

# EXHIBIT A

NORTHEAST OHIO REGIONAL SEWER DISTRICT  
RESOLUTION NO. 251-22

**AUTHORIZATION TO ENTER INTO AGREEMENTS WITH MEMBER COMMUNITIES TO FUND THE RESPECTIVE EIGHTEEN MEMBER COMMUNITY INFRASTRUCTURE PROGRAM PROJECTS PRESENTED FOR THE 2023 ROUND OF FUNDING, IN THE TOTAL AMOUNT NOT-TO-EXCEED \$14,987,695.67, AS PRESENTED.**

**WHEREAS**, on April 21, 2022, the Board of Trustees adopted Resolution No. 132-22, authorizing the District to implement the 2023 Member Community Infrastructure Program (“MCIP”) (the “Program”) and to issue a Request for Proposals (RFP) for the Program;

**WHEREAS**, the Watersheds Program Department received twenty-two (22) proposals for the Program;

**WHEREAS**, The District recommends entering into agreements with the respective grant applicants listed below in Table 1 and Table 2 in the total amount not-to-exceed Fourteen Million Nine Hundred Eighty-Seven Thousand Six Hundred Ninety-Five and 67/100 Dollars (\$14,987,695.67); and

**TABLE 1. 2023 MEMBER COMMUNITY INFRASTRUCTURE PROGRAM  
EQUITY INVESTMENT FOCUS AREA PROJECTS**

APPLICANT	PROJECT TITLE	AWARD
East Cleveland	Target Area Multi-Street Sewer Replacement Phase 1-Woodlawn	\$ 2,722,725.00
Garfield Heights	East 126th Street and Wolf Creek Interceptor Relocation Project	\$ 669,675.00
East Cleveland	Wheeler Ave. Sewer Replacement Project	\$ 367,077.00
Maple Heights	Southwest Sewer District Sewer Improvements - Ph 3	\$ 182,700.00
Maple Heights	Southwest Sewer District Sewer Repairs Phase 1a	\$ 1,431,750.00
Berea	North End Sewer New Flow Connection	\$ 618,141.00
Cleveland Division of Water Pollution Control	Brookside Boulevard Area Sewer Improvement Phase 1	\$ 1,542,564.00
Garfield Heights	MLK Drive Sewer Separation Project	\$ 162,900.00
Newburgh Heights	East 26th Street Sewer Separation Project	\$ 90,800.00
<b>EIFA FUNDING</b>		<b>\$ 7,788,332.00</b>

**TABLE 2. 2023 MEMBER COMMUNITY INFRASTRUCTURE PROGRAM  
NON-EQUITY INVESTMENT FOCUS AREA PROJECTS**

APPLICANT	PROJECT TITLE	AWARD
Shaker Heights	Lynnfield/Lomond SSO-11 Control Project	\$ 2,000,000.00
Cleveland Heights	Cedar Glen Pkwy Rehab and Replacement	\$ 619,300.00
South Euclid	Maywood Road Infrastructure Improvement Project Phase 2	\$ 634,412.00
Parma	Krueger Avenue Area Sewer Improvements Phase 2	\$ 1,000,000.00
Beachwood	Timberlane/Green Sanitary Relief Sewer Phase 1	\$ 1,400,000.00
Parma	East Linden Lane Pump Station Relocation and Replacement Project	\$ 235,000.00
University Heights	East Scarborough and Canterbury Relief Sewer	\$ 86,951.67
North Royalton	North Royalton Valley Vista Pump Station Improvements	\$ 725,000.00
Cleveland Heights	CH-27, CH-51 SSO Control	\$ 498,700.00
<b>NON-EIFA FUNDING</b>		<b>\$ 7,199,363.67</b>

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE NORTHEAST OHIO REGIONAL SEWER DISTRICT:

**Section 1.** That this Board hereby authorizes the District to enter into agreements with respective Program applicants listed in the preamble of this Resolution, consistent with the Member Community Infrastructure Program Policy, in a total amount not-to-exceed Fourteen Million Nine Hundred Eighty-Seven Thousand Six Hundred Ninety-Five and 67/100 Dollars (\$14,987,695.67).

**Section 2.** That this Board further finds that the Program serves a public purpose by assisting member communities with cost-effective sewer infrastructure projects to address water quality and quantity issues associated with sewer infrastructure that adversely impact human health and the environment.

**Section 3.** That this Board hereby authorizes the Chief Executive Officer, at the request of the Director of Watershed Programs, to execute all documents and do all things necessary to effectuate the terms and conditions of the agreements authorized in Section 1.

**Section 4.** That this Board declares that all formal actions of the Board concerning and relating to the adoption of this resolution and that all deliberations of the Board and any of its committees that resulted in said formal action were conducted in meetings open to the public and in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

On motion of Mr. Sulik, seconded by Ms. Dumas, by rollcall vote with abstention by Mayor DeGeeter and Mayor Bacci, the foregoing resolution was unanimously adopted on August 4, 2022.



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Timothy J. DeGeeter, Secretary  
Board of Trustees  
Northeast Ohio Regional Sewer District

# **EXHIBIT B**

# EXHIBIT B

(Insert Member Ordinance)

# EXHIBIT C

**Northeast Ohio Regional Sewer District**  
**2023 Member Community Infrastructure Program**  
**Request for Proposals**  
**April 21, 2022**

### **Introduction**

The Northeast Ohio Regional Sewer District (District) through the Member Community Infrastructure Program (MCIP) will fund local communities and other eligible political subdivisions that own, operate, and maintain public sewer infrastructure that is tributary to a District wastewater treatment plant to address water quality and quantity issues associated with sewer infrastructure that adversely impacts human health and the environment.

The District will provide funding for up to 75% of project costs. The MCIP funds will be provided by the District on a reimbursement basis directly to the community based on MCIP project costs, conditioned on the District's prior approval of the design and/or construction of the project.

The District will determine the appropriate funding mechanism, grant, or community operating lease, during project evaluation. Determination of the funding mechanism for the project will be at the discretion of the District. Refer to the MCIP Policy for additional background and information on the funding mechanism.

### **Eligible Projects**

Eligible projects include, but are not limited to the following:

- **Projects to Mitigate Sanitary Sewer Overflows (SSO) and Illicit Discharges:** Projects necessary to mitigate separate sanitary sewer overflows and illicit discharges.
- **Projects to Mitigate Infiltration & Inflow (I/I):** Projects necessary to address inflow and infiltration problems, including but not limited to, rehabilitation or separation of common trench pipes and manholes, removal of direct inflow connections, repair, or replacement of cracked or exfiltrating combined, sanitary or storm sewers, and reduction of public and private sources of I/I.
- **Projects to Remove/Eliminate Failing Home Sewage Treatment Systems (HSTS):** Projects to construct new separate sanitary sewers to eliminate failing HSTSs. HSTS failure should be confirmed by the jurisdictional Board of Health.
- **Projects that Improve Local Sewer System Level of Service:** Projects that reduce local sewer flooding and backups in the local system that can be attributed to undersized or structurally deficient local sewers. Such projects include efforts to address basement flooding in separate and combined sewer systems, and to the extent practical, on-site stormwater management practices to mitigate the increase in downstream flows.
- **Projects to Manage Stormwater Flow that Improve Combined/Sanitary Level of Service:** Projects that reduce volume, flow rate, or pollutant load of stormwater to a combined sewer, separate storm sewer, and/or directly to receiving water body that improve a combined or sanitary sewer level of service
- **Projects that Separate Over/Under Sewers:** Complete separation of common trench over/under sewers, with new infrastructure to transport storm and/or sanitary flows.

To ensure project eligibility, communities should schedule a pre-proposal meeting prior to submitting a proposal. Details on scheduling a pre-proposal meeting are found under the Pre-Proposal Meeting section of this document.

### **Ineligible Projects**

MCIP funds should not be used for any project that causes, accelerates, or contributes to water quality degradation or water quantity issues that increase flooding, erosion, or is otherwise detrimental to human health within the District's service area. Ineligible projects include, but are not limited to the following:

- The proposal of fill materials in floodplains, riparian areas or wetlands, and the culverting or channelizing of watercourses;
- Capital, operation, maintenance, and administrative expenses not directly related to an eligible project; and
- Projects that increase the potential for flooding within a community and/or neighboring community's combined, sanitary, or storm sewer systems or local watercourses. The applicant is responsible for evaluating any potential downstream or upstream impacts of the proposed work on other users, or on the level of service of the infrastructure.

### **Project Requirements**

To be considered for funding, projects at a minimum must meet the following requirements:

- Reduce water quantity issues and/or address water quality issues that impact human health and the environment associated with combined or separate sanitary infrastructure problems, as determined by the community or the District.
- Be located in the District's sanitary sewer service area (<http://arcg.is/2bPxzEt>).
- Meet all applicable District, federal, state, and local regulations.
- Design-only projects must complete design within 12 months of MCIP Project Agreement start.
- Design/Construction projects must reach construction completion within 24 months of a signed MCIP Project Agreement. The District will consider projects that may go beyond 24 months, but this should be discussed with the District at a pre-proposal meeting.
- Construction-only projects must include professional engineer stamped design drawings at the time of application, and construction activity must be complete within 12 months of a signed MCIP Project Agreement.
- Include at least 25% non-District matching funds dedicated to the project. These funds may include cash and/or in-kind sources. For example, costs associated with road rehabilitation in which MCIP funding is proposed for sanitary or combined sewer replacement or rehabilitation may be captured as non-District matching funds. Community Cost Share (CCS) may be used in accordance with CCS policy as community match. In addition, the following project costs may be captured to meet this 25% non-District matching fund requirement:
  - Personnel: Fully-loaded labor costs for employees of the community related

to the direct performance of engineering and design, construction services, project management, and performance verification on the project.

- Planning and design costs directly related to the project that were incurred prior to the submittal of a project proposal that have a material benefit to the proposal. These costs include, but are not limited to CCTV costs, manhole inspection costs, pre- construction performance verification activities (i.e. flow monitoring, water quality sampling), and engineering services such as surveying, design engineering, and cost estimating. Itemization and documented proof of these costs is required to be submitted with the proposal for consideration.

All funds must be approved as eligible by the District for the 25% non-District match requirement. Funds acquired from previous District awards cannot be used as match. Communities should contact the District's Grant Programs Administrator to assess if the funding source is eligible.

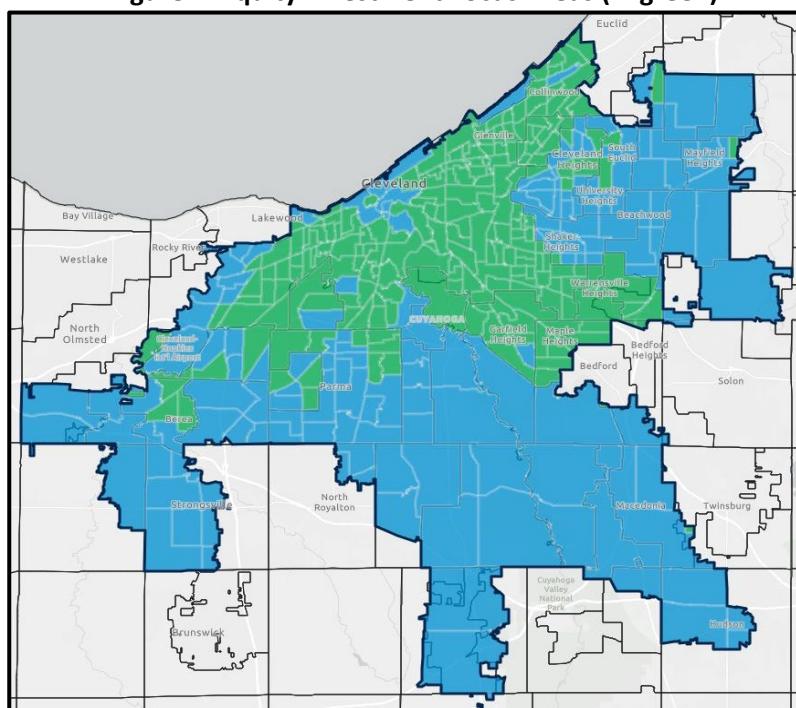
The District, at its sole discretion, may waive the 25% requirement for a community identified by the Office of the Auditor of the State of Ohio as being a local government in fiscal distress. This includes a community in fiscal caution, watch, or emergency as defined by the Office of the Auditor of the State of Ohio (<https://ohio auditor.gov/fiscal/local.html>).

### **Equity Investment Focus Areas**

The District will designate separate funding for the award of projects within Equity Investment Focus Areas (EIFA). For the purposes of this RFP, EIFA is defined as those areas within the District's sanitary sewer service area that are included in a census tract with high poverty levels. Households earning less than 250% of the Federal Poverty Level (FPL) are eligible for the District's Affordability Program. This criterion (FPL) is based on 2021 Census Data regarding Median Household Income and Average Household Size.

A 25% match is still required for projects within an Equity Investment Focus Area. A map delineating the EIFA can be viewed at the following link: <https://arcg.is/0e5v15> or in Figure 1 below.

**Figure 1: Equity Investment Focus Areas (in green)**



### **Terms of Grant Funding**

The MCIP is a reimbursement grant and payment will be made only on project-specific invoices as referenced in the approved project budget accrued on or after January 1, 2022. If the project for which you are applying is part of a larger construction project, the District will require individual, itemized, and verified invoices to support reimbursement. Refer to the District's *MCIP Policy, Process, and Procedures* document for additional information on reimbursement.

Costs associated with services provided by third-parties towards the project, including technical services such as engineering and design, construction services, project management, performance verification, testing, and inspection, and/or other direct costs as approved by the District, are eligible for grant funding. Indirect cost allocations are not eligible for reimbursement.

### **Project Performance Verification**

The District will require project performance verification to demonstrate how the project is functioning. Verification activities and data collection may include reporting, pre- and post-construction rainfall and flow monitoring, water quality sampling, and modeling or other type of evaluation, such as Rainfall Derived Inflow and Infiltration (RDII) determination depending on the type of project. Guidelines on the type of pre and/or post construction monitoring, sampling and evaluation are provided in **Attachment A – Performance Verification Guidelines**. Communities should review the guidelines and include their anticipated method(s) of data collection, project verification and the estimated associated costs in their proposal.

It is the applicant's responsibility to ensure that no negative impacts will occur as a result of the proposed project through investigations, modeling, or other analysis.

### **Project Evaluation**

The District will review and prioritize proposed projects for available funding based on the following criteria:

#### **1. Infrastructure Condition (30%)**

The current and actual condition of the structure using the condition descriptions defined in Table 1. Information that expands on the description should be provided with the proposal to assist with the scoring of this category. This may include but is not limited to condition assessments, identification of broken pipes, televised underground system inspection reports, age inventory reports and maintenance records, and any additional information that may impact the evaluation of the infrastructure condition. If available, condition assessments should be provided in accordance with NASSCO's Pipeline and Manhole Assessment and Certification Program (PACP and MACP). NASSCO condition is recommended. Only provide a high-level summary spreadsheet that details the sewer system's condition. If available, please provide photo or video proof of major defects with detailed documentation indicating defect(s).

Due to deficiencies commonly experienced with Over/Under sewer configurations (deteriorating, leaky, contribute high I/I and are difficult to maintain), Over/Under systems will automatically be scored 30 points in the Infrastructure Condition category.

**Table 1. Rating System for Structural Infrastructure Condition.**

Condition Rating	Description	Score
Failed	Complete reconstruction needed – existing infrastructure is failed, in the Over/Under configuration, and/or a PACP/MACP structural condition scores above 4.	30
Critical	Major reconstruction needed to maintain integrity, and/or A PACP/MACP structural condition scores above 4.	24
Poor	Partial reconstruction or extensive rehabilitation required to maintain integrity, and/or PACP/MACP structural condition scores between 3-4.	18
Fair	Major rehabilitation needed to maintain integrity, and/or a PACP/MACP structural condition scores between 2-3.	12
Good	Routine maintenance and periodic repairs required to maintain integrity, and/or a PACP/MACP structural condition scores between 1-2.	6
New	New infrastructure, and/or a PACP/MACP structural condition scores between 0-1.	0

**Note: To validate condition rating, photo/video evidence or a structural PACP/MACP report must be submitted.**

For projects where the infrastructure condition is unknown, the infrastructure condition will be assessed and scored based on age and/or common trench configuration, using Table 2. Trench type can be verified through photo documentation, Local Sewer System Evaluation Study report(s), or as-built drawings detailing the configuration. Applications should include documentation verifying age of infrastructure, as well as any additional qualitative or historical information that can confirm the current condition.

**Table 2. Rating System for Unknown Structural Infrastructure Condition**

Condition Rating	Description	Score
Failed	50 years or older, and/or an Over/Under configuration	30
Critical	40-49 years and/or Over Under or Dividing Wall configuration	24
Poor	30-39 years and/or common trench	18
Fair	20-29 years and/or common trench	12
Good	10-19 years	6
New	Less than 10 years	0

For projects proposing to remove/eliminate failing HSTSs, the infrastructure condition will be assessed using Table 3. Information that expands on the description should be provided with the proposal to assist with the scoring of this category.

**Table 3. Rating System for Home Sewage Treatment System Projects**

Age of HSTS	Score
20 years or older	30
19-16 years old	24
15-11 years old	18
10-7 years old	12
6 years or younger	6

**NOTE: Projects proposing to remove/eliminate failing HSTSs must provide:**

- Documentation that the area the community is targeting is part of an approved prescription of the Municipality's 208 Plan, or
- A feasibility study for removal has been completed, or
- A letter and/or agreement with the property owners or for the sanitary sewer assessment has been executed

**2. Water Quality and Quantity Impacts on Human Health and the Environment (35%)**

Demonstrate the effects of the project on water quality and quantity. The water quality and quantity impacts will be assessed using Table 4. Responses should be formulated that provide clarity to the following questions:

- What is the frequency and/or magnitude of the problem?
- What is the direct human health or environmental impact?
- How many verified homes, businesses, or other occupied structures will see a benefit from this project?
- How will the proposed project eliminate or reduce the water quality/quantity impact?
- How will the proposed project mitigate the potential for unregulated release of sewage to the environment

Information that verifies and quantifies the water quality and quantity issues should be provided with the proposal and appropriately referenced within the response (e.g., page or document reference). Examples of project type and corresponding, supporting evidence include but are not limited to the following:

- HSTS /Illicit Discharge Elimination
  - Findings & Orders or Public Nuisance issued (e.g. Board of Health, EPA)
  - Sampling data supporting water quality deficiency issues (e.g. *E. Coli*, Pollutant Load)
  - Regulatory agency mandates citing deficiencies
  - Documentation of failing HSTS
- Basement Flooding Elimination
  - Documentation of reported flooding events such as:
    - Household surveys with addresses and details of flooding event
    - Call logs with flood event dates
    - Photos of event

- Desktop or hydrologic/hydraulic modeling results (hydraulic grade line, projected basements at-risk)
- Combined Sewer Overflow (CSO)/ Sanitary Sewer Overflow (SSO) Elimination/Reduction/Control
  - Monitoring results
  - Modeling results (Overflow volume, number of activations, dates)
  - Sampling data supporting water quality deficiency issues (e.g. *E. coli*, Pollutant Load)
- I/I Reduction, Elimination
  - Dye testing
  - Smoke testing
  - CCTV
  - Peak flows identified from modeling or study (District Local Sewer System Evaluation Study (LSSES) or other study)
- Common Trench Rehabilitation - Trench Type Verification
  - Photographs
  - Design plans
  - CCTV
  - Dye Testing
  - Smoke Testing

**Table 4. Rating System for Water Quality/Quantity Impacts\***

Water Quality and Human Health Issue	Description	Score Range	
		Low	High
Failed HSTS, Illicit Discharge	Removal of a continuous source of water quality impairment during wet and dry weather	<b>11</b> <i>&lt; 40 units</i>	<b>20</b> <i>&gt; 200 units</i>
Basement Flooding	Reducing intermittent and direct water quality impairments to human health and private property	<b>11</b> <i>&lt;10 basements</i>	<b>20</b> <i>&gt; 20 basements</i>
CSO/SSO	Removal of wet weather source of water quality impairment	<b>6</b> <i>Unknown effect of project</i>	<b>10</b> <i>Modeled quantity and/or multiple locations</i>
Inflow/Infiltration	Conserving capacity in the common trench/separate sewer system	<b>1-5</b> <i>Sliding scale depending on severity of I/I</i>	
Common Trench	Work varying from minimum rehabilitation to full separation	<b>1-5</b>	
<i>Documentation</i>			
Problem(s) is/are verified through documentation		<b>1-10</b>	

**\*35 points scoring maximum**

**3. Project Provides Source Control of Stormwater (10%)**

Project demonstrates source control of stormwater by preventing (removal) or controlling (detention/retention) stormwater from entering the combined or separate sanitary sewer system. To be considered for points under this criterion, the applicant will have to show volume reduction and/or peak rate control of stormwater entering the combined or separate sanitary sewer system using stormwater control measures such as disconnection, detention, or other innovative practices; see Table 5 and Attachment B.

**Table 5. Rating System for Source Control of Stormwater**

Description	Score
Removal of stormwater from combined or sanitary sewer system and managed for quality and/or quantity. This can be accomplished by a single SCM that provides a dual function ( <i>ex. retention basin with critical storm and wet extended detention</i> ), or by one or more SCMs that provide independent functions ( <i>ex: infiltration, harvesting, impervious area reduction, critical storm, WQv treatment</i> )	9-10
Control of stormwater prior to discharging into the combined or sanitary sewer system via a SCM that provides a quantity management function via runoff reduction or peak rate control ( <i>ex: infiltration, harvesting, impervious area reduction, critical storm</i> )	6 - 8
Removal of stormwater from the storm sewer system via a SCM that provides a quantity management function via runoff reduction ( <i>ex: infiltration, harvesting, impervious area reduction</i> )	1 - 5

**4. Project Provides a Significant Benefit to the District (15%)**

Demonstrate the benefits to the District of the project. Benefits include but are not limited to projects that assist in attaining compliance with a District community discharge permit, addresses private property flows to District collection system infrastructure, reduce infrastructure flooding/basement back-ups, expand water quality treatment benefit to new District customers, are recommended by a District study, and/or improve water quality in area waterways to compliment the District's ongoing programs, such as the Project Clean Lake Program, Local Sewer System Evaluation Studies, or Regional Stormwater Management Program.

**5. Non-District Matching Funding (10%)**

One point will be provided for meeting the minimum requirement of 25% non-District matching funds (Table 6). If the District waives this for a community in fiscal distress as discussed under the Project Requirements section in the Request for Proposals, the proposal will be awarded one point. Projects within Equity Investment Focus Areas (EIFA) are required to provide only a 25% match and will be scored and awarded independently from other projects outside of the EIFA. Proposals must provide documentation of funding sources.

**Table 6. Non-District Project Match Scoring**

<b>% Match</b>	<b>Point Score</b>
25	1
26-28	2
29-31	3
32-34	4
35-37	5
38-40	6
41-43	7
44-47	8
48-49	9
50-99	10

**6. Design Complete (5 extra points)**

Five extra points will be added to the overall project score if the design is complete (professional engineer stamped) and ready for bidding at the time of proposal submission due date.

**7. Intercommunity Projects (5 extra points)**

Up to five extra points will be added to the overall project score if the project assists in conserving sewer capacity of a downstream community or a downstream community is able to remove additional flows from an upstream community. The community should reference District Local Sewer System Evaluation Study findings or other data including certification from the benefiting community

## **MCIP Workshop**

The District has created a MCIP Workshop Video that will be available 4/22/2022 at the following link:

<https://youtu.be/RU-DNT0eWsU>

## **Pre-proposal Meeting**

District staff will provide an opportunity to meet with applicants to discuss projects prior to submission. Meetings will be scheduled between May 16 - 24. Please contact the District's Grant Programs Administrator by close of business on May 10, 2022, to schedule a meeting.

## **Application**

The 2023 Member Community Infrastructure Program application portal is accessed through the following link:

[https://www.grantrequest.com/SID\\_5833?SA=SNA&FID=35064](https://www.grantrequest.com/SID_5833?SA=SNA&FID=35064)

## **Timeline and Submission**

The District must receive submissions by close of business on **June 10, 2022**. If proposal is successfully submitted there will be an immediate message and an email confirmation.

The District will not review incomplete proposals. If a proposal is determined to be incomplete, the community will have 5 business days, from the date of email receipt notification, to submit the necessary information to complete the proposal.

**Direct workshop inquiries, pre-proposal meeting requests, and questions to the Grant Programs Administrator:**

**Linda Mayer**

[mayerl@neorsd.org](mailto:mayerl@neorsd.org)

## **Awards**

Award selection and announcements are anticipated in August 2022. Awards are contingent on funding availability. The District is under no obligation to fund any MCIP request.

