



April 29, 2024

Mr. Jeffrey Aluotto  
Board of County Commissioners of Hamilton County, Ohio  
138 East Court Street  
Cincinnati, Ohio 45202

Re:    Board of County Commissioners of Hamilton County, Ohio  
      Westport Village Pump Station Elimination  
      Loan Number: CS391525-0177  
      Finding of No Significant Impact

Dear Mr. Aluotto:

On March 25, 2024, Ohio EPA issued a preliminary Finding of No Significant Impact (FNSI) and Environmental Assessment for the Board of County Commissioners of Hamilton County, Ohio Westport Village Pump Station Elimination project for public review and comment. The thirty-day period for comments has passed and no comments have been received. Therefore, the conclusions contained in that preliminary FNSI become the basis for this final FNSI for the above referenced project.

This final Finding of No Significant Impact may be revised or rescinded at a future date based upon either changes to the proposed project, the presentation of information which significantly alters earlier conclusions, or failure of the applicant to perform the environmental mitigation prescribed in the Environmental Assessment.

Sincerely,

A handwritten signature in black ink that reads "Kathleen Courtright".

Kathleen Courtright, Assistant Chief  
Division of Environmental & Financial Assistance



**March 25, 2024**

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

**Board of County Commissioners of Hamilton County, Ohio – Hamilton County  
Westport Village Pump Station Elimination  
Loan Number: CS391525-0177**

The attached Environmental Assessment (EA) is for a pump station elimination and new sewer construction project in Cincinnati which the Ohio Environmental Protection Agency intends to finance through its Water Pollution Control Loan Fund (WPCLF) below-market interest rate revolving loan program. The EA describes the project, its costs, and expected environmental benefits. We would appreciate receiving any comments you may have on the project. Making available this EA and seeking your comments fulfills Ohio EPA's environmental review and public notice requirements for this loan program.

Ohio EPA analyzes environmental effects of proposed projects as part of its WPCLF program review and approval process. We have concluded that the proposed project 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 this project 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 Board of County Commissioners of Hamilton County, Ohio can then proceed with its application for the WPCLF loan.

Sincerely,

A handwritten signature in black ink that reads "Kathleen Courtright".

Kathleen Courtright, Assistant Chief  
Division of Environmental & Financial Assistance

Attachment

# ENVIRONMENTAL ASSESSMENT

## **Project Identification**

Project: Westport Village Pump Station Elimination

Applicant: Board of County Commissioners of Hamilton County, Ohio  
138 East Court Street  
Cincinnati, Ohio 45202

Loan Number: CS391525-0177



**Figure 1. Hamilton County**

## **Project Summary**

The Board of County Commissioners of Hamilton County, Ohio (Board) has requested funding from the Ohio Water Pollution Control Loan Fund (WPCLF) to finance the Westport Village Pump Station Elimination project. The proposed project consists of the elimination of a failing pump station, the construction of new sanitary sewer, and stubs being provided for the future sewer connection of four properties currently being served by household sewage treatment systems (HSTS).

## **History & Existing Conditions**

The Board, based in Hamilton County (Figure 1) manages the Metropolitan Sewer District of Greater Cincinnati (MSDGC), also known as the Metropolitan Sewer District (MSD). MSD operates a number of different wastewater treatment plants (WWTPs) and a collection system within the City of Cincinnati and surrounding areas. One of these plants is the Muddy Creek WWTP, which currently receives the flows from the Westport Village pump station.

The existing Westport Village pump station was constructed in 1968, replaced in 1985, and is nearing the end of its design life. The force main was constructed in 1968 and is also nearing the end of its design life. While no overflows are known to have occurred, MSD wishes to eliminate the pump station before the pump fails due to age. The Westport Village subdivision was constructed in the 1960s, and MSD does not have any records on why the pump station was built when gravity sewer could have been sufficient at the time of construction. It is suspected that the sewer and pump station configuration at that time necessitated a pump station; however, the sewers have been updated since then and the other downstream pump station has been eliminated, meaning that this pump station can also now be eliminated.

In addition to the pump station replacement, four residential homes on Charity Drive that are currently serviced by HSTS will receive stub connections that will allow them to connect to the new sewer line at an undetermined point in the future. MSD does not require these residents to connect to the sewer, that responsibility falls to the Hamilton County Health Department. The residents will coordinate with the county health department to determine when they should connect to the sewer. At least two of these four homes have reported issues with their HSTS and are looking forward to connecting to the new sewer line.

