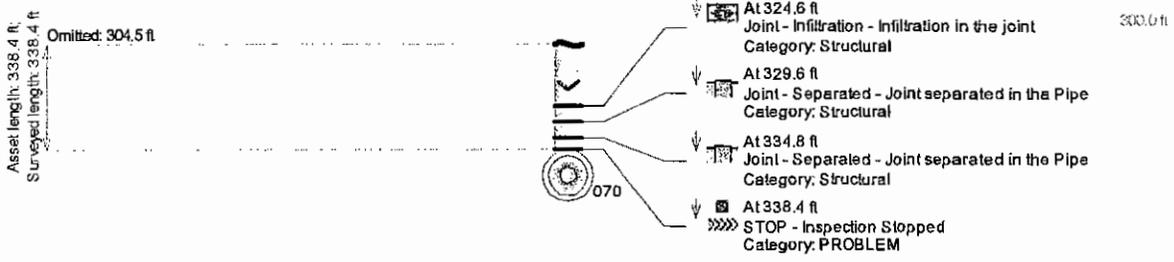


Culy Construction  
 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509

Project Name: 09041T Upland Mainline ID: 063 - 070 City: Upland Address: Anson & East

Start date/time: 5/6/2009 Pipe width: 8 Pipe height: 8 Pipe type: VCP Surface condition: Asphalt

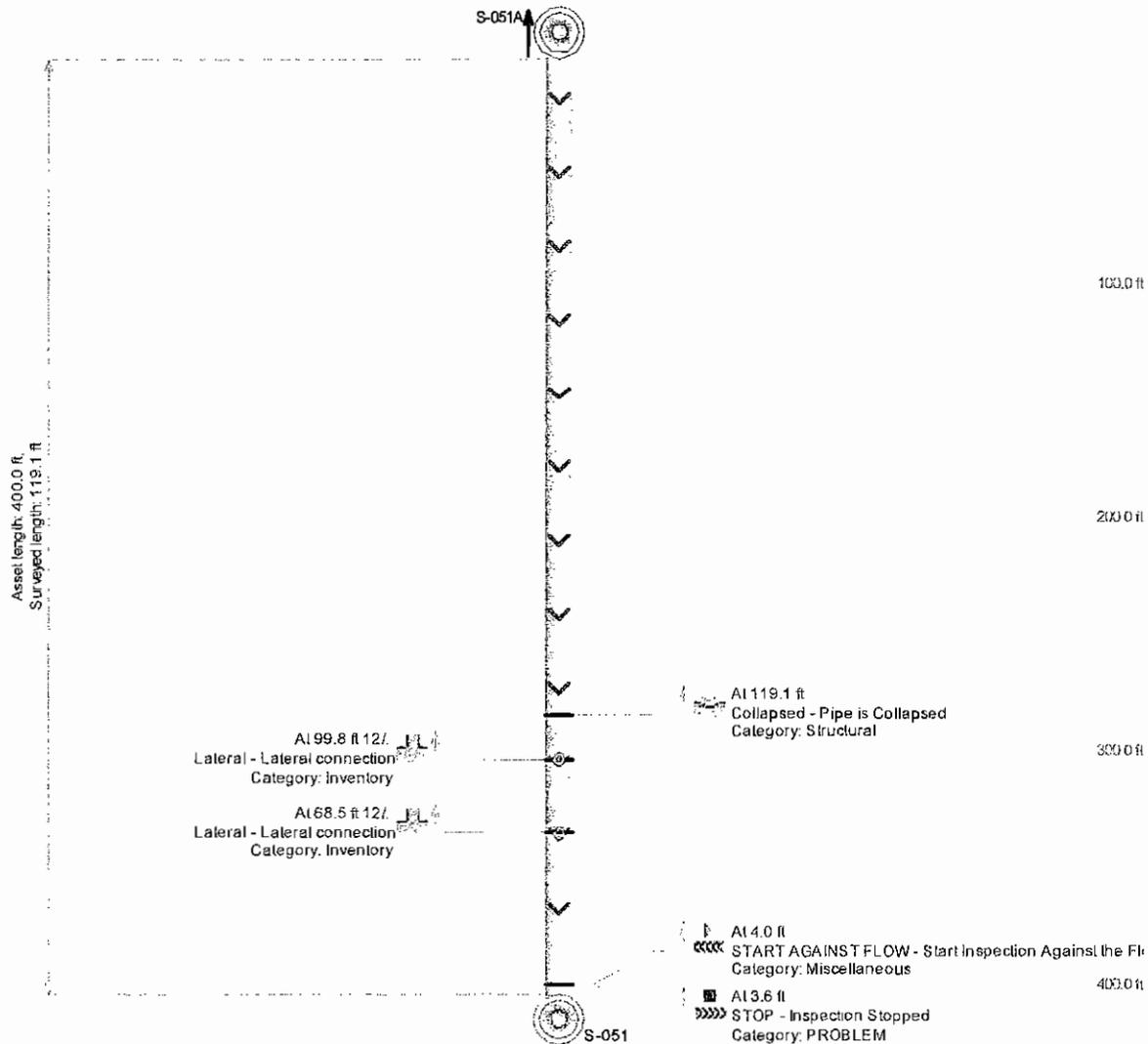
Direction: Downstream Surveyed footage: 338.4 Weather: Dry MediaLabel



Culy Construction  
 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509



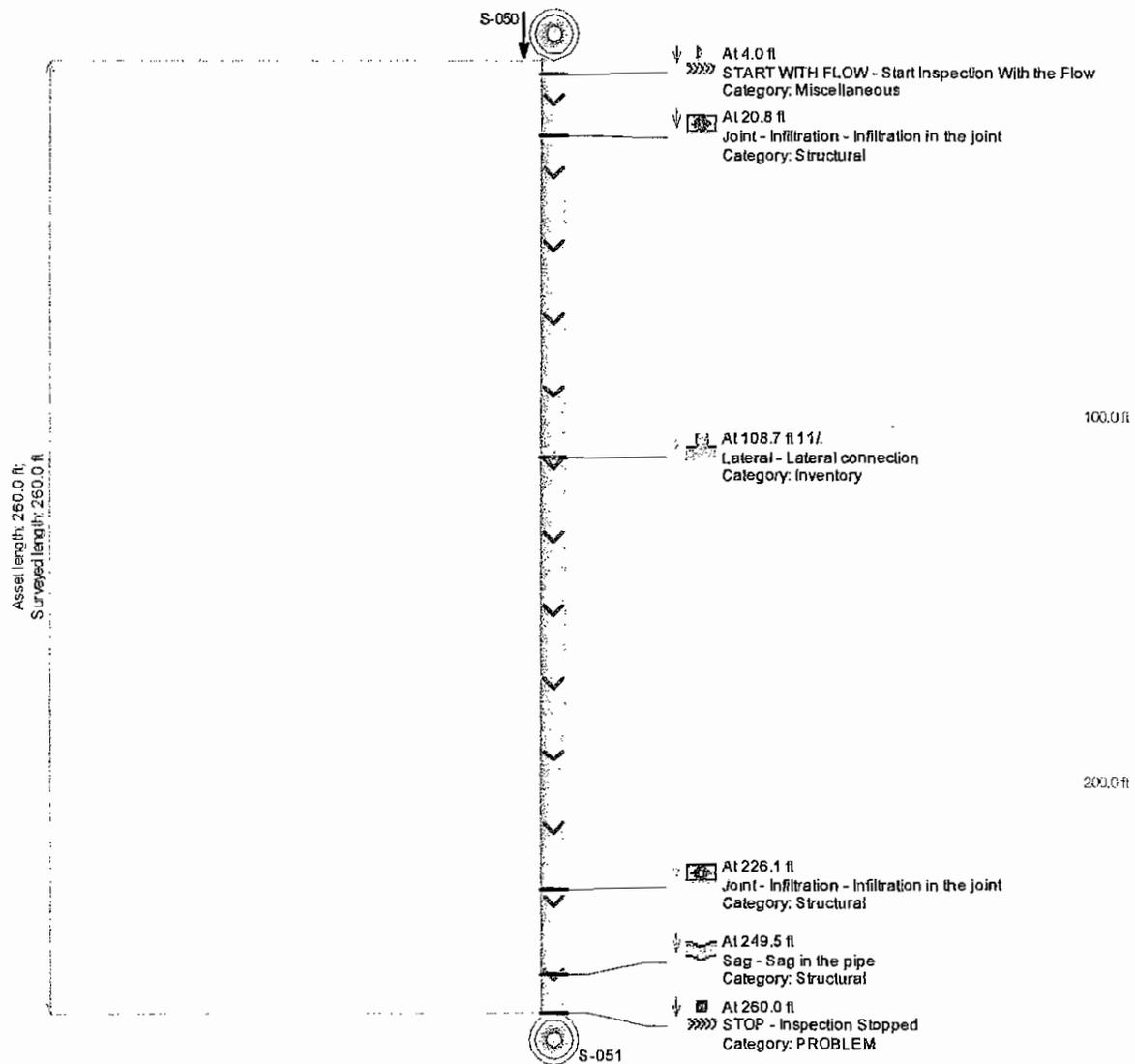
|                  |                   |              |                          |
|------------------|-------------------|--------------|--------------------------|
| Project Name:    | Mainline ID:      | City:        | Address:                 |
| 09041T Upland    | S-051 - S-051A    | Upland       | Behind 483 E. Washington |
| Start date/time: | Pipe width:       | Pipe height: | Pipe type:               |
| 4/27/2009        | 10                | 10           | VCP                      |
| Direction:       | Surveyed footage: | Weather:     | Surface condition:       |
| Upstream         | 119.1             | Dry          | Easement                 |
|                  |                   |              | MediaLabel               |