## **Included with this document:**

- Attachment A – Performance Verification Technical Guidance
- Attachment B – Stormwater Control Measure Guidance
- Attachment C – MCIP Agreement Template – Design Only Projects
- Attachment D – MCIP Agreement Template – Design & Construction Projects

## Attachment A

### Performance Verification Technical Guidance

## Sewer Type Definitions: to be used when describing the existing system

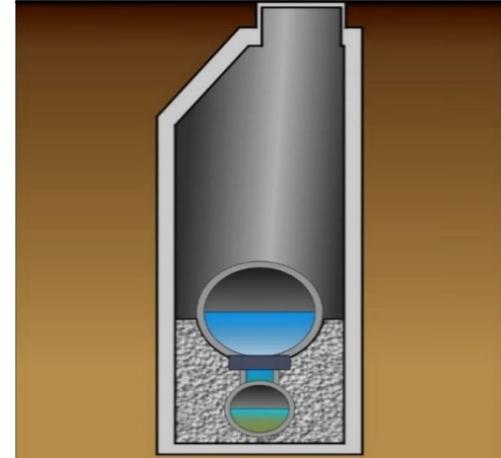
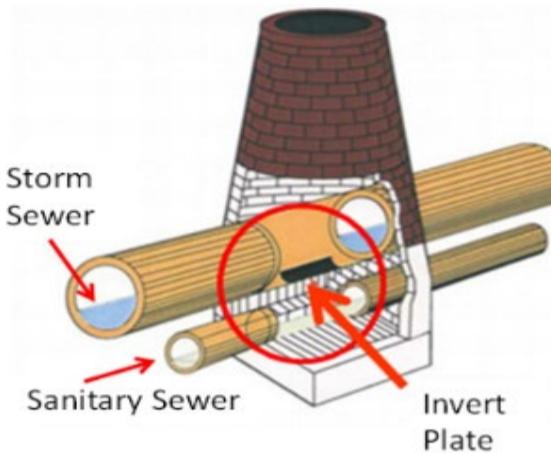
### Common Trench

Both sanitary and storm sewers in the same trench, with the storm sewer either aligned on top of or next to the sanitary sewer. There are three types of Common Trench sewers.

#### Common Trench Over/Under

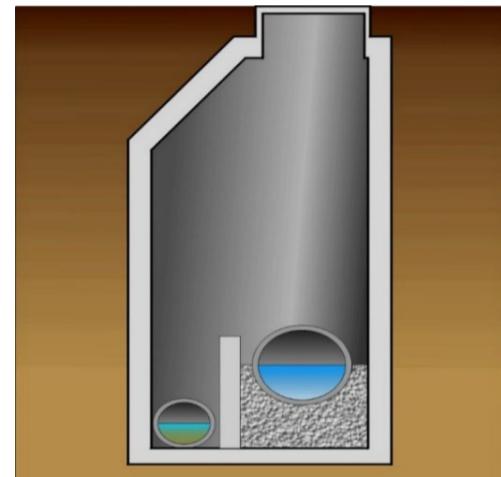
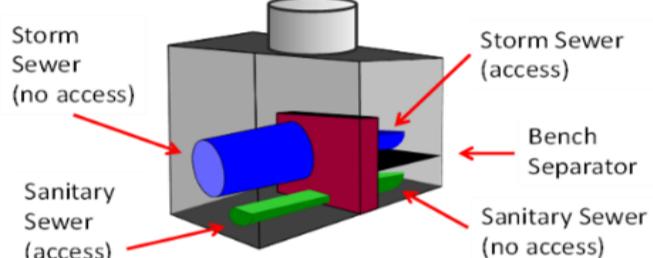
One manhole is used to access both the storm and the sanitary sewers, with a removal invert plate on the storm sewer to provide access to the sanitary sewer.

Some invert plates are found to be damaged, displaced, or missing, resulting in a direct connection between the storm and sanitary sewers.



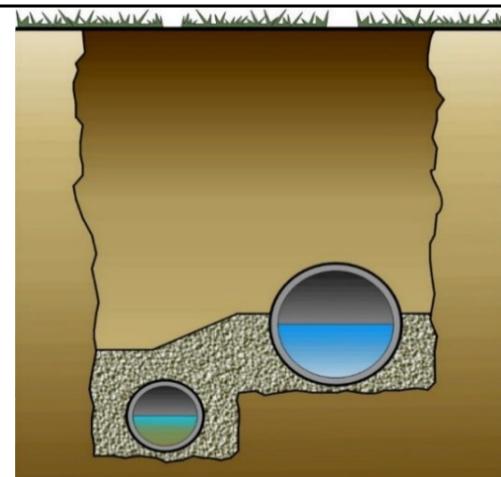
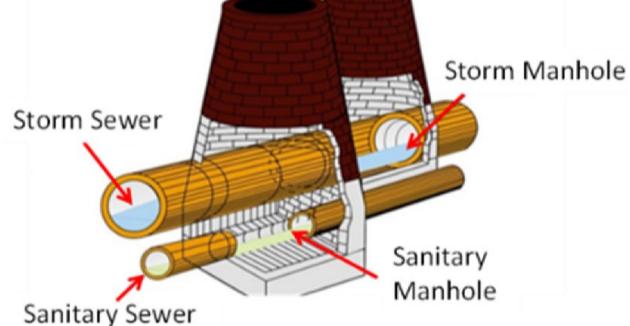
#### Common Trench Dividing Wall

One manhole is used to access both the storm and sanitary sewers. A vertical wall separates the storm and sanitary sewer access openings, such that flow from one sewer to the other at the manhole requires overtopping the dividing wall.



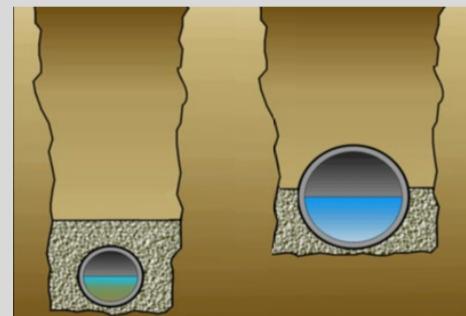
#### Common Trench Standard Manhole

Two manholes are constructed to allow separate access to each sewer in the common trench, but with no direct connections between the sewers.



#### Separate Trench

Sanitary and storm sewers in different trenches with separate manholes.



#### Combined Sewer

A single sewer designed to receive and transport both sanitary sewage and stormwater runoff in the same pipe.

#### Home Sewage Treatment Systems (HSTS)

Individual domestic wastewater disposal systems often located in areas without public sanitary collection systems.

## Project Performance Verification Technical Guidance

The District requests project performance verification to document how a MCIP project is performing. Performance verification may include pre- and post-construction flow monitoring or water quality sampling, and/or desktop or hydraulic/hydrologic modeling depending on the type of project. Table 1 details options for types of performance verification activities suggested for various MCIP project types. This guidance should be considered when developing a performance verification plan and project budget.

**Table 1: Suggested Project Performance Verification by Project Type**

	Flow Monitoring	RDII evaluation <sup>1</sup>	Dry Weather Water Quality Outfall Sampling	Notes/Comments
<b>Combined Sewer Separation</b>	X	X (post)	X	Post RDII will quantify any private property I/I contribution
<b>Common Trench Sewer Lining or Separation</b>	X	X		Pre- and post-construction flow monitoring and RDII analysis will show reductions in I/I within new/rehabilitated sanitary sewer.
<b>Separate Trench Sewer Lining or Replacement</b>	X	X		
<b>Lateral Repair</b>	X	X		
<b>Private Property I/I Reduction</b>	X	X		
<b>HSTS Removal</b>			X	Sampling will verify elimination of failing HSTS
<b>Illicit Connection Removal</b>			X	Sampling will verify elimination of illicit discharge
<b>SSO/CSO Control<sup>2</sup></b>	X			Monitor for activations; can be level or flow monitoring
<b>Relief Sewer/ Parallel Storage</b>	X			Monitor existing sewer level

<sup>1</sup> Applicant is responsible for evaluating any potential downstream or upstream impacts of the proposed work on other users, or on the level of service of the infrastructure.

<sup>2</sup> Quantification of SSO/CSO volume and/or activation reduction assists in determining the benefit of the project.

Table 1 is not a complete list of all MCIP-eligible project types but is provided for guidance. Questions regarding project eligibility should be directed to a District Watershed Team Leader or discussed during a pre-application meeting. Other project performance verification activities may include dye or smoke testing, Closed-Circuit Televising (CCTV), and/or other methods depending on the project.

Costs relating to performance verification activities should be included in the proposal. Communities must detail their anticipated method(s) of performance verification within the proposal, as well as complete the online District AGOL submittal. Instructions for this submittal can be found later in this instructions document, and a walk-through of the process is included as part of the annual MCIP Workshop, [available in video format on the District's YouTube page](#).

The District will review project performance verification plans and may suggest additional or alternate locations for verification activities to fully capture the impact of the project. Performance verification activities will be the responsibility of the community to complete.

### Flow Monitoring and Rainfall Derived Inflow and Infiltration (RDII) Evaluation Guidelines

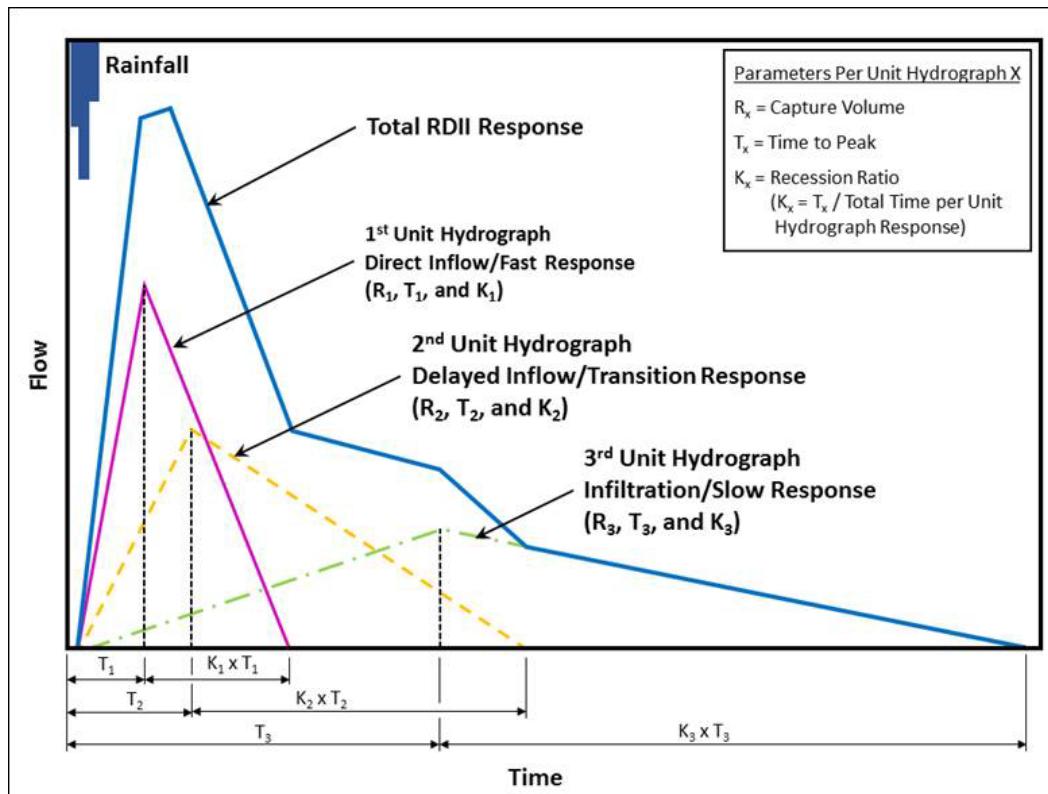
#### Objective

The objective of flow monitoring and RDII evaluation is to demonstrate sewer rehabilitation/replacement project performance by quantifying the resultant level of I/I reduction. For I/I reduction or elimination projects (including private property work), combined or common trench separation, and separate trench lining or replacement, the District will require pre- and post-construction flow monitoring and RDII evaluation.

#### RDII Evaluation

Evaluation should follow the "RTK" method for both the pre-construction and post-construction evaluations. The RTK method uses three triangular hydrographs as illustrated in **Figure 1** to estimate the wide range of response times associated with the effect of fast inflow and slower ground water infiltration. For additional information on RDII evaluation following the RTK method please reference Section 3.9 of the District's [Hydrologic and Hydraulic Modeling for Sewer Systems Standards and Protocols](#).

**Figure 1: RTK Hydrographs**



The RDII analysis should provide the pre-construction and post-construction RTK values for each of the three unit hydrographs for each qualifying event in both monitoring periods. Minimum deliverables are outlined in the corresponding section below. USEPA offers a free "SSOAP Toolbox" software which can be used for this analysis. Other available modeling tools may be used as desired by the member community.

### Monitoring Duration and Siting

A minimum four-week duration is recommended for both pre- and post-construction flow monitoring (total 8-week monitoring program). Monitoring can end sooner if three storms that meet either of the following criteria are captured:

- Rain event meets or exceeds a depth of 0.2 inches AND an intensity of 0.25 inches/hour
- 24-hour rainfall is greater than 0.75 inches

Data collected should include, but is not limited to: flow depth, velocity, and flow rate, recorded in 5-minute intervals. The community should identify any alternative monitoring plan (e.g., level monitoring) in their proposal. The data collection over the monitoring periods should be continuous.

In the case where pre-construction flow monitoring has already been completed, the community should input via the District AGOL portal the monitor locations and data collected or summary of findings for review by the District to support the scoring of the project.

In general, flow monitors should be placed to isolate flows within the MCIP project area. Pre- and post-construction monitoring should occur in the same locations and similar seasons ("growing season"/summer vs. "non-growing"/winter). The District will review all proposed monitoring plans submitted during the application process and, if requested, can assist with site selection of flow monitors and rain gauges.

### Rain Data

The District owns and maintains a network of rain gauges that may be sufficient for the project's needs. The community should determine if additional temporary rain gauges are necessary for verification activities. **Figure 2** shows the locations of District rain gauges. Rain gauge data requests should be sent to Matt Fedak, Data Analyst with the NEORSD Systems Integration Department ([fedakm@neorsd.org](mailto:fedakm@neorsd.org)). Gauge-adjusted radar rainfall data is also available for the District service area. Requests for that data should be sent to George Remias ([remiasg@neorsd.org](mailto:remiasg@neorsd.org)).

**Figure 2: District Rain Gauge Locations**



To view a larger Rain Gauge map, please visit the following link: <http://arcg.is/10KTCr>

#### Minimum Deliverables (Flow Monitoring)

The following deliverables should be submitted to the District and can be included in quarterly progress updates:

- Site installation forms
- Rain data, 5-minute intervals (tabular data)
- Raw and edited flow monitoring data, 5-minute intervals (tabular data)
- RDII-evaluation report/summary including:
  - Discussion on methodology and findings
  - Drainage area (acres)
  - RTK values (including sub-values for each parameter)
  - Rain data analysis (number of storms, intensity, and volume)
  - Assumed dry weather flow (DWF, tabular data)
  - Assumed base wastewater flow (BWF, tabular data)
  - Assumed groundwater infiltration (GWI)

#### **Dry Weather Water Quality Outfall Sampling Guidelines**

For projects focused on illicit discharge and HSTS elimination, or combined sewer separation, the District recommends dry-weather water quality sampling. The objective of this sampling is to obtain data that quantifies the approximate pollutant load reduction resulting from the infrastructure improvement identified in the MCIP project proposal and/or verifies separation. Pre-construction sampling should indicate elevated pollutant levels. Post-construction performance verification should consist of sampling from the same locations used for pre-construction sampling, or representative location, as applicable. Dry weather sampling locations include end of pipe samples from illicit discharges or outfalls. Sampling events should occur at three separate times for each identified outfall, in order to ensure a representative E. coli measurement.

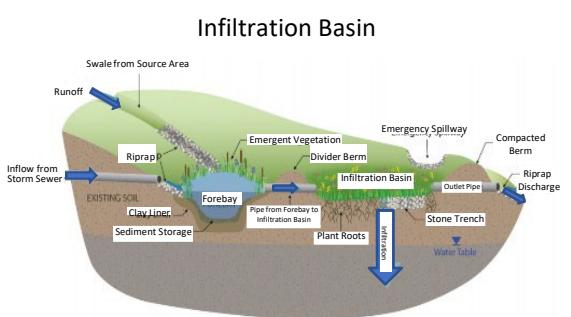
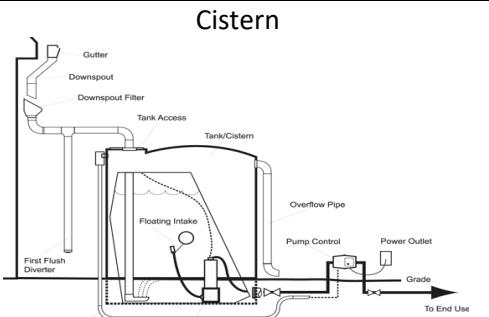
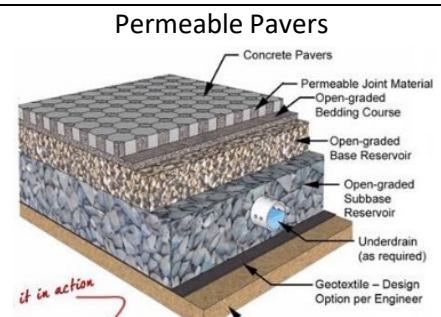
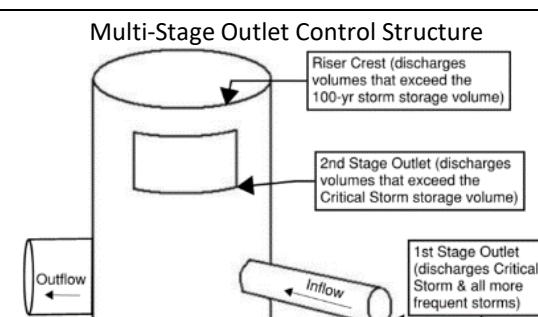
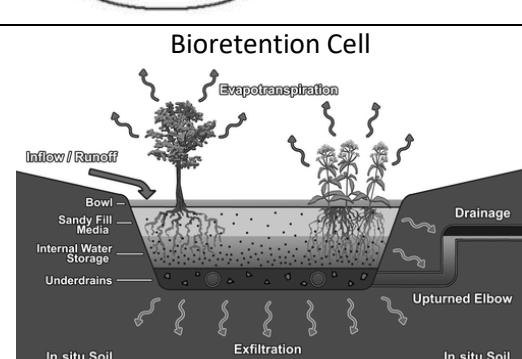
#### Minimum Deliverables (Water Quality Sampling)

The following deliverables should be submitted to the District and can be included in quarterly progress updates:

- Field sample collection report
- Sample analysis results

## Attachment B

### Stormwater Control Measure Guidance

Stormwater Control Measure Examples per Function		
<p>Stormwater infiltration is the process by which rainfall and stormwater runoff flows into and through the subsurface soil.</p> <p>Stormwater infiltration occurs when rainfall lands on pervious surfaces, when runoff flows across pervious surfaces, and when runoff is collected and directed to an infiltrating stormwater control measure (SCM).</p>	<p><b>Infiltration Basin</b></p> 	
<p>Rainwater harvesting is the practice of collecting and storing rain for reuse, rather than letting the water be channeled into drains, streams, or rivers. To truly be effective, there must be a dedicated need for the harvested rainwater to ensure the storage vessels are consistently emptied and that storage volumes are available to collect and hold the next rain event.</p>	<p><b>Cistern</b></p> 	
<p>Impervious area reduction is the practice of converting impervious areas (e.g., rooftops &amp; parking lots) into pervious surfaces (e.g., natural vegetation, permeable pavers, green roofs, etc.). This can also be accomplished by disconnecting and conveying impervious surfaces and roof drains to suitable pervious areas.</p>	<p><b>Permeable Pavers</b></p> 	
<p>Peak Rate Control for stormwater runoff (i.e., Critical Storm) is the process of reducing the post-dvl'p peak runoff rate from the critical storm (CS) &amp; all more-frequent storms to the pre-dvl'p peak runoff rate from a 1-yr, 24-hr storm.</p> <p>Storms less frequent than the CS (up to the 100-yr) have peak runoff rates <math>\leq</math> peak runoff rates from equivalent size storms under pre-dvl'p conditions.</p>	<p><b>Multi-Stage Outlet Control Structure</b></p> 	
<p>Water Quality Volume (WQv) Treatment is accomplished in Ohio via designing post-construction SCMs that store storm water runoff (from developed areas) from rainfall events <math>\leq 0.90"</math> (estimated 80% reduction in total suspended solids on an average annual basis). Ohio EPA feels this precipitation depth will adequately control pollutants in runoff and minimize channel &amp; bank erosion.</p>	<p><b>Bioretention Cell</b></p> 	

## Attachment C

### Design Only Project Agreement

**MEMBER COMMUNITY INFRASTRUCTURE GRANT PROGRAM AGREEMENT**

**BY AND BETWEEN**

**NORTHEAST OHIO REGIONAL SEWER DISTRICT**

**AND CITY OF**

**FOR PROJECT**

**THIS AGREEMENT** ("Agreement") is entered into as of the 1st day of January, 2023 ("Effective Date"), by and between the Northeast Ohio Regional Sewer District ("District"), a regional sewer district organized and existing as a political subdivision under Chapter 6119 of the Ohio Revised Code, pursuant to the authority of Resolution No. **XXX**, adopted by the District's Board of Trustees on XX XX, 2022 (Exhibit "A"), and the \_\_\_\_\_ ("Member Community"), a \_\_\_\_\_ of the State of Ohio, acting pursuant to Ordinance No. \_\_\_\_\_, passed on \_\_\_, 2022 (Exhibit "B"). The District and the Member Community may be collectively referred to herein as "Parties."

**RECITALS:**

WHEREAS, the District is interested in assisting member communities with water quality and quantity issues associated with sewer infrastructure that adversely impact human health and the environment; and

WHEREAS, Ohio law authorizes regional water and sewer districts to enter into grant agreements with political subdivisions for water resource projects; and

WHEREAS, pursuant to Ohio Revised Code Chapter 6119, generally, and Ohio Revised Code Section 6119.06(F), the District established the Member Community Infrastructure Program ("MCIP") to provide water resource project funding opportunities to member communities for sewer infrastructure projects in the District's service area; and

WHEREAS, the District issued a Request for MCIP Proposals (Exhibit "C"); and

WHEREAS, in response to the District's Request for MCIP Proposals, the Member Community, a District member community, submitted an application for \_\_\_\_\_ (the "Project" or "MCIP Project"), attached hereto as Exhibit "D;"

WHEREAS, the District has determined that the MCIP Project will address water quality and quantity issues associated with sewer infrastructure that adversely impacts human health and the environment.

NOW THEREFORE, in consideration of the foregoing, the grant to be made by the District and the mutual promises contained in this Agreement, the parties agree as follows:

## **Article 1. The MCIP Project**

- 1.1 The MCIP Project. The Member Community will manage a Design, Only MCIP Project, which generally consists of   , as set forth in Exhibit "D."
- 1.2 Compliance with District's Code of Regulations. The MCIP Project shall be designed to ensure compliance with the District's Code of Regulations. The goal of the MCIP is to reduce water quality and quantity issues that impact human health and the environment associated with combined or separate sanitary and/or storm sewer infrastructure problems.
- 1.3 MCIP Project Modifications. The Member Community shall submit requests to modify the budget, deadlines, deliverables, or other components of the Project to the District Representative for approval at least fifteen (15) business days prior to the execution of the modification. Any modification to the MCIP Project must be approved by the District Representative in writing.
- 1.4 Photographs of MCIP Project. The District shall have the right to observe, monitor, inspect, and photograph the MCIP Project at any and all stages of design.

## **Article 2. Design of the MCIP Project**

- 2.1 District Review of Design Work. The Parties agree that the District shall have the right to review and comment on the final MCIP Project design. The Member Community shall submit the final MCIP Project design plans to the District Representative in a timely manner that provides the District with at least fifteen (15) business days to review.
- 2.2 MCIP Project Meetings. The District shall have the right to attend all MCIP Project progress meetings and shall receive at least five (5) business days advance notice of all such meetings.
- 2.3 Final Design. The Member Community shall provide to the District Representative the final stamped design, approved by the Member Community's Engineer, at the closure of the MCIP Project.
- 2.4 District Request for Progress Meetings. The Member Community agrees to meet with the District to review the MCIP project status and progress, as may be requested by the District.

## **Article 3. Project Costs and Funding**

- 3.1 District Funds. The District agrees to pay the Member Community an amount not to exceed Dollars (\$  ) (the "District Funds") on a reimbursement basis, in accordance with the terms of this Article and Article 4. The anticipated reimbursement amount for calendar year 2023 is \$                   . The District shall withhold five

percent (5%) or  
\$\_\_\_\_\_ of the District Funds until the District receives the final MCIP project design.

3.2 Member Community Funds. The Member Community agrees to pay all MCIP Project costs that exceed the amount of the District Funds ("Member Community Funds"). Under no circumstance, shall the District be responsible for payment of any costs that, in aggregate, exceed the amount of the District Funds. Prior to the Member Community issuing a notice-to-proceed for any MCIP Project related work or service, the Member Community shall provide the District a copy of the certification by the Member Community's Finance Director that the Member Community Funds have been lawfully appropriated by the Member Community for the Project. This certification is attached hereto as Exhibit "E."

3.3 Use of District Funds - Reimbursement Requests and Quarterly Progress Reports. The District Funds must be used for activities and expenses approved by the District that are related to the MCIP Project accrued on or after January 1, 2022 and in accordance with the project schedule requirements set forth in Article 4. In accordance with the provisions of this Agreement, the District shall reimburse the Member Community for eligible MCIP Project expenses based upon paid invoices, prepared, and submitted by the Member Community to the District, in the form prescribed by the District, and including all supporting documentation as required by this Agreement and the MCIP Policy, Process, and Procedures, attached hereto as Exhibit "F."

