



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

August 24, 2015

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

CITY OF MIAMISBURG, WESTOVER PUMP STATION AND FORCE MAIN IMPROVEMENTS
PROJECT, WPCLF LOAN # CS390593-0029

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 entity 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 have been 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 general 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 entity 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,

A handwritten signature in purple ink that reads "Jerry Rouch". The signature is written in a cursive, flowing style.

Jerry Rouch, Assistant Chief
Division of Environmental and Financial Assistance

Attachment

ENVIRONMENTAL ASSESSMENT

A. Project Identification

Name: City of Miamisburg, Westover Pump Station and Force Main Improvements Project

Address: Mr. Stephen Morrison, Project Manager
City of Miamisburg
600 North Main Street
Miamisburg, Ohio 45342

Loan No.: CS390593-0029

B. Project Summary

The City of Miamisburg, through its project manager, has nominated the above referenced pump station and force main project for Water Pollution Control Loan Fund (WPCLF) financing through Ohio EPA's Division of Environmental and Financial Assistance (DEFA). These two facilities comprise components of the city's separate sanitary sewer system that convey wastewater to the city's wastewater treatment plant (WWTP) located on the east side of the Great Miami River, and due to the problems described in the following document need to be replaced.

As noted in the city's WWTP National Pollutant Discharge Elimination System (NPDES) permit's compliance schedule, Miamisburg's sanitary sewers are subject to excessive infiltration/inflow (I/I). More specifically, this condition in the city's collection system can trigger sanitary sewer overflows (SSOs); surcharging of sewers; hydraulic overloading of lift stations; and high sewage flows at the WWTP that cause poor WWTP performance and/or WWTP bypasses. These collection system overflows and treatment plant overflows/bypasses constitute violations of the city's NPDES permit, and required the city to take specific steps under a schedule of compliance, including preparation of a No Feasible Alternatives Analysis (NFAA) study, completing a System Evaluation and Capacity Assurance Plan (SECAP), and developing and implementing a Management, Operation, and Maintenance Program (MOM) for its municipal sanitary sewer system. Building on these three studies and related technical memos, the two proposed improvements discussed in this document are intended to partly address Miamisburg's NPDES permit compliance schedule's requirements, such as SSO control.

The main purpose of this proposed project is to replace the existing Westover pump station and force main with a properly sized new pump station and corresponding force main in the same general location capable of conveying wastewater without causing an SSO. As with all the city's proposed wastewater projects, this one is consistent with the regional water quality management plan for this part of Ohio.

In the following document, the proposed pump station and force main project needed to provide long-term I/I and SSO control is described in more detail. Information on the city's alternatives analysis, selected alternative, project implementation activities, the project's potential environmental impacts and mitigation, and the city's public participation can be found below.

The proposed project mainly consists of a new wastewater lift station and force main with a railroad crossing using jack and bore technology, a trenchless river crossing using directional drilling techniques, and associated temporary erosion and sedimentation controls. More detailed information on this proposed project's scope can be found in the "Selected Alternative" section of this document. Construction of the proposed project is expected to require about twelve months.

Based on recently received contractor bids, the construction of this project will cost about \$1,898,000, with the total project cost estimated to be \$2,487,940. All of the proposed project's construction costs will be financed through the WPCLF. Please see the "Project Implementation" and the "Local Economy" sections of this document for more information on the project's costs. The city expects to repay its anticipated WPCLF loan with revenues collected from its wastewater customers in the form of sanitary sewer service charges.

Overall, the environmental review of this proposed project conducted by Ohio EPA described in this document indicates that the proposed project will not result in significant, adverse, direct or indirect environmental or socioeconomic impacts.

C. Existing Conditions

As noted in the project summary, the city's sanitary sewers are subject to excessive I/I¹ and SSOs during and following storms. This condition can lead to water quality and potential human health concerns found in the Great Miami River in the vicinity of Miamisburg. In dry weather when I/I is typically low, wastewater flows generally flow in a west to east direction without any SSOs taking place at one of the twelve locations shown below in Figure 1 on Page 3. As the city's sanitary sewer system was not constructed with designed overflow points, these overflows often occur at one of the city's ten pump stations, including the Westover facilities, also shown in Figure 1. Ultimately, the wastewater flows from the west side of Miamisburg cross beneath the Great Miami River via the existing Westover pump station and force main to the east side pump station. From that point, they are pumped south to the city's WWTP for treatment prior to discharge from the east bank of the river.

¹ Infiltration/inflow is defined as extraneous, clear water that enters a sanitary sewer system through surface or subsurface locations. Inflow may include clear water entering the system through manhole covers, roof or foundation drains, direct storm sewer connections, etc. Infiltration usually occurs when clear water enters the system below ground through cracked or broken pipes and manholes, poorly sealed or misaligned pipe joints, damaged or poorly connected sewer laterals, etc.

Within the urbanized project area project area shown in Figure 2, the City of Miamisburg currently owns and operates its Westover pump station. This facility consists of a below-grade concrete dry well where the pumps are housed. The existing pump station is rated at 0.8 million gallons per day (mgd), and is located on the west side of the Great Miami River near the intersection of Schroeder Avenue and Riverview Avenue at the site of the original Miamisburg WWTP. Originally named the westside pump station, it was constructed in 1965 to convey all wastewater collected on the west side of the Great Miami River to the eastside pump station located on the east side of the river.

