December 6, 2023

Preliminary Finding of No Significant Impact
To All Interested Citizens, Organizations, and Government Agencies

City of Hillsboro – Highland County
2023 Water System Improvements
Loan Number: FS390054-0023
Roberts Lane Extension Critical Infrastructure
Loan Number: CS390450-0026

The attached Environmental Assessment (EA) is for two projects in Hillsboro which the Ohio Environmental Protection Agency intends to finance through its Water Supply Revolving Loan Account (WSRLA) and Water Pollution Control Loan Fund (WPCLF) below-market interest rate revolving loan programs. The first project entails water system improvements, while the second includes sanitary sewer and storm sewer extensions on the northwest side of the city. The EA describes the projects, their costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the city's two projects and their associated growth aspects. Making available this EA and seeking your comments fulfills Ohio EPA's environmental review and public notice requirements for these two loan programs.

Ohio EPA analyzes environmental effects of proposed projects as part of both its WSRLA and WPCLF program review and approval processes. We have concluded that the proposed projects should not result in significant adverse environmental impacts. More information can be obtained by contacting the person named at the end of the attached EA.

Any comments on our preliminary determination should be sent to the email address of the contact named at the end of the EA. We will not act on these two projects for 30 calendar days from the date of this notice. In the absence of substantive comments during this period, our preliminary decision will become final. After that, the City of Hillsboro can then proceed with its application for both Ohio EPA loan programs.

Sincerely,

Kathleen Courtright

Kathleen Courtright, Assistant Chief
Division of Environmental & Financial Assistance

Attachment

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ENVIRONMENTAL ASSESSMENT

Project Identification

Projects: 2023 Water System Improvements
Roberts Lane Extension Critical Infrastructure

Applicant: City of Hillsboro
130 North High Street
Hillsboro, Ohio 45133

Loan Numbers: FS390450-0022 and CS390450-0026

Project Summary

The City of Hillsboro has requested funding from Ohio EPA's Water Supply Revolving Loan Account (WSRLA) and Water Pollution Control Loan Fund (WPCLF) programs.

The city has requested $743,167 from the WSRLA program to finance the 2023 Water System Improvements project. This proposed project will loop dead end lines at Roberts Lane, Fenner Avenue, and Fairgrounds Road and make necessary repairs to aging lines. This will improve the volume and pressure of the current water service in the area and prepare for future development.

The city has also requested $4 million from the WPCLF program to finance the Roberts Lane Extension Critical Infrastructure project. This project will extend Roberts Lane sanitary and storm sewer service which will open up about 73 acres of land for development in the northwest section of Hillsboro. As a result of the infrastructure improvements, the land around the extension of Roberts Lane and other streets recently built will be open to residential and commercial development.

History & Existing Conditions

Hillsboro is a mid-sized city located in Highland County near the headwaters of Clear Creek. The population is 6,471.

Water Service. Hillsboro owns and operates its own water treatment, storage, and distribution system and provides roughly 800,000 gallons of water per day (gpd) to users within the city. Hillsboro's water comes entirely from surface water sources, including Clear Creek, the Selph Reservoir, and the Liberty Park Reservoir. Hillsboro's distribution system consists of nearly 255,000 feet of 4-inch through 16-inch water mains that date back as far as the 1920s. Currently, Hillsboro is experiencing water loss due to deterioration and failing of mains, particularly in the older sections of its system.

Wastewater Service. Hillsboro owns and operates its own wastewater treatment plant (WWTP), storm sewers, and sanitary sewer system, and treats about 1.5 million gallons per day (mgd). Hillsboro's treated wastewater is discharged to Clear Creek, an exceptional warmwater habitat stream that is within the Paint Creek watershed. The village's wastewater collection system consists of 32.8 miles (173,000 linear feet) of sanitary sewers which convey flows north to its WWTP located near Clear Creek.

Population and Flow Projections

The average daily flow at the Hillsboro WWTP is 1.5 mgd. Peak flow pumping capacity is 11 mgd. Therefore, there is sufficient capacity for future development.