The Member Community will provide a copy of the award bid with the first reimbursement request.

Quarterly progress reports shall be submitted to the District in accordance with the following:

- First Request: Due April 30, 2023 for work completed January 1, 2023 – March 31, 2023;
- Second Request: Due July 31, 2023 for work completed April 1, 2023 – June 30, 2023;
- Third Request: Due October 31, 2023 for work completed July 1, 2023 – September 30, 2023;
- Fourth Request: Due January 31, 2024 for work completed October 1, 2023 – December 31, 2023;

Failure to submit the quarterly progress report in accordance with these deadlines may result in the revocation of the Agreement by the District.

The Member Community agrees to meet with District staff, as requested, to review MCIP Project progress and to use the reimbursement request and progress report form provided by the District available at:  
<http://www.neorsd.org/mcip>.

3.4 Third Party Payments. The Member Community shall bear the risk and remain solely responsible for any payments made by the Member Community to third parties for work not approved for reimbursement by the District.

3.5 Records Retention. The Member Community shall keep all records and documents relevant to the MCIP Project, including but not limited to, an accurate, current, and complete accounting of all financial transactions for the MCIP Project. Such records and documents shall be available at reasonable times and places for inspection and copying by the District or any authorized representative thereof and shall be submitted to the District upon request along with any other compliance information which may be reasonably required.

3.6 District Funds Not Used. Any District Funds that are not used to complete the MCIP Project shall be retained by the District.

3.7 Final Project Costs. If final project costs decrease from the project proposal estimate, then the amount of the District's final contribution shall be adjusted to maintain the same District contribution percentage of the final project cost. (Exhibit C).

#### **Article 4. Project Schedule.**

4.1 Project Schedule. The MCIP Project schedule shall be as set forth in the Project Schedule and Budget Section of Exhibit "D." Any change to the Project schedule must be approved in writing by the District Representative.

#### **Article 5. Term.**

5.1 Term. This Agreement shall begin on the date first above written and expire upon successful completion of the obligations contained herein.

#### **Article 6. Dispute Resolution.**

6.1 Continuation of Obligations. The Parties shall continue the performance of their obligations under this Agreement notwithstanding the existence of a dispute. The District reserves the right to deposit District Funds in an escrow account until the dispute is resolved.

6.2 Designated Representatives. The Parties shall first try to resolve the dispute at the level of the designated representatives as follows:

<b>District Representatives</b>	<b>Member Community Representatives</b>
---------------------------------	---

Director of Watershed Programs	_____
--------------------------------	-------

If the Parties are unable to resolve the dispute at that level within ten (10) working days, the Parties shall escalate the dispute to the following level to resolve the dispute:

District Representatives	Member Community Representatives
District Chief Legal Officer or CLO's designee	_____

6.3 **Mediation.** If the Parties remain unable to resolve the dispute within an additional ten (10) working days, the Parties shall proceed to mediation upon request by either party. The Parties shall mutually select a mediator who is experienced in public utility infrastructure engagements. The mediator shall review all documents and written statements, in order to accurately and effectively resolve the dispute. The mediator shall call a meeting between the Parties within ten (10) working days after the mediator appointment, which meeting shall be attended by at least the respective representatives in Article 6.2 above. The Parties shall attempt in good faith to resolve the dispute. The Parties agree to follow the Uniform Mediation Act, Chapter 2710 of the Ohio Revised Code. The Parties shall share the cost of the mediator equally.

6.4 **Mediation Resolution.** Such mediation shall be non-binding between the Parties and, to the extent permitted by law, shall be kept confidential. If the dispute is resolved and settled through the mediation process, the decision will be implemented by a written agreement signed by both Parties. If the dispute is unable to be resolved through mediation, the Parties agree to submit the dispute to the appropriate jurisdiction as per Article 7, Remedies, below.

#### **Article 7. Remedies.**

7.1 **Remedies and Ohio Law.** The Parties agree that, after exhausting the dispute resolution process outlined above, all claims, counterclaims, disputes, and other matters in question between the Parties arising out of or relating to this Agreement, or the breach thereof, will be decided at law. This Agreement shall be governed by and interpreted according to the law of the State of Ohio. A party may file a lawsuit in a court of competent jurisdiction in Cuyahoga County, Ohio.

#### **Article 8. Notifications.**

8.1 Points of Contact. The Parties hereby designate the following individuals to serve as the primary points of contact under this Agreement:

District Representative	Member Community Representative
Grant Programs Administrator	_____

#### **Article 9. Release of Liability.**

9.1 Release of All Liability. The Parties understand and agree that the District has no responsibilities or interest in the MCIP Project with respect to ownership, operation and maintenance and is acting solely as a funding source. The Member Community hereby releases the District from all liability related to the grant funding provided by the District hereunder. The Member Community further releases the District from all liability for: (i) the design, construction, implementation, operation, maintenance, and inspection of the Member Community's MCIP Project; (ii) any damages to third parties caused by the design, construction, implementation, operation, maintenance, inspection and every other aspect of the Member Community's MCIP Project; (iii) any defective performance of the Member Community's MCIP Project by the Member Community and/or its agents; and (iv) any damages caused by malfeasance or misfeasance of the grant funds by the Member Community.

#### **Article 10. Miscellaneous.**

10.1 Limit of Commitment. This grant is made with the understanding that the District has no obligation to provide other or additional support, including maintenance of the Member Community's MCIP Project. This grant does not represent any commitment to, or expectation of, future support, including maintenance of the Member Community's MCIP project from the District.

10.2 Disclaimer of Joint Venture. This Agreement is not intended to create a joint venture, partnership or agency relationship between the Parties, and such joint venture, partnership, or agency relationship is specifically hereby disclaimed.

10.3 Authority to Execute. Each person executing this Agreement represents and warrants that it is duly authorized to execute this Agreement by the party on whose behalf it is so executing.

10.4 Counterpart Signatures. This Agreement may be executed in

counterparts, each of which shall be deemed to be an original, but which counterparts when taken together shall constitute one Agreement.

10.5 Modification of Agreement. This Agreement may only be modified by written instrument executed by each party.

10.6 Merger Clause. This Agreement, along with any exhibits attached hereto, encompasses the entire agreement of the parties, and supersedes all previous understandings and agreements between the parties, whether oral or written.

10.7 Binding on Successors. This Agreement is binding upon, and inures to the benefit of, the parties and their respective permitted successors and assigns.

10.8 Prohibition on Assignment and Subcontracting. The Member Community may not assign or subcontract its rights or duties under this Agreement, in whole or in part, whether by operation of law or otherwise, without the prior consent of the District. Consent may be withheld for any reason or no reason. Any assignment or subcontract made in contravention of the foregoing shall be void and of no effect.

10.9 Severability. If any term or provision of this Agreement is determined to be illegal, unenforceable, or invalid, in whole or in part for any reason, such provision shall be stricken from this Agreement and such provision shall not affect the validity of the remainder of this Agreement.

10.10 Headings. The headings in this Agreement are included for convenience only and shall neither affect the construction nor the interpretation of any provision in this Agreement.

10.11 Relationship of Agreement to Exhibits. The exhibits to this Agreement are attached for reference purposes only. Nothing in this Agreement shall be construed to modify, alter, clarify, or give effect to the terms and conditions of the various exhibits attached to this Agreement.

## **Article 11. Exhibits.**

It is mutually understood and agreed that all Exhibits attached hereto are made a part hereof as if fully written herein. In the case of any conflict or variance between the terms of this Agreement and the terms of referenced documents, the terms of this Agreement shall govern. The following Exhibits attached hereto are hereby incorporated with and made a part of this Agreement:

- Exhibit "A" – District Resolution
- Exhibit "B" – Member Community's Authorizing Ordinance
- Exhibit "C" – Request for MCIP Proposals

- Exhibit “D” – Member Community’s MCIP Application
- Exhibit “E” - Member Community’s Certification of Funds
- Exhibit “F” – MCIP Policy, Process, and Procedures

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DRAFT

## NORTHEAST OHIO REGIONAL SEWER DISTRICT

By: \_\_\_\_\_  
Kyle Dreyfuss-Wells  
Chief Executive Officer

and: \_\_\_\_\_  
Darnell Brown, President  
Board of Trustees

## MEMBER COMMUNITY

By: \_\_\_\_\_  
Title: \_\_\_\_\_

The legal form  
and correctness  
of this  
instrument is  
approved.

By: \_\_\_\_\_ Assistant/Director of Law MEMBER COMMUNITY  
Date: \_\_\_\_\_

This Instrument Prepared By:  
Katarina Waag  
Assistant General Counsel  
Northeast Ohio Regional Sewer District

Each party agrees that this Agreement may be executed and distributed for signatures via email, and that the emailed signatures affixed by both parties to this Agreement shall have the same legal effect as if such signatures were in their originally written format.

**[FOR DISTRICT USE  
ONLY]**

AGREEMENT NO.

NORTHEAST OHIO REGIONAL  
SEWER DISTRICT  
WITH  
\*\*\*  
FOR  
2023 Member Community  
Infrastructure Program PROJECT:  
\*\*\*\*\*

---

Total Approximate Cost: \$\*\*\*.00

---

The legal form and correctness of the within  
instrument are hereby approved.

---

ERIC J. LUCKAGE  
CHIEF LEGAL OFFICER

---

Date

**CERTIFICATION**

It is hereby certified that the amount  
required to meet the contract, agreement,  
obligation, payment, or expenditure, for the  
above, has been lawfully appropriated or  
authorized or directed for such purpose and  
is in the Treasury or in process of collection  
to the credit of the fund free from any  
obligation or certification now outstanding.

---

KENNETH J. DUPLAY  
CHIEF FINANCIAL OFFICER

---

Date

## Attachment D

### Design and Construction Project Agreement

**MEMBER COMMUNITY INFRASTRUCTURE GRANT PROGRAM AGREEMENT**

**BY AND BETWEEN**

**NORTHEAST OHIO REGIONAL SEWER DISTRICT**

**AND CITY OF**

**FOR PROJECT**

**THIS AGREEMENT** ("Agreement") is entered into as of the 1st day of January, 2022 ("Effective Date"), by and between the Northeast Ohio Regional Sewer District ("District"), a regional sewer district organized and existing as a political subdivision under Chapter 6119 of the Ohio Revised Code, pursuant to the authority of Resolution No. **XXX**, adopted by the District's Board of Trustees on XX XX, 2022 (Exhibit "A"), and the \_\_\_\_\_ ("Member Community"), a \_\_\_\_\_ of the State of Ohio, acting pursuant to Ordinance No. \_\_\_\_\_, passed on \_\_\_, 2022 (Exhibit "B"). The District and the Member Community may be collectively referred to herein as "Parties."

**RECITALS:**

WHEREAS, the District is interested in assisting member communities with water quality and quantity issues associated with sewer infrastructure that adversely impact human health and the environment; and

WHEREAS, Ohio law authorizes regional water and sewer districts to enter into grant agreements with political subdivisions for water resource projects; and

WHEREAS, pursuant to Ohio Revised Code Chapter 6119, generally, and Ohio Revised Code Section 6119.06(F), the District established the Member Community Infrastructure Program ("MCIP") to provide water resource project funding opportunities to member communities for sewer infrastructure projects in the District's service area; and

WHEREAS, the District issued a Request for MCIP Proposals (Exhibit "C"); and

WHEREAS, in response to the District's Request for MCIP Proposals, the Member Community, a District member community, submitted an application for \_\_\_\_\_ (the "Project" or "MCIP Project"), attached hereto as Exhibit "D;"

WHEREAS, the District has determined that the MCIP Project will address water quality and quantity issues associated with sewer infrastructure that adversely impacts human health and the environment.

NOW THEREFORE, in consideration of the foregoing, the grant to be made by the District and the mutual promises contained in this Agreement, the parties agree as follows:

## **Article 1. The MCIP Project**

- 1.1 **The MCIP Project.** The Member Community will manage a Design, Only MCIP Project, which generally consists of\_\_\_\_, as set forth in Exhibit "D."
- 1.2 **Performance Goal and Verification.** At the request of the District, the Member Community will provide pre- and post-construction data and analysis relevant to the project performance verification as set forth in Exhibit C. Failure to do so may impact future grant awards.
- 1.3 **Compliance with District's Code of Regulations.** The MCIP Project shall be designed and constructed to ensure compliance with the District's Code of Regulations. The goal of the MCIP is to reduce water quality and quantity issues that impact human health and the environment associated with combined or separate sanitary and/or storm sewer infrastructure problems.
- 1.4 **Permits and Approvals.** The Member Community shall obtain and pay the cost of all required federal, state, and local approvals, including permits, necessary to initiate and complete the MCIP Project.
- 1.5 **Affected Property Owners.** The Member Community shall obtain all easements, rights of entry, and other necessary legal agreements with affected property owners to perform construction and to bind any successor in title to maintain compliance as required in this Agreement. The costs of obtaining such legal agreements are eligible for MCIP fund reimbursement if they are part of the proposal and approved by the District.
- 1.6 **MCIP Project Modifications.** The Member Community shall submit requests to modify the budget, deadlines, deliverables, or other components of the Project to the District Representative for approval at least fifteen (15) business days prior to the execution of the modification. Any modification to the MCIP Project must be approved by the District Representative in writing.
- 1.7 **Photographs of MCIP Project.** The District shall have the right to observe, monitor, inspect, and photograph the MCIP Project at any and all stages of design and construction, as well as post-construction.

## **Article 2. Design and Construction of the MCIP Project**

- 2.1 **District Review of Design Work.** The Parties agree that the District shall have the right to review and comment on the final MCIP Project design plans prior to construction. The Member Community shall submit the final MCIP Project design plans to the District Representative in a timely manner that provides the District with at least fifteen (15) business days to review. Any modification to the MCIP Project must be submitted to the District Representative in writing.

- 2.2 MCIP Project Meetings. The District shall have the right to attend all MCIP Project progress meetings and shall receive at least five (5) business days advance notice of all such meetings.
- 2.3 Member Community to Bid and Construct MCIP Project. After the District's review of the MCIP Project design in accordance with Article 2.1 above, the Member Community shall bid and complete the construction work pursuant to the final MCIP Project plans and specifications and in accordance with all applicable laws and regulations. The Member Community shall be responsible for construction procurement, supervision, and inspection in accordance with the terms of this Agreement. The Member Community shall provide the District Representative a copy of the awarded bid.
- 2.4 Construction Schedule. The District shall have the right to review and provide written comments to the proposed MCIP Project construction schedule, prior to the selected contractor beginning field activities.
- 2.5 Pre-Construction and Construction Meetings. The District shall have the right to attend all pre-construction and construction meetings with the MCIP Project contractor. The Member Community shall notify the District Representative, in writing or via e-mail, of such meetings at least five (5) business days prior to the meeting date.
- 2.6 Daily Construction Supervision. The District is not required to and will not provide any daily construction supervision, or inspection and testing services for the MCIP Project.
- 2.7 As-Built Drawings. At the District's request, the Member Community shall provide the District Representative with "as-built" drawings for the MCIP Project.
- 2.8 Record Drawings. The Member Community shall provide to the District Representative record drawings, approved by the Member Community's Engineer, at the closure of the MCIP Project.
- 2.9 District Request for Construction Progress Meetings. The Member Community agrees to meet with the District to review the MCIP construction project status and progress, as may be requested by the District.
- 2.10 Payment of Prevailing Wage. The Member Community shall be responsible for determining whether the payment of prevailing wages, as set forth in Chapter 4115 of the Ohio Revised Code, are required for labor used in constructing the MCIP Project, and shall ensure compliance with any prevailing wage requirements in such Chapter.

### **Article 3.      Ownership, Operation, and Maintenance**

- 3.1 Member Community Operation and Maintenance Responsibilities. During construction and after construction, the Member Community shall own, operate, and maintain the MCIP Project. The Member Community shall reimburse the

District in an amount equal to one hundred percent (100%) of the District Funds provided by the District under this Agreement if this provision is violated. In the event that the District determines a violation of this section has occurred, the District shall notify the Member Community in writing. The Parties agree to resolve any dispute relating to such alleged violation in accordance with the procedure set forth in Article 9 of this Agreement.

- 3.2 Post-Construction Operation and Maintenance Plan. The Member Community shall provide the District with a letter referencing the post-construction operation and maintenance plan for the MCIP Project. Operation and maintenance plans shall be updated by the Member Community, as may be necessary, and as may be requested by the District.
- 3.3 Maintenance Inspection Records. The Member Community shall maintain a record of the Member Community's maintenance inspections and overall performance of the MCIP Project for at least three (3) years and shall submit a copy to the District upon reasonable request.

#### **Article 4. Project Costs and Funding**

- 4.1 District Funds. The District agrees to pay the Member Community an amount not to exceed \_\_\_\_\_ Dollars (\$\_\_\_\_\_ ) (the "District Funds") on a reimbursement basis, in accordance with the terms of this Article and Article 6. The anticipated reimbursement amount for calendar year 2023 is \$ \_\_\_\_\_ and for 2024 is \$ \_\_\_\_\_. Yearly anticipated reimbursement amounts may only be altered in writing at the discretion of the District's Director of Watershed Programs. The District shall withhold five percent (5%) \$ \_\_\_\_\_ of the District Funds until the District receives:
  - a) final record drawings for the MCIP Project,
  - c) a letter referencing the post-construction operation and maintenance plan.
  - d) post-construction verification data (exceptions may apply, including sewer connection sampling data)
- 4.2 Member Community Funds. The Member Community agrees to pay all MCIP Project costs that exceed the amount of the District Funds ("Member Community Funds"). Under no circumstance, shall the District be responsible for payment of any costs that, in aggregate, exceed the amount of the District Funds, including, but not limited to, differing site conditions or other unforeseen situations. Prior to the Member Community issuing a notice-to-proceed for any MCIP Project related work or service, the Member Community shall provide the District a copy of the certification by the Member Community's Finance Director that the Member Community Funds have been lawfully appropriated by the Member Community for the Project. This certification is attached hereto as Exhibit "E."
- 4.3 Use of District Funds - Reimbursement Requests and Quarterly Progress Reports. The District Funds must be used for activities and expenses approved by the District that are related to the MCIP Project accrued on or after January 1, 2023 and in accordance with the project schedule requirements set forth in

Article 6. In accordance with the provisions of this Agreement, the District shall reimburse the Member Community for eligible MCIP Project expenses based upon paid invoices, prepared, and submitted by the Member Community to the District, in the form prescribed by the District, and including all supporting documentation as required by this Agreement and the MCIP Policy, Process, and Procedures, attached hereto as Exhibit "F."

The Member Community will provide a copy of the award bid with the first reimbursement request.

Quarterly progress reports shall be submitted to the District in accordance with the following:

- First Request: Due April 30, 2023 for work completed January 1, 2023 – March 31, 2023;
- Second Request: Due July 31, 2023 for work completed April 1, 2023 – June 30, 2023;
- Third Request: Due October 31, 2023 for work completed July 1, 2023 – September 30, 2023;
- Fourth Request: Due January 31, 2024 for work completed October 1, 2023 – December 31, 2023;
- Fifth Request: Due April 30, 2024 for work completed January 1, 2024 – March 31, 2024;
- Sixth Request: Due July 31, 2024 for work completed April 1, 2024- June 30, 2024;
- Seventh Request: Due October 31, 2024 for work completed July 1, 2024 – September 30, 2024; and
- Eighth Request: Due January 31, 2025 for work completed October 1, 2024 – December 31, 2024.

Failure to submit the quarterly progress report in accordance with these deadlines may result in the revocation of the Agreement by the District.

The Member Community agrees to meet with District staff, as requested, to review MCIP Project progress and to use the reimbursement request and progress report form provided by the District available at <http://www.neorsd.org/mcip>.

- 4.4 Third Party Payments. The Member Community shall bear the risk and remain solely responsible for any payments made by the Member Community to third parties for work not approved for reimbursement by the District.
- 4.5 Records Retention. The Member Community shall keep all records and documents relevant to the MCIP Project, including but not limited to, an accurate, current, and complete accounting of all financial transactions for the MCIP Project. Such records and documents shall be available at reasonable times and places for inspection and copying by the District or any authorized representative thereof and shall be submitted to the District upon request along with any other compliance information which may be

reasonably required.

- 4.6 District Funds Not Used. Any District Funds that are not used to complete the MCIP Project shall be retained by the District.
- 4.7 Final Project Costs. If final project costs decrease from the project proposal estimate, then the amount of the District's final contribution shall be adjusted to maintain the same District contribution percentage of the final project cost. (Exhibit C).

#### **Article 5. Public Participation and Outreach**

- 5.1 Educational Signage and Public Outreach. The Member Community shall coordinate any educational signage and any public outreach with the District. The Member Community shall acknowledge the District on MCIP Project related outreach communications and in public meetings that discuss the MCIP Project.
- 5.2 District Right to Reject. The District reserves the right to reject any signage, related to the MCIP Project.

#### **Article 6. Project Schedule and Warranty Period.**

- 6.1 Project Schedule. The MCIP Project schedule shall be as set forth in the Project Schedule and Budget Section of Exhibit "D." Any change to the Project schedule must be approved in writing by the District Representative.
- 6.2 MCIP Project Warranty. The Member Community's construction agreement shall require the contractor to provide a minimum of a one (1) year warranty period that commences upon final completion of the MCIP Project construction ("Warranty Period"). Prior to the conclusion of the Warranty Period the Member Community shall perform a CCTV inspection of the installed Project, if applicable, and provide a report to the District.

#### **Article 7. Term.**

- 7.1 Term. This Agreement shall begin on the date first above written and expire upon successful completion of the obligations contained herein.

#### **Article 8. Insurance.**

- 8.1 Insurance. The Member Community shall require MCIP Project consultants and contractors to name the Northeast Ohio Regional Sewer District as an Additional Insured for general liability, automobile liability, and property liability insurance coverages.

#### **Article 9. Dispute Resolution.**

- 9.1 Continuation of Obligations. The Parties shall continue the performance of their

obligations under this Agreement notwithstanding the existence of a dispute. The District reserves the right to deposit District Funds in an escrow account until the dispute is resolved.

9.2 Designated Representatives. The Parties shall first try to resolve the dispute at the level of the designated representatives as follows:

<b>District Representatives</b>	<b>Member Community Representatives</b>
Director of Watershed Programs	_____

If the Parties are unable to resolve the dispute at that level within ten (10) working days, the Parties shall escalate the dispute to the following level to resolve the dispute:

<b>District Representatives</b>	<b>Member Community Representatives</b>
District Chief Legal Officer or CLO's designee	_____

9.3 Mediation. If the Parties remain unable to resolve the dispute within an additional ten (10) working days, the Parties shall proceed to mediation upon request by either party. The Parties shall mutually select a mediator who is experienced in public utility infrastructure engagements. The mediator shall review all documents and written statements, in order to accurately and effectively resolve the dispute. The mediator shall call a meeting between the Parties within ten (10) working days after the mediator appointment, which meeting shall be attended by at least the respective representatives in Article 9.2 above. The Parties shall attempt in good faith to resolve the dispute. The Parties agree to follow the Uniform Mediation Act, Chapter 2710 of the Ohio Revised Code. The Parties shall share the cost of the mediator equally.

9.4 Mediation Resolution. Such mediation shall be non-binding between the Parties and, to the extent permitted by law, shall be kept confidential. If the dispute is resolved and settled through the mediation process, the decision will be implemented by a written agreement signed by both Parties. If the dispute is unable to be resolved through mediation, the Parties agree to submit the dispute to the appropriate jurisdiction as per Article 10, Remedies, below.

## **Article 10. Remedies.**

10.1 Remedies and Ohio Law. The Parties agree that, after exhausting the dispute resolution process outlined above, all claims, counterclaims, disputes, and other matters in question between the Parties arising out of or relating to this Agreement, or the breach thereof, will be decided at law. This Agreement shall be governed

by and interpreted according to the law of the State of Ohio. A party may file a lawsuit in a court of competent jurisdiction in Cuyahoga County, Ohio.

### **Article 11. Notifications.**

11.1 Points of Contact. The Parties hereby designate the following individuals to serve as the primary points of contact under this Agreement:

District Representative	Member Community Representative
Grant Programs Administrator	_____

### **Article 12. Release of Liability.**

12.1 Release of All Liability. The Parties understand and agree that the District has no responsibilities or interest in the MCIP Project with respect to ownership, operation and maintenance and is acting solely as a funding source. The Member Community hereby releases the District from all liability related to the grant funding provided by the District hereunder. The Member Community further releases the District from all liability for: (i) the design, construction, implementation, operation, maintenance, and inspection of the Member Community's MCIP Project; (ii) any damages to third parties caused by the design, construction, implementation, operation, maintenance, inspection and every other aspect of the Member Community's MCIP Project; (iii) any defective performance of the Member Community's MCIP Project by the Member Community and/or its agents; and (iv) any damages caused by malfeasance or misfeasance of the grant funds by the Member Community.

### **Article 13. Miscellaneous.**

13.1 Limit of Commitment. This grant is made with the understanding that the District has no obligation to provide other or additional support, including maintenance of the Member Community's MCIP Project. This grant does not represent any commitment to, or expectation of, future support, including maintenance of the Member Community's MCIP project from the District.

