



Environmental
Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

April 25, 2012

FINDING OF NO SIGNIFICANT IMPACT
TO ALL INTERESTED CITIZENS, ORGANIZATIONS,
AND GOVERNMENT AGENCIES

City of Defiance
Richland Township Sanitary Sewer Improvements Project

WPCLF Loan No.: CS390305-0019

The purpose of this notice is to seek public input and comments on Ohio EPA's preliminary decision that a Supplemental Environmental Study is not required to implement the recommendations discussed in the attached Environmental Assessment of a wastewater facilities plan submitted by the municipality mentioned above.

How were environmental issues considered?

The Water Pollution Control Loan Fund program requires the inclusion of environmental factors in the decision-making process. Ohio EPA has done this by incorporating a detailed analysis of the environmental effects of the proposed alternatives in its review and approval process. Environmental information was developed as part of the facilities plan, as well as through the facilities plan review process and during site inspections. The Agency's preliminary Environmental Assessment found that the project does not require the preparation of a Supplemental Environmental Study.

Why is a Supplemental Environmental Study not required?

Our environmental review concluded that significant environmental impacts will not result from the action. Any adverse impacts have either been eliminated by changes in the facilities plan or will be reduced by the implementation of the mitigative measures discussed in the attached Assessment.

How do I get more information?

A map depicting the location of the project is included as part of the Environmental Assessment. The Environmental Assessment presents additional information on the project, alternatives that were considered, impacts of the action and the basis for our decision. Further information can be obtained by calling or writing the contact person listed in the back of the Environmental Assessment.

How do I submit comments?

Any comments supporting or disagreeing with this preliminary decision should be submitted to me at the letterhead address. We will not take any action on this facilities plan for 30 calendar days from the date of this notice in order to receive and consider any comments.

What happens next?

In the absence of substantive comments during this period, our preliminary decision will become final. The municipality will then be eligible to receive loan assistance from this agency.

Please bring any information that you feel should be considered to our attention. We appreciate your interest in the environmental review process.

Sincerely,



Gregory H. Smith, Chief
Division of Environmental &
Financial Assistance

GHS//TW

Attachment

Environmental Assessment

A. Project Identification

Name: City of Defiance
Richland Township Sanitary Sewer Improvements

Address: 631 Perry Street
Defiance, OH 43512

WSRLA No: 390305-0019

B. Proposed Project

1. Summary

The City of Defiance has requested approximately \$2,599,905 from the Ohio Water Pollution Control Loan Fund (WPCLF) for construction of new sanitary sewers to provide sanitary sewer service in the vicinity of the triangle formed by Dohoney Road, Standley Road and Defiance-Ayersville Road, the area of Dohoney Road south of Defiance-Ayersville Road and in the area of Defiance-Ayersville Road southeast toward the intersection of Fullmer and Shindler roads. This area was recently annexed into the City of Defiance.

The proposed sanitary sewers will eliminate approximately 84 household sewage treatment systems. Ohio EPA issued Findings and Orders as a result of Defiance County Health Department's testing of Preston Run and local ditches in the area. The unsanitary conditions that were identified are due primarily to the small lot sizes, very poor percolation rate of the soils, and possible high ground water conditions.

The City of Defiance plans to install approximately 14,500 lineal feet of gravity sewer, 3,000 lineal feet of force main, 3 pump stations, and all necessary appurtenances. Wastewater treatment will be provided by the City of Defiance Wastewater Treatment Plant (WWTP).

No significant primary or secondary adverse impacts should result from the installation of the proposed sanitary sewer improvements project. Most of the alignments for the proposed sanitary sewer lines are located in the road ways and road rights-of-way of the service area. The proposed sewer is to be constructed by a combination of open-cut excavation and jack and bore construction methods. The alignment will cross Preston

Run once, using the directional boring trenchless technology. At the stream crossing, as well as all parts of the alignment where there is a potential for erosion or release of sediment to surface water, contractors will be required to follow designated measures (which are included in project documents) to protect surface waters. In addition, any future development in the City of Defiance/Richland Township area should be consistent with current land use and not due to the planned sanitary sewer improvements. Please see the "Environmental Impact of the Proposed Project" section for more details.