The City of Hillsboro's flow projections are shown in the following table:

EXHIBIT ES-4
CITY OF HILLSBORO
WASTEWATER FLOW PROJECTIONS (MGD)

Condition	Existing	2011	2016	2021	2026
Avg Dry Weather Flow	764,000	801,000	860,000	922,000	990,000
Avg Daily Flow	1,100,000	1,150,000	1,240,000	1,330,000	1,420,000
Peak 30-Day Avg Flow	2,190,000	2,290,000	2,469,000	2,648,000	2,840,000
Peak Daily Flow	6,837,000	7,148,000	7,707,000	8,266,000	8,826,000

Notes:
1. Existing flows based on statistical analysis of plant flows during the period 2004-5.
2. Existing dry weather flow obtained from, *City of Hillsboro Wastewater Facilities Plan 2004-2024.*

Alternatives

Water Lines. Considering the problem defined by the city in its planning document, there are only two options that are available to address the current conditions of the water system. These include leaving the system as is and continue to deal with water line problems or loop the water line and address the existing needs of the city, while also providing capacity to serve about 70 acres of developable land. On this basis, a no-action option is not feasible, and the only approach is to loop the water line as shown in Figure 1. In so doing, the city will be able to provide for the future needs of its customers into the future.

Sanitary Sewer. Considering the problem defined by the city in its planning document, there are two options that are available to address the city's interest in developing the property it recently acquired for commercial and mixed land uses. These include ether a no-action option or installing a new sanitary sewer system with enough future capacity to serve about 70 acres of developable land. On this basis, a no-action option is not feasible, and the only approach is to install sanitary and storm sewers as shown in Figure 1 below. In so doing, the city will be able to provide for the future needs of its customers into the future.