Culy Construction  
610 North 100 East  
Winchester, IN 47394  
765-584-8509

|                  |                   |              |                       |                    |
|------------------|-------------------|--------------|-----------------------|--------------------|
| Project Name:    | Mainline ID:      | City:        | Address:              |                    |
| 09041T Upland    | S-050 - S-051     | Upland       | Behind 551 Washington |                    |
| Start date/time: | Pipe width:       | Pipe height: | Pipe type:            | Surface condition: |
| 4/27/2009        | 10                | 10           | VCP                   | Easement           |
| Direction:       | Surveyed footage: | Weather:     | MediaLabel            |                    |
| Downstream       | 260.0             | Dry          |                       |                    |

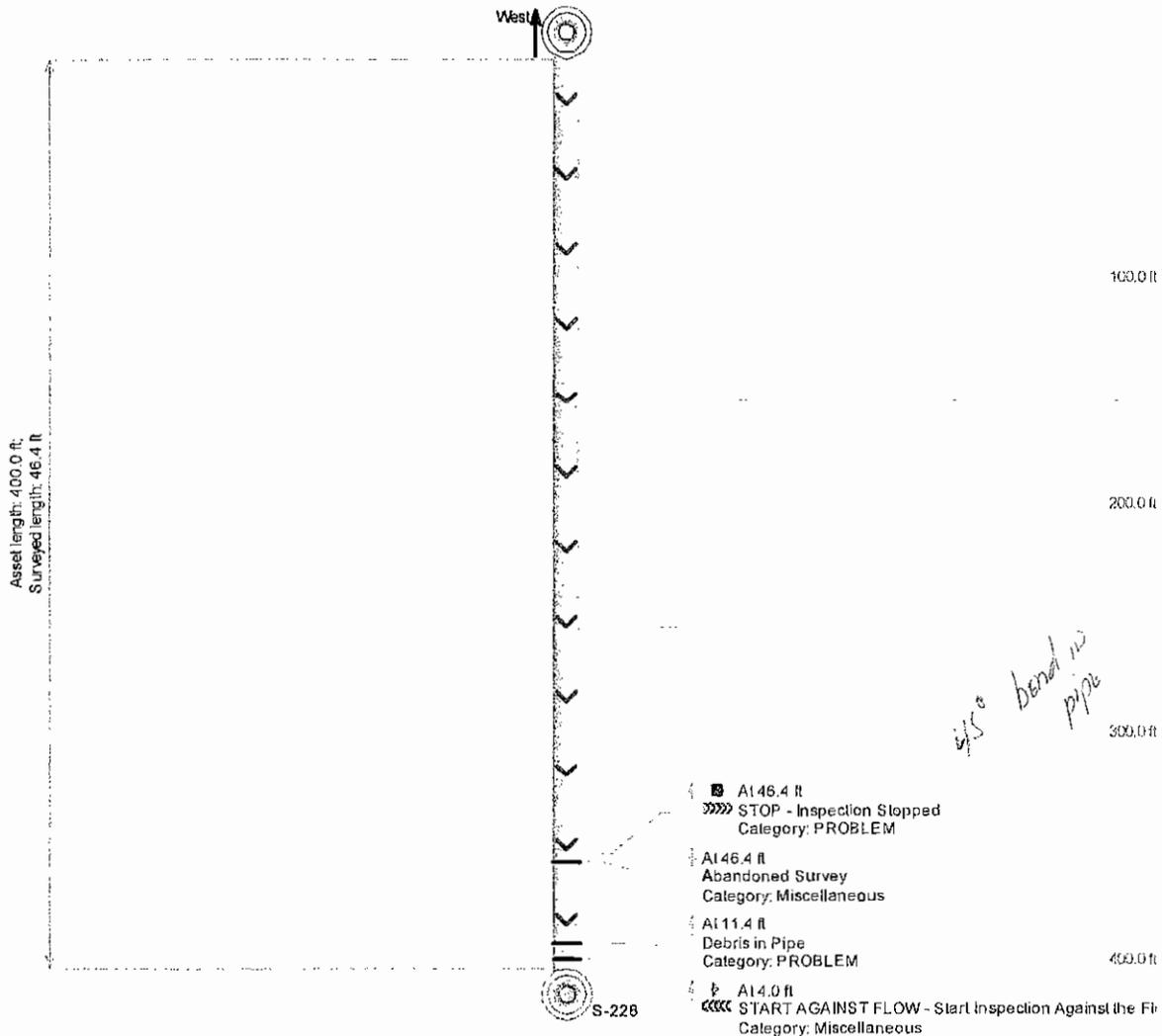




7

Culy Construction  
610 North 100 East  
Winchester, IN 47394  
765-584-8509

|                  |                   |              |                    |
|------------------|-------------------|--------------|--------------------|
| Project Name:    | Mainline ID:      | City:        | Address:           |
| 09041T Upland    | S-228 - West      | Upland       | Spencer & Third    |
| Start date/time: | Pipe width:       | Pipe height: | Pipe type:         |
| 4/27/2009        | 8                 | 8            | VCP                |
| Direction:       | Surveyed footage: | Weather:     | Surface condition: |
| Upstream         | 46.4              | Dry          | Asphalt            |
|                  |                   |              | MediaLabel         |

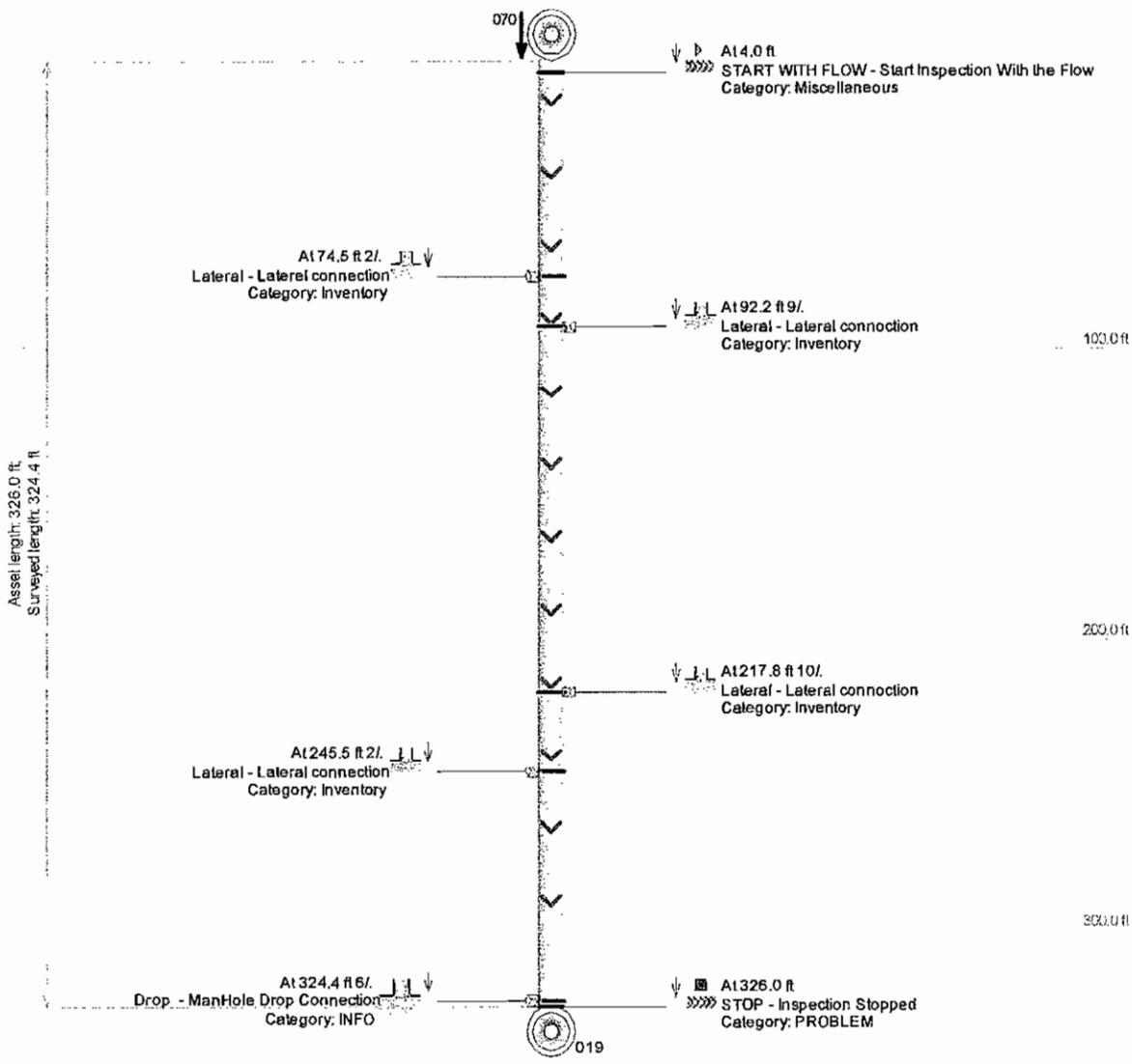




7

Culy Construction  
 610 North 100 East  
 Winchester, IN 47394  
 765-584-8509

|                  |                           |              |                    |
|------------------|---------------------------|--------------|--------------------|
| Project Name:    | Mainline ID:              | City:        | Address:           |
| 09041T Upland    | Grant/Anson - Grant/Urban | Upland       | Grant & Anson      |
| Start date/time: | Pipe width:               | Pipe height: | Pipe type:         |
| 5/5/2009         | 8                         | 8            | SDR35              |
| Direction:       | Surveyed footage:         | Weather:     | Surface condition: |
| Downstream       | 324.4                     | Dry          | Asphalt            |
|                  |                           |              | MediaLabel         |