13.2 Disclaimer of Joint Venture. This Agreement is not intended to create a joint venture, partnership or agency relationship between the Parties, and such joint venture, partnership, or agency relationship is specifically hereby disclaimed.

13.3 Authority to Execute. Each person executing this Agreement represents and warrants that it is duly authorized to execute this Agreement by the party on whose behalf it is so executing.

13.4 Counterpart Signatures. This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but which counterparts when taken together shall constitute one Agreement.

- 13.5 Modification of Agreement. This Agreement may only be modified by written instrument executed by each party.
- 13.6 Merger Clause. This Agreement, along with any exhibits attached hereto, encompasses the entire agreement of the parties, and supersedes all previous understandings and agreements between the parties, whether oral or written.
- 13.7 Binding on Successors. This Agreement is binding upon, and inures to the benefit of, the parties and their respective permitted successors and assigns.
- 13.8 Prohibition on Assignment and Subcontracting. The Member Community may not assign or subcontract its rights or duties under this Agreement, in whole or in part, whether by operation of law or otherwise, without the prior consent of the District. Consent may be withheld for any reason or no reason. Any assignment or subcontract made in contravention of the foregoing shall be void and of no effect.
- 13.9 Severability. If any term or provision of this Agreement is determined to be illegal, unenforceable, or invalid, in whole or in part for any reason, such provision shall be stricken from this Agreement and such provision shall not affect the validity of the remainder of this Agreement.
- 13.10 Headings. The headings in this Agreement are included for convenience only and shall neither affect the construction nor the interpretation of any provision in this Agreement.
- 13.11 Relationship of Agreement to Exhibits. The exhibits to this Agreement are attached for reference purposes only. Nothing in this Agreement shall be construed to modify, alter, clarify, or give effect to the terms and conditions of the various exhibits attached to this Agreement.

#### **Article 14. Exhibits.**

It is mutually understood and agreed that all Exhibits attached hereto are made a part hereof as if fully written herein. In the case of any conflict or variance between the terms of this Agreement and the terms of referenced documents, the terms of this Agreement shall govern. The following Exhibits attached hereto are hereby incorporated with and made a part of this Agreement:

- Exhibit "A" – District Resolution
- Exhibit "B" – Member Community's Authorizing Ordinance
- Exhibit "C" – Request for MCIP Proposals
- Exhibit "D" – Member Community's MCIP Application
- Exhibit "E" - Member Community's Certification of Funds
- Exhibit "F" – MCIP Policy, Process, and Procedures

The parties hereto have executed and delivered this Agreement as of the date first above written.

**NORTHEAST OHIO REGIONAL SEWER DISTRICT**

By: \_\_\_\_\_

Kyle Dreyfuss-Wells  
Chief Executive Officer

and: \_\_\_\_\_

Darnell Brown, President  
Board of Trustees

**MEMBER COMMUNITY**

By: \_\_\_\_\_

The legal form  
and  
correctness of  
this instrument  
is approved.

By: \_\_\_\_\_ Assistant/Director of Law MEMBER COMMUNITY

Date: \_\_\_\_\_

This Instrument Prepared By:  
Katarina Waag  
Assistant General Counsel  
Northeast Ohio Regional Sewer District

Each party agrees that this Agreement may be executed and distributed for signatures via email, and that the emailed signatures affixed by both parties to this Agreement shall have the same legal effect as if such signatures were in their originally written format.

**[FOR DISTRICT USE ONLY]**

**CONTRACT NO.**

NORTHEAST OHIO REGIONAL SEWER DISTRICT  
WITH  
\*\*\*  
FOR  
2023 Member Community Infrastructure  
Program PROJECT:  
\*\*\*\*\*

---

Total Approximate Cost: \$\*\*\*.00

---

The legal form and correctness of the within  
instrument are hereby approved.

---

CHIEF LEGAL OFFICER

---

Date

**CERTIFICATION**

It is hereby certified that the amount required  
to meet the contract, agreement, obligation,  
payment, or expenditure, for the above, has  
been lawfully appropriated or authorized or  
directed for such purpose and is in the  
Treasury or in process of collection to the  
credit of the fund free from any obligation or  
certification now outstanding.

---

CHIEF FINANCIAL OFFICER

---

Date

# **EXHIBIT D**

## **Before You Begin**

### **PLEASE READ BEFORE PROCEEDING**

- Limit your use of bullets and other formatting.
- Copy and paste as needed.
- Log into your account at [https://www.GrantRequest.com/SID\\_5833?SA=AM](https://www.GrantRequest.com/SID_5833?SA=AM) to access saved and submitted requests.
- Add mail@grantapplication.com to your safe senders list to ensure you receive all system communications.

## **Application**

### **Applicant Information**

#### **Member Community or Public Agency**

City of Berea

#### **Applicant**

City of Berea

#### **Co-Applicant**

#### **Co-Applicant Letter of Support**

#### **Project Contact Title**

Director of Public Works/City Engineer

#### **Project Contact First Name**

Tony

#### **Project Contact Last Name**

Armagno

#### Project Contact Address

11 Berea Commons  
Berea, OH 44017

#### Project Contact Phone

4408265814

#### Project Contact E-mail

tarmagno@cityofberea.org

#### Project Information

##### Project Title

North End Sewer New Flow Connection

#### Project Location

(Address, cross streets, which streets, etc)

All of PFA BE-05;  
Specific Work Location - Bryant Avenue, Riveredge Parkway, Shelley Parkway,  
and Emerson Drive

#### Project Type

Design & Construction

#### Total Project Cost

824188.00

#### MCIP Requested Grant Amount

618,141.00

#### EIFA

Yes

#### Non-District Funds

206,047.00

#### % Non-District Funds

25

#### Project Start Date

April 27, 2022

### Project End Date

November 30, 2023

Project Funding Request - Identify what the District funds will support

### Project Funding Request - Design Only

Provide documentation that shows non-district funding (match funding) has been secured for project design that funding and when the design will start and be completed.

### Project Funding Request - Design and Construction

Provide documentation that shows non-district funding (match funding) has been secured for project construction that funding and when the construction will start and be completed.

**Construction only applications require a "shovel-ready" project. Please include a copy of the stamped drawings.**

North End Sewer New Flow Connection - Project Budget & Certification of Local Funds.pdf

### Project Funding Request - Construction Only

Provide documentation that shows non-district funding (match funding) has been secured for project construction that funding and when the construction will start and be completed.

**\*\*\*IMPORTANT\*\*\* Review the 2023 MCIP RFP Project Evaluation section for details and expectations for each section. Multiple documents can be combined into one file prior to uploading. (Maximum upload of 1GB)**

### Project Description

Attach reports, plans, and maps as needed to explain the project with a summary of any attachment within the project description. Important information that may assist in characterizing the project includes but is not limited to:

- Project maps displaying the location of any infrastructure being rehabilitated or reconstructed.
- Map of tributary area with approximate tributary area stated in acres.
- Detailed description of the type of infrastructure being rehabilitated or replaced (e.g. common trench over/under, common trench dividing wall, common trench standard manhole, separate trench) and what the infrastructure will be replaced with (if applicable).
- All project evaluation reports, photographs, or other information that may help the District quantify water quality issues.
- In an HSTS project, identify if the failing septic system is also classified as an illicit discharge per Ohio EPA definition.
- If the scope of the project includes illicit discharge elimination or HSTS removal, provide the number of units being eliminated.
- Documentation verifying age of infrastructure, as well as any additional qualitative or historical information that can confirm the current condition.

### Attachment - Maps

North End Sewer New Flow Connection - Project Map & Private Property Dye Testing Map.pdf

### Attachment - Documentation

North End Sewer New Flow Connection - Summary of Project Users.pdf

### Attachment - Documentation

North End Sewer New Flow Connection - Common Trench Sewer Lateral Program.pdf

### Project Description

The North End Sewer New Flow Connection Project is located in the "North End" of the City of Berea. The project limits are shown on the attached Project Map. The project includes a new flow connection near the upstream end of Riveredge Parkway to offload flows to the District's SWI sewer. The project also includes the partial lining of sanitary sewer laterals on Shelley Parkway and Emerson Drive.

The new flow connection was identified and recommended as part of the District's SWI LSSES which was performed between 2018 and 2021. The final report was provided to the City in February 2022. The new flow connection will include the installation of approximately 600 linear feet of new sanitary sewer along Bryant Avenue from Riveredge Parkway to the SWI manhole shaft on Sheldon Road. Please see the attached Project Map for the location of the new flow connection.

The lining of laterals will be performed on 30 houses on Shelley Parkway and

Emerson Avenue. The attached Project Map includes the locations of these houses. These houses are unique to the neighborhood as they were constructed in the 1990's and 2000's, however the sanitary sewer on these streets was installed in the 1930's. When the developer installed the sanitary sewer connections for these homes, the new PVC pipe was connected to the original VCP pipe in the right-of-way. (See Attached Record Drawings & CCTV Photos). The sewer mains on these streets have already been lined as part of the North End Sewer Rehabilitation Project - Phase 1, however there is a section of lateral pipe that remains clay. This project will include lining of the section of clay pipe that remains from the main.

In addition to the lateral lining proposed on Shelley Parkway and Emerson Avenue, Berea City Council recently approved the Common Trench Sewer Lateral Improvement Partnership Program. The purpose of the Common Trench Sewer Lateral Improvement Partnership Program is to replace and/or reline the public portion of common trench lateral sewer lines, without regard to its condition, when the owner of the private property served by the public common trench sewer replaces and/or relines their lateral sewer line. In addition to the sewer mains being in common trenches, the laterals are as well. In 2012, the City performed dye testing on private property in the North End and found that 71% of households had some type of dye transfer to the sanitary sewer system. (See Attached Private Property Testing Results) It is believed that many of these issues are due to the VCP pipe in the common trench laterals. The improvement of these laterals will reduce I/I in the sewer system and therefore help reduce the risk of basement flooding. The project area for North End Sewer New Flow Connection Project consists of almost all common trench sewers and therefore will benefit from this program. (See Attached Approved Legislation)

A map exhibit has been prepared to demonstrate the work and flow monitoring that will be performed in the project area. The City of Berea has already televised the sewers and preconstruction flow monitoring will be taking place in June, July, and August. Design for the new flow connection will begin in the fall of 2022 and construction will be ready to start in early 2023 if this project is funded by MCIP. (See Attached Project Map)

Infrastructure Condition

## **Sewer Projects**

1. For sewer rehab and replacement projects, provide the condition, trench type, and length that most accurately reflects the current and actual condition of the structure using the condition descriptions defined below.

### **Condition Rating**

Partial reconstruction or extensive rehabilitation required to maintain integrity and/or PACP/MACP condition scores between 3-4.

### **Age of Sewer**

Years

93

Unknown

## **Sewer Type**

Please indicate length(s) of existing sewer that is being rehabbed/replaced and/or new sewer that is being installed.

### **Combined Sewer**

#### Linear Feet

0

### **Common Trench**

#### Over/Under - Linear Feet

#### Dividing Wall - Linear Feet

0

#### Standard Manhole - Linear Feet

1260

### **Separate Trench**

#### Linear Feet

600

#### Related Sewer Documentation

For example, document trench type, reports, condition inspection, photographs, studies, field work, etc.

North End Sewer New Flow Connection - Sewer Trench Types, Record Drawings, CCTV Photos.pdf

#### Is CCTV available upon request?

Yes

## HSTS Projects

1. Select age of HSTS being removed/eliminated.

### Select age of HSTS

None

### Systems Failing

2. What number of systems are rated by the Board of Health as failing?

### Related HSTS Documentation

NOTE: Projects proposing to remove/eliminate failing HSTS must provide documentation that the area the Municipality is targeting is part of an approved prescription of the Municipality's 208 Plan, or a feasibility study for removal has been completed, or a letter and/or agreement with the residents for the sanitary sewer assessment has been executed.

3. Describe the structural deficiencies of the infrastructure.

### Describe the structural deficiencies of the infrastructure

The existing sewers in the North End of Berea are common trench sewers built prior to 1948. In many cases the storm sewer was built over top of the sanitary sewer and through the sanitary sewer manholes. Over time, pipe sections have failed and the joints of both the storm and sanitary sewers have deteriorated to the point that they are contributing to heavy I/I and basement flooding.

During the North End Sewer Rehabilitation Project - Phase 1 & 2, the City made significant improvements to the sewer infrastructure by increasing capacity, replacing structurally deficient sewer segments, lining sewer mains, lining manholes, and abandoning unused sewers. This included upsizing the downstream sewer segments in PFA BE-05 from a 12" to a 18" diameter sewer, CIPP lining of over 110 sanitary sewer segments, cementitious lining of over 120 sanitary sewer manholes, and abandoning 12 sewer segments that are not being utilized.

Although these significant improvements have been made, some structural

deficiencies remain in the sewer system. These include deficiencies of the sewer laterals. In addition to the sewer mains being in common trenches, the laterals are as well. Most of the laterals are still VCP pipe, which allow from transfer of storm water into the sanitary sewer through deficient pipe joints and sections.

#### Water Quality and Quantity Impacts on Human Health and the Environment

1. How many reported homes/businesses have experienced basement backups in the project area?

#### Number of Actual Basement Backups

56

#### Actual Basement Backup Description

The residents and businesses in the North End of the City of Berea have experienced basement flooding during large rain events for many years. The recent events include February 28, 2011; July 19, 2011; June 25, 2013; May 12, 2014; June 27, 2015; and July 12, 2021. During a rain event on July 19, 2011, 50 of the 118 households in Berea directly serviced by this project called to report that their basement flooded. In many cases raw sewage entered homes which can cause serious health hazards including a number of diseases, such as those caused by E.coli. Although improvements have been made to the sewer system as part of the North End Sewer Rehabilitation Project - Phase 1 & 2, the City still received calls from 6 households on July 12, 2021, to report that their basement flooded. (See Attached Actual Basement Flooding Documentation)

### Actual Basement Backup documentation

North End Sewer New Flow Connection - Actual Basement Backup Documentation.pdf

2. Please provide documentation of these flooding events (e.g. flooding logs, modeling results, etc.)

## Number of Model-Projected Basement Backups

4

## Model-Projected Basement Backup Description

As part of the District's SWI LSSES, they identified buildings likely to have basements at risk of backups during the 5-year, 1-hour rainfall due to excess wet weather flow and/or sanitary sewer capacity deficiencies. This was done by projecting peak flow rates and corresponding maximum HGL profiles and comparing them to building elevations. The model assumed basement floor elevations are 8 feet below the highest ground elevation at the structure. There were a total of three basement backups projected along Riveredge Parkway, however one additional house was built between two of the houses that are projected to backup. This new house was built in late 2020 and has a basement floor elevation deeper than the neighboring houses, therefore it is safe to assume the model would predict basement backup for this structure to bring the total basement backups to four. When modeled with the proposed bulkhead and new flow connection to the SWI that are included in this project, these basement backups are shown to be eliminated. (See Attached Model-Projected Basement Backup Documentation)

## Model-Projected Basement Backup Documentation

North End Sewer New Flow Connection - Model Project Basement Backup Documentation.pdf

### 3. Indicate the deficiencies the project will mitigate. Check all that apply.

Flooding with structural and/or property damage  
Structural breaks during the life of the sewer  
Service capacity issues  
Common Trench Rehabilitation  
Infiltration  
Inflow

Demonstrate the effects of the project on water quality/quantity.

- What is the frequency and/or magnitude of the problem?
- What is the direct human health or environmental impact?
- How many verified homes, businesses, or other occupied structures will see a benefit from this project?
- How will the proposed project eliminate or reduce the water quality/quantity impact?
- How will the proposed project mitigate the potential for unregulated release of sewage to the environment?

There are over 1800 direct users within the sewershed that will benefit from North End Sewer New Flow Connection Project. (See Attached Summary of Users) The residents and businesses in the North End of the City of Berea have experienced basement flooding during large rain events for many years. The flooding is due to excessive I/I in the sanitary sewer due to the deteriorating condition of the common trench sewer mains and private property sewer systems. The recent events include February 28, 2011; July 19, 2011; June 25, 2013; May 12, 2014; June 27, 2015; and July 12, 2021. During the rain event on July 19, 2011, 50 households directly serviced by this project called to report that their basement flooded. On July 12, 2021, 6 households called to report that their basement flooded. In many cases during these events, raw sewage entered homes which can cause serious health hazards including a number of diseases, such as those caused by E.coli. (See

Attached Actual Basement Flooding Documentation)

In addition to the health hazards for residents, the basement flooding causes health concerns for the City's service crews and employees. During these rain events, City crews assist residents with basement cleanup along with snaking and televising sewer laterals that may be blocked. This exposure to raw sewage is a health concern to anybody working in these conditions.

Source Control of Stormwater

## Source Control of Stormwater

Removal of stormwater from combined or sanitary sewer system and managed for quality and/or quantity

### Describe how the project will provide source control stormwater.

The lateral lining work being performed as part of this project will reduce the amount of I/I entering the sanitary sewer system. By sealing the section of the laterals that are VCP pipe and are within the common trench, stormwater will remain in the storm sewer system or be permitted to infiltrate into the ground rather than entering the sanitary sewer system to be unnecessarily treated.

## Significant Project Benefit to the District

### Describe how the project significantly benefits the District.

This project is located within a sewershed that makes up 8.3% of Berea's

total local sanitary collection system and also includes a large portion of Brook Park's collection system. There are 408 households, 563 apartment units, and over 900 employees within the sewershed. (See Attached Summary of Project Users). This sewershed is tributary to NEORSD's Southwest Interceptor which ultimately flows to the Southerly Wastewater Treatment Plant. By reducing the amount of I/I entering the sanitary sewer system, it will benefit NEORSD's interceptor and Southerly Plant which serves a population of more than 600,000.

Additionally, there have been many incidents of basement flooding reported in the last 11 years. This has resulted in a significant amount of property damage and is a human health and safety hazard. The reduction or elimination of basement flooding will not only increase the quality of life for the residents of the area, but will also increase their property values.

#### Inter-Community Benefits

Describe the inter-community benefit(s) and provide supporting documentation.

## Description of Inter-Community Benefit

The improvements included in this project will be within the sewershed identified as PFA BE-05 in the SWI-LSSES City of Berea Community Report dated February 2022. This sewershed also collects flow from a significant portion of Brook Park's sewer collection system, before flow enters the SWI. It receives flows from PFA's BEBP-01, BP-08, BP-10, and BP-11. There are approximately 219 homes, 173 apartment units, and 2 businesses in these sections of Brook Park. The flows from the Brook Park sewers enter Berea's system along Sheldon Road in the downstream portion of PFA BE-05 and downstream of the new flow connection proposed as part of this project. The reduction of flows that will result from the new flow connection will have an inter-community benefit. (See Attached Summary of Project Users and Inter-Community Map)

## Attachment

North End Sewer New Flow Connection - Inter-Community Map.pdf

## Performance Verification

Use the following link to download instruction regarding input of Project Performance Verification (PPV) to the NEORSD ArcGIS online (AGOL) platform. For technical assistance regarding AGOL please email [gis@neorsd.org](mailto:gis@neorsd.org) . [AGOL instructions](#)

North End Sewer New Flow Connection - American Structurepoint Agreement for Preconstruction PPV.pdf

## AGOL Completed

Yes

## Project Schedule and Budget

**Provide a project schedule, cash flow, and budget for the project as applicable to the MCIP fund request.** The budget should specify items with prices and quantities necessary for the project. Budget may include engineering services such as design, construction, project administration, construction administration, and performance verification. Do not summarize construction into one item. A construction contingency up to 10% is permitted but inflationary adjustments are not. Provide a detailed Engineer's Estimate and a Useful Life Statement with an engineer's seal or stamp and signature by a registered professional engineer in the State of Ohio.

## Design Cost

61751.00

## Design Completion Date

December 23, 2022

## Performance Verification Cost

68176.00

## MCIP Construction Cost

\*Not applicable for design only

694261.00

## MCIP Construction Start Date

\*Not applicable for design only

March 01, 2023

## MCIP Construction Completion Date

\*Not applicable for design only

August 31, 2023

## Detailed Engineer's Estimate and a Useful Life Statement

North End Sewer New Flow Connection - Project Budget, Construction Estimate, & Useful Life.pdf

## Project Schedule and Budget

Design Engineering Cost: \$61,751.00

Design Schedule: August 2022 to December 2022

Construction Cost: \$694,261.00

Construction Schedule: March 2023 to August 2023 (The Construction Schedule is Determined by the Terms of Grant Funding and Expected Weather Conditions)

Performance Verification Cost: \$68,176.00

Pre-Construction Performance Verification Schedule: June 2022 to September 2022

Post-Construction Performance Verification Schedule: September 2023 to November 2023

(See Attached Project Budget)

(See Attached Engineer's Estimate)

(See Attached Useful Life Statement)

(See Attached American Structurepoint Flow Monitoring Agreement - in Performance Verification Section)

**From:** [Antonio Armagno](#)  
**To:** [Linda Mayer](#)  
**Cc:** [Cyril Kleem](#); [Heather Toth](#)  
**Subject:** EXTERNAL: City of Berea - 2023 MCIP Application - North End Sewer New Flow Connection Project - Revised Project Budget  
**Date:** Tuesday, June 14, 2022 10:05:15 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[North End Sewer New Flow Connection - Project Budget revised 6-14-22.pdf](#)

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**CAUTION:** This email originated from outside the organization. Do **not** click links or open attachments unless you recognize the sender and know the content is safe.

Hi Linda,

It was nice talking with you this morning regarding our MCIP application. Please find attached the revised project budget, based on our conversation. The new Non-District Funds amount is \$206,047.00 which represents 25% of the project. If you have any questions or need more information, please let me know.

Sincerely,

Tony Armagno, P.E.  
Director of Public Works/City Engineer  
City of Berea, Ohio  
11 Berea Commons  
Berea, Ohio 44017  
Phone (440) 826-5814  
[www.cityofberea.org](http://www.cityofberea.org)



**CITY OF BEREAL - NORTH END SEWER NEW FLOW CONNECTION PROJECT**  
**Project Budget**

**Revised on June 14, 2022**

<b><u>Project Financial Resources</u></b>	<b><u>Subtotals</u></b>	<b><u>Total</u></b>
<b><u>Local Funds (25%)</u></b>		
Preconstruction Performance Verification	\$ 49,176.00	
Engineering, Construction, & Post Construction	\$ 156,871.00	
Subtotal	\$ 206,047.00	--> \$ 206,047.00
<b><u>MCIP Grant Request (75%)</u></b>		
		--> \$ 618,141.00
		<b>Total</b> <u><u>\$ 824,188.00</u></u>
 <b><u>Project Estimated Costs</u></b>		
 <b><u>Preconstruction Performance Verification (In Progress)</u></b>		
	\$ 49,176.00	--> \$ 49,176.00
 <b><u>Engineering (10% of Construction)</u></b>		
	\$ 61,751.00	--> \$ 61,751.00
 <b><u>Construction</u></b>		
Construction	\$ 617,510.00	
Contingency	\$ 61,751.00	
Construction Oversight & Inspection	\$ 15,000.00	
Subtotal	\$ 694,261.00	--> \$ 694,261.00
 <b><u>Post Construction</u></b>		
Performance Verification	\$ 19,000.00	--> \$ 19,000.00
		<b>Total</b> <u><u>\$ 824,188.00</u></u>

# BEREA CITY COUNCIL

*City of Berea, Ohio*

## ORDINANCE NO. 2022-32

By: Councilman Chris McManis

Sponsor: Mayor Cyril M. Kleem, Council President Jim Maxwell

Council Members: Leon Dozier, Chris McManis,

Rick Skoczen, Gene Zacharyasz

### AN ORDINANCE

**ESTABLISHING THE COMMON TRENCH SEWER LATERAL IMPROVEMENT PARTNERSHIP PROGRAM TO ADDRESS THOSE PROPERTIES IN THE CITY OF BEREA SERVED BY COMMON TRENCH SEWERS, WHEREBY THE CITY WILL COMMIT TO IMPROVING THE PORTION OF THE LATERAL SEWER LINE LOCATED ON PUBLIC PROPERTY WHEN THE OWNER OF THE PROPERTY SERVED BY THE COMMON TRENCH SEWER MAKES THE NECESSARY IMPROVEMENTS TO THE LATERAL SEWER LINE ON PRIVATE PROPERTY, AND DECLARING AN EMERGENCY.**

WHEREAS, the City of Berea is served by a separate sanitary sewer system with ninety-one percent of the sanitary sewers are separate trench sewers, and with nine percent of the sanitary sewers in a common trench; and

WHEREAS, most common trench sewers were constructed before 1960 and, due to leaks, likely represent the main cause of flooding issues in the South West Interceptor area; and

WHEREAS, a common trench sewer is one in which both the storm sewer and sanitary sewer are placed in the same, or common, trench. Common trench sewers become problematic when the clay pipe degrades which causes leakage into the soil or into the other sewer in the same trench; and

WHEREAS, leaky common trench sewers may contribute large amounts of sanitary sewer stormwater infiltration and inflow, which can cause surcharging; and may allow crossflow of sanitary sewer and storm sewer flows, which can contaminate stormwater; and

WHEREAS, it is common practice for the City to replace the public portion of lateral sewer lines, when the public portion of the line is obstructed or degraded; and

WHEREAS, the Council of the City of Berea and the Mayor find that property owners served by a common trench sewer may benefit if the City replaces and/or relines the public portion of sewer lateral lines at such time that a property owner replaces and/or relines the private portion of sewer lateral lines, even in the absence of obstruction or degradation on the public side; and

WHEREAS, it is the intent of this Council and the Mayor to provide this program for an initial period of three years, subject to a yearly appropriation by Council, to provide that the City shall reline or replace the public portion of the lateral sewer line, without regard to its condition, when a private property owner, served by the same common trench sewer, relines or replaces their sewer lines.