Much of the construction will occur in previously-disturbed areas. Besides its potential effects on local streams, adverse environmental impacts associated with the proposed construction of the sanitary sewer improvements project could include temporary increases in noise, dust, and erosion. Staged construction and site restoration, proper equipment maintenance, strict adherence to erosion control measures, and prompt site stabilization should help minimize these potential impacts. Local traffic disruption may also occur during construction work along road ways and road rights-of-way. See the "Environmental Impacts" section of this document for a more detailed discussion of potential impacts to local resources.

The elimination of the aforementioned on-lot disposal systems will reduce the potential for human health problems and adverse water quality impacts to Preston Run and the Maumee River. Over the long term, eliminating effluent from on-lot disposal systems should also help improve the quality of local ground water and local drainageways.

2. Project History and Existing Conditions

The Defiance County Board of Health investigated and sampled three locations in the Defiance-Ayersville Road and Dohoney Road area in 2002 and confirmed the presence of unsanitary conditions, and turned the area over to Ohio EPA. At the time of testing, the area was outside the Ayersville Water and Sewer District (AWSD) boundaries. Due to the unsanitary conditions, the area was added to AWSD. As a result, Ohio EPA investigated the conditions and confirmed the presence of unsanitary conditions, so Finding and Orders were issued to AWSD in January 2006. At that time, the area was still in AWSD. Subsequently, residents in the area petitioned the City of Defiance to become part of Defiance, and in February 2010, the area was accepted into the City by annexation.

All 84 residences in the area covered by the Findings and Orders rely upon on-site treatment systems (septic tanks) for treatment and disposal of wastewater. The population of Defiance's current service area is 16,494. The population of the Richland Township area being evaluated for possible sewer service is 218. Figure 1 shows the study area.

3. Discussion of Alternatives

The evaluation of wastewater treatment alternatives was intended to identify the cost-effective method for meeting the water quality and public health needs of the proposed service area. The identification and evaluation of alternatives was based on a number of factors including condition and availability of existing wastewater systems, topography and drainage patterns of the planning area, expected wastewater flows, wastewater characteristics, various environmental factors, and costs.

The following evaluation was performed to help address the wastewater needs in Defiance's proposed Richland Township service area:

A. No-Action

The "No Action" alternative is not considered feasible, due to the failing on-site septic systems within the area. If nothing is done, the failure of these systems will continue to degrade the water quality of the streams and rivers that are also located within the area, along with posing an on-going health threat. This area has a history of household sewage related problems. Given this on-going problem, the "No-action" alternative (i.e., leaving things the same as they are now) would not address the identified wastewater needs of the area, and thus was eliminated from further consideration. In addition, the City does not allow on-lot septic systems.

B. Conventional gravity sewers and force mains

This alternative involves the use of typical gravity-flow sewers and pump station force mains to collect and transport the service area wastewater to a treatment facility. Gravity sewers usually require moderate-to-deep excavations, but relatively little ongoing maintenance. This alternative eliminates septic tanks and leach fields, and replaces them with small diameter laterals that connect buildings to the main sewer. Gravity sewer systems are generally the most reliable and economical means of conveying wastewater, as operation and maintenance costs are generally minimal over the lifetime of the system. While environmental impacts may be slightly more during the construction phase, as a result of deeper and wider trenches, gravity sewers generally are not considered to have significant, long-term impacts. Most land disturbed for construction can be restored to preconstruction contours and, often, preconstruction uses.

C. Low-pressure sewers with grinder pumps

This alternative involves installation of relatively shallow sewers that use grinder pumps to push wastewater from individual homes and businesses, through variable terrain, to a wastewater treatment facility. The City of Defiance does not typically utilize grinder pumps with low-pressure force mains as a means for collecting wastewater due to

relatively high maintenance costs.