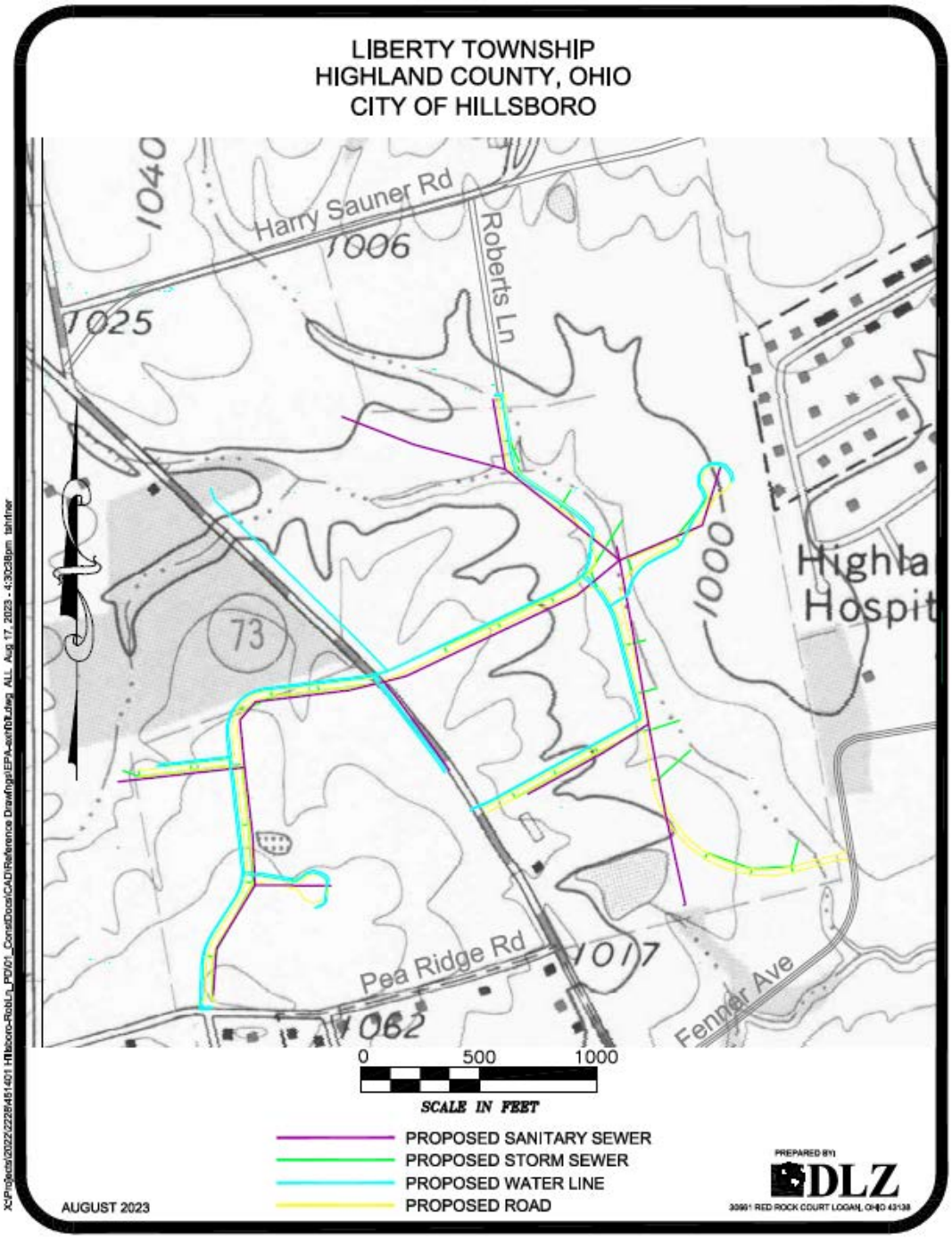

Figure 1. Hillsboro's proposed Roberts Lane extension critical infrastructure improvements

Selected Alternative

As part of the city's overall plan for the project areas, the city proposes to extend Roberts Lane from its existing endpoint just south of Harry Sauner Road to a new point where the extended Roberts Lane will intersect with Fenner Avenue. In addition to the proposed sanitary sewer extension and new street, five other streets have been recently built on both sides of Route 73, also known as West Street.

Water Line. The project will loop dead end lines at Roberts Lane, Fenner Avenue, and Fairground Road. Approximately 8,500 linear feet (lf) of new 8-inch main would be laid to provide services and loop the system. This will improve the volume and pressure of the current water service in the area. Hydrants and other essential components are included. Figure 1 above shows the map of the project area.

Sanitary and Storm Sewer. The sanitary and storm sewer components of the city's project would entail installing 8,400 lf of 8-inch diameter sanitary sewers at a depth of about 20 feet, 1,900 lf of 3- and 6-inch diameter force mains, 1,300 lf of sanitary sewer laterals, and one grinder pump lift station to convey the sanitary flows from the new developments to the city's WWTP. A minimal amount of storm sewers (55 linear feet) is included in the overall project to collect runoff from the proposed Roberts Lane extension and convey the collected runoff and discharge it to a tributary of Clear Creek at 17 locations.

More specifically, the second of the city's two critical infrastructure projects would extend a sanitary sewer under or adjacent to the Roberts Lane to the south. This extension will open up about 73 acres of land for development in the northwest section of Hillsboro. As a result of the infrastructure improvements, the land around the extension of Roberts Lane and other streets recently built will be open to commercial development on the east side of West Street and mixed land uses on the west side of Route 73.

Implementation

Hillsboro proposes to borrow $743,167 from the Ohio WSRLA at the small community rate of 2.33 percent (interest rates are set monthly and may change for the requested loan award date) to fund the proposed 2023 Water System Improvements project. Borrowing WSRLA funds at this rate could save Hillsboro approximately $159,000 over a 20-year loan period compared to the current market rate of 3.87 percent.

For the sanitary sewer and storm sewer project, the city qualifies for a 1% low interest loan from Ohio EPA's WPCLF program. The project is expected to cost about $4 million; with this funding, the city would save about $1.47 million over a 30-year loan period.

The debt associated with the distribution system project will be recovered from user charges. Hillsboro last increased their base water rate in 2022. Currently in committee and before city council are the following rate increases: 2 percent in 2024 and 2025, and 1.5 percent in 2026. Upon completion of the city's 2023 water system improvements projects in 2024, the average annual water bill for residents served by Hillsboro will be $684. This is 1.85 percent of the of the median household income (MHI) for Hillsboro (MHI; $37,000) and is higher than the average Ohio water bill of $477.