# BEREA CITY COUNCIL

*City of Berea, Ohio*

## ORDINANCE NO. 2022-32

**NOW, THEREFORE, BE IT ORDAINED** by the Council of the City of Berea, State of Ohio:

**SECTION 1.** That the Council of the City of Berea authorizes and directs the Mayor or his designee to establish the Common Trench Sewer Lateral Improvement Partnership Program in a manner consistent with the program summary, attached hereto as Exhibit A, and incorporated herein by reference.

**SECTION 2.** That the Mayor or his designee be, and hereby is, authorized to utilize the services of city employees and/or contractors to perform improvement services to the public portion of the lateral lines, and that if the work shall exceed \$50,000, to advertise for bids and, after approval of the Board of Control, to enter into one or more contracts with the lowest, most responsive and responsible bidder(s) replacing and/or relining lateral sewer lines for properties served by a common trench sewer in accordance with plans and specifications on file in the office of the City Engineer.

**SECTION 3.** That the Director of Finance be, and hereby is, authorized and directed to pay out such contract sum(s) and charge the same to, and the funds therefore are hereby appropriated from the Sewer Capital Improvement Fund, designated for accounting purposes as Fund No. 420, for the purposes set forth in Sections 1 and 2, hereinabove.

**SECTION 4.** That it is found and determined that all formal actions of this Council concerning and relating to the adoption of this Ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal actions were in meetings open to the public in compliance with all legal requirements, including Section 121.22 of the Ohio Revised Code.

**SECTION 5.** That this Ordinance is hereby declared to be an emergency measure necessary for the immediate preservation of the public peace, property, health, safety and welfare, or providing for the usual daily operation of a municipal department, and for the further reason that the public will be best served if the Common Trench Sewer Lateral Improvement Partnership Program begins immediately in order to provide flooding relief to qualified property owners. Therefore, provided this Ordinance receives the affirmative vote of two-thirds of all members elected to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise, from and after the earliest period allowed by law.

# BEREA CITY COUNCIL

*City of Berea, Ohio*

ORDINANCE NO. 2022-32

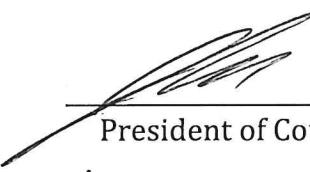
PASSED: June 6, 2022

ATTEST:   
Clerk of Council

APPROVED AS TO FORM:

  
Director of Law

APPROVED:

  
President of Council  
June 7, 2022  
  
Mayor

## CITY OF BEREAL

### COMMON TRENCH SEWER LATERAL IMPROVEMENT PARTNERSHIP PROGRAM

#### PURPOSE STATEMENT

The City of Berea is served by a separate sanitary sewer system. Ninety-one percent of the sanitary sewers are separate trench sewers, with nine percent of the sanitary sewers in a common trench.

Most common trench sewers were constructed before 1960 and due to leaks, likely represent the main cause of flooding issues in the South West Interceptor area.

A common trench sewer is in which both the storm sewer and sanitary sewer are placed in the same, or common, trench. Common trench sewers become problematic when the clay pipe degrades which causes leakage into the soil or into the other sewer in the same trench.

Leaky common trench sewers may contribute large amounts of sanitary sewer stormwater infiltration and inflow, which can cause surcharging; and may allow crossflow of sanitary sewer and storm sewer flows, which can contaminate stormwater.

The purpose of the Common Trench Sewer Lateral Improvement Partnership Program is to replace and/or reline the public portion of common trench lateral sewer lines, without regard to its condition, when the owner of the private property served by the public common trench sewer replaces and/or relines their lateral sewer line.

#### ELIGIBLE PROPERTIES

Using data from City records and from the Northeast Ohio Regional Sewer District, the City has identified each address and parcel in the City served by a common trench sewer. These owners of these identified properties, which are actually served by common trench sewers, are eligible to participate in the Common Trench Sewer Lateral Improvement Partnership Program. The list of eligible properties is available in the Department of Public Service or on the City's website.

#### RESPONSIBILITIES OF THE PRIVATE PROPERTY OWNER

The owner of the private property served by a common trench sewer will be required to make the following improvements to their property:

1. The entire lateral sanitary line from the house to the property-line (usually to the sidewalk) must be improved by either a total replacement of the sewer line or by lining the existing lateral line with PVC or some other material approved by the City Engineer.

In some cases, both the sanitary and storm sewer laterals be need to be replaced or lined.

2. A "Tee" type of cleanout shall be installed by the private property owner as close to the right-of-way as possible.

The program is also available to those private property owners whom have already replaced and/or relined their entire lateral sewer line. The City shall make a good faith effort to identify those properties already improved, but any property owner believing that their property has been improved may also contact the City Engineer to determine if their improvement qualifies for the program.

### **CITY RESPONSIBILITIES**

Upon completion of the improvement project by the private property owner, the City shall replace or reline the public portion of the common trench sewer that serves the improved private property sewer line.

### **PROCEDURES**

The Common Trench Sewer Lateral Improvement Partnership Program will be administered by the Department of Public Service.

The City shall maintain three lists: (1) Eligible properties; (2) Properties with outstanding building permits to make replace and/or reline the lateral sewer; (3) Private properties where the replacement and/or relining has been inspected and complete.

The City will not begin the improvement the public portion of the sewer until the private property sewer is replaced and/or improved in accordance with the program requirements. While the City will make every effort to complete their portion of the project in a timely manner, there are variables that may dictate the scheduling of the improvement to the public portion. Such factors include, but are not limited to:

- Weather - The weather will be a key factor in scheduling the public improvement will require concrete and asphalt to complete the work.
- Availability of city crews and/or contractors – It is not clear whether public bidding will be required if an outside contractor is used. If work is performed by city employees, it will be subject to their other duties.

Representatives of the Department of Public Service are available by appointment to assist property owners and their contractors.

### **CITY FUNDING**

This program is subject to an annual appropriation by City Council.

In 2022, the Administration committed \$250,000 to spend for sewer improvements in Ward 1. While these funds may be used for other Ward 1 sewer improvements, they may also be used for the Common Trench Lateral Sewer Improvement Partnership Program. In 2022, the City's priority will be to make improvements to the public side of those private properties served by a common trench sewer that have already been replaced and/or relined. However, all eligible properties are encouraged to participate as soon as possible.

Permit fees will be waived for private property owners.

It is the intent of this Council and Administration to offer the program during calendar years 2022, 2023 and 2024, and may be renewed by Council.

**FINANCIAL ASSISTANCE FOR PRIVATE PROPERTY OWNERS**

At this time, the City is aware of two programs that may assist private property owners.

(1) Heritage Home Program – (216) 426-3116 or at [hhp@heritagehomeprogram.org](mailto:hhp@heritagehomeprogram.org)

(2) Housing Enhancement Loan Program – (216) 443-2149 or at

<https://www.cuyahogacounty.us/development/residents/home-repair-and-remodeling/housing-enhancement-loan-program>

Check the Department of Public Service's webpage for updates: <http://www.cityofberea.org/270/Service>

**CITY OF BEREAL  
NORTH END SEWER NEW FLOW CONNECTION  
Summary of Project Users**

**Users**

<b>Households</b>	<b>Number of Homes</b>
Berea Homes	119
Brook Park Homes	219
Proposed Front & Emerson Townhomes	70
Total	<b>408</b>

<b>Apartment Complex</b>	<b>Number of Units</b>
Tabor Ridge	97
Villas of Berea	125
Acadian Apartments	173
Stone Ridge Apartments	144
Shellard Park Apartments	24
Total	<b>563</b>

<b>Business</b>	<b>Number of Employees</b>
Alloy Engineering	70
Amerimark Direct	290
Avient	80
Berea Alzheimer's Care Center	
Residents	50
Employees	40
Berea Auto Mall	2
Berea Barbershop	3
Berea Schools Transportation Department	105
Berea Smokehouse	6
City Cell	3
CCM (Formerly Arnco)	20
Circle K	7
Dunkin	30
Fosbel Inc.	35
Grindstone Tap House	34
HMF	50
Hunt Imaging	15
Hydrant Pub	5
NAPA Auto Parts	11
Speedway	25
Subway	7
Sunoco	6
Tim Horton's	6
Valero	3
Total	<b>903</b>

**CITY OF BERA - NORTH END SEWER NEW FLOW CONNECTION PROJECT**  
**Project Budget**

<b><u>Project Financial Resources</u></b>	<b><u>Subtotals</u></b>	<b><u>Total</u></b>
<u>Local Funds (38%)</u>		
Preconstruction Performance Verification Flow Monitoring	\$ 49,176.00	
Engineering, Construction, & Post Construction	\$ 264,015.44	
Subtotal	\$ 313,191.44	--> \$ 313,191.44
<u>MCIP Grant Request (62%)</u>		
		--> \$ 510,996.56
		<b>Total</b> <b>\$ 824,188.00</b>

<b><u>Project Estimated Costs</u></b>	<b><u>Subtotals</u></b>	<b><u>Total</u></b>
<u>Preconstruction Performance Verification (In Progress)</u>	\$ 49,176.00	--> \$ 49,176.00
<u>Engineering (10% of Construction)</u>	\$ 61,751.00	--> \$ 61,751.00
<u>Construction</u>		
Construction	\$ 617,510.00	
Contingency	\$ 61,751.00	
Construction Oversight & Inspection	\$ 15,000.00	
Subtotal	\$ 694,261.00	--> \$ 694,261.00
<u>Post Construction</u>		
Performance Verification	\$ 19,000.00	--> \$ 19,000.00
		<b>Total</b> <b>\$ 824,188.00</b>

**CITY OF BERA - NORTH END SEWER NEW FLOW CONNECTION PROJECT**  
**Project Budget**

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		<b>Total</b> <b>\$ 824,188.00</b>

2023 CITY OF BEREAL - NORTH END SEWER NEW FLOW CONNECTION  
Construction Engineer's Estimate

ITEM NO.	DESCRIPTION	EST. QUAN.	UNIT		
				Total Unit Price	Total
1	Mobilization	1	LUMP	\$ 27,000.00	\$ 27,000.00
2	Preconstruction Photography	1	LUMP	\$ 1,620.00	\$ 1,620.00
3	Construction Staking, As Per Plan	1	LUMP	\$ 2,160.00	\$ 2,160.00
4	Maintaining Traffic, As Per Plan	1	LUMP	\$ 8,100.00	\$ 8,100.00
5	Erosion and Sedimentation Control	2000	EACH	\$ 2.00	\$ 4,000.00
6	Monument Assembly, Removed and Replaced	2	EACH	\$ 1,620.00	\$ 3,240.00
7	Existing Sanitary Manhole Modified, As Per Plan	1	EACH	\$ 2,700.00	\$ 2,700.00
8	Sanitary Manhole Abandoned, As Per Plan	1	EACH	\$ 681.00	\$ 681.00
9	Pipe Removal	350	LF	\$ 13.00	\$ 4,550.00
10	Bulkhead Sewer, Complete In Place	1	EACH	\$ 477.00	\$ 477.00
11	Maintaining Sewage Flow	1	LUMP	\$ 21,600.00	\$ 21,600.00
12	8" PVC SDR 26 Sanitary Sewer, Complete In Place	20	LF	\$ 249.00	\$ 4,980.00
13	18" PVC SDR 26 Sanitary Sewer, Complete In Place	580	LF	\$ 281.00	\$ 162,980.00
14	Sanitary Manhole with 60" Base Complete In Place	3	EACH	\$ 16,200.00	\$ 48,600.00
15	Connection to Ex. NEORSD Manhole	1	Each	\$ 10,800.00	\$ 10,800.00
16	6" PVC SDR 35 for House Service Connections	165	LF	\$ 162.00	\$ 26,730.00
17	6" PVC SDR 35 Test Tee, Complete In Place	6	EACH	\$ 432.00	\$ 2,592.00
18	Concrete for Bedding, Cradling and Fill	5	CY	\$ 216.00	\$ 1,080.00
19	Sheeting Left in Place by Order of the Engineer	5	MBF	\$ 162.00	\$ 810.00
20	Additional Excavation	75	CY	\$ 33.00	\$ 2,475.00
21	Additional Premium Fill	75	CY	\$ 44.00	\$ 3,300.00
22	Miscellaneous Metal	1000	LB	\$ 3.00	\$ 3,000.00
23	Trench Repair/ Base Repair	200	SY	\$ 76.00	\$ 15,200.00
24	Concrete Repair 8"	250	SY	\$ 141.00	\$ 35,250.00
25	Pavement Planing, Asphalt Concrete, As Per Plan (3" Deep)	1060	SY	\$ 11.00	\$ 11,660.00
26	Chip Seal	1060	SY	\$ 6.00	\$ 6,360.00
27	Asphalt Concrete Intermediate Course, Type 2, (448), PG64-22, As Per Plan 1.25"	45	CY	\$ 189.00	\$ 8,505.00
28	Asphalt Concrete Surface Course, Type 1, (448), PG64-22, As Per Plan 1.25"	45	CY	\$ 270.00	\$ 12,150.00
29	4" Concrete Walk as Per Plan	840	SF	\$ 7.00	\$ 5,880.00
30	Curb Ramp	400	SF	\$ 22.00	\$ 8,800.00
31	Compacted Agg.	17.5	CY	\$ 162.00	\$ 2,835.00
32	Restoration	650	SY	\$ 11.00	\$ 7,150.00
33	Sewer Cleaned and CCTV Pipe 4"-15" (Pre & Post)	1260	LF	\$ 5.00	\$ 6,300.00
34	Clean and Televise Lateral From Test Tee (5" to 6" Lateral)	30	EACH	\$ 168.00	\$ 5,040.00
35	Lateral Lining from Mainline Sewer Manhole Setups	5	EACH	\$ 324.00	\$ 1,620.00
36	Lateral Lining 4"-6" Dia. For a 8"-12" Mainline 5' Up from Main (Greater than 5 Laterals)	30	EACH	\$ 2,808.00	\$ 84,240.00
37	Expose Cleanout Riser in Grass or Unpaved, Backfill w/Same Dirt	30	EACH	\$ 324.00	\$ 9,720.00
38	Additional 4"-6" M to L Lateral Lining Footage Greater than 5 Foot	395	LF	\$ 135.00	\$ 53,325.00
39	Installation of Test Tee	5	EACH	\$ 3,240.00	\$ 16,200.00

**Base Estimate Total** \$ 617,510.00

**Contingency 10%** \$ 61,751.00

**Construction Inspection** \$ 15,000.00

**Total Construction Estimate** \$ 694,261.00



PREPARED BY:

*Antonio C. Armagno*

Tony Armagno, P.E. City Engineer

**CITY OF BREA**  
**NORTH END SEWER NEW FLOW CONNECTION**

**USEFUL LIFE STATEMENT**

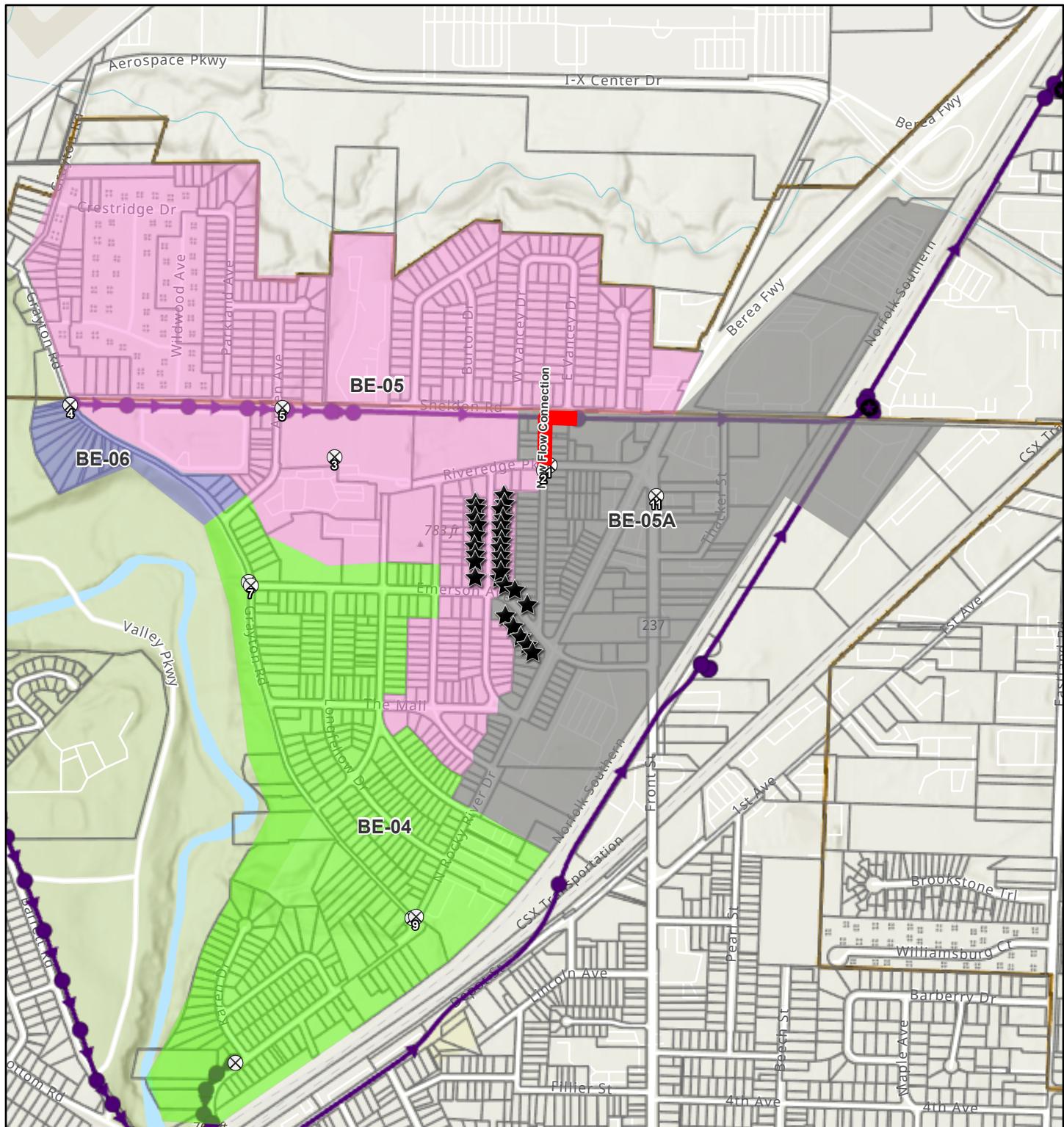
**I HEREBY CERTIFY THAT THE CONSTRUCTION OF THIS PROJECT WILL PROVIDE THE INFRASTRUCTURE WITH A USEFUL LIFE SPAN OF 50 YEARS.**

*Antonio C. Armagno*

**PREPARED BY:** \_\_\_\_\_  
Antonio C. Armagno, P.E.  
City Engineer



# North End Sewer New Flow Connection - Project Map



6/9/2022, 8:42:46 AM

1:15,000

0 0.07 0.15 0.3 mi  
0 0.15 0.3 0.6 km

- Municipalities
- BE-05
- BE-06
- Proposed New Flow Connection
- Flow Monitor Locations
- ★ Proposed Lateral Lining Locations
- BE-05A
- Sewershed - Existing Sewershed
- BE-04
- District Pipe
- District Manhole
- District Manhole
- District Network Structure
- District Sewer Pipe

CuyahogaGIS, CCFO, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N. Robinson, NCEAS, NLS, OS, NMA, Geodatasystelen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community, CuyahogaGIS, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

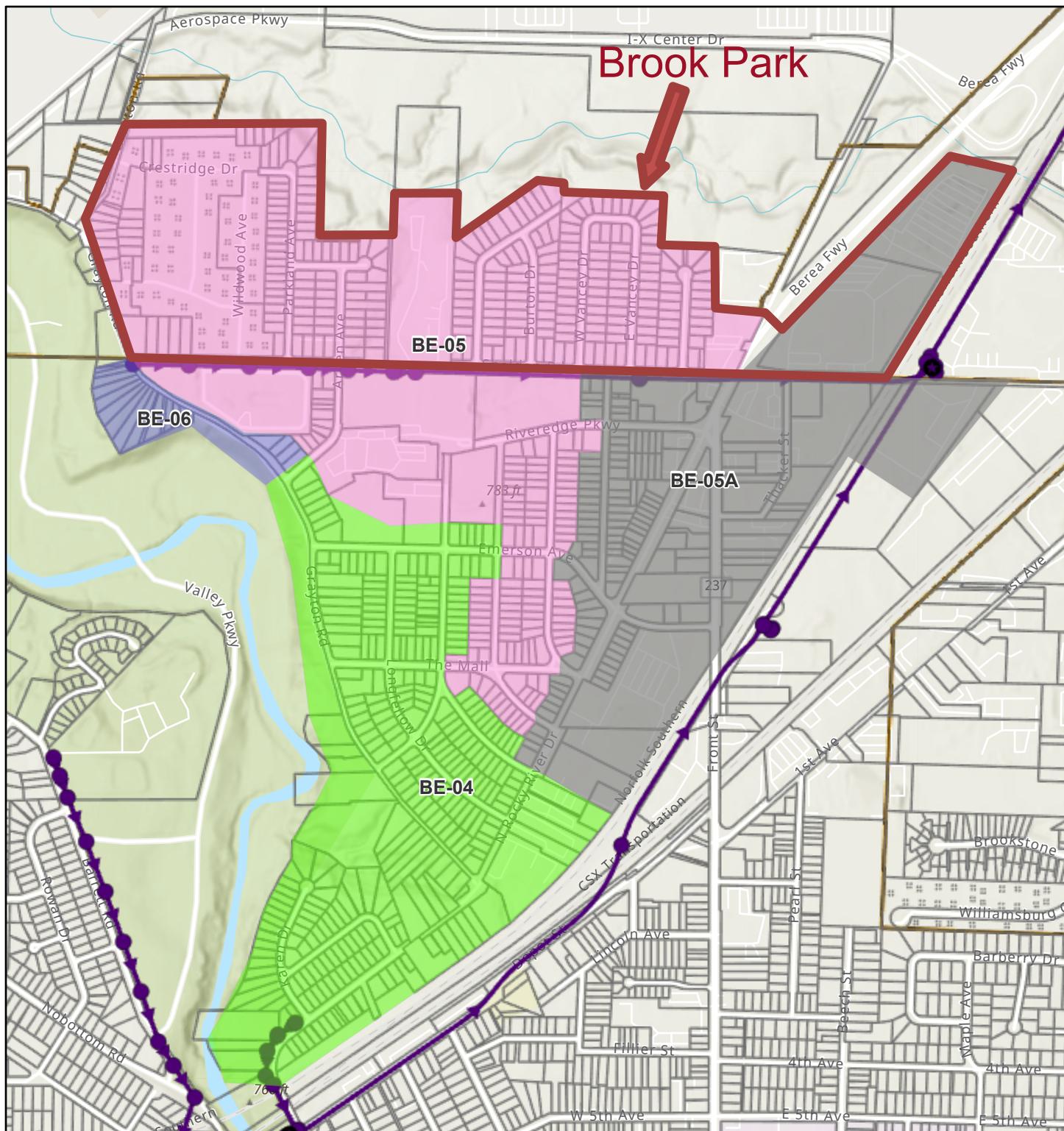
City of Berea

# Private Property Testing Results- North End Area



- Total Homes Tested = 257
- No. of Positive Homes (Fail) = 183 (71%)

# North End Sewer New Flow Connection - Inter-Community Map



6/9/2022, 9:07:52 AM

1:15,000

0 0.07 0.15 0.3 0.3 mi  
0 0.15 0.3 0.6 km

  Municipalities

Areas

BE-05

BE-06

BE-05A

Sewered - Existing Sewered

BE-04

Override 1

Override 2

District Sewer Pipe

→ District Pipe

District Manhole

● District Manhole

● District Network Structure

CuyahogaGIS, CCFO, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N. Robinson, NCEAS, NLS, OS, NMA, Geodatasyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap, and the GIS user community, CuyahogaGIS, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

City of Berea

Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, Cuyahoga County, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, MET/NASA, USGS,

34

## Sewer System Overview

The City of Berea is served by a separate sanitary sewer system composed of 9% common trench and 91% separate trench sewers with a total sanitary sewer system length of 383,600 linear feet (LF). The common trench sewers in Berea are believed to be constructed entirely with common trench standard manhole (common standard) configuration. The sewer system serves a population of approximately 18,609<sup>1</sup> in a total area of 5.8 square miles. Sewer system trench types and lengths are summarized in **Table ES-1**.