*Cusy Quote*

Town of Upland, Indiana  
**Sanitary Sewer Cleaning & Televising**

| <u>Description</u>  | <u>Size</u> | <u>Length</u> | <u>Unit Price</u> | <u>Total</u>       |
|---|-------------|---------------|-------------------|--------------------|
| MH S048 to MH S049  | 10"         | 150 LF        | \$2.75            | \$412.50           |
| MH S049 to MH S050  | 10"         | 20 LF         | 2.75              | 55.00              |
| MH S050 to MH S051  | 10"         | 300 LF        | 2.75              | 825.00             |
| MH S051 to MH S030  | 10"         | 460 LF        | 2.75              | 1,265.00           |
| MH S014 to MH S016 (Main to Alley on Urban)   | 10"         | 130 LF        | 2.75              | 357.50             |
| MH S019 to MH S022 (Grant to East on Urban)   | 10"         | 200 LF        | 2.75              | 550.00             |
| MH S334 to MH S054 (Wash. St. east of Half St.)   | 12"         | 280 LF        | 3.25              | 910.00             |
| MH S333 to MH S063 (Anson from Half to East St.)  | 8"          | 460 LF        | 2.50              | 1,150.00           |
| MH S063 to MH S070 (Anson from East to Grant)   | 8"          | 290 LF        | 2.50              | 725.00             |
| MH S069 to MH S070 (Grant from Wash. To Anson)  | 8"          | 260 LF        | 2.50              | 650.00             |
| MH S071 to MH S067 (Alley from Wash. To Anson)  | 8"          | 360 LF        | 2.50              | 900.00             |
| MH S067 to MH S016 (Alley Anson to Urban)   | 8"          | 250 LF        | 2.50              | 625.00             |
| Alley 1/2 block east of Main St. to alley East of East St.                                      | 8"          | 720 LF        | 2.50              | 1,800.00           |
| MH ?? to MH S016 (Alley east of East St. & 1/2 block south of Washington ~ north to Washington) | 8"          | 140LF         | 2.50              | 350.00             |
| MH S051 (southeasterly direction to unknown destination)  | 8"          | 50 LF         | 2.50              | 125.00             |
| <b>Total Price</b>  |             |               |                   | <u>\$10,700.00</u> |

**Storm Sewer Cleaning**

The following pipes are full of dirt, sand and gravel material and must be cleaned. Contractor must have adequate equipment to completely remove the materials. The town will make available a dump truck for offsite disposal of the materials.

| <u>Description</u>  | <u>Size</u> | <u>Length</u> | <u>Unit Price</u> | <u>Total</u> |
|---|-------------|---------------|-------------------|--------------|
| Storm Line @ Washington Street  |             |               |                   |              |
| Half Street west to MH structure at the NW corner of alley & Washington | 24"         | 350 LF        | T&M               | T&M          |
| Structure S024 southeasterly to structure S354                          | 24"         | 680 LF        | T&M               | T&M          |
| Urban St. to structure S023   | 12"         | 400 LF        | T&M               | T&M          |

**Appendix A**  
**2. Additional Documents/Updates**  
**for Town of Upland**  
**Sanitary and Storm Sewer**  
**Improvements Project (2012)**

2.a.

SAP

# TRIAD ASSOCIATES, INC.

5835 Lawton Loop East Drive  
Indianapolis, Indiana 46216-1064  
(317) 377-5230  
Fax (317) 377-5241

# LETTER OF TRANSMITTAL

To: IDEM, SRF Section  
100 North Senate Avenue  
Room 1275  
Indianapolis, Indiana 46206-6015

|   |          |
|---|----------|
| Date: 1/28/11                             | Job No.: |
| Attention: Ms. Amy Henninger              |          |
| Reference: Upland Sanitary-Storm Workplan |          |
|   |          |
|   |          |
|   |          |
|   |          |

WE ARE SENDING YOU  Attached  Under separate cover via  the following items:  
 Shop drawings  Prints  Plans  Samples  Specifications  
 Copy of letter  Change order  Other: See Description Below

| COPIES | DATE | NO. | DESCRIPTION  |
|--------|------|-----|--|
| 1      |      |     | Cover Letter from Town                               |
| 1      |      |     | Response to Comments                                 |
| 1      |      |     | Back-up Documentation for Repairs and Rehabilitation |
|        |      |     |  |
|        |      |     |  |
|        |      |     |  |
|        |      |     |  |
|        |      |     |  |

THESE ARE TRANSMITTED as checked below:

For approval  Approved as submitted  Resubmit  copies for approval  
 For your use  Approved as noted  Submit  copies for distribution  
 As requested  Returned for corrections  Return  corrected prints  
 For review and comment  Other:  
 FOR BIDS DUE:  PRINTS RETURNED AFTER LOAN TO US

REMARKS: This is in response to your comments of January 20, 2011.  
Please call if additional information is needed.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

COPY TO: Amy Miller, Cornerstone Grants  
Chip Long, Town of Upland SIGNED: Dee Revnyak  
 Dee Revnyak

*If enclosures are not as noted, kindly notify us at once.*

Recv'd. By: Jeanie Jones Date: RECEIVED  
 FEB 01 2011

J.a

## Town of Upland, Indiana

---

Jane E. Rockwell  
Bruce "Chip" Long  
Clerk Treasurer  
Town Manager

January 28, 2011

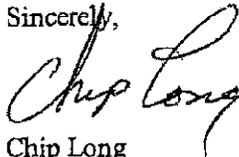
Ms. Amy Henninger  
IDEM, SRF Section  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015

RE: Workplan, Sanitary-Storm Improvements Project, Upland, Indiana

Dear Ms. Henninger:

We are in receipt of your comments of January 20, 2011. Our response is attached. Three copies of revised pages are included. Please feel free to call me or our consultant, Triad Associates Inc., with any questions or requests for additional information. Thank-you.

Sincerely,



Chip Long  
Town Manager

enclosures

RECEIVED

FEB 01 2011

PLANNING & ZONING DEPARTMENT  
TOWN OF UPLAND, INDIANA

Town Hall  
87 N. Main Street  
Upland, Indiana 46989

20

---

Response to June 2011 Comments  
Upland Wastewater and Storm Water Workplan

Additional information is requested on the following:

**Comment:**

**- wetlands impacts (amount/type of wetland)**

**Response:**

The relocated storm line will discharge to a wetland, which is designated as Palustrine Forested Broad-leaved Deciduous Temporarily Flooded (PFO1A). The line will not cross the wetland and trees will not be removed from the wetland.

**Comment:**

**- If direct wetland impacts: proposed CWA Section 404 permit information (proposed wetland mitigation plan, if direct wetland impacts),**

**Response:**

At this stage it is not believed that the wetland will be impacted. The line will not cross and no trees will be removed from the wetland. As part of the design stage, plans will be submitted for review to determine if a Section 404 permit and additional mitigation is necessary. If so, any noted requirements will be included in the final design and specifications.

**Comment:**

**- tree removal: Was tree removal done/or will it be done in a wetland?**

**Response:**

Tree removal was not and will not be done in a wetland.

**Comment:**

**- tree mitigation: Tree mitigation plan: where, what, when, and how will tree/saplings be nurtured and protected)**

**Response:**

Enclosed, as Detail B, is the preliminary proposed tree mitigation plan. The plan will be finalized during design. Plantings will be staggered and placed in the outer 10 feet of the 20 foot easement, which will allow the trees to form a canopy over the access path for the sewer. Plantings will be selected from the attached list of native herbaceous and woody riparian vegetation and will be appropriate for the central region. Plant installation will be as soon as practical after construction is complete, but will not occur prior to March 1<sup>st</sup> or before frost has left the ground. Saplings will be staked as needed for protection and stabilization. The Town will inspect the growth annually for 3 years, and will replace any plantings that have not survived.