This project was originally designed between 2012 and 2014. MSD internal engineers began to revisit the project in 2022. Several rounds of alternative analysis and public participation have occurred due to the planning hiatus.

### **Population and Flow Projections**

Currently, this pump station serves 19 homes, located on Westport Court. With the completion of this project these homes will continue to receive service, and service will be extended to four additional homes on Charity Drive that are currently serviced by HSTS. This will translate to an estimated additional flow of 5,000 gallons per day of wastewater to the Muddy Creek WWTP. This plant currently treats an average of 15 million gallons per day, so an increase in flow of about 0.03% is not expected to have much of an impact on the plant.

The entire MSD sewer system serves around 830,000 people and treats about 200 million gallons of wastewater a day. These numbers are expected to hold steady in the coming years.

### **Alternatives**

This project went through two rounds of alternatives analysis to determine what the best course of action would be to fix the failing pump station. The first round examined four potential options:

#### **Alternative 1: Upgrade Pump Station and Replace Force Main**

This alternative would replace the entire pump station, add a stand-by generator for back up power supply, and replace 450 feet of 4-inch force main. This option was not preferred due to the potential for overflows in a residential front yard, which would pose a health hazard. This was also the most expensive option.

#### **Alternative 2: New gravity sewer with fill in backyard**

This alternative would eliminate the pump station and add new gravity sewer running between Sharlene Court and Charity Drive. The gravity sewer would run between three and 13 feet below ground, and due to the existing angle and topography, would require approximately 300 cubic yards of fill in residential backyards to cover the sewer pipe to an appropriate depth of two feet. This option was not preferred due to residential pushback against backyard fill.

#### **Alternative 3: New gravity sewer with additional backyard fill**

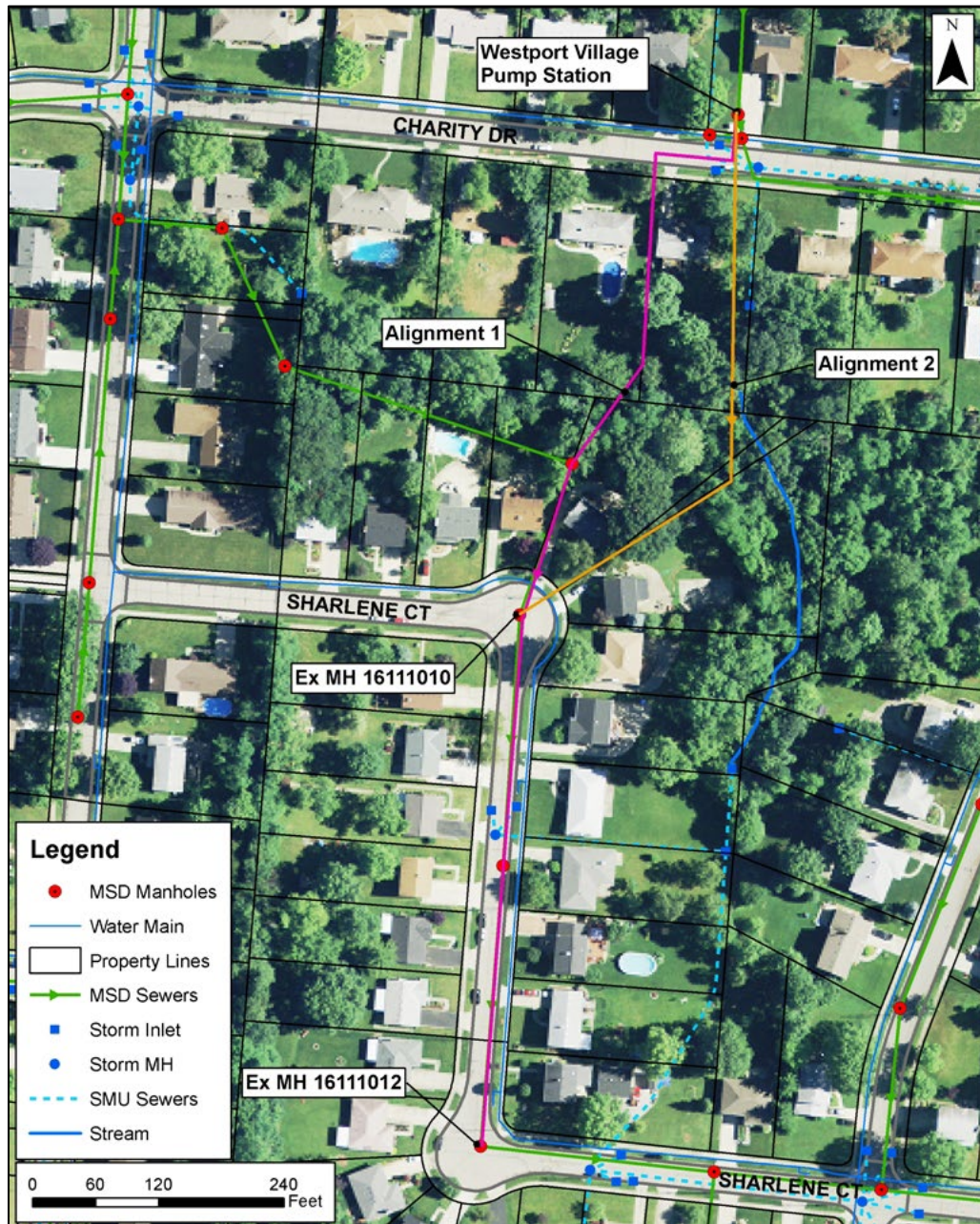
This alternative is identical to Alternative 2, except with fill being placed in a different area. This alternative would require 1,300 cubic yards of fill in a different residential backyard. This option was also not preferred due to residential concerns and concerns over the gravity sewer not being at the correct slope to drain properly.