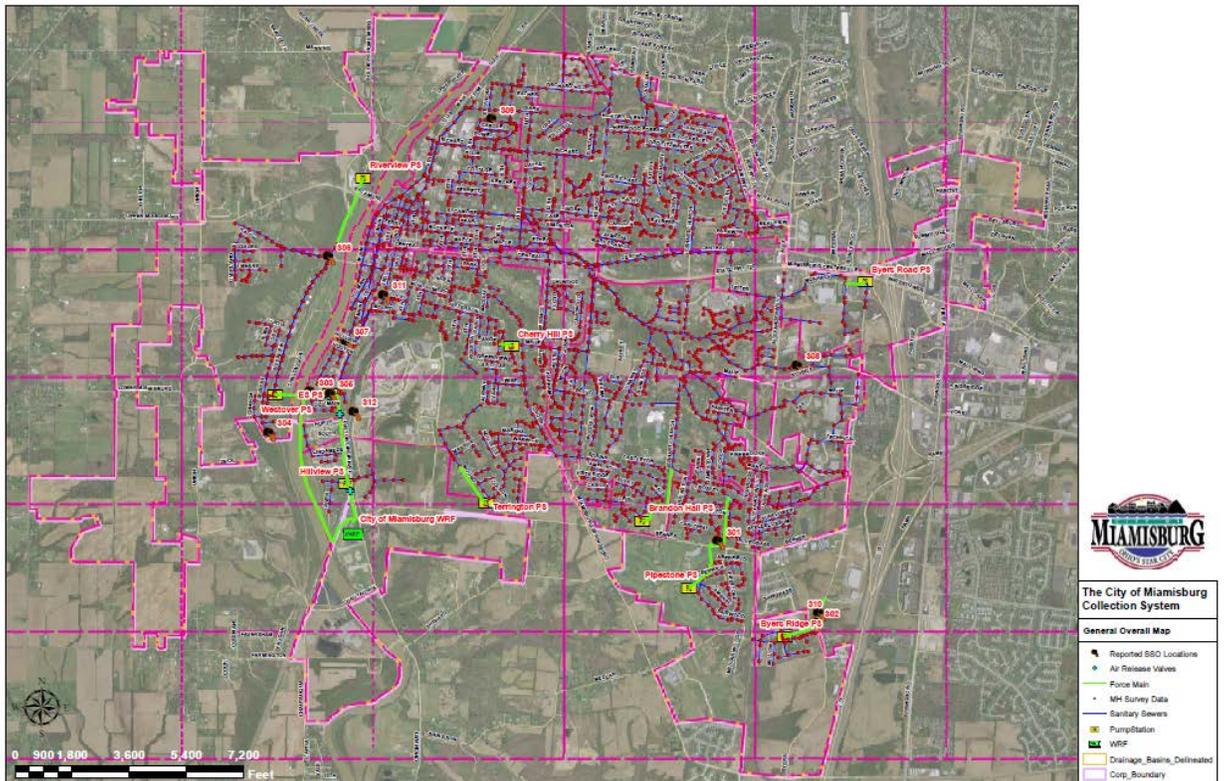


Figure 1, Miamisburg’s Collection System Map showing known SSO locations

In addition to the Westover pump station, the city operates an existing 12-inch diameter cast iron force main that originally conveyed flow from the east side pump station to the old WWTP site on the west side of the river. This force main is now used to convey the flow in the reverse direction (from west to east). According to the city’s consulting engineer, this existing force main was in service prior to the construction of the Westover pump station in 1965. Based on testing, the cast iron force main has significantly more headloss (loss of pressure) than expected based on the size and length of the force main. For the existing pumps, the force main has been too large to maintain the minimum recommended velocity to scour solids from the pipe. This low velocity can result in solids deposition in the force main’s low spots (under the river), which in turn results in increased headloss, less flow getting

through to the other side, and increased chances for SSOs. Due to the undersized pumps in the Westover Pump Station combined with the diminished capacity of the force main, the SSO at this location has activated during wet weather events.

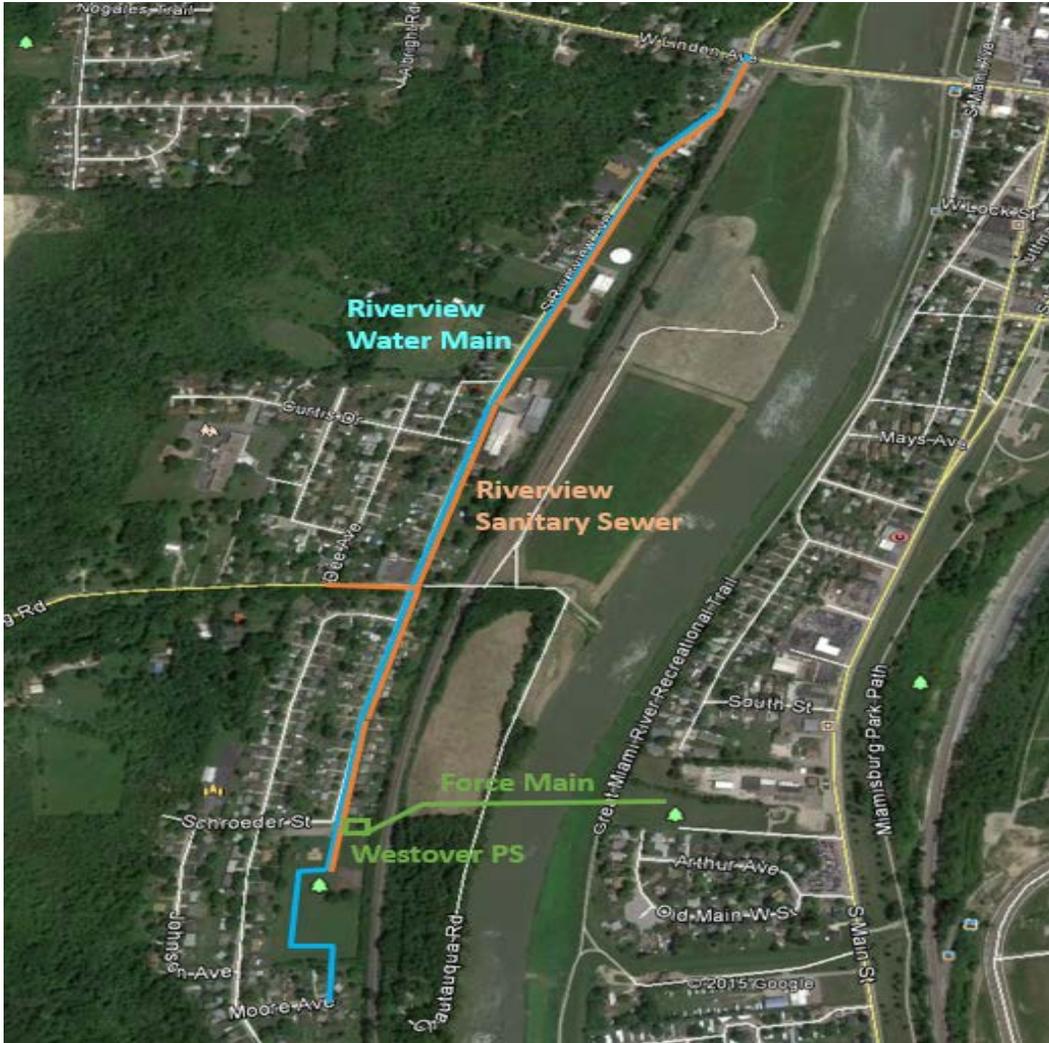


Figure 2, Location of Miamisburg’s Westover Pump Station and Force Main

More information on the conditions in Miamisburg and the development of this proposed project can be found in the project planning section of this document. Figure 3 below shows the location of the City of Miamisburg in relation to the facilities planning areas established in Montgomery County.