**Comment:**

**- Outfall armament: More details regarding the proposed outfall/armament (scour/erosion concern),**

**Response:**

An outfall detail is provided as Detail A, which will be included in the plans during the design stage.

**Comment:**

**- Property owner (storm sewer line/outfall) contact information, identification.**

---

Response to June 2011 Comments  
Upland Wastewater and Storm Water Workplan

Response:

The property owners are:

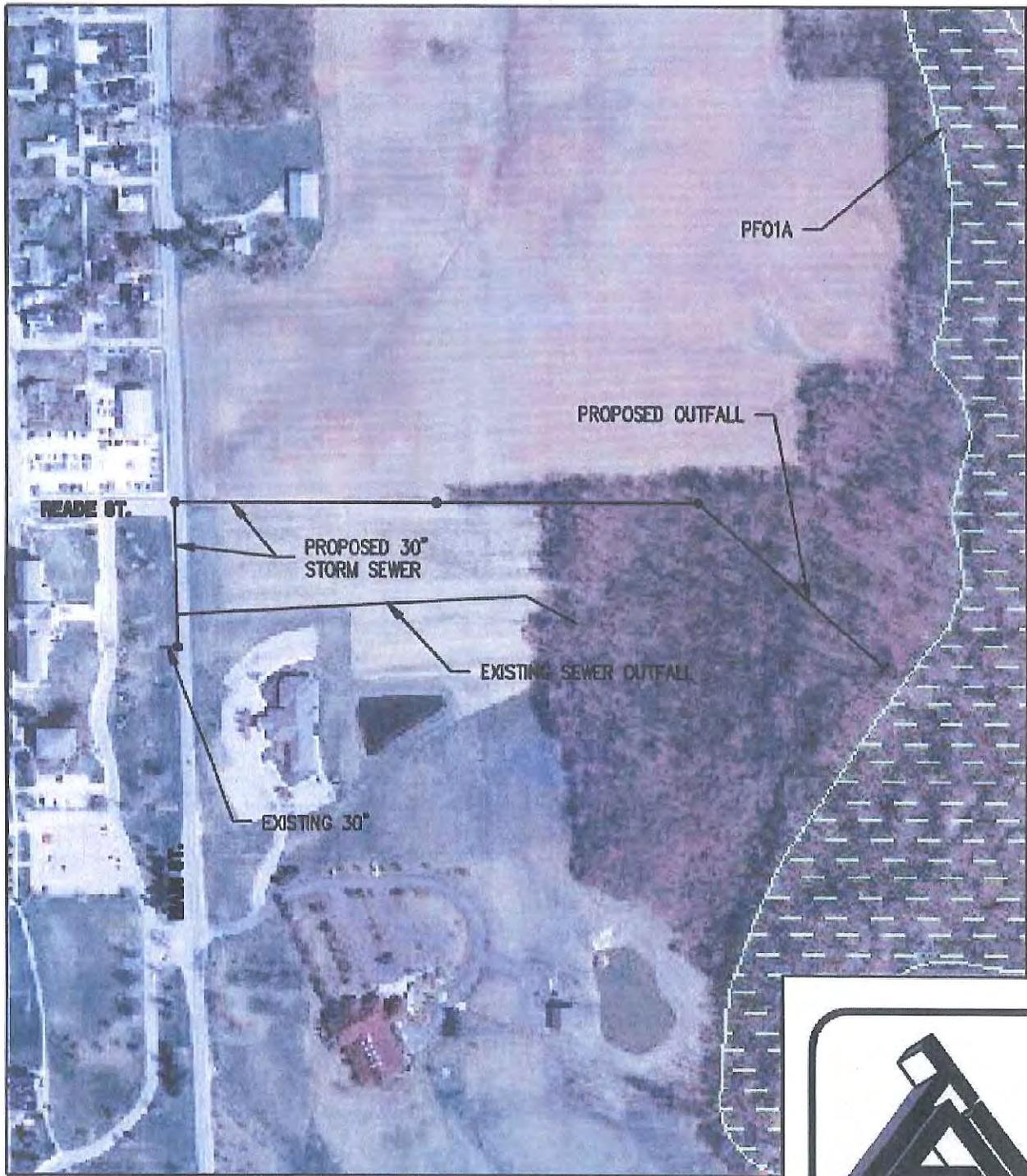
Shannon and Helen Riegler  
3808 W. Riggin Road  
Muncie, Indiana 47304-6145

**Comment:**

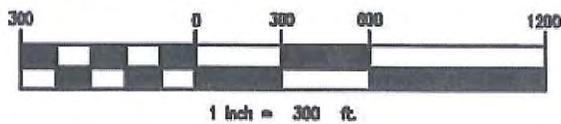
**- Existing outfall location: Provide a legible map/airphoto) showing the existing outfall location.**

Response:

Enclosed Exhibit 9 shows the existing and proposed sewer and outfall locations.

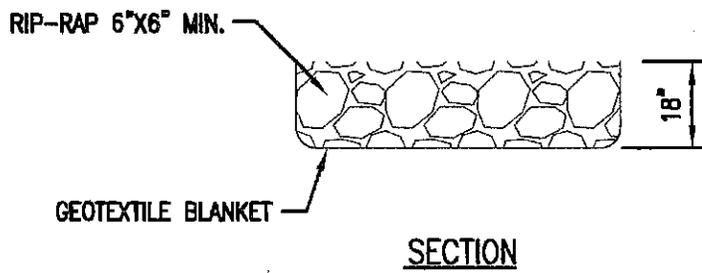
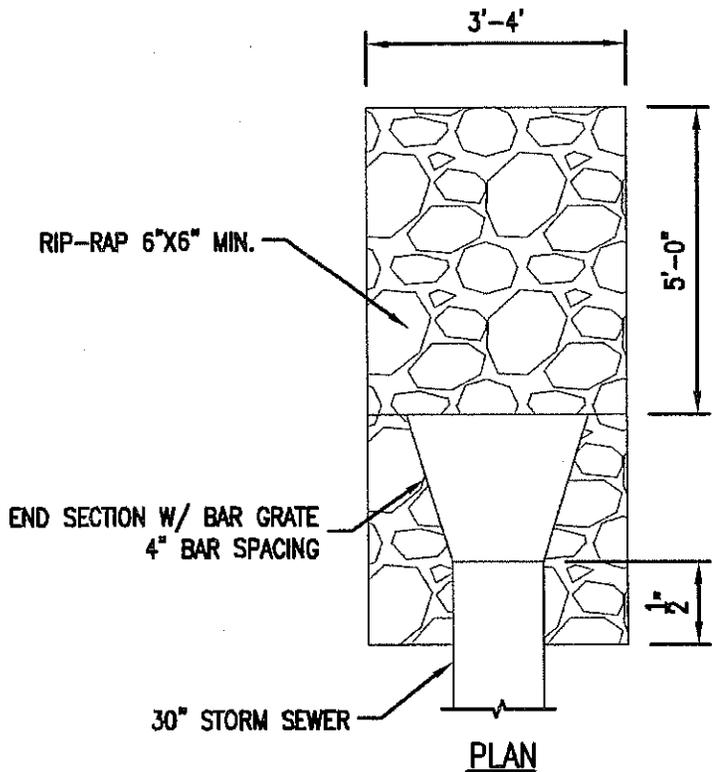


### TOWN OF UPLAND EXISTING & PROPOSED OUTFALLS



**TRIAD ASSOCIATES INC.**  
2020 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46220  
PHONE: 317-877-8200 FAX: 317-877-8201