4. Description of the Selected Alternative

Alternative B, conventional gravity sewers and force mains, was selected for implementation based on lower long term maintenance costs and the reliability of gravity sewers with pump stations and force mains. The selected alternative includes the construction of conventional gravity sewers and force mains for the proposed service area. The proposed project consists of the installation of approximately 1,670 linear feet of 10-inch diameter gravity sewer, 12,806 linear feet of 8-inch diameter gravity sewer, 579 lineal feet of 4-inch diameter force main, 2407 lineal feet of 2-inch diameter force main, 51 sanitary sewer manholes, 84 residential service connections, and 3 force main pump stations.

Pump station number 1 will be located on Dohoney Road, south of Defiance-Ayersville Road approximately 1,500 feet. Pump station number 2 will be located on Dohoney Road, north of Defiance-Ayersville Road approximately 1,650 feet, and pump station number 3 will be located on Defiance-Ayersville Road approximately 1,600 feet northwest of Dohoney Road. (See Figure 1)

All construction will take place in the existing road way and road right-of-way along Dohoney Road, Standley Road, Defiance-Ayersville Road, Barlow Court, Woodlawn Drive, Shamrock Lane, Zimmerman Court, and Edgewood Drive, all of which have been previously disturbed in the form of ditch maintenance. Residents are responsible for lateral installation from their homes to the service connection in the road right-of-way.

An estimated 84 sewer connections will be served by the proposed project. The proposed improvements will help eliminate the numerous malfunctioning on-lot treatment systems in the service area, thereby eliminating surface water pollution and the unsanitary conditions that create a potential public health hazard in the area streams and rivers.

5. Implementation of Selected Alternative

Construction of the proposed Richland Township Sanitary Sewer Improvements project is scheduled as follows:

Advertise for Bids -----	February 3, 2012
Open Bids -----	February 21, 2012
Start Construction-----	June 2012
Complete Construction -----	September 30, 2013
Complete Site Restoration-----	Fall 2013

The City of Defiance's estimated cost for the Richland Township Sanitary Sewer

Improvements project is \$2,599,905, which the City plans to fund through a WPCLF loan. Please see the "Local Economy" section of this document for more information on the project costs.

C. Environmental Impact of the Proposed Project

A wide variety of environmental resources can potentially be impacted adversely by construction such as that proposed for the Richland Township Sanitary Sewer Improvements project. Therefore, Ohio EPA conducted an environmental review of the proposed project in order to help determine its eligibility for WPCLF loan assistance. This review examined both known and anticipated environmental impacts associated with completion of the proposed sanitary sewer project. The results of the environmental review are discussed below.

Construction of the proposed sanitary sewers and related appurtenances will take place primarily in previously-disturbed areas in the road and road right-of-way. The disturbed areas will be regraded after construction to ensure proper drainage. Contours of the area will not change and completion of the project should not result in any significant adverse land form changes.

The proposed project could affect the following attributes:

1. Terrestrial Habitat and Wildlife

Through coordination with the Ohio Department of Natural Resources' (ODNR) Division of Wildlife and the US Fish and Wildlife Service, it was determined the project lies within the range of two federally-listed endangered species, the clubshell mussel and the Indiana bat; one threatened species, the copperbelly water snake; and one candidate species, the eastern massasauga rattlesnake.

ODNR, from its Natural Heritage Data Base Records of rare and endangered species previously found within the area, also identified the following state-threatened species as possibly still being present in the proposed project area:

- bushy horseweed
- western rock-jasmine
- few-sedge weed

Additionally, the following potentially-threatened species may exist in the project area:

- hairy penweed
- St. John's wort
- prairie iron weed

The species identified above, if present within the project area, should not be adversely

impacted due to location of the proposed collection lines in the road and road rights-of-way, limited vegetation clearing being required, and all potential stream crossings being bored, further minimizing impacts.