Table ES-1. Berea Sanitary Sewer System Trench Types		
Trench Type	Length (LF)	Proportion
Separate Trench	349,400	91%
Common Trench Standard Manhole	34,200	9%
Total	383,600	100%

### Common Trench Sewers

Common trench sewer systems were primarily constructed prior to 1960 and likely represent the largest single cause of problems in the SWI area. **Figure ES-2** shows the common trench standard manhole configuration. Other common trench configurations, including over/under (invert plate) and dividing wall, are not known to exist in Berea. Leaky common trench sewers may:

- Contribute large amounts of sanitary sewer stormwater infiltration and inflow (I/I) which can cause surcharging, SSOs, and potential BBUs.
- Allow crossflow of sanitary sewage and storm sewer flows, which can contaminate stormwater.
- Contribute to solids deposition in sanitary sewers and allow undetected dry weather overflows.
- Make sewer system operation, maintenance, and repairs (O,M&R) more difficult.

<sup>1</sup> US Census Bureau, Quick Facts Berea, OH, July 1, 2019, population estimate; <https://www.census.gov/quickfacts/bereacityohio>

### Common Trench Standard Manhole Systems (Common Standard)

The common standard sewer configuration constructed the storm sewer above and offset laterally from the sanitary sewer in the same trench as shown in **Figure ES-2**. Two separate manholes provide independent access to the storm and sanitary sewers. Although there is no direct hydraulic connection in the common standard system, there is an increased potential for stormwater exfiltration entering the sanitary sewer due to the proximity and relative elevations of the storm and sanitary sewers. **Figure ES-3** shows locations of the modeled sanitary sewers and associated trench types for Berea.

**Figure ES-2. Common Trench Standard Manholes**

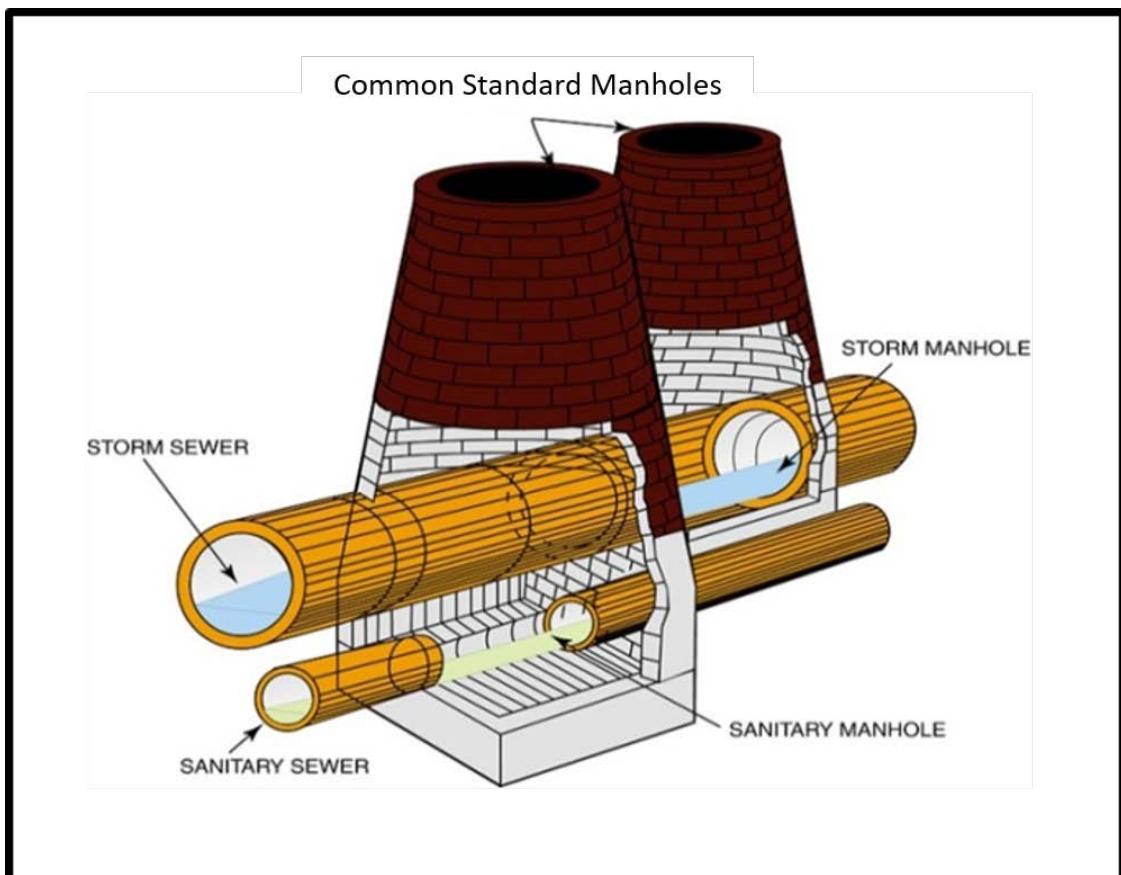
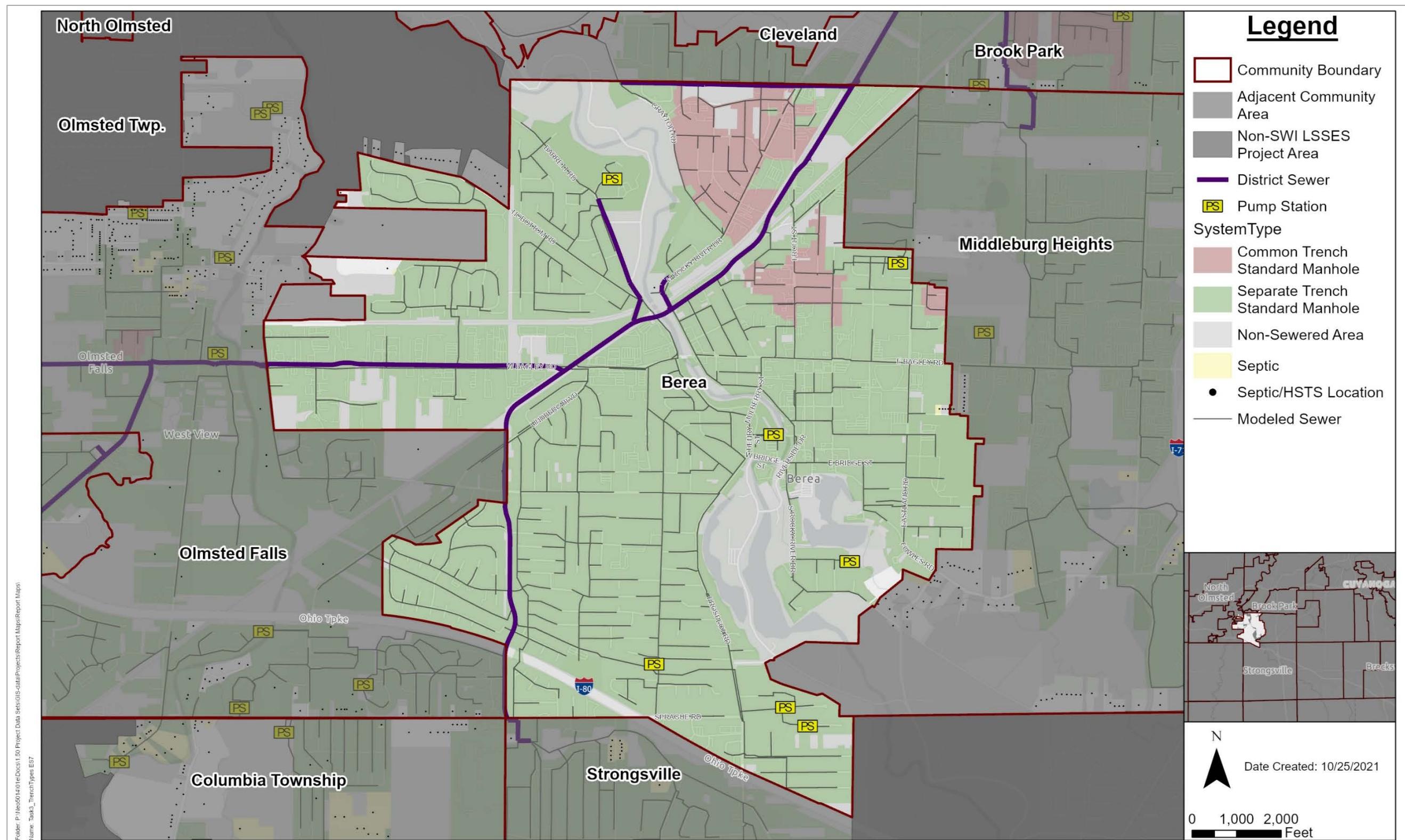
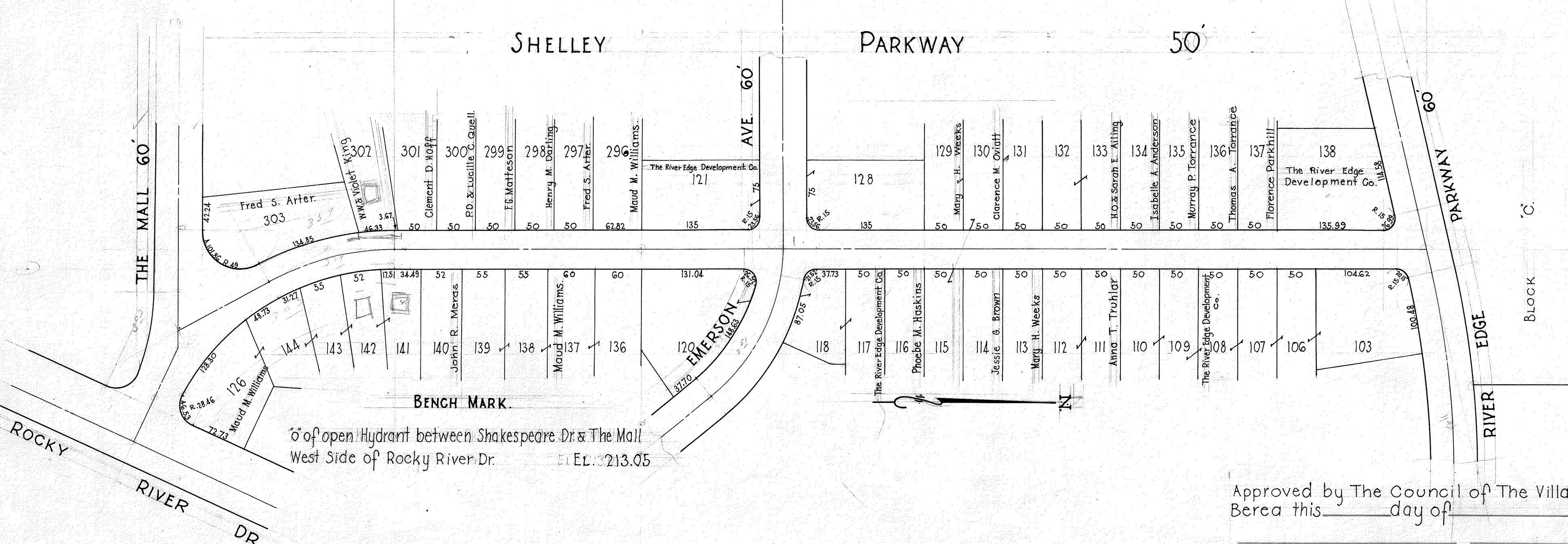
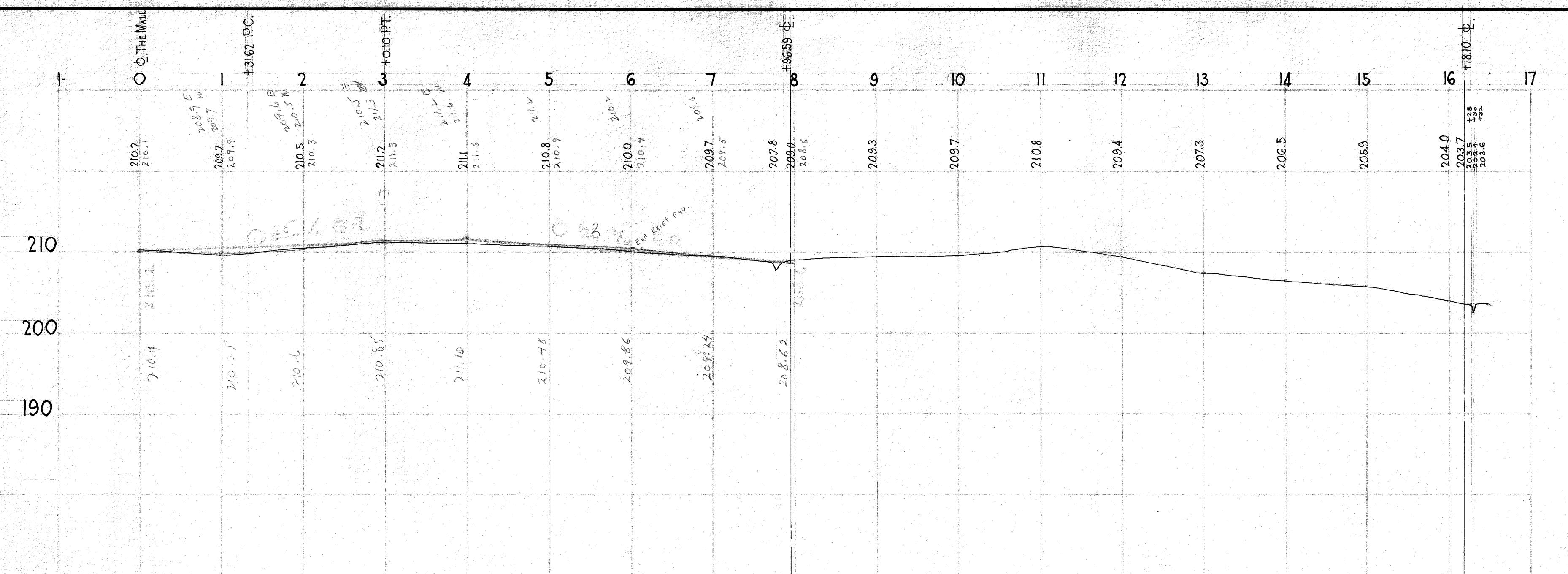


Figure ES-3. Sewer System Trench Types





Approved by The Council of The Village of  
Berea this                    day of                    1929

\_\_\_\_\_  
Mayor \_\_\_\_\_ Clerk. \_\_\_\_\_

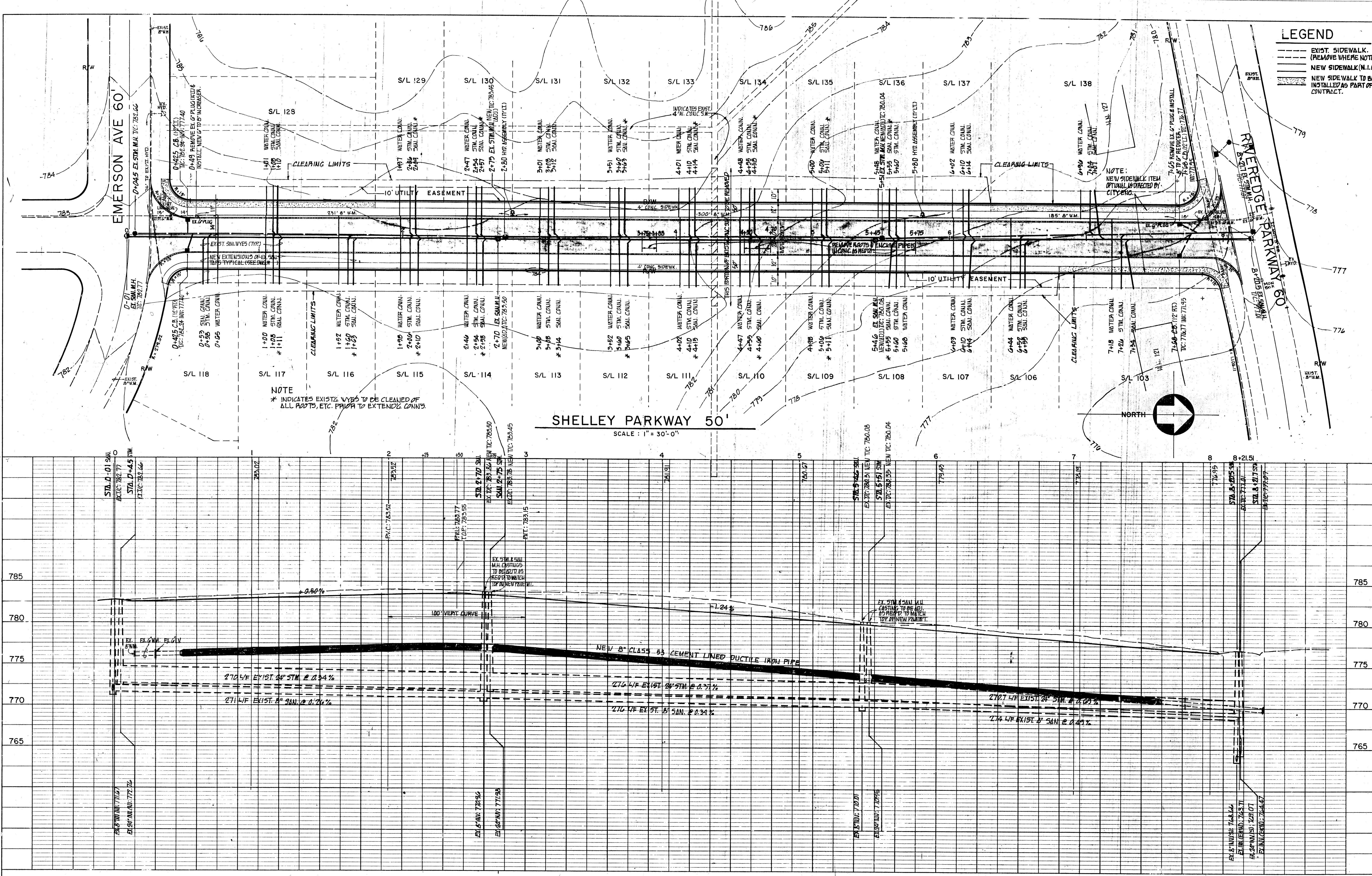
Approved this \_\_\_\_\_ day of \_\_\_\_\_ 1929.

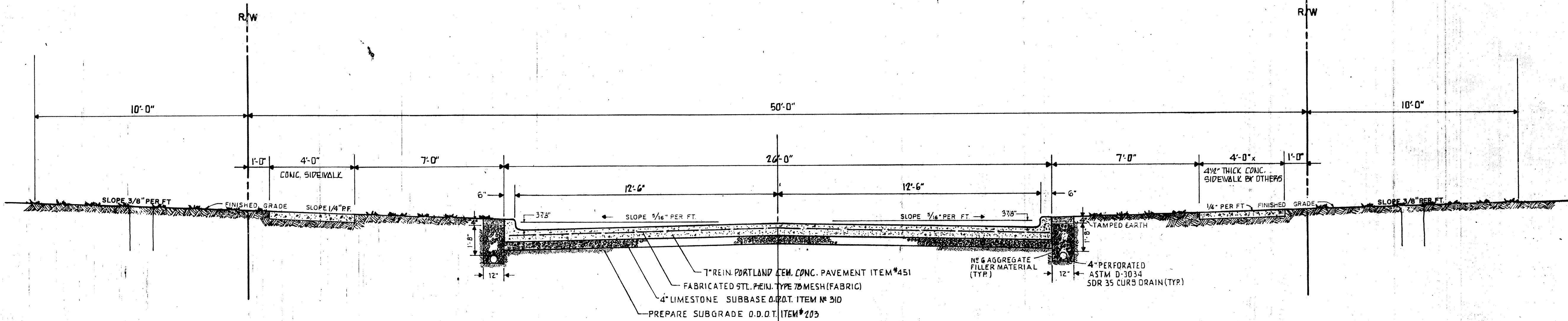
## Village Engineer.

PLAN OF SEWER  
IN  
SHELLEY PARKWAY 50'

BEREA VILLAGE, O.

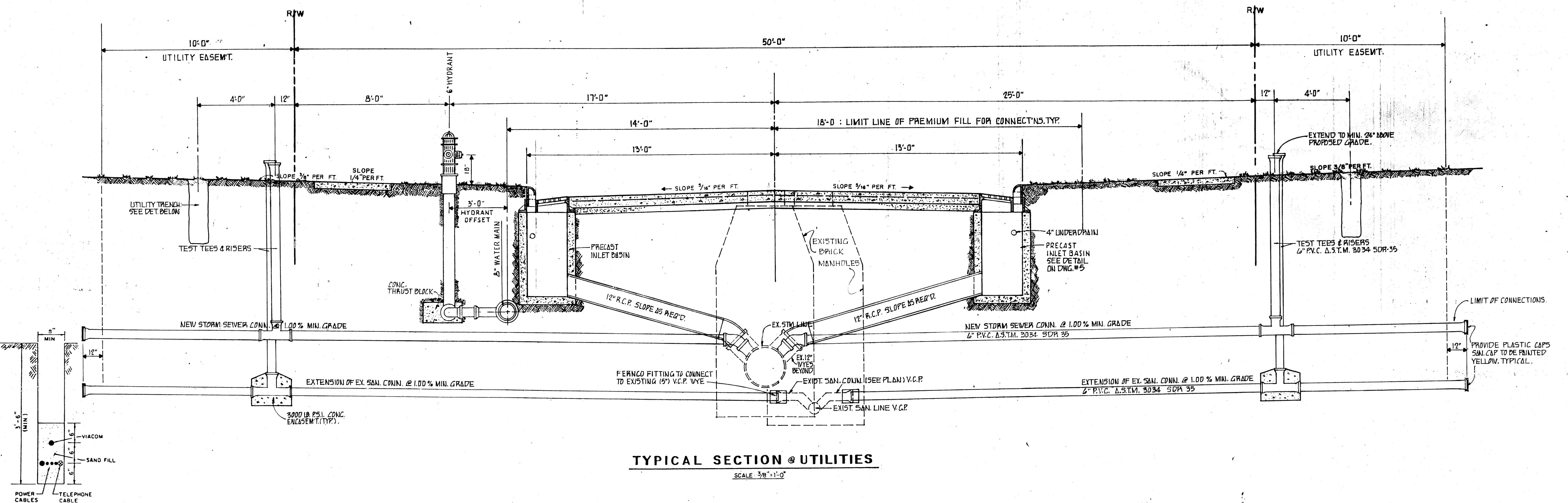
SCALE, 1 = 100 ORDER N. 9970  
CHARLES W. ROOT.  
D-5-59 L ENGINEERS & SURVEYORS. P. 28





## TYPICAL PAVEMENT SECTION

SCALE : 3/8" = 1'-0"



## TYPICAL SECTION @ UTILITIES

SCALE: 3/8" = 1'-0"

## UTILITIES TRENCH DETAIL

## SHELLEY PARKWAY

## TYPE PAVEMENT SECTIONS

			JOB NO. <b>9918</b>	SCALE <b>AS NOTED</b>	DRAWN <b>R.J.B.</b> CHK'D <b>D.J.N.</b>	SHEET <b>3</b>	DATE <b>NOV. 1992</b>	
DATE	ISSUE	DESCRIPTION						

CITY OF BEREAL – NORTH END SEWER NEW FLOW CONNECTION  
PROJECT CCTV PHOTOS



CCTV of Sanitary Sewer Lateral at 770 Shelley Parkway showing transition from PVC to VCP Pipe.



CCTV of Sanitary Sewer Lateral at 781 Shelley Parkway showing transition from PVC to VCP Pipe.