**EXHIBIT 9**

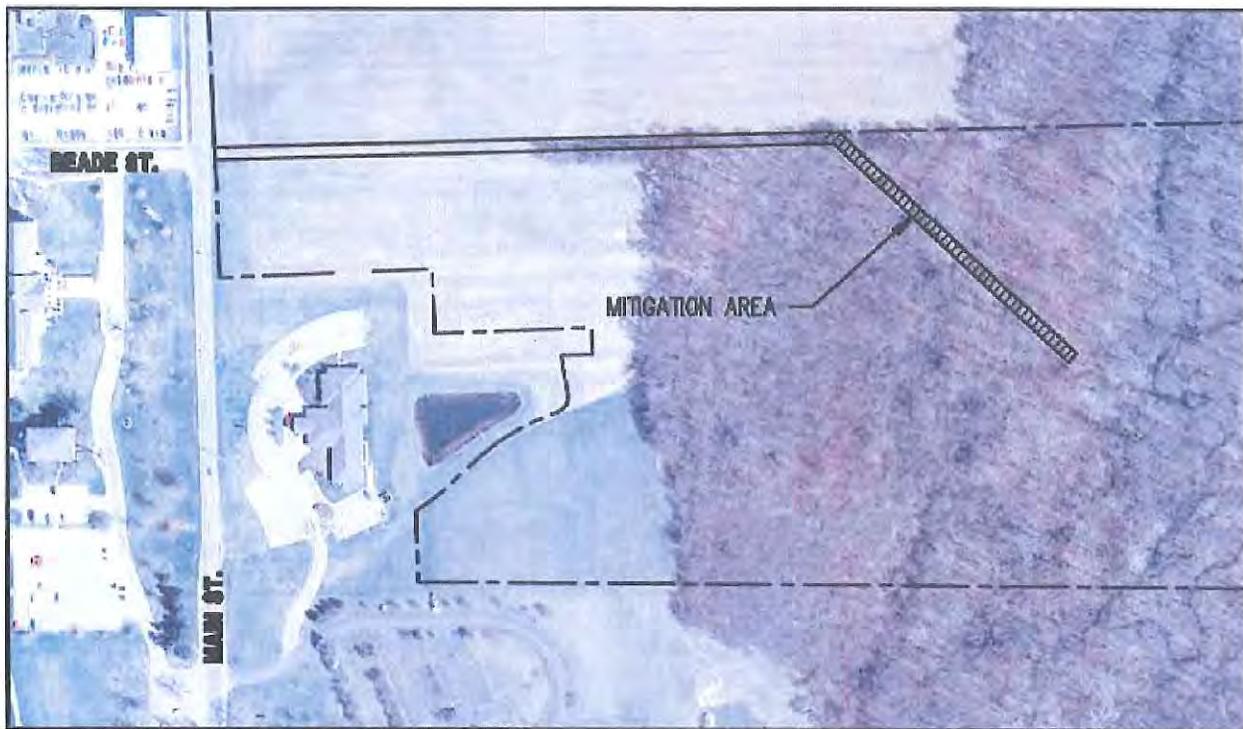


**OUTFALL W/ RIP-RAP**  
SCALE: NONE



**TRIAD ASSOCIATES INC.**  
5835 LAWTON LOOP EAST DRIVE  
INDIANAPOLIS, INDIANA 46216  
PHONE: 317-377-5230 FAX: 317-377-5241

**DETAIL A**



**LEGAL DESCRIPTION – EASEMENT**

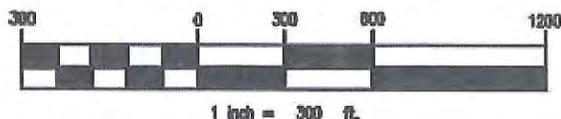
Beginning at the Northwest Corner of Southeast Quarter of Section 10, Township 23 North, Range 9 East; thence South 89° 20' 16" East 1,069.90 feet, along the North line of said Southeast Quarter of section 10; thence South 45° 04' 21" East 553.06 feet; thence South 44° 55' 39" West 20.00 feet; thence North 45° 04' 21" West 544.93 feet; thence North 89° 20' 16" West parallel to the North line of the Southeast Quarter of Section 10, 1061.54 feet to the West line of said Southeast Quarter; thence North 0° 00' 00" East 20.00 feet to the Point of Beginning and containing 0.74 Acres more or less.

**Mitigation Details**

Mitigation includes planting five trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height. A native riparian forest planting plan must use at least 5 canopy trees and 5 understory trees, shrubs, or vines selected from the Woody Riparian Vegetation list or an approved equal. Additionally, a native herbaceous seed mixture should be planted consisting of at least 10 species of grasses, sedges, and wildflowers selected from the Herbaceous Riparian Vegetation list or an approved equal. Restore disturbed areas within forested habitats such that trees are planted as close as possible to the storm sewer.

It has been identified that the construction will affect three (3) trees that are 10 inches in diameter or larger. Therefore the mitigation plan will require a minimum planting of 15 new trees at least 2 inches in diameter-at-breast height.

**TOWN OF UPLAND  
TREE MITIGATION**



### Woody Riparian Vegetation

| Common name                           | Species name                     | Region 3 status | Type of plant          | Tree, Shrub, Vine | Region (N, C, S) | Coefficient of Conservatism | Comment                            |
|---------------------------------------|----------------------------------|-----------------|------------------------|-------------------|------------------|-----------------------------|------------------------------------|
| Box Elder                             | <i>Acer negundo</i>              | FACW-           | Large Understory Tree  | T                 | N, C, S          | 1                           |                                    |
| Black Maple                           | <i>Acer nigrum</i>               | FAC             | Large Canopy Tree      | T                 | N, C, S          | 6                           |                                    |
| Red Maple                             | <i>Acer rubrum</i>               | FAC             | Large Canopy Tree      | T                 | N, C, S          | 5                           |                                    |
| Silver Maple                          | <i>Acer saccharinum</i>          | FACW            | Large Canopy Tree      | T                 | N, C, S          | 1                           |                                    |
| Sugar Maple                           | <i>Acer saccharum</i>            | FACU            | Large Canopy Tree      | T                 | N, C, S          | 4                           |                                    |
| Ohio Buckeye                          | <i>Aesculus glabra</i>           | FAC+            | Large Understory Tree  | T                 | N, C, S          | 5                           |                                    |
| Indigobush                            | <i>Amorpha fruticosa</i>         | FACW-           | Medium Shrub           | S                 | S                | 3                           |                                    |
| Black Chokeberry                      | <i>Aronia melanocarpa</i>        | FACW-           | Medium Shrub           | S                 | N, C, S          | 8                           |                                    |
| Purple Chokeberry                     | <i>Aronia prunifolia</i>         | FACW            | Medium Shrub           | S                 | N                | 8                           |                                    |
| Common Paw Paw                        | <i>Asimina triloba</i>           | FAC             | Small Understory Tree  | T                 | N, C, S          | 6                           |                                    |
| River Birch                           | <i>Betula nigra</i>              | FACW            | Small Canopy Tree      | T                 | N, S             | 2                           |                                    |
| American Hornbeam                     | <i>Carpinus caroliniana</i>      | FAC             | Medium Understory Tree | T                 | N, C, S          | 5                           |                                    |
| Bitternut Hickory                     | <i>Carya cordiformis</i>         | FAC             | Large Canopy Tree      | T                 | N, C, S          | 5                           |                                    |
| Pecan                                 | <i>Carya illinoensis</i>         | FACW            | Large Canopy Tree      | T                 | S*               | 4                           | Extreme southwestern counties      |
| Shellbark Hickory                     | <i>Carya laciniosa</i>           | FACW            | Large Canopy Tree      | T                 | N, C, S          | 8                           |                                    |
| Shagbark Hickory                      | <i>Carya ovata</i>               | FACU            | Large Canopy Tree      | T                 | N, C, S          | 4                           |                                    |
| Sugarberry                            | <i>Celtis laevigata</i>          | FACW            | Large Understory Tree  | T                 | S                | 7                           |                                    |
| Hackberry                             | <i>Celtis occidentalis</i>       | FAC-            | Large Canopy Tree      | T                 | N, C, S          | 3                           |                                    |
| Buttonbush                            | <i>Cephalanthus occidentalis</i> | OBL             | Medium Shrub           | S                 | N, C, S          | 5                           |                                    |
| Redbud                                | <i>Cercis canadensis</i>         | FACU            | Small Understory Tree  | T                 | N, C, S          | 3                           |                                    |
| Alternate-leaf Dogwood                | <i>Cornus alternifolia</i>       | FACU-           | Small Understory Tree  | T                 | N, C, S          | 8                           |                                    |
| Pale Dogwood (formerly Silky Dogwood) | <i>Cornus obliqua</i>            | FACW+           | Medium Shrub           | S                 | N, C, S          | 5                           |                                    |
| Roughleaf Dogwood                     | <i>Cornus drummondii</i>         | FAC-            | Medium Shrub           | S                 | N, C, S          | 2                           |                                    |
| Flowering Dogwood                     | <i>Cornus florida</i>            | FACU-           | Small Understory Tree  | T                 | N, C, S          | 4                           | Susceptible to dogwood anthracnose |
| Gray Dogwood                          | <i>Cornus racemosa</i>           | FACW-           | Medium Shrub           | S                 | N, C, S          | 2                           |                                    |
| Red-osier Dogwood                     | <i>Cornus sericea</i>            | FACW            | Medium Shrub           | S                 | N                | 4                           |                                    |
| Hazelnut                              | <i>Corylus americana</i>         | FACU-           | Medium Shrub           | S                 | N, C, S          | 4                           |                                    |
| Cockspur Hawthorn                     | <i>Crataegus crus-galli</i>      | FAC             | Small Understory Tree  | T                 | N, C, S          | 4                           |                                    |