The proposed pump stations will not affect these species either, again due to the construction locations being adjacent to the road and in road rights-of-way.

Potential summer habitat for the federally-listed Indiana bat was identified as a concern, and a field assessment was conducted to determine if suitable habitat was present in the project area. The field assessment resulted in a determination that trees with potentially suitable Indiana bat roosting habitat were present, and that the trees could either be avoided during project construction, or not cut from April 1 through September 30. A total of only four trees may need to be removed; however, tree avoidance will take precedence, if possible.

There are no national or state parks, or national monuments, within the project area. The Maumee River, which is located in the vicinity of the proposed project, is a State Scenic and Recreational River. The project area contains no unique ecological sites, geological features, state nature preserves, state parks, or wildlife areas within or adjacent to it. The project is not expected to adversely impact significant local woodlands or wildlife populations because construction activity is predominately taking place in previously-disturbed lawns, road ways, road rights-of-way, and limited agricultural land along the road rights-of-way. Thus, no significant adverse impacts to terrestrial habitat or wildlife expected as a result of this project.

2. Surface Water and Aquatic Habitat

The Richland Township Sanitary Sewer Improvements service area is located along Preston Run, a tributary of the Maumee River. The proposed project will not directly affect the Maumee River, since none of the components of the project will be constructed near the river. As mentioned above, the Maumee River is a State Scenic and Recreational River. The water quality of this surface water has been negatively impacted by the discharge of untreated and partially-treated sewage. Studies conducted over the years by the Defiance County Health Department and Ohio EPA confirmed these findings. Once the proposed sanitary sewer collection system is completed and residents are tied in, there will be a reduction in pollutants going into Preston Run, also reducing the impacts to aquatic life and eliminating a potential human health threat locally and downstream in the Maumee River.

No construction activities will encroach upon the riparian areas of Preston Run or the Maumee River. All stream crossings for the proposed sewer lines will be installed by directional boring or other trenchless technologies. Some tributary streams could be temporarily impacted by runoff from general project construction, but these impacts will be short-term and controlled by use of prescribed best management practices (BMPs).

The mitigative measures to be used during construction to avoid adverse impacts to the surface waters in the area are as follows: Areas of exposed soil will be limited to the immediate work sites. All stockpiles of topsoil and other erodible materials will be surrounded by silt barriers, covered, or temporarily seeded to prevent or contain erosion and sedimentation. All construction debris and excavated materials will be disposed of in an environmentally-sound manner, and will not be piled adjacent to or in drainage ways, waterways, wetlands, floodplains, or on steep slopes. Any dewatering will provide for adequate settling or filtration prior to discharging flows to storm drains or waterways. Erosion and sedimentation runoff will also be minimized through compliance with ODNR's Manual of Rainwater and Land Development.

With use of the above construction mitigation, including minimizing land disturbance, no significant short- or long-term, direct or indirect impacts are expected to occur to surface waters or aquatic habitats as a result of the proposed project.

3. Ground Water

Domestic water supply in the service area comes from both private on-site wells and a central water service operated by the City of Defiance. There are no sole-source aquifers located in the project area. The proposed project will have no adverse impact on ground water quality in the area. Due to the small lot sizes and seasonally high water table in the residential area, it is possible that failing septic systems with inadequate leach fields are presently contributing to ground water contamination. The proposed project will eliminate this problem.

Construction activities associated with this project are not expected to result in ground water contamination, or depletion of ground water supplies. Construction trenches will only be open for short periods of time, limiting both the exposure of ground water to potential contaminants and the amount of any dewatering activity that may be required. If sewer trench dewatering is needed, it will be short-term and should not result in any permanent impacts on domestic water supply systems. Thus, no adverse environmental impacts to ground water should result from this project.