#### **Alternative 4: New gravity sewer with no backyard fill**

This alternative will eliminate the pump station and the issue of backyard fill by lowering the sewer pipe depth from two feet to between 12 and 27 feet. The new gravity sewer will follow the same route as in alternatives 2 and 3, simply at a deeper depth. This option was ultimately the chosen alternative as it allows for the sewer to be constructed at the correct slope for proper drainage and avoids the issue of backyard fill.

Once Alternative 4 was selected as the preferred option, the Board's engineers then looked at two different routes that the new gravity sewer could take, labeled Alignment 1 and Alignment 2. The alignments were very similar, differing only in that Alignment 2 had fewer utility conflicts, would

not require a by-pass pump to maintain existing sewer service, and was overall less expensive. This led to the preferred alternative being selected as Alignment 2. See Figure 2 below for a look at both alignments considered for the project.



**Figure 2. Both alignments considered for project. Alignment 2 was chosen.**

### **Selected Alternative**

This project consists of the elimination of the aging Westport Village pump station and force main by installing approximately 425 feet of new 12-inch gravity sewer and replacing approximately 675 feet of existing 12-inch gravity sewer at a deeper depth. Four residential houses currently being served by HSTS will receive stubs in order to connect to the new gravity sewer after the completion of the project. See Figure 3 below for a map of the project area. In the figure, dark green lines

denote existing sewer lines. The red line is the force main that is being abandoned. The light green line is the new sewer line that is being constructed. The pink lines are private lateral connections from residential properties to the sewer line.