The debt associated with the sanitary sewer and storm project also will be recovered from user charges. Hillsboro last increased their sanitary sewer rate in 2018. Assuming no sanitary sewer rate increases to accompany the water rate increases, the average annual sanitary sewer bill for residents served by Hillsboro will be $938 upon completion of these projects. This is 2.5 percent of the median household income for Hillsboro (MHI; $37,000), which is higher than the Ohio average bill of $490.

Taken together, an average residential customer of the city's water and sewer systems can expect to pay about $1600 annually for these two city services.

Construction is expected to begin following loan awards and be completed in about a year.

Public Participation

Hillsboro has discussed water and sewer system issues at city council meetings and in the local newspaper over the past several years to keep residents informed of the need to continue replacing antiquated system components to provide safe and reliable water service into the future. The Hillsboro planning commission held a public meeting on October 28, 2021, to discuss this project and get feedback from residents about planned future development.

Ohio EPA is unaware of controversy about or opposition to these two projects. Ohio EPA will make a copy of this document available to the public on the following webpage and will provide it upon request:

https://epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/announcements.

Environmental Impacts

The city's proposed projects have the potential to affect the following features, but the effects will be reduced or mitigated to acceptable levels as explained below.

Air Quality, Noise, Traffic, and Local Aesthetics

Temporary construction impacts on noise, dust, traffic, and air emissions will be minimized. In particular, the detail plans and specifications for both projects indicate that noise will be reduced for example by limiting construction activities to daytime hours and providing construction equipment with proper intake silencers and mufflers. Further, air emissions will be limited by making sure that all construction equipment has proper emission control devices and that they are properly maintained. Any unpaved areas will be wet down (as necessary) during construction to minimize dust. Finally, traffic control will be accomplished by requiring that one lane of traffic must be maintained, that emergency vehicles have access to the construction sites, and that other traffic control practices in the detail plans are followed.

Archaeological and Historical Resources

Based on coordination between the State Historic Preservation Office (SHPO) and the city, a Phase 1 survey of the combined project area was completed. The results of this survey were the following:

Seven archaeological sites were identified during the survey of the project area shown in Figure 1. Of these seven sites, none were determined to be eligible for the National Register of Historic Places. While a site was originally shown to be within the project area, further evaluation indicated that it was determined not to be present in the project area.

Duckwall Cemetery, while previously documented to be outside the project area, subsequent field work determined that it is in fact located inside the project area during the survey work. The cemetery consists of five gravestones which date from 1847-1926 that were reset in a concrete slab sometime before 1954. While research and field survey were not able to confirm burial locations, it is assumed that the burials exist within the proximity of the reset gravestones. However, due to the unusual setting of gravestones without clear documentation and burial sites, SHPO recommended a large buffer around this cemetery. The detail plans show a 200-foot buffer around the gravestone area of Duckwall Cemetery.

On this basis, Ohio EPA has concluded there should be no adverse effects on historical or archaeological resources.

Aquatic Habitat and Surface Water Resources

Hillsboro's project is in the Clear Creek watershed and its recently completed storm water system in the southern half of the city flows into the Rocky Fork Creek mainstem and its associated tributaries. Based on the limited scope of the city's two projects, Ohio EPA has concluded that the projects' potential impacts on aquatic habitat and surface water resources will be minimal as a result of the impact mitigation in the detail plans and specifications. As shown below in Figure 2, there are numerous headwater streams in the project area, one of which will be relocated.