| Common Name         | Scientific Name               | OBL   | Medium Canopy Tree    | T | S*      | 7  | Extreme southwestern counties  |
|---------------------|-------------------------------|-------|-----------------------|---|---------|----|--|
| Overcup Oak         | <i>Quercus lyrata</i>         | OBL   | Medium Canopy Tree    | T |         | 7  | Extreme southwestern counties  |
| Bur Oak             | <i>Quercus macrocarpa</i>     | FAC-  | Large Canopy Tree     | T | N, C, S | 5  |  |
| Swamp Chestnut Oak  | <i>Quercus michauxii</i>      | FACW  | Med.-Lg. Canopy Tree  | T | S*      | 7  | Far southern and southwestern counties                                       |
| Chinkapin Oak       | <i>Quercus muehlenburgii</i>  | UPL   | Med.-Lg. Canopy Tree  | T | N, C, S | 4  | Also along well-drained riverbanks   |
| Pin Oak             | <i>Quercus palustris</i>      | FACW  | Small Canopy Tree     | T | N, C, S | 3  |  |
| Northern Red Oak    | <i>Quercus rubra</i>          | FACU  | Large Canopy Tree     | T | N, C, S | 4  |  |
| Shumard Oak         | <i>Quercus shumardii</i>      | FACW- | Large Canopy Tree     | T | C, S    | 7  |  |
| Post Oak            | <i>Quercus stellata</i>       | FACU- | Sm.-Med. Canopy Tree  | T | S*      | 5  | Seasonally swampy woods in SW counties                                       |
| Staghorn Sumac      | <i>Rhus typhina</i>           |       | Large Shrub           | S | N       | 2  |  |
| Pasture Gooseberry  | <i>Ribes cynosbati</i>        | FACW  | Small Shrub           | S | N, C, S | 4  |  |
| Carolina Rose       | <i>Rosa carolina</i>          | FACU- | Small Shrub           | S | N, C, S | 4  |  |
| Peachleaf Willow    | <i>Salix amygdaloides</i>     | FACW  | Small Canopy Tree     | T | N       | 4  |  |
| Sandbar Willow      | <i>Salix interior</i>         | OBL   | Medium Shrub          | S | N, C, S | 1  |  |
| Black Willow        | <i>Salix nigra</i>            | OBL   | Large Understory Tree | T | N, C, S | 3  |  |
| Elderberry          | <i>Sambucus canadensis</i>    | FACW- | Medium Shrub          | S | N, C, S | 2  |  |
| Bristly Greenbriar  | <i>Smilax hispida</i>         | FAC   | Vine                  | V | N, C, S | 3  |  |
| American Bladdernut | <i>Staphylea trifolia</i>     | FAC-  | Medium Shrub          | S | N, C, S | 5  |  |
| Bald Cypress        | <i>Taxodium distichum</i>     | OBL   | Large Canopy Tree     | T | S*      | 10 | Only in Vanderburgh, Posey, Warrick, Knox, Gibson Co.                        |
| American Basswood   | <i>Tilia americana</i>        | FACU  | Large Canopy Tree     | T | N, C, S | 5  |  |
| American Elm        | <i>Ulmus americana</i>        | FACW- | Large Canopy Tree     | T | N, C, S | 3  | Susceptible to Dutch elm disease; typically grows as a small understory tree |
| Slippery Elm        | <i>Ulmus rubra</i>            | FAC   | Large Canopy Tree     | T | N, C, S | 3  |  |
| Nannyberry          | <i>Viburnum lentago</i>       | FAC+  | Medium Shrub          | S | N       | 5  |  |
| Black Haw           | <i>Viburnum prunifolium</i>   | FACU  | Medium Shrub          | S | N, C, S | 4  |  |
| Riverbank Grape     | <i>Vitis riparia</i>          | FACW- | Vine                  | V | N, C, S | 1  |  |
| Prickly ash         | <i>Zanthoxylum americanum</i> |       | Medium Shrub          | S | N       | 3  |  |

|                          |                                    |       |                        |   |         |   |  |   |
|--------------------------|------------------------------------|-------|------------------------|---|---------|---|--|---|
| Downy Hawthorn           | <i>Crataegus mollis</i>            | FACW- | Small Understory Tree  | T | N, C, S | 2 |  | Okay in floodplains; not in extreme southwestern counties |
| Dotted hawthorn          | <i>Crataegus punctata</i>          |       | Small Understory Tree  | T | N, C, S | 2 |  |   |
| Persimmon                | <i>Diospyros virginiana</i>        | FAC   | Medium Understory Tree | T | S       | 2 |  |   |
| American Beech           | <i>Fagus grandifolia</i>           | FACU  | Large Canopy Tree      | T | N, C, S | 8 |  |   |
| Honey Locust             | <i>Gleditsia triacanthos</i>       | FAC   | Small Canopy Tree      | T | N, C, S | 1 |  |   |
| Kentucky Coffeetree      | <i>Gymnocladus dioicis</i>         | FACU  | Large Canopy Tree      | T | N, C, S | 4 |  |   |
| Witch Hazel              | <i>Hamamelis virginiana</i>        | FACU  | Small Understory Tree  | T | N, C, S | 5 |  |   |
| Smooth Hydrangea         | <i>Hydrangea arborescens</i>       | FACU- | Small Shrub            | S | N, C, S | 7 |  |   |
| Common Winterberry       | <i>Ilex verticillata</i>           | FACW+ | Medium Shrub           | S | N, C, S | 8 |  |   |
| Butternut (White Walnut) | <i>Juglans cinerea</i>             | FACU+ | Small Canopy Tree      | T | N, C, S | 5 |  | Scattered within range; susceptible to butternut canker   |
| Black Walnut             | <i>Juglans nigra</i>               | FACU  | Large Canopy Tree      | T | N, C, S | 2 |  |   |
| Spicebush                | <i>Lindera benzoin</i>             | FACW- | Medium Shrub           | S | N, C, S | 5 |  |   |
| Sweet Gum                | <i>Liquidambar styraciflua</i>     | FACW  | Large Canopy Tree      | T | S       | 4 |  |   |
| Tuliptree                | <i>Liriodendron tulipifera</i>     | FACU+ | Large Canopy Tree      | T | N, C, S | 4 |  |   |
| Wild Sweet Crabapple     | <i>Malus coronaria</i>             |       | Medium Understory Tree | T | N, C, S |   |  |   |
| Common Moonseed          | <i>Menispermum canadense</i>       | FAC   | Low Vine               | V | N, C, S | 3 |  |   |
| Black Gum                | <i>Nyssa sylvatica</i>             | FAC   | Large Understory Tree  | T | N, C, S | 5 |  |   |
| Hop Hornbeam             | <i>Ostrya virginiana</i>           | FACU- | Medium Understory Tree | T | N, C, S | 5 |  |   |
| Virginia Creeper         | <i>Parthenocissus quinquefolia</i> | FAC-  | Vine                   | V | N, C, S | 2 |  |   |
| Common Ninebark          | <i>Physocarpus opulifolius</i>     | FACW- | Small Shrub            | S | N, C, S | 7 |  |   |
| American Sycamore        | <i>Platanus occidentalis</i>       | FACW  | Large Canopy Tree      | T | N, C, S | 3 |  |   |
| Eastern Cottonwood       | <i>Populus deltoides</i>           | FAC+  | Large Canopy Tree      | T | N, C, S | 1 |  |   |
| Swamp Cottonwood         | <i>Populus heterophylla</i>        | OBL   | Large Canopy Tree      | T | N, S    | 8 |  | Scattered within its range                                |
| Quaking Aspen            | <i>Populus tremuloides</i>         | FAC   | Small Canopy Tree      | T | N       | 2 |  |   |
| American Plum            | <i>Prunus americana</i>            | UPL   | Small Understory Tree  | T | N, C, S | 4 |  | Also along riverbanks                                     |
| Black Cherry             | <i>Prunus serotina</i>             | FACU  | Small Canopy Tree      | T | N, C, S | 1 |  |   |
| Common Hop-tree          | <i>Ptelea trifoliata</i>           | FACU+ | Medium Shrub           | S | N, C, S | 4 |  |   |
| White Oak                | <i>Quercus alba</i>                | FACU  | Large Canopy Tree      | T | N, C, S | 5 |  |   |
| Swamp White Oak          | <i>Quercus bicolor</i>             | FACW+ | Large Canopy Tree      | T | N, C, S | 7 |  |   |
| Southern Red Oak         | <i>Quercus falcata</i>             | FACU- | Med.-Lg. Canopy Tree   | T | S*      | 5 |  | Far southern and southwestern counties                    |
| Shingle Oak              | <i>Quercus imbricaria</i>          | FAC-  | Medium Canopy Tree     | T | N, C, S | 3 |  |   |