## BASEMENT FLOODING CALL LIST - JULY 19, 2011

Address	Street	Name	Phone
65	Emerson Ave.	Jeremy Kiffer	216-849-4161
231	Emerson Ave.	Norman Grier	440-234-1936
133	Emerson Ave.	Hugh Davidson	440-243-0269
108	Emerson Ave.	Junko Kraft	440-243-2603
71	Emerson Ave.	Saradh Deenanauth	440-243-3168
87	Emerson Ave.	Lynn Para	440-243-5121
161	Emerson Ave.	Hattie Madden	440-816-1933
127	Emerson Ave.	Joyce Washington	
195	Emerson Ave.	Gregory Hayden	
231	Emerson Ave.	Norman Greer	
243	Emerson Ave.	Michelle Prenzlow	
161	Emerson St.	Hattie Madden	
716	N. Rocky River Dr.	Kim Baldwin	440-212-0674
700	N. Rocky River Dr.	Charles Schnell	440-234-1841
704	N. Rocky River Dr.	Jim & Victoria Danko	440-234-6935
665	N. Rocky River Dr.	Neil Bartos	440-243-3442
720	N. Rocky River Dr.	Payton Winters	440-826-1390
623	N. Rocky River Dr.	Patricia Penny	
56	Riveredge Parkway	Laurence Gertsma	440-708-6219
91	Riveredge Parkway	Marie Smith	
687	Shakespeare Dr.	David Niziolek	216-633-3828
724	Shakespeare Dr.	Alvin Sutherland	216-906-3714
657	Shakespeare Dr.	Edna Thomason	440-234-1617
447	Shakespeare Dr.	Mr. Davison	440-243-7519

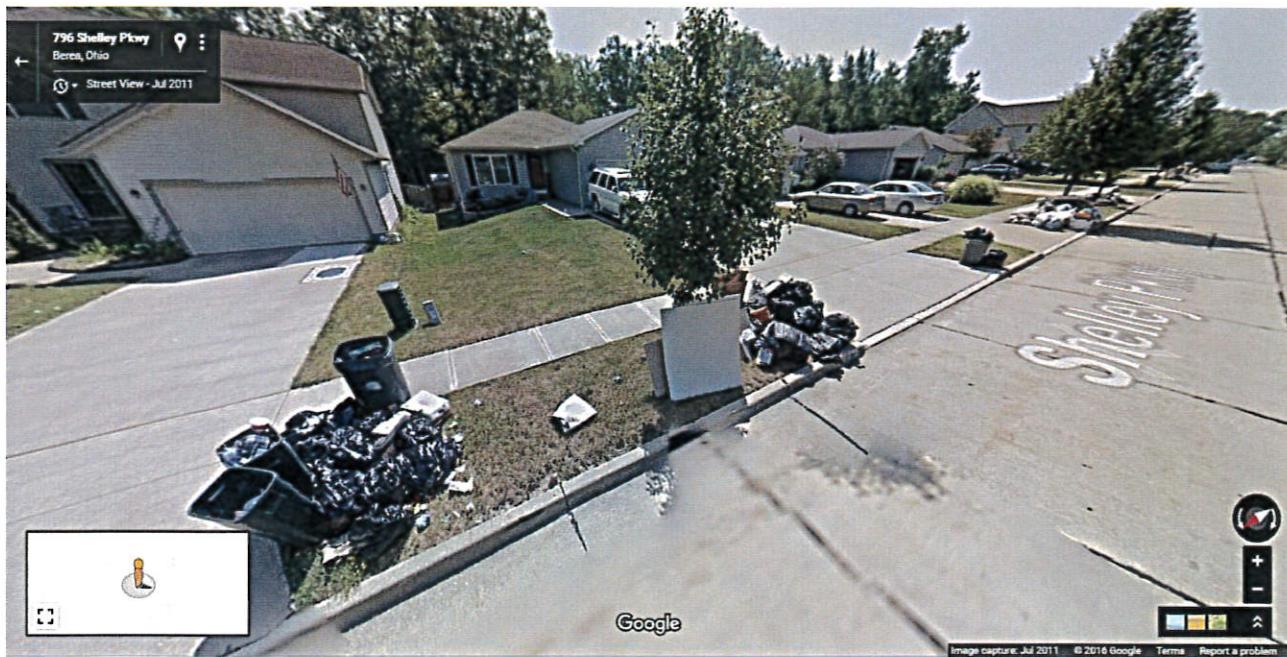
## BASEMENT FLOODING CALL LIST - JULY 19, 2011

Address	Street	Name	Phone
667	Shakespeare Dr.	Honester & Marsha Davidson	440-243-7519
663	Shakespeare Dr.	Thomas Harris	440-465-7219
732	Shakespeare Dr.	Steven Scheutzow	440-915-1993
657	Shakespeare Dr.	Edna Thomason	
667	Shakespeare Dr.	Marsha Davidson	
681	Shakespeare Dr.	Annie Payne	
766	Shelley Parkway	Don & Terri Jarecki	216-347-3900
212	Shelley Parkway	Mark Smih	216-408-9787
780	Shelley Parkway	Mark Smith	216-408-9787
778	Shelley Parkway	Savita Agnihotri	216-548-5388
721	Shelley Parkway	Bobbie Fossett	440-234-5950
773	Shelley Parkway	Leon & Cathy Dozier	440-234-7445
731	Shelley Parkway	John Hunter	440-243-1461
782	Shelley Parkway	James & Janet Klimo	440-243-3714
760	Shelley Parkway	Marty & Eydie Lott	440-826-3885
776	Shelley Parkway	Jim & Linda Stavrenos	440-891-1215
780	Shelley Parkway	Mark Smith	
760	Shelly Parkway	Martin & Edith Lott	
148	The Mall	Donald Johnson	216-938-5870
122	The Mall	Ruth & Darlene Wilson	440-234-3570
142	The Mall	Edna Lott	440-234-6113
127	The Mall	Gay Grizzell	440-243-4483
163	The Mall	Nancy Merritt	440-985-8721
122	The Mall	Ruth Wilson	
137	The Mall	Dorothy Jackson	
195	The Mall	Rose Cansler	

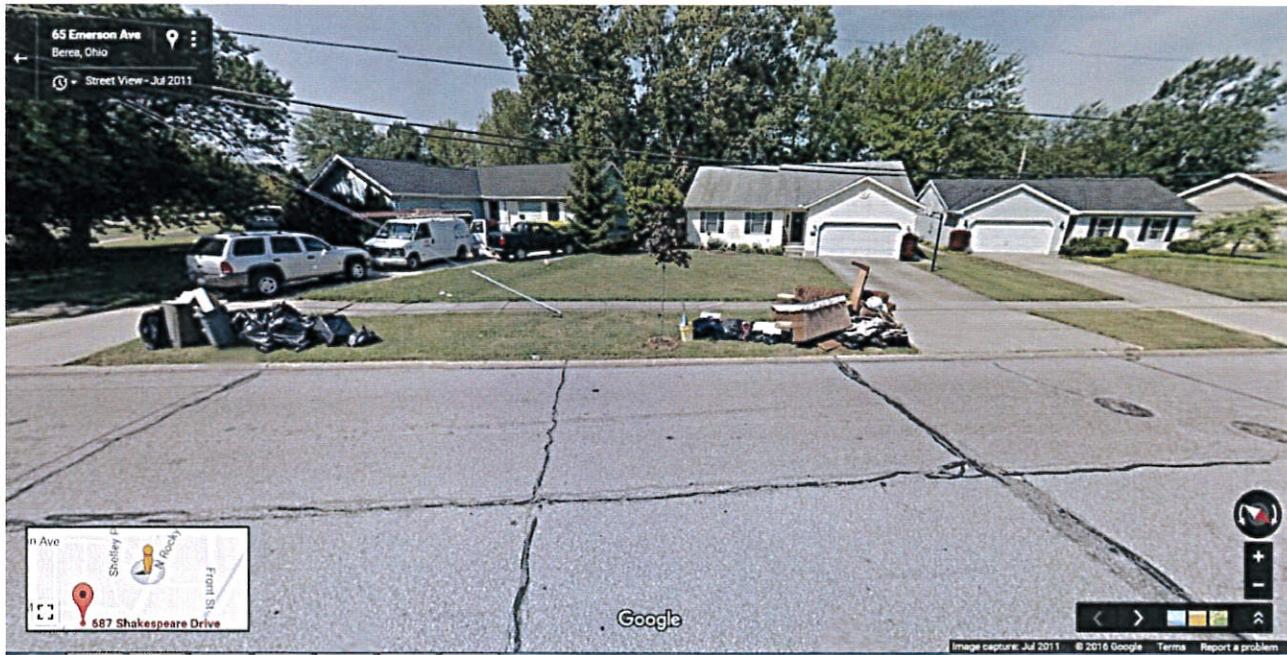
50 of 118 Single Family Homes

# BASEMENT FLOODING PHOTOS

## 780 Shelley Parkway



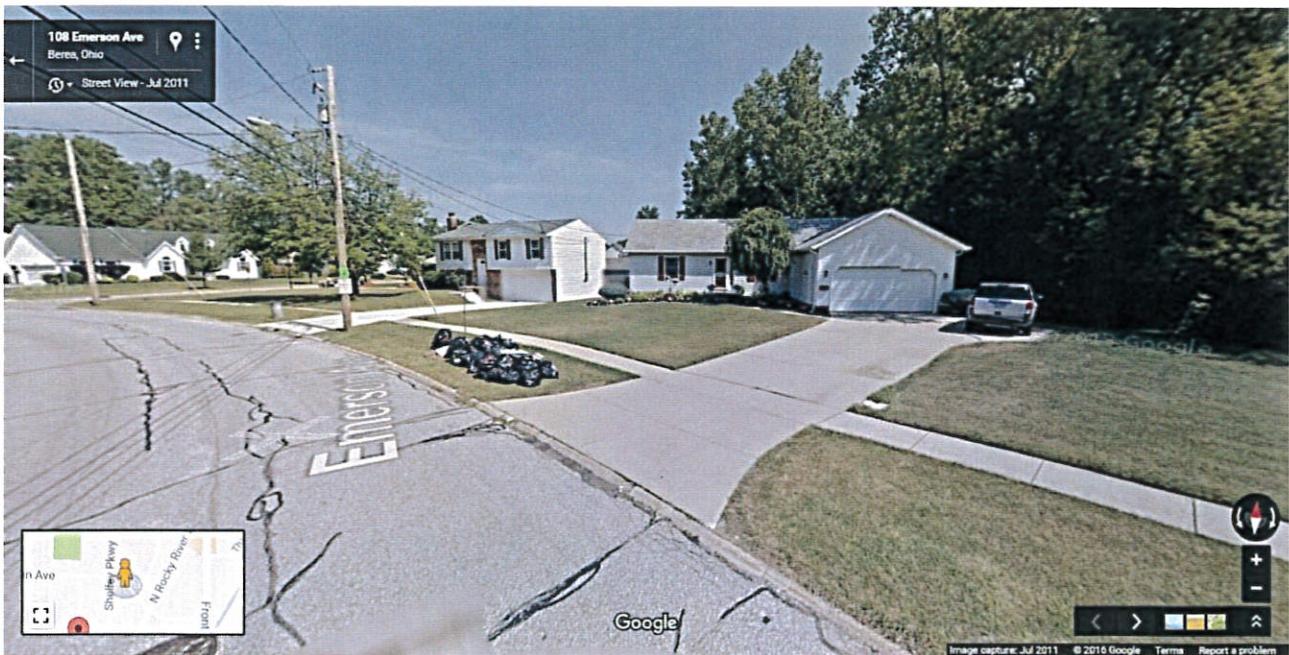
## 71 Emerson Avenue



## 87 Emerson Avenue



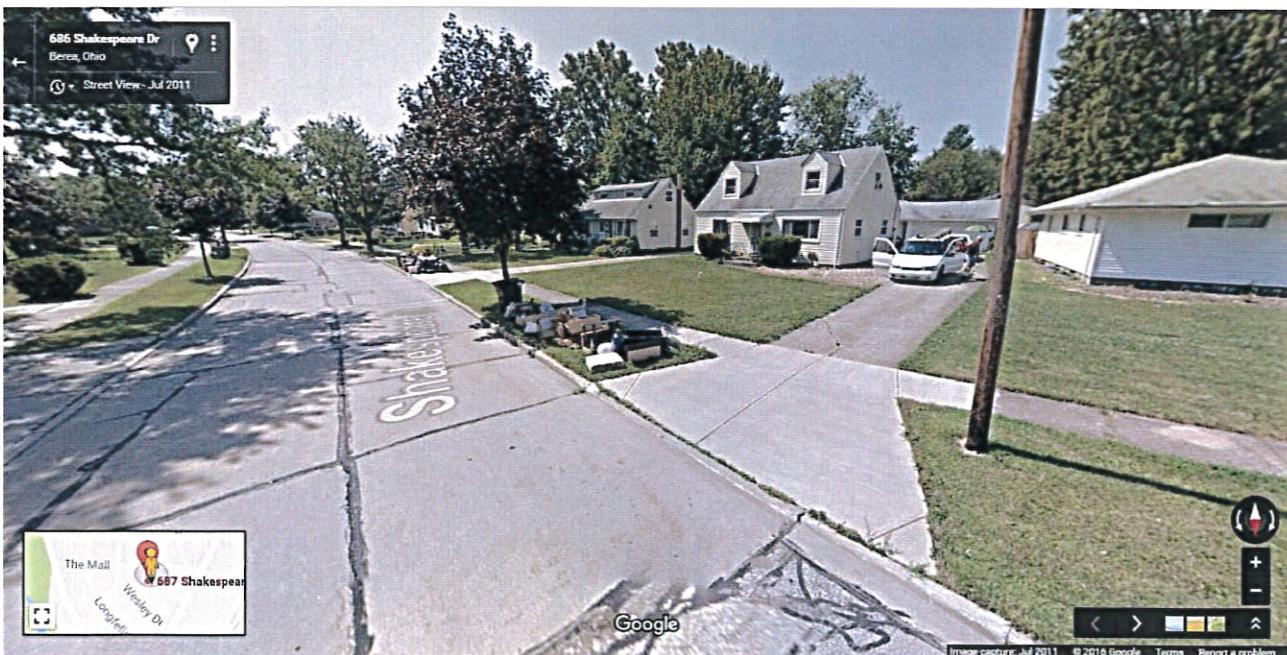
## 108 Emerson Avenue



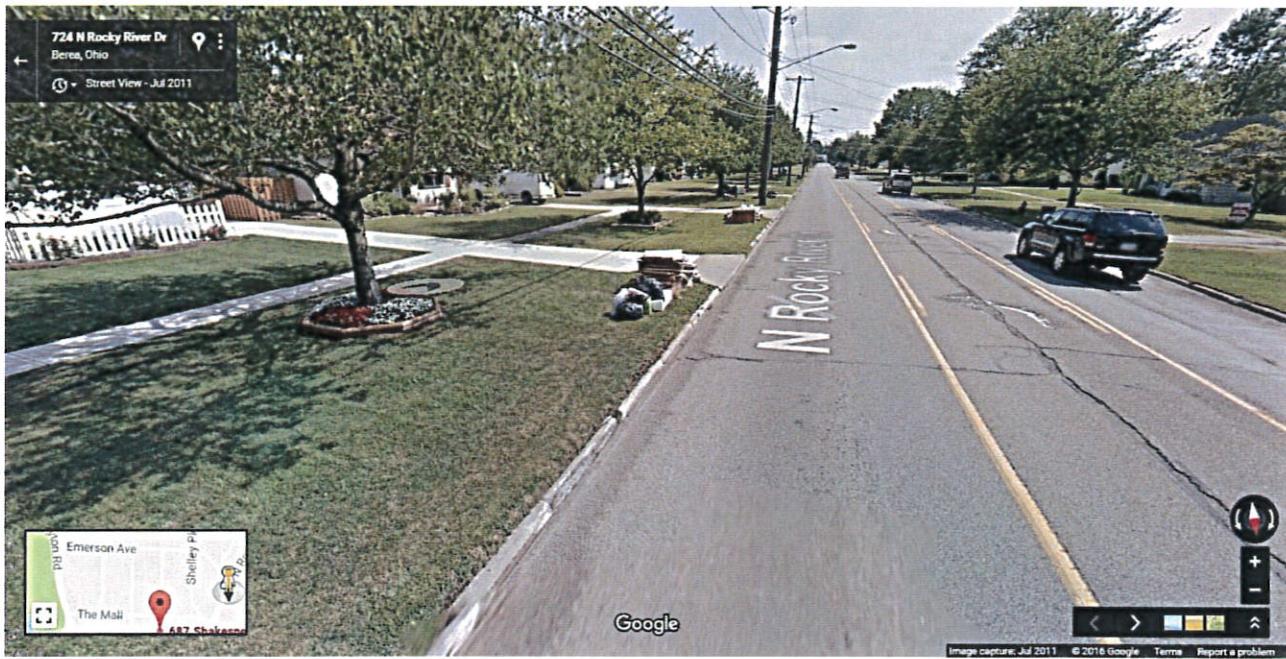
## 672 Shakespeare Drive



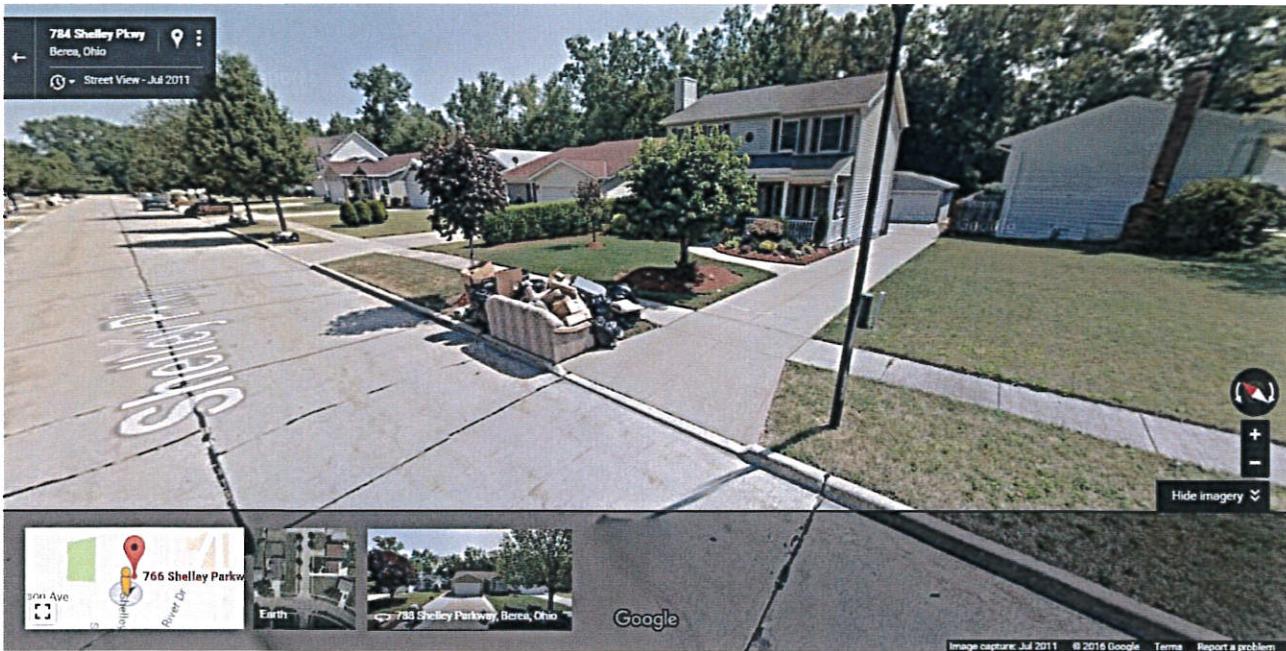
## 687 Shakespeare Drive



## 712-720 North Rocky River Drive



## 760 Shelley Parkway



# 766 Shelley Parkway



## BASEMENT FLOODING CALL LIST – JULY 12, 2021

Date Call/Email Received	Name	Address	Comment/Concern
7/13/21	Gail Grizzell	129 The Mall 127 The Mall (Gay Grizzell)	Basement Flooding Concern. Guy Turner spoke with residents.
7/13/21	Eydie & Marty Lott	760 Shelley Parkway	Ryan received an email regarding flooding concerns.
7/13/21	Honestar Davidson	667 Shakespeare	The Service Department received a call regarding flooding concerns.
7/14/21	Mr. Klimo	782 Shelley	The resident called and Ryan spoke with him regarding his concern of backyard and basement flooding. The resident believes a new home is contributing to his concerns. Ryan spoke with him and asked Mike to contact the resident regarding permits for 109 Riveredge.
7/16/21	Kaitlin Niedermyer	71 Emerson	Received an email from resident with flooding concerns. Bill DeVito was following-up with resident.

# Berea basements flood with some gathering to help Fair Street family



By [Joanne Berger DuMound/special to cleveland.com.](#)

[Email the author](#) | [Follow on Twitter](#)

on July 27, 2011 at 7:50 AM

**BEREA** -- The city created a hot line — one week after many homes in the city experienced flooding in their basements.

The city received more than 200 calls after last week's heavy rains flooded streets, yards and homes.

City Council also will meet at 7:30 p.m. Thursday, July 28, to ask state leaders to help its southwestern Cuyahoga County community, residents and businesses who experienced flooded basements, yards and streets.

The hotline number is (440) 826-5800, ext. 4270 or ext. 4271. The phones are staffed from 2-8 p.m. today through July 29 and 9 a.m. to 3 p.m. July 30.

This is part of the city's response a week after Berea residents and businesses struggled with heavy rains and flash flooding last week. Some of them were still cleaning their basements as late as July 25.

More than 20 people gathered at Abel and Heather Reyes' Fair Street home several days last week to clear and sanitize the family's basement while the couple and their three children were out of town. According to some of those who stepped up to help, the Reyes' oldest daughter, Dominique, has stage 4 neuroblastoma, a cancer that has no cure but a disease the 7½-year-old has been fighting for three years. The family was in New York seeking consultation when the flooding occurred.

Members of Renew Communities, a congregation that gathers at Polaris Career Center, decided to help, received keys to the house and began removing items from the basement, where there was at least 2½ feet of water. They cleared, cleaned and sanitized the basement while the Reyes' were out of town.

Heather Reyes said this was the fourth time in three years they experienced flooding. The last time was in February after heavy snow melted. She said any work the city did in the area has not worked. She is concerned not only about Dominique, whose low white-blood-cell count cannot fight mold that can occur after flooding, but also others who might be at risk of a potential health hazard.

"The people who came and helped us while we were gone were a godsend. They helped so much," she said. "I want the city to see this as a health concern, not just loss of property. When you deal with life and death like we do, you realize how dangerous this is, not only for Dominique but the elderly and those with compromised immune systems."

Reyes said she does not want a "band aid" attempt in the flooding issue.

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"I hope they will get down to the real root of what is causing this. Whether it's one inch or three feet, you have the same clean-up," she said.

Kevin and Sara Deenanauth live on Emerson Avenue, across town from others who had flooding.

Despite having three sump pumps, the couple's basement has flooded four times this year. They said their backyard turns into a lake when this happens, with water rising up to the bottom of their deck. The storm last week damaged their home's new furnace system, which will have to be replaced.

"We know the city knew about the flooding because a police car was stuck in it about 3-4 a.m. that morning and had to be towed," Sara Deenanauth said.

The couple said they have contacted the city's engineering and service departments but have not received help in determining what might be causing the problem.

"We try to keep everything off the floor at least two feet," Kevin Deenanauth said. "There is nothing else we can do. We feel pretty helpless." One group of residents in Reyes' area called a "town hall" meeting at Lou Groza Park July 24 to discuss their concerns. State Senator Tom Patton, R-24, attended.

Berea Mayor Cyril M. Kleem said neither he nor council members were contacted about that meeting. He said the rain that fell early July 18 measured up to 5 inches in an hour.

"That is too much water. That is an unusual amount for any system to handle," he said.

Kleem, who called the special July 28 meeting while council is on summer break, said the city has spent \$12 million in recent years to improve infrastructure. He said some who experienced previous flooding has not had any recently.

"We cannot do every neighborhood at one time, nor do we have the funding to do so. Some flooding areas have different issues. Sometimes it's a problem on people's own property," he said. "We continue to improve our infrastructure but we cannot do it all at one time. We have the hot line and the special council meeting called now due to the recent flooding issues."

**See more Berea news at [cleveland.com/berea](http://cleveland.com/berea).**

*Contact DuMound at (216) 986-7538.*

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# Berea to tackle flooding challenge



By [Joanne Berger DuMound/special to cleveland.com.](#)

[Email the author](#) | [Follow on Twitter](#)

on August 04, 2011 at 9:22 AM, updated August 04, 2011 at 9:23 AM

**Berea** -- city began meeting with engineering firms this week to discuss the overall plan and direction in tackling flooding issues.

"We are aware of some of the areas that need improvement regarding sanitary sewers and storm sewer maintenance," Service Director R. James Brown said. "We have seen some areas, however, that experienced flooding last month that did not have it in the past."

Brown said when he first assumed his post more than 10 years ago, he learned the city was not clearing its lines as often as possible.

He said the city has a sewer jet truck that cleans catch basins and main line sewers. Berea began leasing the truck five years ago, with the last payment made this week to own it.

"We average its use now at least four days a week," he said. "You'd be amazed what we find in the lines — basketballs, footballs, toys, pop cans. You find them on a Tuesday and on Wednesday, they may be back again. That is just the way it is."

City leaders said storm and sanitary sewers receive routine maintenance, but they believe a number of factors may have occurred that added to the flooding after the heavy July 19 rainstorm.

More than 150 people attended the July 28 special City Council meeting where members passed a resolution asking for federal, state and county assistance. Those attending had flooding issues — some multiple times in the past year.

City Engineer Tony Armagno said it has been an ongoing process to try to alleviate the storm water problem.

"It is a combination of the amount of rain that fell in such a short period of time," Armagno said. "And, at different locations, there could be multiple reasons why a property received water in its basement."

Some residents saw sewage in their basement after the rain. Armagno said that may occur due to cross-connections of sanitary with storm sewer lines on private or city property and infiltration of storm water into the sanitary sewer system.

He also said codes have changed over the years.

"When many homes were built years ago, they were allowed to combine storm and sewer lines into one pipe. That is no longer allowed. So that is part of the source of the problem," Armagno said. "Where there is any permit, the city checks to make sure the connection is in the right location."

The Cuyahoga County Office of Emergency Management visited five homes Aug. 1 as a result of the city's resolution. They also made previous visits to selected residences and businesses in Parma and North Royalton.

The Federal Emergency Management Agency has specific criteria that must be met to be eligible for financial assistance. Examples of a "destroyed" home includes having the basement full, or eight feet of water, and more than two feet of water on the first floor for a home with a basement, or more than five feet of water on the first floor of a slab.

The agency requires that an area, or county, must identify a minimum of 25 structures, considered to have "major" or "destroyed" damage, with 40 percent uninsured damages.

"It does not appear that a county disaster will be declared," said John Kohlstrand, with the Cuyahoga County Executive's office. "There were a handful, a few, that may have reached those criteria. But not 25, based on the federal basis, to declare an emergency."