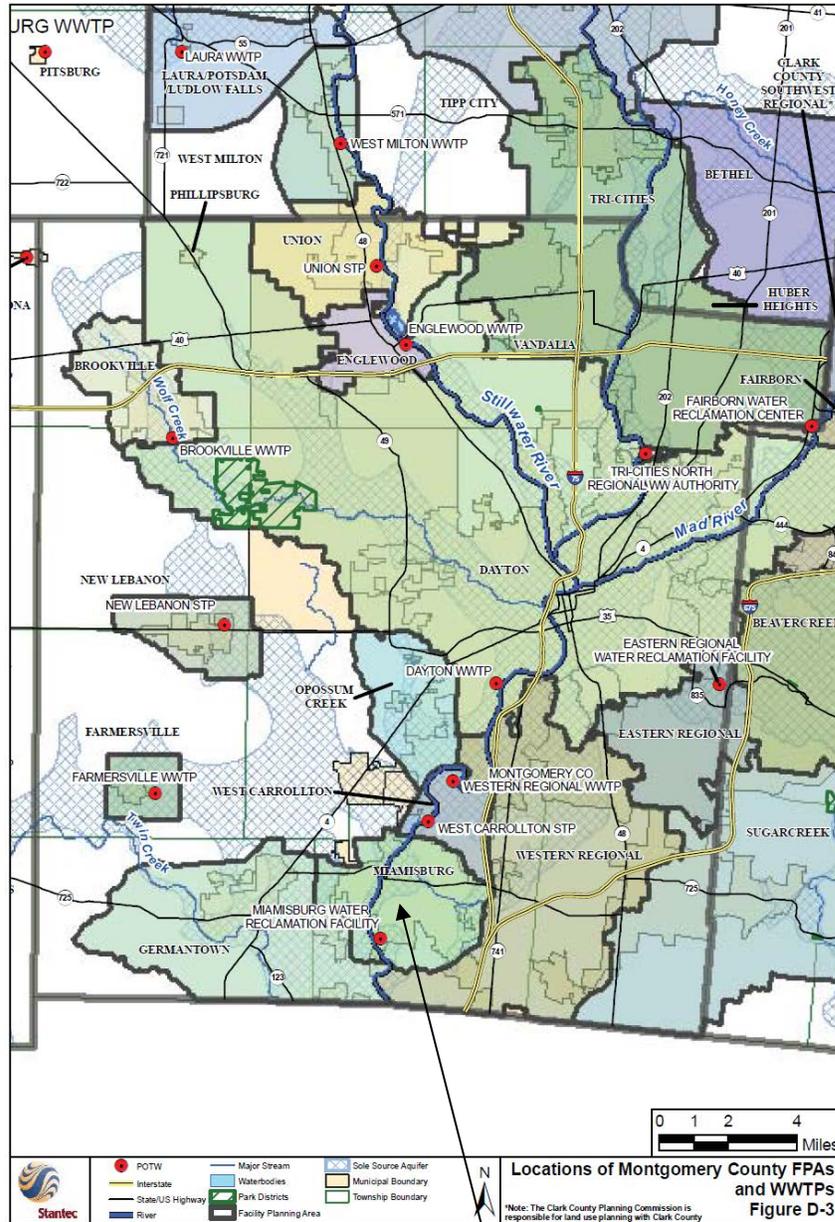


Figure 3, City of Miamisburg’s Facilities Planning Area

D. Future Needs

Given the scope of the proposed project and its main purpose to help address the excessive I/I and SSOs within the city’s collection system, there is very little residential population growth associated with it. Rather, in order to address the capacity of sanitary sewers above the existing Westover pump station, the city proposes to build the new pump station with a firm capacity (capacity with one pump out of service) of 2.7 mgd and so help alleviate SSOs and properly convey the I/I remaining in the collection system. Similarly, the proposed 12” force main and

the small amount of gravity sewer needed to make this project complete are designed to handle this amount of existing wastewater flow.

E. Project Planning and Discussion of Feasible Alternatives

During the planning for Miamisburg's proposed Westover pump station and force main project conducted since July 2009, the city mainly considered where to build the new needed wastewater infrastructure, how large to size certain components to address the current amount of flow, and what river crossing techniques to use. A no-action alternative was not considered viable as it would not address the underlying problems noted earlier in this document, and so was never considered further. Due to the excessive cost of relocating sanitary sewer lines, no options other than the proposed action to replace the existing pump station were considered.

In terms of force main options, the city considered five force main rehabilitation and replacement methods alternatives. Each alternative met the city's objectives of avoiding open-cut construction in the river, across the railroad easement, and adjacent earthen levee. The following is a summary of the information about each option, as provided by the city's consultant.

Ice pigging – Ice pigging is a process in which an ice slurry is pumped into a pipe and forced along by applied system pressure (flushing water). The ice pig is a semi-solid that can be pumped, can flow through changes in diameter, bends and fittings, and can scour out sedimentation from a pipe. The best case scenario would be if ice pigging could restore the city's force main back to an appropriate roughness factor, but if the roughness is caused by a pipe collapse or deformation, ice pigging would provide little to no benefit. There is also the potential to damage the existing force main and the existing pumps, and possibly contaminate the river.

Conclusion: Without a pipe condition assessment and more knowledge of exactly how effective this process will be, it was determined to be too risky with too little benefit to be economical. This option was not considered further.

Slip Lining – The potential for slip lining a 10-inch high density polyethylene (HDPE) pipe into the existing 12-inch force main was considered next. It was determined that a 10-inch force main could be an acceptable size for the future Westover pump station based on the flows through this part of the city's collection system. However, for this to be possible the exact internal diameter of the existing 12-inch diameter cast iron force main would need to become known. Also, the existing force main would need to be cleaned to remove any accumulated solids before slip lining.

Conclusion: While it would seem possible to slip line a new 10-inch diameter HDPE line into the existing force main, limited knowledge of any collapsed or deformed pipe, bends, or amount and hardness of sedimentation increases the risk associated

with this method. It also reduces the chances for a satisfactory outcome, and so this option was rejected.

Pipe Bursting – The use of pipe bursting was considered and initially it seemed possible to burst a new force main through the existing one. However, since there is no record of the existing force main’s profile, alignment, nor depth of burial (to ensure the pipe isn’t simply lying across the river bottom), it is not known if the host pipe would be kept in place while being bursted. The possibility of contaminating the river with the contents of the force main due to this method was a concern. In addition, it is not known if there are bends or obstructions that would prohibit pipe bursting. The existing railroad would be another challenge to overcome as pipe bursting has the potential to displace the ground surface. Consequently, another method would have to be used to cross under the railroad tracks.