4. Land Use, Agriculture, Secondary Development

Land use in the project area is primarily agricultural, with some scattered and clustered residential, and some commercial establishments. According to the Maumee Valley Planning Organization (MVPO), population growth in the study area is expected to be about 70 people over the next 20 years. It is anticipated that growth in the project area will follow a pattern similar to the rest of the City of Defiance, and in Richland and Highland townships. The project area presently contains approximately 84 residences.

The proposed sewer system project will be serving the existing developed area, and sized to accommodate the projected twenty-year needs of the project area. This public

wastewater infrastructure is not expected to stimulate additional development or loss of farmland, but some development could occur from infilling along the roads where sanitary sewer service is available.

Based on MVPO's growth projections, significant secondary (indirect) development in the area due to project implementation is not anticipated. Thus, significant short- or long-term adverse development impacts, including loss of farmland, are not expected as a result of the proposed project.

5. Floodplain and Wetlands

The proposed sewer line work does not cross any floodplain areas except for a 90-foot section of collection line on Dohoney Road about 300 feet north of Woodlawn Drive. (this is the only element of the proposed project that crosses the 100-year floodplain of Preston Run). The proposed project will have no long-term effect on the floodplain, as the collection lines that are within the floodplain are to be constructed underground, and the surface will be restored to pre-construction conditions.

The National Wetland Inventory Map indicates that numerous wetlands are present within the proposed project service area. None of the proposed pump stations will be located in or near wetlands. Construction of the collection lines should not have a significant impact on wetlands, as all wetlands along the collection line routes are shown on the plans and specifications and no collection lines are located in wetlands.

Preston Run and its tributaries will be crossed with the proposed collection lines. All of these crossings will be made by directional drilling to minimize the impact on the waterways and any nearby wetlands.

6. Archaeological and Historical Resources

According to the Ohio Historic Preservation Office's (OHPO) On-line Mapping, there are no archaeological sites or historic structures in the project area. The On-line Mapping did identify two, Phase 1 Cultural Resources Reconnaissance Surveys of the proposed Ayersville-Pleasant Bend Roadway Widening Project (DEF-CR27-0.77, PID 75623) in Richland and Highland townships. However, no sites were found in the project area.

Therefore, OHPO has completed a review of the proposed construction and concluded that no properties included on or eligible for listing on the National Register of Historic Places will be affected. It was further determined that no archaeological survey would be necessary for the proposed project area. Ohio EPA concurs with these findings. However, if during the course of construction evidence of deposits of historical or archaeological interest are found, operations affecting the find will cease and the State Historic Preservation Officer will be notified. Work will not resume until a survey of the find and a determination of value has been made, and Ohio EPA authorizes construction

to continue.

7. Air Quality

Defiance County is in attainment with all federal air quality pollutant standards. Pollutants monitored for air quality are: ozone, particulates, sulfur dioxide, nitrogen oxide, lead, and carbon monoxide. The proposed project will result in a temporary increase of dust and fumes from construction activities; however, the contractor(s) will take appropriate measures (such as spraying exposed soil with water) to control fugitive dust during construction, and is to provide appropriate emission controls for all equipment, so any such impacts should be short-term and insignificant. There will be no new sources of air pollution created as a result of sewer system installation, so there are no long-term adverse impacts to air quality associated with the proposed project.

8. Noise, Traffic, and Aesthetics

While noise levels in the project area will be affected by the operation of equipment during construction, the impact of these activities will be short-term. Vehicles and equipment will be operated in such a way as to minimize noise to the greatest degree practicable, including limiting hours of operation. Therefore, noise resulting from the operation of earthmoving, trenching, and other construction equipment should not result in any significant adverse environmental impacts.

The proposed project involves excavation of streets and other public rights-of-way for sewer installation, so some temporary, short-term traffic disruption is likely. However, effective mitigative measures will be put in place to ensure maintenance of traffic flow, access for residents to their properties, and emergency vehicle access at all times. Only one side of the road shall be closed in any one work zone. Areas disturbed during construction will be restored by repaving or reseeding, as appropriate, so no long-term adverse impact on traffic should result from this project.