### Herbaceous Riparian Vegetation

| Common Name                | Scientific Name                 | Size / Class    | Indicator |
|----------------------------|---------------------------------|-----------------|-----------|
| Hog-Peanut                 | <i>Amphicarpaea bracteata</i>   | herbaceous vine | FAC       |
| Ground-Nut                 | <i>Apios americana</i>          | herbaceous vine | FACW      |
| Panicked Aster             | <i>Aster lanceolatus</i>        | wildflower      | FACW      |
| Side-Flowering Aster       | <i>Aster lateriflorus</i>       | wildflower      | FACW-     |
| False Nettle               | <i>Boehmeria cylindrica</i>     | wildflower      | OBL       |
| Blue-Joint Grass           | <i>Calamagrostis canadensis</i> | grass           | OBL       |
| Emory's Sedge              | <i>Carex emoryi</i>             | sedge           | OBL       |
| Shoreline Sedge            | <i>Carex hyalinolepis</i>       | sedge           | OBL       |
| Lakebank Sedge             | <i>Carex lacustris</i>          | sedge           | OBL       |
| Larger Straw Sedge         | <i>Carex normalis</i>           | sedge           | FACW      |
| Hairy-Fruit Sedge          | <i>Carex trichocarpa</i>        | sedge           | OBL       |
| Fox Sedge                  | <i>Carex vulpinoidea</i>        | sedge           | OBL       |
| Wild or Streambank Chervil | <i>Chaerophyllum procumbens</i> | wildflower      | FAC+      |
| Wood-Reed                  | <i>Cinna arundinacea</i>        | grass           | FACW      |
| Honewort                   | <i>Cryptotaenia canadensis</i>  | wildflower      | FAC       |
| American Beakgrass         | <i>Diarrhena americana</i>      | grass           | FACU      |
| Wild Cucumber              | <i>Echinocystis lobata</i>      | herbaceous vine | FACW-     |
| Canada Wild Rye            | <i>Elymus canadensis</i>        | grass           | FAC-      |
| Virginia Wild Rye          | <i>Elymus virginicus</i>        | grass           | FACW-     |
| Riverbank Wild Rye         | <i>Elymus riparius</i>          | grass           | FACW      |
| Spotted Joe-Pye-Weed       | <i>Eupatorium maculatum</i>     | wildflower      | OBL       |
| Boneset                    | <i>Eupatorium perfoliatum</i>   | wildflower      | FACW+     |
| White Snakeroot            | <i>Eupatorium rugosum</i>       | wildflower      | FACU      |
| White Avens                | <i>Geum canadense</i>           | wildflower      | FAC       |
| Fowl Manna Grass           | <i>Glyceria striata</i>         | grass           | OBL       |
| False Sunflower            | <i>Heliopsis helianthoides</i>  | wildflower      | FAC-      |
| Bottlebrush Grass          | <i>Hystrix patula</i>           | grass           | FACU      |
| Orange Jewelweed           | <i>Impatiens capensis</i>       | wildflower      | FACW      |
| Yellow Jewelweed           | <i>Impatiens pallida</i>        | wildflower      | FACW      |
| Soft Rush                  | <i>Juncus effusus</i>           | rush            | OBL       |
| Wood Nettle                | <i>Laportea canadensis</i>      | wildflower      | FACW      |
| Rice Cut Grass             | <i>Leersia oryzoides</i>        | grass           | OBL       |
| White Grass                | <i>Leersia virginica</i>        | grass           | FACW      |
| Great Blue Lobelia         | <i>Lobelia siphilitica</i>      | wildflower      | FACW+     |
| American Bugleweed         | <i>Lycopus americanus</i>       | wildflower      | OBL       |
| Virginia Blue Bells        | <i>Mertensia virginica</i>      | wildflower      | FACW      |
| Hairy Sweet-Cicely         | <i>Osmorhiza claytonii</i>      | wildflower      | FACU      |
| Switch Grass               | <i>Panicum virgatum</i>         | grass           | FAC+      |
| Wild Blue Phlox            | <i>Phlox divaricata</i>         | wildflower      | FACU      |
| Clearweed                  | <i>Pilea pumila</i>             | wildflower      | FACW      |
| Green-Headed Coneflower    | <i>Rudbeckia laciniata</i>      | wildflower      | FACW+     |
| Three-Lobed Coneflower     | <i>Rudbeckia triloba</i>        | wildflower      | FAC-      |
| Clustered Black-Snakeroot  | <i>Sanicula odorata</i>         | wildflower      | FAC+      |
| Dark Green Bulrush         | <i>Scirpus atrovirens</i>       | bulrush         | OBL       |

|                    |                               |            |       |
|--------------------|-------------------------------|------------|-------|
| Wool-Grass         | <i>Scirpus cyperinus</i>      | bulrush    | OBL   |
| River Bulrush      | <i>Scirpus fluviatilis</i>    | bulrush    | OBL   |
| Drooping Bulrush   | <i>Scirpus pendulus</i>       | bulrush    | OBL   |
| Soft-Stem Bulrush  | <i>Scirpus validus</i>        | bulrush    | OBL   |
| Cup-Plant          | <i>Silphium perfoliatum</i>   | wildflower | FACW- |
| Late Goldenrod     | <i>Solidago gigantea</i>      | wildflower | FACW  |
| Prairie Cordgrass  | <i>Spartina pectinata</i>     | grass      | FACW+ |
| American Germander | <i>Teucrium canadense</i>     | wildflower | FACW- |
| Blue Vervain       | <i>Verbena hastata</i>        | wildflower | FACW+ |
| Wingstem           | <i>Verbesina alternifolia</i> | wildflower | FACW  |



State Revolving Fund Loan Program  
an Indiana Finance Authority Environmental Program

100 North Senate Avenue, Room 1275  
Indianapolis, Indiana 46204  
www.srf.in.gov

**James P. McGoff**  
Director of Environmental Programs  
(317) 234-2916  
jmcgoff@ifa.in.gov

**MEMORANDUM**

TO: Virginia Laszewski, Kenneth Westlake  
FROM: Amy Henninger, Indiana State Revolving Fund Loan Programs  
DATE: 3/7/2012  
RE: Upland, IN project information

Hello!

This project was previously submitted under a different appropriation. After those funds were rescinded the community has asked if they can utilize the remaining funds in their current grant for this project.

This project was submitted to the environmental authorities by the grantee prior to application to our offices as they were applying for Office of Community and Rural Affairs, Disaster Recovery Funds, which they did not receive. These projects were presented in two phases by the communities grant administrator (Amy Miller, Cornerstone Grants Management).

The provided document "env agency submissions" contains the projects as they were presented to the environmental review authorities and the resulting responses.

The project being utilized for match of this grant (SRF loan DW 05072701) . This project was submitted to the EPA for review and a final FNSI was issued July 30, 2007. If copies of this FNSI, the SRF EA or the previous submission to your office are required please contact me.

The workplan was submitted to the IFA and comments on both the environmental and technical were sent to the community. Responses were received 1/20 and follow up responses were received 3/7. These documents, including responses, are provided to you in the file "Upland Workplan". Upon response to comments technical approval by an SRF engineer was rendered. Please note that in the environmental response section of the workplan, storm sewer projects are mentioned that have been omitted from the project (noted in comments). After EPA's previous review of the provided information additional comments were sent to the community. Their response can be found in the file "Upland response to comments".

To summarize the project for your use and comply with our SERP and MOU with the EPA, our office has completed a project summary document and a document outlining the EID information. (file: Upland Project Summary)

For your use our office has drafted a FNSI and legal notice. Once your review is complete we will pursue public notice of this project and supply to you the dates of publication. Please note that at this time we post a legal notice to the local paper for two consecutive days and have all documentation available on our website ([www.in.gov/ifa](http://www.in.gov/ifa)) and at local repositories for the duration of the public notice period. ("draft legal notice", "draft NEPA EA Title page", "2011 DFONSI Title Page & "draft Upland NEPA FONSI")

Please contact me at 317-232-6566 with any questions or comments. I will relay your concerns to the grantee as necessary.

Thank you.





**Town of Upland, IN Special Appropriation**

Henninger, Amy to: Virginia Laszewski, Kenneth Westlake  
Cc: Steffanie Crossland

03/15/2012 02:54 PM

From: "Henninger, Amy" <AHENNING@ifa.IN.gov>  
To: Virginia Laszewski/R5/USEPA/US@EPA, Kenneth Westlake/R5/USEPA/US@EPA  
Cc: Steffanie Crossland/R5/USEPA/US@EPA

History: This message has been replied to.

**11 attachments**

-  photo of SW line from Workplan.pdf
-  Upland Workplan.pdf
-  EID comparison.doc
-  Upland Project Summary.pdf
-  Upland response to comments.pdf
-  draft Legal Notice.doc
-  draft NEPA EATitle page new.doc
-  2011 DFONSI Title Page new.doc
-  EID comparison.doc
-  Upland memo for EPA.doc
-  draft Upland NEPA FONSI.doc

Hello,

Attached please find the documentation for the Upland Indiana Special Appropriation addendum. This project visited you previously and you required that I amend my documentation to your new guidance documentation before it could be submitted. I've attempted to update everything and hope it will be acceptable. Please make any changes you need and send updated documents to me with information on legal notice when you are ready. Please feel free to contact me with any questions. It is my hope that the attached file "Upland memo for EPA" will assist you in navigating the attached documentation and the history of the project.

Thank you,

Amy Henninger  
Special Programs Coordinator  
Indiana Finance Authority  
317/232-6566  
100 N Senate Ave Rm 1275  
Indianapolis, IN 46204

2.d



Re: Town of Upland, IN Special Appropriation  
Virginia Laszewski to: Henninger, Amy  
Bcc: Virginia Laszewski

03/19/2012 12:30 PM

From: Virginia Laszewski/R5/USEPA/US  
To: "Henninger, Amy" <AHENNING@ifa.IN.gov>  
Bcc: Virginia Laszewski/R5/USEPA/US

Hi Amy,

I've reviewed the materials from your below email and have the following comments/questions/requests for additional information regarding the following:

1. PROJECT SUMMARY, IV. Estimated Project Costs, Affordability and Funding, B. 2nd paragraph, last two sentences (page 3 of 9): The second sentence implies that the July 30, 2007, EPA FNSI is associated with a drinking water project. Is this correct? It states here that a copy of the [July 30, 2007] EPA FNSI is attached. However, a copy was not attached (i.e., not included in your email). Please email me a copy of the July 30, 2007, FNSI, EA and a map/figure that depicts/labels the specific project areas associated with that July 30, 2007, FNSI.