Conclusion: Utilizing pipe bursting as a means of force main replacement carries high perceived and measurable risks without a mechanism for management of those risks. For these reasons, it was not viewed as a favorable option.

Cured-in-Place Pipe (CIPP) Lining – The use of CIPP lining was considered. If successful, this option could provide the city with a structurally renewed pipe with very little excavation. There is a specific CIPP resin for pressurized piping, and in order to use this method the force main would first have to be cleaned, dewatered and close-circuit television (CCTV) inspected. Dewatering the pipe is not easily accomplished since the low point is likely under the river and without a way to drain it. While this limitation could be overcome, the city’s lack of profile drawings of the force main means that it is not known how deep the force main is, if suctioning it dry would be possible, or if there are bends. In addition, it would be necessary to take the existing Westover pump station off-line and to bypass pump or haul the flow in vector trucks across the river, depending on the length of time the Westover pump station would be out of service. In addition, if the pipe were vacuolated dry, but groundwater or river water were to infiltrate into the excavation, this could eliminate the ability to CIPP line the city’s force main.

Conclusion: This option may be possible, but has a high level of difficulty and risk. For that reason, it was not considered further.

Horizontal Directional Drilling HDD – The installation of a new 10-inch force main by HDD was discussed in detail. An assumed HDD alignment would cross under Chautauqua Road, the Great Miami River, and the Great Miami River Recreational trail. The river width is approximately 275 feet, with total distance to cross both elevated roadways approximately 650 feet. The river depth at the proposed crossing is approximately 10 feet deep according to the United States Geological Survey (USGS) and Great Miami River gauge data. A 25-foot depth of cover below the stream bed was assumed for permitting and evaluation purposes. Geotechnical conditions appear to be granular with bedrock outside of the HDD profile. However, cobbles and boulders are a possibility, especially through the first 15 feet of depth.

According to the city's consultant, polyethylene solid wall pipe with 12-inch nominal diameter would be recommended to maximize bending radius. The HDD bore hole would be 20 inches in diameter. The approximate total horizontal drilling length would be 1,000 feet with entry angles greater than 10 degrees required to reduce the overall length. Site conditions would favor drilling from the west and pulling back from the east to take advantage of the approximately 700 feet of laydown for pipe fusion, string up, and pullback. The preferred site area for the drill rig setup is 200-ft. by 100-ft which appears available. Construction access could be Chautauqua Road and Arthur Avenue to the Drill Rig and Pull Back areas respectively.

Conclusions: According to the city's consultant, close proximity to the railroad right-of-way, and the Great Miami River flood control levee may require encroachment and permitting efforts; however, actions to reduce the length of the HDD alignment could mitigate some of that risk to project schedule and coordination. To mitigate additional project risk, strict contractor experience qualification by specification or through a prequalification process could be implemented.

Figure 4 in the Selected Alternative section below shows an aerial photo with the proposed alignment for the Westover force main along with the potential start and endpoints for the HDD.

On this basis, Miamisburg has provided sufficient documentation in its planning reports that it evaluated feasible alternatives for addressing the problems facing its collection system, and for properly conveying the wastewater through them to its WWTP.

F. Selected Alternative

Following completing its comprehensive analysis of all feasible alternatives (as part of its NFAA report and other related studies) needed to address the secondary treatment bypass at the treatment plant and any overflows in the collection system, the city chose to construct a new pump station and force main as described below.

The new Westover pump station will be a 2.7 mgd submersible triplex (variable speed) pump station constructed just south of the existing pump station location. The pump station component of the project will also include an influent gravity sewer, precast wet well structure, precast valve vault, a masonry electrical building with a standby generator, related electrical and instrumentation controls, site work, and a perimeter fence. The existing pump station will be demolished upon project completion.

The 1700 lineal foot Westover force main will connect the new pump station to the sewer just upstream of eastside pump station and will cross the CSX railroad and the Great Miami River using a jack and bore approach, and a horizontal directional drilling (HDD) technique, respectively.

The as-bid construction costs for this proposed project is currently \$1.9 million.