No major recreational features, designated natural areas, or parks are located within the project area. Except for the pump station, the collection system will be located entirely underground and, thus, will not adversely affect the aesthetics of the area.

9. Local Economy

The estimated total project cost of the City of Defiance's Richland Township Sanitary Sewer Improvements project is \$2,599,905. The City anticipated borrowing the full amount of \$2,599,905 from the WPCLF at the hardship interest rate of 0.0%.

The annual median household income (MHI) for the City of Defiance according to the most recent (2000) census information was \$41,670. Sewer rates have been increasing over the years to keep up with the wastewater infrastructure needs. The City of Defiance enacted a 5-year graduated annual rate increase for 2010 through 2015 to

help meet the costs of the planned combined sewer overflow separation work. Currently, a typical residential customer who utilizes 1037 cubic feet of water monthly is paying \$73.70 per month (\$884.40 per year). This user charge is 2.1% of the MHI income, which is generally considered to be within the upper range of affordability guidelines.

In addition to the above city-wide monthly user costs, the homeowners in the proposed project area will receive an assessment estimated at \$25,000, that can be added to the property tax and paid over a 20-year period at 0.0% interest. Residents can also opt to pay in full up front to keep assessments off their property taxes. In addition, there will be costs to install an average service line from the street to the house, plus the cost to abandon an existing septic tank, which is usually between \$2,500 to \$3,500, though some properties may be higher. The homeowner is responsible for hiring a licensed contractor to install the service line and to properly abandon the septic tank.

D. Public Participation

The residents of the project area held several meetings before petitioning the City of Defiance requesting annexation. The City of Defiance held several Council meetings where annexation of the project area was discussed and finally voted on. Annexation was approved on February 4, 2010.

The City of Defiance also held several public meetings with Ayersville Water and Sewer District and the residents of the project area to discuss project costs and assessments. Approximately 80-90 residents attended these meetings. No assessment hearings were required: assessment hearings are required only if a resident appeals their assessment, which apparently did not occur.

In addition, the City of Defiance holds regular council, open to the public, where the proposed Richland Township Sanitary Sewer Improvements project was discussed and voted on. The information presented at the Council meetings identified the reasons for undertaking the proposed project, how the project would be constructed and operated, the costs involved with construction of the proposed project, sources of funding, and the expected cost to system users as a result of implementing the proposed project.

Many articles have appeared in *The Crescent-News* newspaper during the annexation, planning, and design period, providing information and further opportunity for public notification and involvement in the planning process. To Ohio EPA's knowledge, no significant opposition to the proposed Richland Township Sanitary Sewer Improvements project was expressed at any of the meetings, or at any other time.

The following agencies have reviewed the proposed project:

- Ohio EPA, Division of Environmental and Financial Assistance
- Ohio Department of Natural Resources
- Ohio Historic Preservation Office

- Maumee Valley Local Clearinghouse

No significant adverse comments have been received regarding the proposed project, and there appears to be no local controversy about it.

E. Reasons for a Preliminary Finding of No Significant Impact

Based on Ohio EPA's review of the planning information and the material presented in this Environmental Assessment, it is concluded that there will be no significant adverse impacts from the proposed project as it relates to the environmental features discussed previously.