2. PROJECT SUMMARY, V. Environmental Impacts of the Selected Alternative, a. Undisturbed Land (page 3 of 9): It is not clear which areas on the Exhibits are currently proposed Project Areas I, II, and/or III. It also appears that current proposed project areas do not necessarily correspond to the Project Areas I, II and III identified in earlier TRIAD correspondence (e.g., letter dated May 18, 2008) to USFWS and InDNR. Please provide me with revised Exhibit 2, Exhibit 3, Exhibit 4A, Exhibit 4B, Exhibit 4C, Exhibit 5, Exhibit 6 that clearly name and show the current proposed Project Area I, Project Area II, and Project Area III areas. Also, please insure that these figures have, at the very least, all the following street names clearly labeled on each figure: Bowen, Main, Washington, Bragg, Howard, Berry, Railroad, Urban, Anson, Grant, Reade, and Wright.

3. DRAFT FINDING OF NO SIGNIFICANT IMPACT, PROJECT (sentences 2, 3, and 5, page 1 ): Please identify which of these three project areas are the currently proposed Project Area I, Project Area II and Project Area III.

4. DRAFT FINDING OF NO SIGNIFICANT IMPACT, Analysis of Environmental Impact (5th paragraph, page 3): For this current proposal, what are the exact dates of each of the concurrence letters from the SHPO, USFWS, USDA and InDNR? It is not clear exactly what was sent to the SHPO for their concurrence. Please provide me with a complete packet of all the information for the current proposal that was sent to the SHPO for their review and concurrence.

Thank you,

Virginia Laszewski  
Environmental Scientist

US EPA, Region 5  
NEPA Implementation, OECA  
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Phone: (312) 886-7501  
Fax: (312) 697-2097  
email: laszewski.virginia@epa.gov

"Henninger, Amy" Hello, Attached please find the documentation fo... 03/15/2012 02:54:41 PM

From: "Henninger, Amy" <AHENNING@ifa.IN.gov>  
To: Virginia Laszewski/R5/USEPA/US@EPA, Kenneth Westlake/R5/USEPA/US@EPA  
Cc: Steffanie Crossland/R5/USEPA/US@EPA  
Date: 03/15/2012 02:54 PM  
Subject: Town of Upland, IN Special Appropriation

---

Hello,

Attached please find the documentation for the Upland Indiana Special Appropriation addendum. This project visited you previously and you required that I amend my documentation to your new guidance documentation before it could be submitted. I've attempted to update everything and hope it will be acceptable. Please make any changes you need and send updated documents to me with information on legal notice when you are ready. Please feel free to contact me with any questions. It is my hope that the attached file "Upland memo for EPA" will assist you in navigating the attached documentation and the history of the project.

Thank you,

Amy Henninger  
Special Programs Coordinator  
Indiana Finance Authority  
317/232-6566

100 N Senate Ave Rm 1275

Indianapolis, IN 46204 [attachment "photo of SW line from Workplan.pdf" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "Upland Workplan.pdf" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "EID comparison.doc" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "Upland Project Summary.pdf" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "Upland response to comments.pdf" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "draft Legal Notice.doc" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "draft NEPA EATitle page new.doc" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "2011 DFONSI Title Page new.doc" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "EID comparison.doc" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "Upland memo for EPA.doc" deleted by Virginia Laszewski/R5/USEPA/US] [attachment "draft Upland NEPA FONSI.doc" deleted by Virginia Laszewski/R5/USEPA/US]



**RE: Town of Upland, IN Special Appropriation**  
Henninger, Amy to: Virginia Laszewski

03/22/2012 01:16 PM

From: "Henninger, Amy" <AHENNING@ifa.IN.gov>  
To: Virginia Laszewski/R5/USEPA/US@EPA

12 attachments

     
SRF Upland DW project.pdf Upland original project.pdf env agency submissions.pdf draft Upland NEPA FONSI.doc  
       
REV-Exhibit 2.pdf REV-Exhibit 4A.pdf REV-Exhibit 4B.pdf REV-Exhibit 4C.pdf REV-Exhibit 5.pdf REV-Exhibit 6.pdf  
   
REV-Exhibit 8.pdf Upland Project Summary update.pdf

Hello Virginia!

Thank you for your review. I will try and respond to these as completely as possible. There are quite a few attachments to this e-mail (12). Please confirm receipt so I know everything made it through to you.

1. The original project was submitted as a wastewater project. However, the Town is meeting their required match with a separate drinking water project. I've attached the SRF Upland EA showing the match project and the original environmental section of the project file showing the completed project (2 files).
2. I've updated the project summary to clarify the "project areas". The Town's engineer's have updated the graphics and provided some beautiful color graphics this time. I'm hoping this will help clarify the projects for you. I assume asking for the label of Bowen, Bragg and Howard is from the letters to the environmental review authorities. As I state in the memo included in the workplan, two of the stormwater projects Bragg/Howard project and the Bowen/ Washington projects have been dropped by the town. This information is only included because it was vetted along with Project Area II.
3. This section is updated in the attached document.
4. This information is included in the document "env agency submission" that was with the original submission but apparently didn't make the transfer to the second submission.

Thanks again, I hope this information helps.

Amy

From: Virginia Laszewski [mailto:Laszewski.Virginia@epamail.epa.gov]  
Sent: Monday, March 19, 2012 1:31 PM  
To: Henninger, Amy  
Subject: Re: Town of Upland, IN Special Appropriation

Hi Amy,

I've reviewed the materials from your below email and have the following comments/questions/requests for additional information regarding the following:

1. PROJECT SUMMARY, IV. Estimated Project Costs, Affordability and Funding, B. 2nd paragraph, last two sentences (page 3 of 9): The second sentence implies that the July 30, 2007, EPA FNSI is associated with a drinking water project. Is this correct? It states here that a copy of the [July 30, 2007] EPA FNSI is attached. However, a copy was not attached (i.e., not included in your email). Please email me a copy of the July 30, 2007, FNSI, EA and a map/figure that depicts/labels the specific project areas associated with that July 30, 2007, FNSI.

2. PROJECT SUMMARY, V. Environmental Impacts of the Selected Alternative, a. Undisturbed Land (page 3 of 9): It is not clear which areas on the Exhibits are currently proposed Project Areas I, II, and/or III. It also appears that current proposed project areas do not necessarily correspond to the Project Areas I, II and III identified in earlier TRIAD correspondence (e.g., letter dated May 18, 2008) to USFWS and InDNR. Please provide me with revised Exhibit 2, Exhibit 3, Exhibit 4A, Exhibit 4B, Exhibit 4C, Exhibit 5, Exhibit 6 that clearly name and show the current proposed Project Area I, Project Area II, and Project Area III areas. Also, please insure that these figures have, at the very least, all the following street names clearly labeled on each figure: Bowen, Main, Washington, Bragg, Howard, Berry, Railroad, Urban, Anson, Grant, Reade, and Wright.

3. DRAFT FINDING OF NO SIGNIFICANT IMPACT, PROJECT (sentences 2, 3, and 5, page 1): Please identify which of these three project areas are the currently proposed Project Area I, Project Area II and Project Area III.

4. DRAFT FINDING OF NO SIGNIFICANT IMPACT, Analysis of Environmental Impact (5th paragraph, page 3): For this current proposal, what are the exact dates of each of the concurrence letters from the SHPO, USFWS, USDA and InDNR? It is not clear exactly what was sent to the SHPO for their concurrence. Please provide me with a complete packet of all the information for the current proposal that was sent to the SHPO for their review and concurrence.

Thank you,

Virginia Laszewski  
Environmental Scientist

US EPA, Region 5  
NEPA Implementation, OECA  
77 W. Jackson Blvd. (mail code: E-19J)  
Chicago, IL 60604-3590  
Phone: (312) 886-7501  
Fax: (312) 697-2097  
email: laszewski.virginia@epa.gov

"Henninger, Amy" ---03/15/2012 02:54:41 PM---Hello, Attached please find the documentation for the Upland Indiana Special Appropriation addendum.

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Laszewski/R5/USEPA/US]



**Upland Project Summary, update**  
Henninger, Amy to: Virginia Laszewski

03/26/2012 12:58 PM

From: "Henninger, Amy" <AHENNING@ifa.IN.gov>  
To: Virginia Laszewski/R5/USEPA/US@EPA

1 attachment



Upland Project Summary update.pdf

Hello!

Attached is the updated project summary, I hope this is clearer.

Thanks,

Amy Henninger  
Special Programs Coordinator  
317/232-6566  
100 N Senate Ave Rm 1275  
Indianapolis, IN 46204