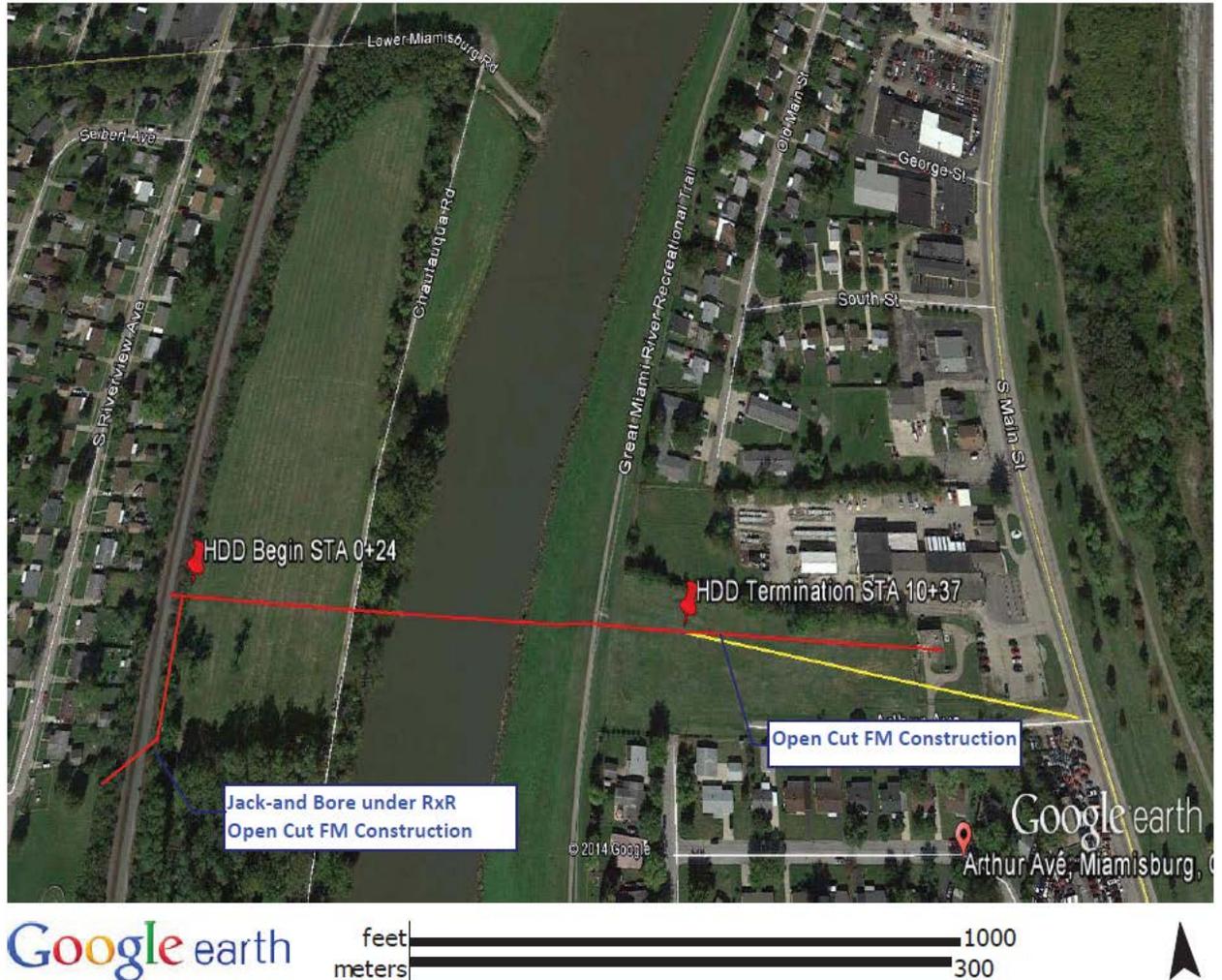


Figure 4, Railroad and River Crossing Details (Source: Hazen and Sawyer)

Within the project area shown in Figures 2 and 4, Ohio EPA expects that the construction activities will be limited to prior-disturbed areas (former WWTP site and park land), one railroad crossing, one major river crossing, and an area of floodplain.

Ohio EPA expects that the impacts associated with the construction of this proposed project can be satisfactorily mitigated by the provisions in the contract documents. With the specific steps the city and its consultants have proposed to mitigate these possible impacts, Miamisburg has shown that these concerns can be adequately addressed. For more information on the possible environmental impacts of each project and the means to mitigate them, please refer to the “Environmental Impacts” section of this document.

G. Project Implementation

The total project cost based on the selected bid is \$2,487,940, all of which the city will borrow from the WPCLF at an estimated interest rate of 2.32% payable over 20 years. The estimated annual debt service associated with this project after construction will be \$156,188. WPCLF loan award is anticipated in September 2015. Construction will be initiated in October 2015 and take twelve months to complete, ending in January 2017 or earlier.

The City of Miamisburg bills its inside and outside city limits residential water and wastewater customers on a quarterly basis and currently charges a city resident \$73.92 for the first 1000 cubic feet and then \$5.97 per 100 cubic feet for the next increment. Assuming an average usage of 2200 cubic feet per quarter, this fee is about \$146 per quarter, or about \$584 per year. Expressed as a percentage of the city's current median household income (MHI) of \$52,689, this figure is about 1.09%. Readers should note that this amount is expected to increase to about \$673.60 per year or 1.28% of the city's MHI by January 2019. With the city also doing water improvements during this same time period, the combined water and sewer fee in 2019 is expected to be about \$1,248, or 2.37% of the current city MHI.

Additional context for this proposed project's related economic impacts can be found in the following "Environmental Impacts" section of this document.

H. Environmental Impacts of the Selected Alternative

The environmental review conducted in part by Ohio EPA and other review agencies, described herein, indicates that the proposed improvements within Miamisburg's project area will not result in significant, adverse direct or indirect environmental impacts on the area shown in Figure 2 above.

Mitigation has been proposed by the City of Miamisburg and its engineering consultant to reduce the direct, indirect, and cumulative impacts that were identified. More specifically, they include at a minimum appropriate provisions in the contract documents (detail plans and specifications) covering (1) prohibited construction activities, (2) erosion/sediment control, (3) traffic control, (4) air pollution/noise control, (5) tree and vegetation protection, (6) dewatering, (7) stream crossings, (8) spoil disposal sites, and (9) archaeological and historical resources. Specific information on each of these topics can be found within this section of this document. All spoil disposal sites require prior review and approval by Ohio EPA to assure that no indirect, adverse environmental impacts on sensitive natural features within the project corridor or other areas within can occur.

Because of the pump station site and force main alignment chosen for Miamisburg's proposed project, its narrow scope, and the mitigation developed by the city's engineering consultant, Ohio EPA expects the proposed wastewater improvements

will not directly result in significant adverse effects on the natural or human environment.

The following natural features will not be affected, for the reasons given. The project is too small in scope to alter major landforms (i.e. plains, mountains, valleys, etc.). Wetlands are absent from the construction alignment. The pump station and force main are either located outside the levee system of the Miami Conservancy District or above the 100-year flood elevation. The project is not located in or near any coastal zones, state-designated scenic and/or recreational rivers, national wildlife reserves or state wildlife reserves. As a condition of project approval, disturbed areas will be graded to reflect original drainage patterns following completion of site work. Thus, pre-construction topography will be restored and soils will be largely unaffected by this project.

Where there is any potential for direct impacts on any resources in these two categories, an analysis can be found below in the following summary of Ohio EPA's environmental reviews.

Miamisburg's Westover pump station and force main project also was reviewed by Ohio EPA for indirect (secondary) impacts on the environment. Where pertinent, an explanation has been provided below that describes the current condition of proposed development areas and why no significant adverse environmental impacts from this development are expected. Overall, Miamisburg's proposed project is not expected to result in any significant, indirect adverse environmental impacts for the reasons cited below. This conclusion was reached mainly because of the lack of any significant natural resources in the facilities planning area (see Figure 3) that could be threatened by potential urban development, and the city's expectation that this project will not adversely affect local demographics, employment patterns, or any cultural characteristics of the project area. Further details that form the basis for this conclusion follow. Readers may want to refer back to the "Selected Alternative" section of this document when looking at the environmental attributes sections below.

1. Topography, Grading Activities, and Soils

Current estimates are that 200 cubic yards of excess excavated material (soil) will be generated by this proposed project and will need to be transported via trucks from the construction sites to the two approved and previously established spoil disposal sites shown in Figure 5 below (see sites 1 and 3; #2 was not approved for use in this and other city projects). Given the proposed use of these prior disturbed sites for this activity, no significant direct, indirect, or cumulative impacts on significant environmental attributes are expected to occur during its disposal. The balance of suitable material will be returned to the excavations from whence it came.