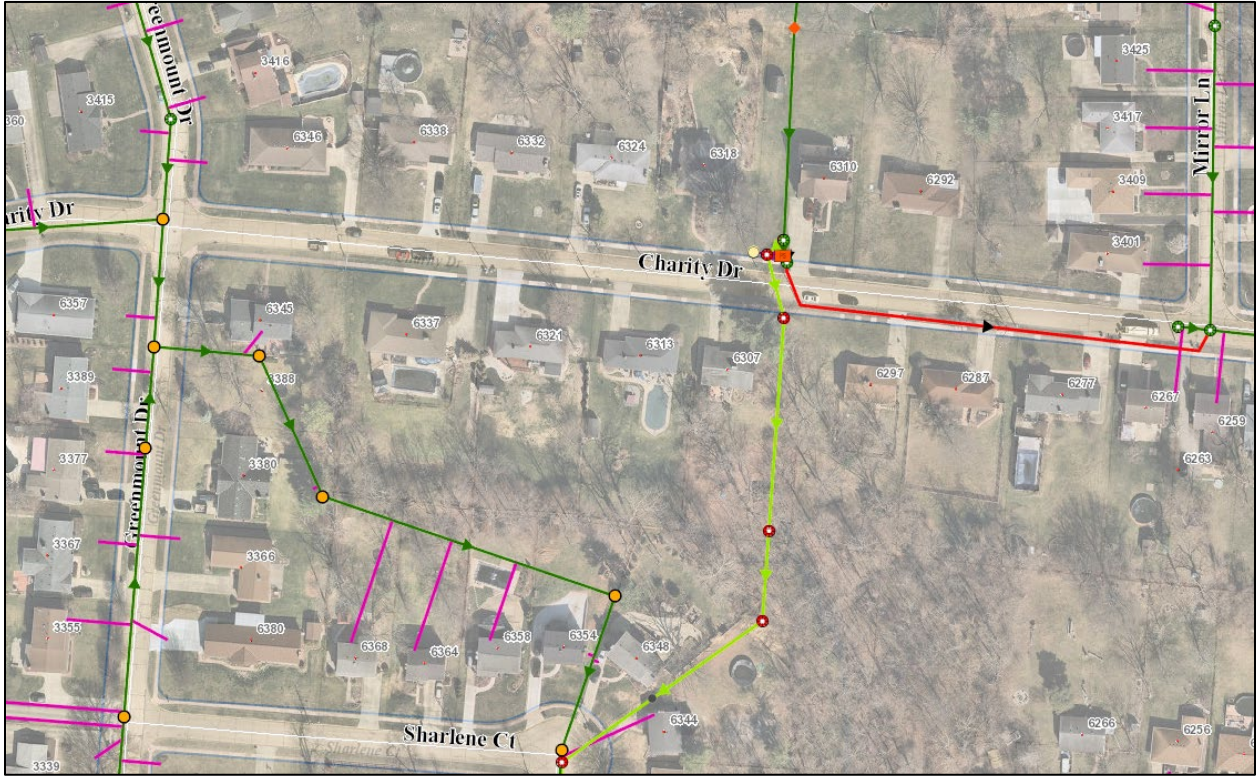


Figure 3. Map of the project area.

**Implementation**

The Board proposes to borrow \$2.5 million from the Ohio WPCLF at the standard interest rate of 2.42%. WPCLF interest rates are set monthly and may change for a later loan award. Assuming a 20-year loan, borrowing this amount could save the Board approximately \$380,000 over the life of the loan compared to the current market rate of 3.67%.

There are no sewer rate increases scheduled as a result of this project. The fee for the residents to connect to the new sewer is \$480. The average annual sewer bill for residents served by the Board is \$638. This is 1.4% of the median household income (MHI: \$45,235) and is slightly higher than the Ohio average annual sewer bill, \$490. Construction began in January 2024 and is scheduled to be completed in approximately five months.

**Public Participation**

Two public budget hearings were held in December 2011. There were some community concerns about residential backyard fill. When public participation picked back up in 2023 this proved to not be an issue as most of the backyard fill was designed to be avoided. MSD did reach an agreement with a neighbor to regrade their backyard at the conclusion of construction at the resident's

request. Additional public meetings were held on October 6<sup>th</sup>, 2022, and June 29<sup>th</sup>, 2023, that authorized construction funding for this project.

In December 2023, once the contractor was selected, a notice-of-construction letter was mailed to about 96 homeowners in the surrounding neighborhood, the local township trustees, and a nearby school. When tree clearing began later that month, many residents spoke with the project manager about the project. One of the neighbors who just had his trees cut down was upset about the removal, but grateful that MSD was able to save some of the larger trees closer to his house. MSD also posted a sign with project information adjacent to the sidewalk and pump station that will be removed.

Ohio EPA is unaware of opposition to or controversy about the project. Ohio EPA will make a copy of this document available to the public on its web page: <https://epa.ohio.gov/divisions-and-offices/environmental-financial-assistance/announcements> and will provide on request to interested parties.

### **Environmental Impacts**

The project has the potential to affect the following features, but the effects will be reduced or mitigated to acceptable levels as explained below.