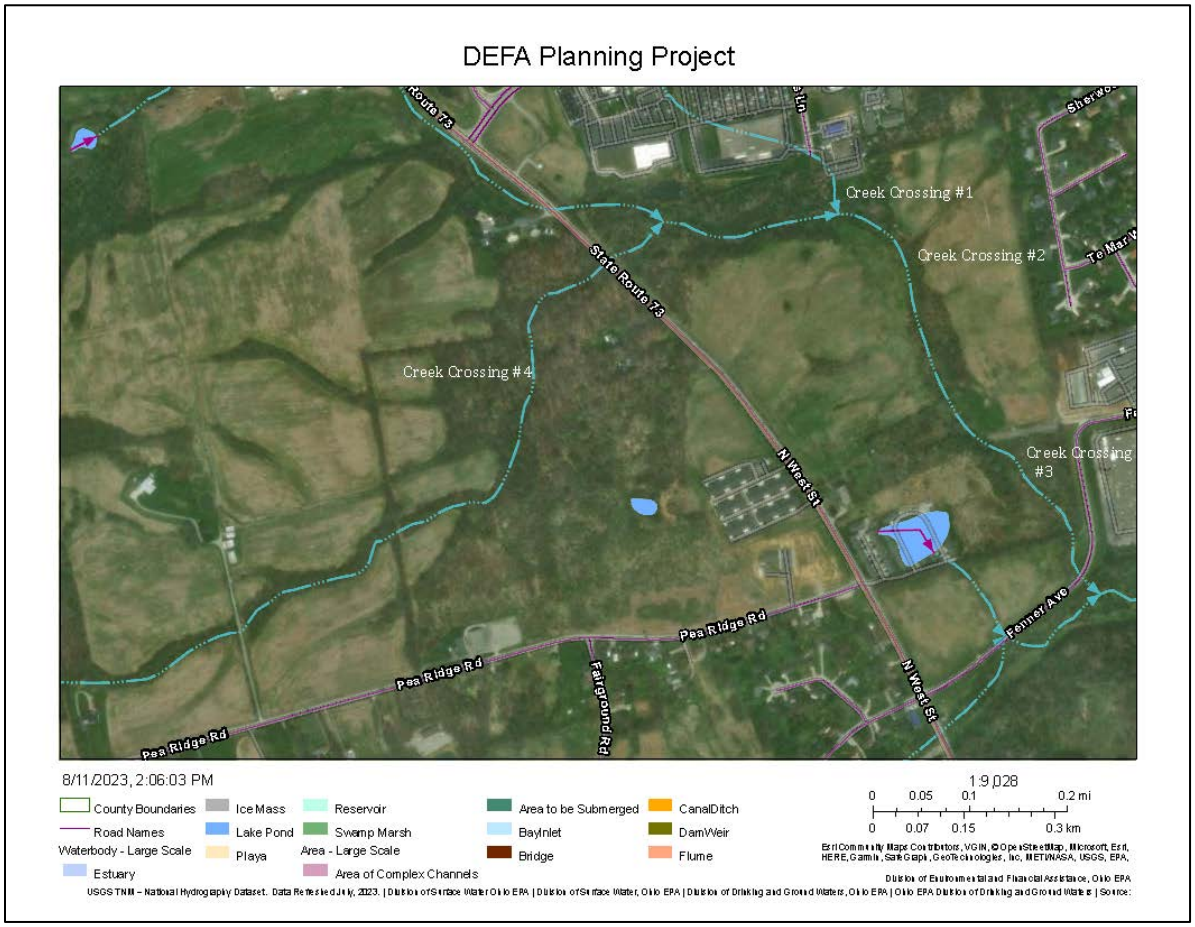

Figure 2. This figure shows the proposed sanitary sewer creek crossings

According to the aquatic habitat delineation report prepared for the U.S. Army Corps of Engineers, a riverine habitat including a small wetland was identified in the vicinity of the project area. There are four creek crossings using open cut trenching within the project area, which the city's consultant identified as falling under the jurisdiction of the U.S. Army Corps of Engineers under Sections 401 and 404 of the Clean Water Act.

Information on each of these crossings shown in Figure 2 follows:

- Stream Crossing 1 - This crossing location originates where Roberts Lane currently dead ends north of the proposed roundabout location. Here, a narrow, dry creek bed channel runs south into a small tributary stream running east and west.

- Stream Crossing 2 - This crossing is where the proposed roadway expansion crosses a woodlot finger east of the proposed Hauke Dragoo Street and Roberts Lane roundabout location and ending in a proposed cul-de-sac of Hauke Drago Court. Near this location, the small tributary stream runs north and south through the woodlot finger. This section of stream is narrower than stream crossing 1 (less than 12 feet) with strong flow and well-developed riffles in some areas.

- Stream Crossing 3 - This crossing is in the same woodlot finger south of the proposed roundabout location. The proposed roadway expansion crosses the small stream directly west of Fenner Ave. This area of stream is wide with moderate flow and some deep pools at stream bend locations.

- Stream Crossing 4 - This proposed crossing area is located west of State Route (also known as West Street) in a woodlot with mature forest behind two residential homes. This area of stream is also wide and shallow in most areas. This stream crossing will be directionally drilled.