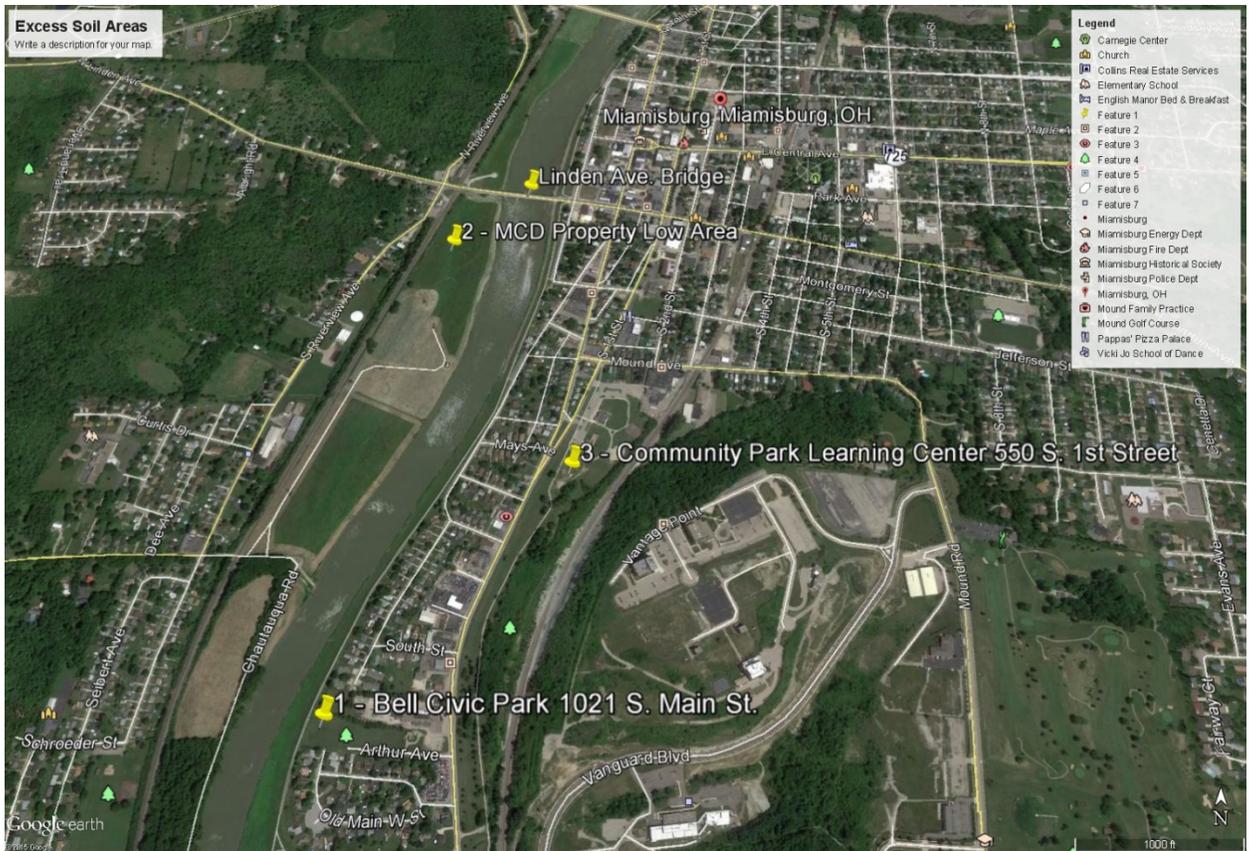


Figure 5, Potential Prior Approved Spoil Disposal Sites (1 and 3)

As all stockpile sites and contractor equipment laydown areas are required to meet applicable storm water pollution prevention plan requirements, no adverse impacts from this part of the project on topography and soils are expected. To conclude, no significant, direct, adverse impacts from site grading of area soils are expected to result from this proposed project.

Prohibited construction activities include restricting disposal of spoil material removed from any excavations to previously disturbed areas such as the two areas shown on Figure 5. As a condition of Ohio EPA’s project approval, none of the excess excavated soil expected to be generated during Miamisburg’s proposed project can be used to fill any wetlands, depressions, or floodplains.

2. Surface and Ground Water

➤ Surface Water

The proposed installation of Miamisburg’s Westover pump station and force main within the generally previously-disturbed corridor shown in Figures 2 and 4 above, along with the avoidance of any open-cut crossings of streams and wetlands during this project, suggests that the city’s proposed project should not result in any significant, adverse, direct environmental impacts on

surface water resources within the project area. Rather, the reduction of sanitary sewer overflows is expected to benefit the health of city residents and surface water quality in the Great Miami River inside Miamisburg downstream of the project area. In addition, the proposed use of directional drilling to perform the river-crossing of the Great Miami River, and the contractor's agreement to implement a frac-out contingency control plan (if the need arises) should assure that surface water features are not adversely affected by direct construction effects.

Also, standard mitigative measures (e.g., perimeter silt fences and timely seeding of bare soil areas) to address storm water runoff, erosion, and sedimentation impacts during the proposed twelve month construction period, plus enforcing prohibited construction activities over this same timeframe, should help assure that no significant, adverse environmental impacts to surface water resources occur. Important to the success of these measures is the requirement that the contractor install and maintain appropriate erosion and sedimentation controls (e.g., silt fences, storm water inlet protection, trench and excavation dewatering, temporary and permanent seeding and mulching, etc.), in accordance with all applicable storm water pollution prevention and erosion control plans in the contract documents.

These assurances are also intended to minimize the amount of sediment that directly enters the storm sewers and streams in Miamisburg's project area, where prior disturbance has already modified local site conditions. As a result of these provisions, Ohio EPA anticipates that no significant, adverse, direct impacts on surface water features will result from Miamisburg's proposed project. For information on any indirect impacts on surface water features, please see the following section on terrestrial and aquatic habitat.

Impervious Surface Area. Given the type of the proposed improvements, the fact that the ground surface in the project work areas will be restored to their pre-construction conditions, and the fact that the project will not directly add a significant amount of impervious surfaces to this project area through the pump station improvements, Ohio EPA expects that the impacts on water quality from adding impervious surfaces to the Great Miami River watershed will be minimal. As no residential growth is expected to occur as a result of this proposed project or its funding, no indirect and cumulative increases in impervious surface area are expected to result. Ohio EPA also expects that compliance with state and federal storm water regulations should help address any possible indirect impacts from future development that might occur during the 20-year project planning period.