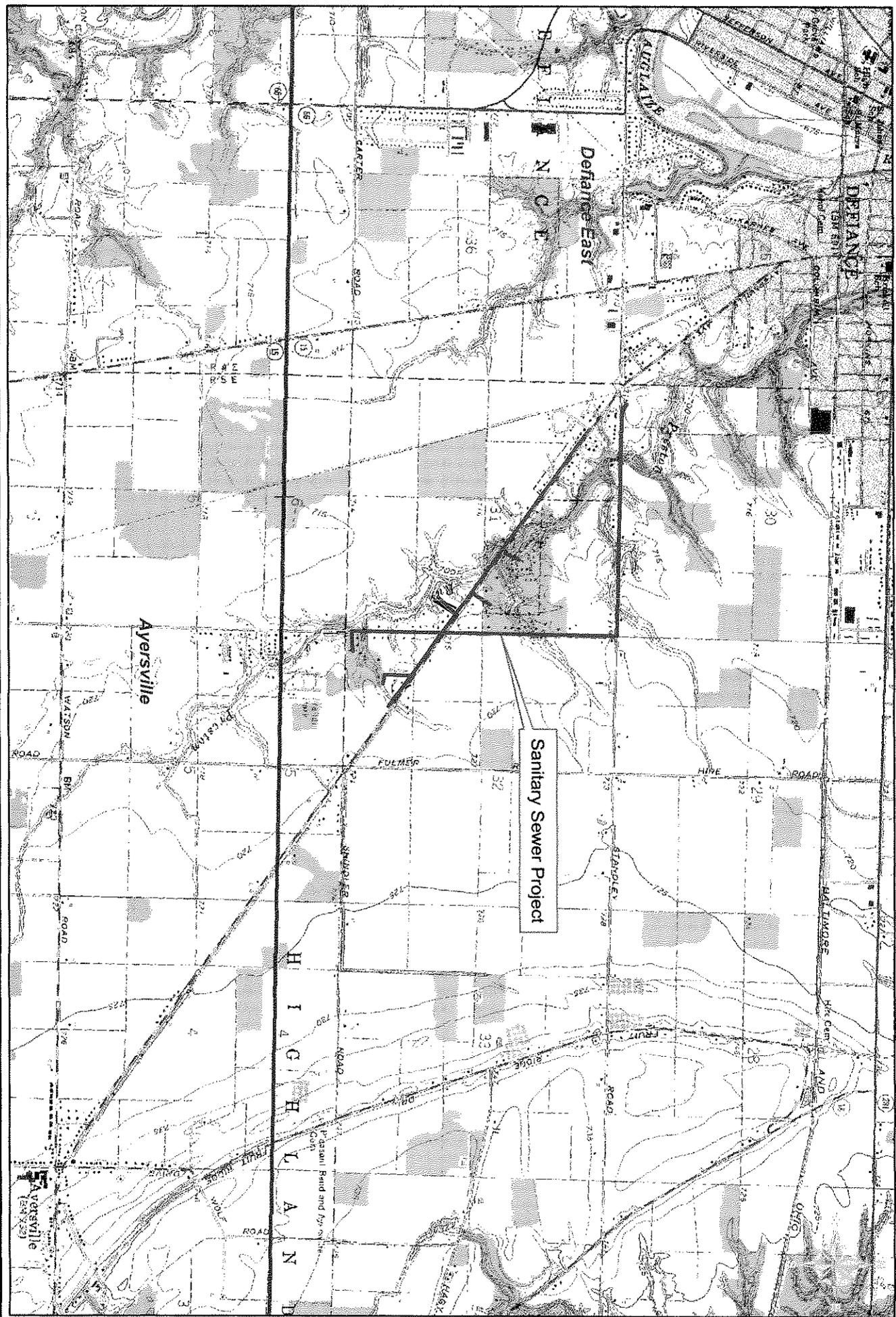
Through avoidance of environmentally-sensitive areas and the use of the mitigative measures outlined in this document, the impacts from construction activities should be generally short-term and insignificant. No secondary (indirect) impacts are anticipated, as any future development in and around City of Defiance/Richland Township should be consistent with current land use and not due to the planned sanitary sewer improvements, which are being undertaken in response to the Findings and Orders issued from Ohio EPA.

The environmental benefits resulting from this project include water quality improvement in local streams and ditches including Preston Run and the Maumee River, and the elimination of a potential human health threat for failing home sewage treatment systems.

F. Questions or Comments

For further information, contact:

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Defiance East Quad

4,500



Feet

City of Defiance Riahland Twp.
Sanitary Sewer Improvements