#### Air Quality

The project area in Hamilton County meets standards for the six regulated air pollutants (carbon monoxide, sulfur dioxide, nitrogen oxide, lead, particulate matter, and ozone). Neither construction nor operation of the proposed new sewer will add significant air pollutants. Contractors will ensure fugitive dust is minimized during construction by applying water or other environmentally benign dust suppressants. The local air pollution contribution by construction vehicles will be temporary and similar to that of vehicles regularly transiting the construction area. For these reasons, the project should have no significant adverse short-term or long-term impacts on local air quality.

#### Archaeological and Historical Resources

The State Historic Preservation Office (SHPO) concurs with Ohio EPA that this project should not impact archaeological or historical resources, as none were found in a record search. As all project work will be conducted in previously disturbed land within the road right-of-way and residential yards, the probability of finding archaeological or historical resources is very low.

In the event of archaeological finds during construction, Ohio Revised Code Section 149.53 requires contractors and subcontractors to notify SHPO of any archaeological discoveries in the project area, and to cooperate with the Office in archaeological and historic surveys and salvage efforts when appropriate. Work will not resume until a survey of the find and a determination of its value and effect has been made, and Ohio EPA authorizes work to continue.

#### Surface Water Resources

The installation of the new sewer line between Sharlene Court and Charity Drive will go through an undeveloped area between the backyards of the houses along these streets. This area is wooded and contains a headwater stream. This stream is a tributary to Muddy Creek and is about 2-3 feet across with a limestone/clay bottom.

The project's scope of work includes using jack-and-bore (a process where the pipe is installed underground without open trenches) to install the new pipe about halfway across the undeveloped

area, and then using open cut trenches to install the rest, including through the headwater stream. U.S. Army Corps of Engineers requires a permit for impacting a stream. MSD has obtained a Nationwide Permit #58 for the project and will perform stream restoration after construction.

#### Endangered Species, Fish and Wildlife

This project is within the range of the endangered Indiana bat and northern long-eared bat, and the proposed endangered tricolored bat. U.S. Fish and Wildlife Service (USFWS) stated that the project was unlikely to impact federally threatened and endangered species, as well as federally proposed threatened and endangered species, as long as the correct seasonal tree-clearing dates were followed to avoid impacting the listed bat species. MSD has already followed the correct tree clearing dates, thereby fulfilling this requirement.

The project is within range of the proposed endangered salamander mussel, but the headwater stream in the project area does not provide suitable habitat for this mussel.

#### Energy

The proposed project should result in a reduction of energy consumption as the pump station, which uses electricity, will be eliminated and replaced with gravity sewer, which does not use electricity. The reduction in energy use was a factor in choosing the preferred project alternative, as this resulted in a cost savings for MSD.

#### Ground Water Resources

The proposed project will be replacing and adding sanitary sewer lines at a variety of depths. The deepest trenching that will occur during the project is 35 feet deep, which will occur along Sharlene Court. MSD will conduct the proper steps during dewatering to ensure that sediment is not conveyed into local waterways or groundwater.

#### Noise, traffic, aesthetics, and safety

Construction noise will be locally audible and similar to that of small machinery used in the local area. Construction will involve excavation in road rights-of-way and backyard areas between suburban streets. Temporary disruption to local traffic will be controlled by use of standard measures (barricades, detours, signs, barrels, flaggers) to ensure safety. Trenches will be covered or filled at the end of each workday to help protect public safety. After construction is complete and road surfaces replaced and lawns restored, and aesthetics will be little changed from pre-construction conditions. For these reasons, this project will result in no significant adverse long-term impacts to noise, traffic, safety, or aesthetics.

#### Terrestrial Habitat

The project work will be residential backyards, areas that lack critical habitat. Trees that will be removed for this project will be removed in the correct season to avoid impacts to endangered bat species.

#### Unaffected Features

Based on the project's scope, location, and prior disturbances, MSD's proposed project is not expected to affect coastal zones, farmland, floodplains, recreational land use, safe drinking water, sole source aquifers, wetlands, or wild and scenic rivers. These environmental attributes are not in the project area.



## **Conclusion**

Based upon Ohio EPA's review of the planning information and the materials presented in this Environmental Assessment, we have concluded that there will be no significant adverse impacts from the proposed project as it relates to the environmental features discussed previously. 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. This project will benefit local residents by eliminating an aging pump station and allowing four properties to connect to sanitary sewer and abandon their HSTS.

## **Contact information**

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