Based on the above information, there should be no significant, short-or long-term, direct or indirect, adverse impacts to surface water resources as a result of the construction of the city's proposed project, and a net

improvement in surface water conditions upon reducing the number of SSO activations taking place in the project area.

➤ Ground Water

Ground Water Quality: The Great Miami River and its associated buried valley aquifer system are highly productive, high quality resources and their protection is of vital importance to the City of Miamisburg and surrounding communities. For this reason, among others, US EPA has designated the system as a sole source aquifer, subject to specific review criteria, and the city has enacted a Wellfield Protection Overlay District Ordinance that applies to all work in and around its source of drinking water. By the contractors working on this project complying with the terms of the city's ordinance and being informed of the sole source aquifer's regional significance, Ohio EPA expects that the city's wellfield and the underlying aquifer will be adequately protected from any spills that might occur during this proposed project.

Ground Water Dewatering: Given the proximity of the Great Miami River and its adjacent aquifer to the project area shown in Figures 2 and 4, ground water is expected to be encountered. As a result, temporary site dewatering during construction of the proposed project is expected to be necessary, so that it can be completed successfully. To assure no adverse direct impacts, all dewatering flows will be filtered before discharge to any storm sewers or other stabilized sites. Any variations from this proposed dewatering plan may require additional review and approval by Ohio EPA.

To conclude, all dewatering activities must conform to all relevant parts of the contract documents (such as erosion control), as well as the Stormwater Pollution Prevention Plan and any NPDES permit (pretreatment) requirements. As a result, all discharge of dewatered flows will be monitored so as to avoid any adverse environmental impacts from the release of contaminated ground water, sediment laden water, or colder than ambient temperature water to the environment. Once construction is successfully completed, the dewatering activities will cease, and ground water levels will begin to return to their pre-construction levels.

Based on the above, the proposed project should not result in significant, short-or long-term, direct adverse environmental impacts to ground water quality or quantity.

In addition to no direct effects on ground water, the proposed project should also not indirectly affect any ground water resources through either related infrastructure improvements or property development. The main reason for this conclusion is that the city already provides potable water to the project area, and so any future development that this proposed project helps

facilitate should not result in any corresponding increase in ground water use or noticeable change in its quality. Overall, no adverse effects on ground water quality or quantity are expected to result from this proposed project.

3. Aquatic, Terrestrial, and Critical Habitat, including Floodplains and Wetlands

➤ Aquatic Habitat

During the planning and design of this proposed project, the one directional-drilling river crossing was the subject of more detailed reviews by Ohio EPA for potential direct aquatic and terrestrial habitat impacts. Given the frac-out control contingency plan required for this proposed project, Ohio EPA expects that no direct, significant, adverse impacts on surface aquatic habitat features (streams, floodplains, or wetlands) are expected to occur during the proposed construction period. Further support for this conclusion is that there will be no wetland impacts due to the absence of any wetlands within the project alignment where surface disturbing activities are proposed. Please see Figure 4.

Readers should also note that adherence to a storm water pollution prevention plan for this project is expected to assure that appropriately timed site restoration activities occur and that aquatic habitats experience no significant, short-or long-term, direct adverse environmental impacts. Overall, a long-term benefit to aquatic habitats around the Great Miami River and downstream is the expected outcome of this proposed project. In particular, grading and properly timed seeding of backfilled entry and exit force main bore holes, excavated material, the new pump station excavation, and spoil disposal sites should help reduce short or long-term, direct impacts on aquatic resources to insignificant levels.

➤ Terrestrial Habitat

The most notable terrestrial habitat feature in the project area is the presence of trees. However, through generally careful selection of the force main alignment, the launch pits for the force main jack and bore and HDD work locations, and the pump station site, no removal of any trees is expected to occur. On this basis, Ohio EPA expects that no significant, short-or long-term, direct (or indirect) adverse environmental impacts to terrestrial habitat are expected.

In summary, on the basis of these findings for aquatic (wetlands, floodplains, and streams) and terrestrial (upland) habitats, Ohio EPA has determined that Miamisburg's proposed project will have no significant, direct, adverse

environmental effects on any unique terrestrial or aquatic habitat features. Similarly, given the limited growth potential of the project and facilities planning areas shown above in Figures 2 and 3, the potential for indirect and cumulative impacts is low.

➤ Critical (Suitable) Habitat

According to the Ohio Department of Natural Resources' (ODNR) Division of Natural Areas, ODNR's Division of Wildlife, and the U.S. Fish and Wildlife Service (US FWS), the project area shown in Figures 2 and 4 does not include any known critical (suitable) habitat used by federally-listed endangered or threatened species, including the Indiana bat, Northern long-eared bat, the rayed bean, and snuffbox. The same applies to any state-listed species such as the inland rush (plant), upland sandpiper (bird), the eastern massasauga (reptile), and Kirtland's snake. In general, ODNR concluded during its reviews that the proposed project is not likely to have an impact on any of the state-listed animal species that historically have existed in the project area. Similarly, no plant species of any significance are known to now occupy the project area under review in this assessment. Accordingly, Ohio EPA has concluded that no significant direct, indirect, or cumulative impacts on animals or plants are likely to occur in response to the proposed improvements on the basis of the sites selected and the force main installation techniques chosen.

4. Land Use (including Open Space) and Agriculture

Based on a review of this proposed project and the city's existing zoning for the project area, Ohio EPA has concluded that the project should have no significant direct, indirect, or cumulative adverse effects on either land use or agriculture production for the following reasons. First, the project's location is within the City of Miamisburg as shown in Figures 2-3. Second, from a direct impact standpoint, all construction activities will be limited to a previously-disturbed corridor shown in Figure 2 and Figures 4-5. Thus, no significant, adverse, direct short-term impacts on land use or agricultural lands are possible during this proposed project's twelve-month construction period, and its subsequent site restoration. Third, from an indirect and cumulative impact standpoint, any long-term effects on land use or agriculture land are expected to be minimal because no farmland is present.

5. Air Quality

Air pollution levels in the project area mirror those in Montgomery County as a whole. Since the entire county is now in full attainment with air quality standards for all seven major ("criteria") air pollutants, Ohio EPA has concluded that the city's proposed project will have no significant, adverse, direct, indirect, or cumulative impacts on air quality. This conclusion is supported by the air quality provisions in

the detail plans and specifications. For example, given that the proposed project is expected to be completed over twelve months within a relatively isolated area, residents are unlikely to encounter increases in heavy truck traffic on a regular basis. Any increases are expected to be relatively temporary. With the mitigation proposed for dust control and proper tuning and maintenance of emission controls on heavy equipment, this relatively short-term increase in construction equipment activity should not result in any significant, adverse, short- or long-term impacts on air quality. In addition, use of dust control measures (such as water and calcium chloride) and prompt mulching, reseeding, and repaving of disturbed areas in reasonable sections should limit dust generation to relatively low levels, as well as minimize soil erosion and sedimentation of area waterways.