As shown in Figure 2 above, these crossings impact tributaries to Clear Creek, which has an aquatic life use designation of exceptional warmwater habitat. Ohio EPA has concluded that the four proposed sanitary sewer crossings will not significantly adversely affect the identified headwater streams as long as mitigation described in the detail plans is followed.

Wetlands

Based on a description of the vegetation prepared by the city's consultant, vegetation typical of wetlands (also known as hydrophytic vegetation) including two trees (Green Ash and American Elm) and an herbaceous plant (Wingstem, also known as Yellow Ironweed) was noted along the banks of the dry creek bed near the ordinary high water mark.

According to the city's consultant who prepared a wetlands study for the project area, the National Wetland Inventory (NWI) maps for the project site revealed no potential wetland impacts within the proposed project limits. However, the NWI mapping identified a small freshwater emergent wetland in the agricultural field north of Stream Crossing 2 shown in Figure 2. The area consists of a small depression with stunted plant growth. Current project limits will not impact the wetland. Should project limits change, care will need to be taken to avoid this area. Pending a final review by the U.S. Army Corps of Engineers, it will determine the final jurisdictional status of any features in the project area.

Endangered Species and Fish and Wildlife Species

Three federally listed species are present in Highland County. Of these species, the Indiana bat and the northern long-eared bat are federally endangered, the tricolored bat is proposed endangered species, and the monarch butterfly is a candidate species. Ohio EPA determined that these four species will not be adversely affected by the proposed project's construction for the following reasons.

Consultation with the US Fish and Wildlife Service (FWS) showed that the project is not likely to adversely affect the listed bat species. This conclusion was reached on the city's commitment to only cut and remove suitable habitat trees greater than or equal to three inches in diameter between October 1 and March 31. Further, the detail plans include provisions to implement this approach or situations where seasonal cutting may have to occur outside this time period. Overall, significant

adverse environmental impacts on federally listed endangered species and their habitat is not expected during this project.

Regarding the state listed species whose ranges overlap that of the project area, none of these species are expected to be adversely affected by the proposed project. This conclusion was reached primarily because suitable habitat is either absent or the proposed construction techniques used for the proposed four creek crossings in the project area will not involve in-water work. In particular, installation of underground utilities will use directional drill/boring methods to cross the four streams in the project area; storm water infrastructure will be developed with best-practice engineering standards and as a mitigation control to increased surface area runoff to avoid potential affects to the property.

Further, Ohio completed a review to determine if any hibernacula used by bat species would be affected by the project. This review concluded that there would be no effect.

Prime Farmland, Land Use, and Terrestrial Habitat

All of the area appears to be prime farmland. However, based on an evaluation by the Natural Resources Conservation Service, less than 30% is actually prime farmland. About 70 acres of agricultural land and terrestrial habitat will be converted to other land uses as a result of the proposed development.

Floodplain

All the proposed improvements will be limited to locations outside of the floodplain of Clear Creek and its tributaries. In particular, the city's local floodplain coordinator found that the Roberts Land development site is outside the 100-year floodplain boundary in an area of minimal flood risk.

Safe Drinking Water, Ground Water Resources, and Sole Source Aquifers

The proposed projects will improve the volume and pressure of the current water service in the area, and have a positive effect on human health.

In terms of ground water resources, there are no known wells, water supply intakes, or source water protection areas in the project area.

Finally, there are no sole source aquifers in the project area.

Conclusion

Based on Ohio EPA's review of the city's proposed projects, they are not expected to have any adverse direct impact on archaeological and historical resources, coastal zones, endangered species, energy, farmland, fish and wildlife, ground water resources, land use, local economy, safety, safe drinking water, and sole source aquifers. This is because these features do not exist in the project area, the features exist but will not be adversely affected, or the impacts will be temporary and mitigated. Similarly, no major indirect and cumulative effects on these resource types are anticipated by Ohio EPA. Overall, these two proposed projects, the associated roads to be constructed throughout the project area, and the associated development is expected to result in improvements in the water distribution system, sanitary sewer system, storm sewers, and other critical infrastructure in this part of Hillsboro.

Contact information

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