Ohio EPA supports the conclusion that this proposed project is consistent with the objectives of water quality planning under the Clean Water Act (see the Miami Valley Regional Planning Commission's web site and Figure 3), and with the State of Ohio's State Implementation Plan under the Clean Air Act. These assurances also indicate that any projected future growth in the facilities planning area should not induce adverse indirect environmental impacts on air quality. A positive benefit of this proposed project will be the elimination of odors associated with the city's SSOs and existing pump station and force main in the vicinity of Westover Park.

6. Noise, Traffic, Aesthetics, and Safety

The contract specifications and detail plans for Miamisburg's proposed project provide adequate mitigation to address potential relatively short-term noise, traffic, and aesthetic concerns from truck traffic and other heavy equipment use. As a result of implementing control measures such as keeping construction equipment properly operating between 7 AM and 5 PM, preventing construction activity during evening and nighttime hours, and providing traffic detours as needed while maintaining limited access in construction areas, no significant, direct project effects on noise, traffic, and aesthetic levels should occur. Overall, noise levels and traffic patterns are expected to return to pre-construction levels once the city's proposed project is completed. By reducing the SSOs mentioned in the previous sections of this document, Ohio EPA expects that Miamisburg's proposed project will improve the overall aesthetics of the project area in the long-run.

Finally, provisions have been included in the contract documents to protect workers' and residents' hearing and safety during the construction of this project. Compliance with the traffic control plan in the contract documents will help assure this, along with meeting the terms of the specifications in ODOT's Manual of Uniform Traffic Control Devices.

7. Energy Use

Based on the planning information provided by Miamisburg, construction of this proposed pump station and force main project is not expected to require a significant amount of non-renewable energy. As such, the planned twelve-month construction period, with its energy use in the form of fuel consumption, is an unavoidable, but necessary, aspect of this proposed project if the wastewater needs of the project area are to be addressed. On this basis, no significant, short- or long-term adverse environmental impacts on energy use are expected to result from the construction activities involved in Miamisburg's project.

In contrast to the prior conclusion about construction-related energy use, energy to operate the proposed replacement Westover pump station is expected to require a long-term, permanent commitment. This commitment is in the form of electricity to run the pump station, as well as a back-up generator at this location, over the next 20 years to maintain the operation of these proposed facilities and keep wastewater from escaping into the environment. Thus, this feature of the proposed project is an unavoidable, long-term aspect of the overall project. However, as these new energy demands are not expected to be large in the overall, Ohio EPA anticipates the actual energy use should be consistent with the operation of other wastewater facilities of this type and not a significant draw on local sources.

To conclude, the operation of the proposed pump station and force main is not expected to have any significant short- or long-term adverse effects on the production and availability of non-renewable energy, or the air pollution energy production creates within this context. This conclusion was reached primarily because the energy demands from these new facilities are expected to be within the range of electrical energy already currently available.

8. Archaeological and Historic Resources

Ohio EPA's review of the proposed pump station location and force main alignment found that this proposed project as shown in Figures 2 and 4 will not adversely affect archaeological and historic properties. The basis for this conclusion is twofold: First, the pump station site is within a previously disturbed area. Second, the force main alignment and proposed installation methods to get it from the west side of the Great Miami River to the east side reviewed by Ohio EPA indicate that minimal surface disturbance will occur. Accordingly, the potential to find any as-yet undiscovered, archaeological and historic resources listed in, nominated to, or eligible for the National Register of Historic Places within the project corridor appears low.

Should any of these resources appear during the project's construction, the detail plans include the necessary provisions for the contractor to stop work and coordinate with the appropriate authorities at OHPO. Ohio EPA concurs with this

approach. On this basis, any direct or indirect impacts on these types of resources should not be adverse.

9. Local Economy

As documented earlier, the proposed project is related to addressing SSOs and I/I in the city's collection system, and not to providing capacity for future growth. Also, as noted above in the Project Implementation section of this document, the long-term costs of this project and others the city is in the process of completing are not expected to have any significant, adverse effect on the local economy. This conclusion is based on the fact that the city has already scheduled water and sewer rate increases through 2019 and that the resulting fees are expected to be affordable for an average city resident.

I. Public Participation

The proposed project and the city's proposal to finance its proposed Westover pump station and force main project, as described in this document, using WPCLF funds, has been reviewed by the following agencies for technical input, or for conformance with legislation under their jurisdiction:

- * Miami Valley Regional Planning Commission
- * Ohio Department of Natural Resources
- * Ohio Environmental Protection Agency
- * Ohio Historic Preservation Office
- * U.S. Fish and Wildlife Service

As no negative comments about the direct or indirect impacts of the proposed improvements were received from these review agencies, Ohio EPA has concluded that any potential concerns have been addressed during project planning, as indicated in the environmental impacts section of this document.

In preparation for this proposed project and others underway, the city has completed extensive public notification and involvement activities. These have occurred over the past several years and focused on the city's water and sewer rate increases. Most recently, the city has scheduled a public meeting for August 19, 2015 and provided residents with a fact sheet on this and other related wastewater projects in Miamisburg. At this meeting, nine residents attended, listened to an overall program and project-specific presentation, and had their questions answered during an informal discussion. On this basis, the city and its consultants have provided facilities planning area residents with ample opportunity to have their questions answered during the public review and comment period. Accordingly, Ohio EPA has concluded that the public participation requirements of the WPCLF program have been met and that the city has appropriately involved the public in the decision making process for its pump station and force main project.

J. Reasons for a Preliminary Finding of No Significant Impact

Based upon our review of Miamisburg's project planning information and the materials presented in this Environmental Assessment, Ohio EPA has concluded that there will be no significant adverse direct impacts from the city's pump station and force main project as it relates to the environmental features discussed previously. Through avoidance of the most environmentally-sensitive areas and the use of mitigative measures described in this document, the impacts from the project's construction should generally be relatively short-term and insignificant. Given the limited scope and purpose of the proposed project, no significant, adverse indirect or cumulative impacts are expected. On-going city initiatives to implement comprehensive planning activities, local zoning, and storm water controls, as well as enforcement of existing federal and state regulatory frameworks under the federal Clean Water Act, Endangered Species Act, and existing state law should help assure that these objectives are met.

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