Rich Skoczen, who helped organize a grassroots meeting of concerned residents the weekend after the flooding, said the federal criteria should not apply across-the-board to all regions in the country. He also questioned the city's maintenance of storm and sewer lines, the pumping of sanitary sewer water into storm water lines, suspected pump failure during the July 19 storm, mouths of catch basins that measure just six inches, and the new Grindstone Elementary School possibly affecting the area.

Skoczen called the federal criteria "crazy" in giving cities like Berea the same conditions as those who live next to a shoreline or the Mississippi River.

"Our infrastructure is our foundation. We have noticed a neglect in our infrastructure above and below our roads," he said. "Let's make it a conscious effort to work together. I don't care if it's one inch or six feet of water in your basement. If mold occurs in the basement, it is serious."

Armagno said none of the city pumps failed during the July 19 storm. He said the city's monitoring system showed they were all functioning. He also said the city did pump sanitary water into the storm water system on Fair Street, which is permitted in an emergency response mode. He said the city is then required to file a report with the (Ohio) EPA and the Cuyahoga County Board of Health.

"We were doing that in the one location to help relief with basement flooding and get it out of the basement," Armagno said.

He also said the city passed a 2005 ordinance that says any development of one acre or more — which applies to the new Grindstone school — cannot discharge more runoff water after it is developed than before. Grindstone has an underground chamber beneath its parking lot that holds storm water and discharges it slowly. It also has a bio-retention basin.

"The city does inspect this during construction on a weekly basis to ensure the storm water management is proper on that site," Armagno said. "The plans are according to the city's storm water ordinance."

See more Berea news at [cleveland.com/berea](http://cleveland.com/berea).

Contact DuMound at (216) 986-7538.

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# Berea selects engineering firm to study flooding issues



By [Joanne Berger DuMound/special to cleveland.com.](#)

[Email the author](#) | [Follow on Twitter](#)

on September 01, 2011 at 6:20 AM

**BEREA** -- An engineering firm will dye-test more than 300 houses to help determine reasons for continued flooding inside the structures.

Mayor Cyril M. Kleem said URS Corporation, an international firm that has a downtown Cleveland office, will perform an engineering study involving the areas of Fair Street and the **North End**. The city interviewed three engineering firms.

"The firm has all the equipment in-house and manpower in doing this type of study. They do no subcontracting," he said.

City Engineer Tony Armagno said the scope of the project includes a public meeting to advise residents of what will occur on their properties.

The project includes examining the city sewers to see if there are issues with infiltration of unwanted water, as well as checking their condition. The firm will place plugs in the storm sewers, fill them with water and test to see if there are any leaks.

Private-property testing includes a simulated rainfall. Hoses will force water through downspout lines and drains using city water from fire hydrants. Dye will be placed in downspouts and sewers to see if that color appears in sanitary sewers. That would identify cross-connections between storm and sanitary sewer lines.

"The city's equipment and manpower would not be able to perform this testing as quickly and efficiently as URS Corporation," said Armagno.

The project includes testing 245 houses in the Fair Street area, from Aaron Street to Jananna Drive. **The 65 homes that saw basement flooding on the North End include those on Shelley Parkway and Shakespeare, Emerson and North Rocky River drives.**

**Armagno said a second phase will test all the homes in the North End.**

URS will present a report of its findings after the testing is completed. The study may cost up to \$220,000. Kleem said the funding will come from city projects that came in under-budget, plus money set aside to help renovate City Hall and build a storage unit at the service garage.

Armagno said the cost to test each property runs between \$250-\$300.

He said the public meeting should be set up within a few weeks and URS will start the project within a month after that gathering.

The city received more than 600 calls after the July 19 rainstorm that caused flooding in parts of Berea, as well as Middleburg Heights and Brook Park. The city also set up a hotline for residents and businesses experiencing problems after that storm.

Kleem sent letters to state and federal legislators whose districts include Berea. He asked them for their assistance in exploring funding sources. In the letter he said the cost to make repairs, by homeowners and the city, could reach "millions of dollars."

Neither the city nor county qualifies for Federal Emergency Management Agency funding because, according to the Cuyahoga County Office of Emergency Management that inspected homes, there was not sufficient damage to ask the state to declare a disaster.

Individual homeowners, however, may seek help from two emergency financing programs available through the Ohio State Treasurer's Office: the Renew Ohio program for business owners and Rebuild Ohio for homeowners. Details are available by contacting (880) 228-1102 or by going to [tos.ohio.gov](http://tos.ohio.gov).

Another aspect to help infrastructure is the city seeking Issue One funding through the Ohio Public Works Commission. One of the two neighborhood projects for which the city will seek funding involves streets in the Elmwood/Oakdale/Parkway area.

"We put in a relief sewer to help that neighborhood, but with the recent flooding and help of Issue One money, there may be funding for a complete rehabilitation," said Rebecca Corrigan, executive director of the Berea Community Development Corporation.

She said the second complete rehabilitation proposal for Issue One involves Fair Street from West to French, as a phased project to handle the entire length of Fair Street.

City Council will see the Issue One legislation to apply for the funding at its Sept. 6 meeting, which is the day after Labor Day.

Kleem said the city continues to look at the flooding issue.

"We have to keep on trying," he said.

**See more Berea news at [cleveland.com/berea](http://cleveland.com/berea).**

*Contact DuMound at (216) 986-7538.*

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# Berea's Fair Street sewer checking should wrap up this week



By [Joanne Berger DuMound/special to cleveland.com.](#)

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on November 10, 2011 at 11:15 AM, updated November 10, 2011 at 12:03 PM

**BEREA** -- The contracted engineering firm will complete its work checking storm and sanitary lines on public property in the Fair Street area this week.

It will then begin testing private homes in that area before heading to the North End site to begin testing in that location.

**The city hired URS Corporation to determine the causes of flooding in two major areas, Fair Street and the North End.**

Service Director R. James Brown said he and City Engineer Tony Armagno agreed they preferred continuing the Fair Street testing with residential homes.

"This will enable to begin assembling information of what the issues are and see them in a more defined perspective."

Scott E. Belz, URS' manager of field operations in the water resources group, said dye testing of storm sewers in the Fair Street area showed there were various types of sewer "deficiencies" on city property in that region.

"Some have cracked pipes, joint leaks and lateral leaks in that location," he said. "The testing is progressing well and we are well on schedule."

As of last week, the company had tested Wyleswood, Meadow, Jacqueline, Best, Concord, French, Baldwin, Aaron and Fair.

Workers are testing the main line of the city's storm and sanitary sewers in the Fair Street area. Bill Fussner, a URS field supervisor, said the company is flooding storm sewers with dyed green water and then monitoring the sanitary sewer. The water and dye are placed into catch basins with a large plug strategically located in the line to stop the water from traveling past the test area. That water simulates a storm. The dye should not infiltrate into a sanitary sewer. If it does, a remote control, closed-circuit camera is placed in the sewer to see where the water is entering.

"It could be through a crack, a joint house connector or other issue," said Fussner. "It pinpoints the severity of the problem, whether it's dripping or gushing."

Clay vitrified pipe is causing some of the problems in that area.

**"It's old clay pipe," said Fussner. "We're going to find problems both on city property and on the private side."**

The firm is testing 250 homes in that area. Thirty others will be checked for lateral elevation in relation to pump station alarms.

The review of the city's system took about two weeks. Belz said it will take up to a month to test private homes in the Fair Street location. He said the firm will review the data to ensure it is accurate and completes the study needed in that location. The city will receive a draft report after the firm completes the entire study of both areas.

Many residents experienced flooded basements and homes during the severe rainstorms this year on at least three occasions, the last being July 19. The Fair Street and North End locations were selected after many of the residents who called the city's hotline after the last heavy rain came from those areas.

**See more Berea news at [cleveland.com/berea](http://cleveland.com/berea).**

*Contact DuMound at (216) 986-7538.*

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# Berea moves forward to solve flooding issues



By [Joanne Berger DuMound/special to cleveland.com.](#)

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on May 17, 2012 at 6:59 AM, updated May 17, 2012 at 9:21 AM

**BEREA** -- A committee will help implement a program to eradicate flooding issues after a report showed 83 percent of tested homes in the Fair Street area had infiltration problems on their properties.

City Council's Coordinating Committee met Monday in a work session. Scott Belz, field operations manager in URS Corporation's water resources group, presented a detailed report of the Fair Street area sewer investigation project's findings and recommendations. It identified leaks that allowed clean water to enter into the sanitary sewer system, causing flooding issues.

The firm's recommendations include the city developing, communicating and undertaking a private property inflow/infiltration elimination program.

Last year the city — as well as the surrounding Greater Cleveland area — experienced heavy rains on three occasions that flooded basements and property. At a special council meeting to address flooding, more than 150 residents packed the audience that flowed onto City Hall steps. They wanted answers to why flooding continues.

City administrators hired URS to investigate two areas that saw the most water problems, the Fair Street area and the **city's North End**. The company tested both public properties belonging to the city and private, residential properties. The Fair Street area is completed and **the company is now testing private property in the North End using dye testing.**

"We will form the committee in the next few days," Mayor Cyril M. Kleem said. "It is critical we have some key people on it from the original flooding area, and even on the North End."

There will be at least one public meeting to discuss the results and the next steps needed to solve the problem.

The city learned deficiencies exist within public property, such as storm and sanitary sewers, catch basins and storm sewers that leak into sanitary sewers, contributing to excessive water. The study found 22 leaking laterals in the city's right of way. Belz said they found some, on both public and private property, that leak five gallons a minute.

"With 22 laterals, and if they leak three to five gallons a minute, that is significant amount just from the public side," Belz said.

The city also has another 20 pipe joints that need to be repaired with chemical grouting to seal them.

"Some were collapsed, so the city needs to go back and fix those," he said.

Those repairs are planned in the next year. City Engineer Tony Armagno said the estimated repair cost is under \$100,000, which Kleem said will come from the general fund or a water/sewer capital improvement fund.

It is the residential properties, however, that are a key factor in resolving issues. Of the 252 homes tested with dye and camera inspection, 217, or 83 percent, failed.

"These houses alone are contributing water to the sanitary sewer system," Belz said. "That is a pretty high percentage. We find as the infrastructure becomes older, this is pretty much the common observance."

Private property includes pipes found on the piece of land that leads into the city's public system. The private responsibility usually ends at the back of a property owner's sidewalk.

Solutions include fixing downspouts that may be correctly connected but broken, repairing storm lateral separations that happened over time and holes caused by tree roots.

Belz said disconnected downspouts can be a significant source of private inflow/infiltration.

"You should have the water drain about 4 or 5 feet away from the house. If not, the water will not travel far enough and (will) migrate into the ground, eventually causing problems," he said.

Driveway cracks create the same problem. Water will flow through the cracks and find any available space, including cracked pipes, foundations or drains.

The city now must develop that private property plan, define it, prioritize it based on test results, and provide further investigation on each house to identify the exact source of the issues. URS will mail a copy of its test results to each property owner whose house was in the study area.

Belz said the city has a law that does not allow the type of infiltration that is now occurring.

"You need to look at it in detail to add some enforcement to it, to regulate it and manage it so people can remove that," he said. "The city needs to work closely with the residents. There needs to be a lot of communication in setting up the committee with administration, residents and others. It has to be a group effort."

Belz said public education/public outreach is the backbone of the issue. He said individual residential water infiltration problems may be solved at a cost between \$500 and \$5,000.

"It could be as simple as a planted bush that has pushed the storm lateral down on the property and the water goes right to the foundation," he said. "It has to be a combined effort on everyone's part."

Armagno said he believed in the program.

"This is important. It gives us a road map for future capital improvements in the city."

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## Berea homeowners fume over repeated basement flooding

They say the problem is the city's sewer system. They mayor said the city has already made upgrades.



Fix the flooding. That's the message homeowners in Berea's River Ridge neighborhood are trying to send to the city's mayor.

By [Michelle Nicks \(WOIO\)](#)

Published: Jul. 25, 2021 at 11:51 PM EDT



BEREA, Ohio (WOIO) - Fix the flooding. That's the message homeowners in Berea's River Ridge neighborhood are trying to send to the city's mayor.

Yard signs with the words, "Mayor Kleem, stop the flooding in my basement," are popping up in front of homes on numerous streets on the city's north end.

Homeowners called the 19 News Troubleshooters and said they can't keep their heads above water because of a serious flooding problem that has taken up residence in their neighborhood. They're trying to get the mayor's attention and demanding the city do something about it.

"Berea has a very poor infrastructure system. It needs to be replaced," said resident Gay Grizzell. "They continue to add new homes and do nothing to

exp

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Grizzell, who says she was dropped by her homeowner's insurance when it comes to sewer backups, says she has spent nearly \$15,000 dollars taking down trees and having the roots cleared out. She also replaced the clay tile pipe with PVC to try and rectify the problem as advised by the city but to no avail.

Heavy rain led to flooding in the last two weeks for these homes some say it was the last straw.

Homeowners like Kim Baldwin say they can't enjoy even the use of their basements as part of their living space anymore, and at times she just wants to throw up her hands and move. "

"It's a lot of anxiety, a lot of stress," said Baldwin. "We hear news media say, 'ok we're going to have heavy floods today,' and instantly we start panicking."

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Eydie Lott and her husband say they're fed up because while growing up in this neighborhood their homes never flooded. That changed, they said, after a large amount of construction began in the area and sewer drains were overwhelmed.

"When there is a backup on Emerson, which is right around the corner from us, that is the time to get a flood," said Lott.

Berea Mayor Cyril Kleem said the city has done its' part, and each homeowner must handle their responsibilities.

"The last three years we've spent close to \$3 million," he said. "When our service workers opened the sewer a few weeks ago it was flowing perfectly fine. What we're seeing is some private links to property that's not flowing right."

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Mayor Kleem also says the city is in the second phase of the sewer rehab project that includes 10 streets on the north end to upgrade the system along streets, including The Mall, Emerson Drive, and North Rocky River Driver.

But he said if all homeowners don't take care of the sewer-related issues identified at each particular residence by the city, the system will never function at 100%.

Grizzell and nearly 12 others who talked to 19 News aren't buying it.

"It is an ongoing problem, and the people here we're all tired of it," she said. "And it's costly."

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Neighbors on these streets have a plan of action saying they will knock on every door to gain support for their cause and hope at some point a special council meeting can be held so their voices can be heard.

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# Berea residents make plea for North End flooding relief

Updated: Jul. 28, 2021, 4:40 p.m. | Published: Jul. 28, 2021, 4:12 p.m.



This sign in a Berea yard asks Mayor Cyril Kleem to fix basement flooding in the North End. The city has been working to address those flooding issues for many years. (Photo Courtesy of Gail Grizzell)

By Beth Mlady, Special to cleveland.com

BEREA, Ohio -- Berea officials have been working on the city's North End basement flooding problem for many years, but storm water continues to flow into some residents' homes.

Residents Gail and Gay Grizzell, along with numerous neighbors, recently placed signs in their yards to raise awareness of the problem after contacting city administrators.

Both Gail and Gay have spent significant sums of money to fix the infrastructure on their properties. Despite their efforts, recent torrential rains again infiltrated their basements.

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"The neighbors who have flooding all start the conversation the same way -- that they have done everything the city has told them to do," Gay told [cleveland.com](http://cleveland.com) July 24, providing a video showing storm water bubbling up from her basement drain.

"We have to have some assurances something is going to be done."

According to information the city provided to [cleveland.com](http://cleveland.com), a two-phase sewer rehabilitation project began after [a 2013 engineering report indicated that storm water was leaking into the sanitary sewer](#).

Phase 1 involved 10 streets and was completed in 2017. Tree roots and debris were removed from the city's portion of the system and various other repairs were made.

[Phase 2 currently is under way](#) and includes increasing system capacity, along with pipe lining and manhole sealing. Sheldon and Grayton roads, as well as Arden, Emerson, Longfellow, Wesley, North Rocky River, Nancy and Karen drives, are being addressed. The Mall and The Burns also are included.

[Mayor Cyril Kleem](#) said problems can persist unless every homeowner does what the city previously recommended they do to fix their properties.

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“You need 100 percent compliance in a neighborhood to completely avoid flooding,” Kleem said in an interview Tuesday (July 27), noting that the city fielded 600 calls during “a major flooding incident” in 2011, compared to fewer than 20 calls received from across the city during recent heavy downpours.

“Clearly, the city has had an impact on this (flooding issue), and clearly some of the things residents have done have had an impact,” Kleem stressed. “The system is all interconnected, and the city did its portion.”

Neighborhood signs, however, place the blame on Kleem for continued flooding.

“The idea that this is Mayor Kleem’s fault, or that the city hasn’t done anything, is false,” he said. “We addressed the issue, and now it comes down to private property.

“The bigger question is, can we force compliance?” Kleem said about city recommendations that some residents may not have heeded. He emphasized that it is not the city’s responsibility to fix problems on private property.

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"To force compliance means, in many cases, taking people to court," he added. "If I can't even force compliance on people to cut their grass, paint their homes or fix their sidewalks, I don't know if I could enforce a \$10,000 (repair cost) compliance on somebody."

The Grizzells continue to meet with affected neighbors as a group and plan to create a Facebook page focusing on the North End flooding issue.

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Cleveland Browns quarterback Deshaun Watson will be deposed twice the week and several other times in June, but a trial on any of the 22 civil lawsuits that accuse him of ...

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## **North end flooding continues to draw Berea residents' ire**

Published: Sep. 05, 2021, 2:31 p.m.



Berea residents filled People's Community Church on Sept. 1 for a meeting with city officials about ongoing basement flooding in their neighborhood. (Beth Mlady/Special to cleveland.com)

By [Beth Mlady, Special to cleveland.com](#)

BEREA, Ohio – A lengthy community meeting about basement flooding in the north end of Berea took place Sept. 1, with a large crowd of frustrated residents firing complaints at city officials about problems they continue to experience during heavy rains.

Gail Grizzell and other homeowners repeated assertions they made to City Council weeks ago, alleging the neighborhood, which is undergoing a two-phase sewer improvement project, has not received the same attention as sanitary sewer work completed elsewhere in the city, particularly on Fair Street in another ward.

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The completed Fair Street project, however, involved only a sewer trunk replacement and not residential side streets.

Grizzell maintained the north end has “an inadequate and antiquated infrastructure” causing residential basements to flood.

Mayor Cyril Kleem, City Engineer Tony Armagno and Northeast Ohio Regional Sewer District Watershed Team Leader Meiring Borchards refuted that, explaining problems in the public portion of the city's sanitary and storm sewer system already have been remedied. Photos taken by underground cameras in those pipes, and shown during the meeting, provided proof of those repairs.

Borchards said “above-average precipitation” for the last several years has created “record ground water tables” across the region. That means heavy rainfall absorbs into the ground, flows into residents' cracked sanitary sewer pipes and causes inflow and infiltration, which, in turn, results in basement flooding.

Kleem emphasized of the 70 percent of north end homes that failed sewer dye testing during a city-commissioned engineering study completed 10 years ago, very few homeowners ever applied for permits to fix their sewer lines.

“I don't know that there is anymore the city can do for the public sewers at this point,” Kleem said, noting the city has spent more than \$4 million in the north end. “One hundred percent of the (public) sewers in this neighborhood have either been replaced or rehabilitated. The trunk sewer capacity has been increased from 12 inches to 18 inches.

"We are determined to also help with the private property issues," Kleem added. "If your neighbors have not addressed their problems, even if you have, you still have a problem."

Grizzell later raised the possibility of hiring a lawyer to represent affected residents.

"I will lead the charge to sue this city," Grizzell angrily told the mayor. "You're either going to stop the flooding, or you are going to reimburse these people for the pain and suffering they have undergone."

The mayor suggested a committee be created, consisting of some Ward 1 homeowners, city officials and possibly an NEORSD representative, to troubleshoot ongoing issues.

In addition, he informed [City Council](#) via email on Sept. 3 he wants to hire an engineering firm to specifically study the north end's Emerson, North Rocky River and Shelley areas. Kleem also said his administration is researching funding programs to financially assist residents who want to repair their sewer lines.

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## Berea mayor offers plan to guide city flooding committee

Updated: Dec. 16, 2021, 12:03 p.m. | Published: Dec. 16, 2021, 11:22 a.m.



Berea residents from the city's north end filled People's Community Church in September for a public meeting with city officials about ongoing basement flooding problems. (Beth Mlady/Special to cleveland.com)

By [Beth Mlady, Special to cleveland.com](#)

BEREA, Ohio -- A committee comprised of Berea residents, storm water/sanitary sewer experts and city officials soon will get under way to address residential flooding in the city's north end.

Mayor Cyril Kleem outlined at the Dec. 6 City Council meeting a multi-part plan to assist committee members in arriving at the best recommended solution. He noted that Cleveland engineering firm American Structurepoint has provided the city new data about that area's infrastructure, as has the Northeast Ohio Regional Sewer District.

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Sewer tie-ins have been an expressed concern of residents, because a new townhouse development has been proposed for nearby vacant land that formerly contained the Williams Ford dealership.

"The plan gives several options to alleviate concerns about north-end sewers and flooding ... and paves the way for the sale of the land for the townhouse development currently being considered," Kleem said.

Council later that evening approved purchase agreement legislation for the project.

"What we are asking this committee to do is look at the data and the information ... and digest it, and to make recommendations," Kleem stressed. "There may be dissenting opinions on the committee, and, of course, we would include that in any final committee report."

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He also emphasized that the data shows "the current sanitary sewer infrastructure has more than enough capacity for the new townhouse development."

"We have explained that before, but now we have outside data to back that up," Kleem said. "The problem is inflow and infiltration, and the data supports that position."

"During large rain events, basements flood because storm water gets into the sanitary system," he explained. "In addition, the city has reduced the hard surface on the Williams Ford site, and adjacent properties, by 84 percent. That means the amount of runoff into the storm sewer is less today than before the city's ownership (of those properties)."

He would like the committee to review options for storm water sewer connections from the townhouse development site. Kleem also wants members to look at the sanitary relief connection from the neighborhood sanitary sewer to the regional sanitary sewer on Sheldon Road.

Creation of a tax increment financing district, or TIF, for the north-end neighborhood was another idea Kleem proposed. It would direct significant property tax dollars from the townhouse development to finance public improvements for that area.

"We can also use TIF dollars on some private property sewer improvements if they directly impact the publicly owned system," Kleem said.

He added that City Council's final approval of the townhouse planned unit development is "several months off."

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## Berea flooding committee mulls regional sewer study results

Updated: Mar. 17, 2022, 11:57 a.m. | Published: Mar. 17, 2022, 11:54 a.m.

# What is Inflow and Infiltration (I/I)

### PRIVATE

#### Inflow

- Uncapped cleanout
- Improper roof or yard drain connection

#### Infiltration

- Cracked/broken sewer lateral
- Root intrusion into lateral

### PUBLIC - Right of Way

#### Inflow

- Vented manhole cover/frame
- Storm sewer cross connections

#### Infiltration

- Leaky sewer lateral
- Deteriorated manhole
- Cracked/broken pipe



zoom

This diagram shows how wastewater can seep from damaged stormwater pipes into the sanitary sewers and cause residential basement backups. (Northeast Ohio Regional Sewer District)

BEREA, Ohio – Sufficient pipe capacity exists to accommodate a planned 70-unit townhome development in the north end of Berea, and a new relief sewer interceptor is being pursued to help redirect wastewater flow generated from homes in the area.

Those were the key takeaways from a lengthy Berea flooding committee meeting held on March 9.

An interceptor is a large sewer pipe where wastewater flows converge from smaller pipes in a community. The interceptor carries that wastewater to other interceptors or to sewer treatment facilities.

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Northeast Ohio Regional Sewer District representatives presented results from a recently completed multi-year southwest interceptor sewer system evaluation.

Basement backups have long impacted several Berea homes in the north end. The city made repairs and improvements to infrastructure in the public rights-of-way; however, inflow and infiltration – when stormwater seeps out of cracked pipes and into the sanitary sewer system – remains problematic on private properties.

"For every 50 feet of public sewer in the middle of the road, you can see plus or minus 300 feet of private sewer, which includes the sanitary connection and possible footer drains," NEORSD Project Manager Lita Laven explained to the committee.

"The study recommendation is to intercept some of the flow and divert it to the district pipe to reduce the risk for basement backups and surcharge (i.e., water flow greater than pipe capacity) in the north end," she added.

NEORSD field efforts focused on sanitary sewer overflow areas and community-reported problem areas, where there are "mainly chronic basement backups," she said. Flow monitors collected data over the course of the study.

A lot of the projected and reported problems are in "common trench sewer areas," Laven emphasized, where both stormwater and sanitary sewers occupy the same underground trench. That antiquated construction method is no longer permitted throughout the industry.

"In Berea, common trench sewers are mainly found in the north end," Laven said. "There is a potential to have water infiltrate from the storm sewer into the sanitary sewer."

As for future development in the north end, study-projected wastewater sewer flows and capacity data showed "the impact was pretty small," she said, noting that based on existing conditions, such development "did not increase the basement backups."

Regarding next steps, NEORSD recommendations include additional testing and analyses to further refine the study results.

In addition, the city is pursuing funding for half the cost of the estimated \$400,000 sewer interceptor. That new relief sewer would be located at Bryant Ave., Riveredge Parkway and Sheldon Rd.

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Community News

## Berea plans four-point remedy to north end flooding

Updated: Apr. 28, 2022, 2:27 p.m. | Published: Apr. 28, 2022, 12:53 p.m.

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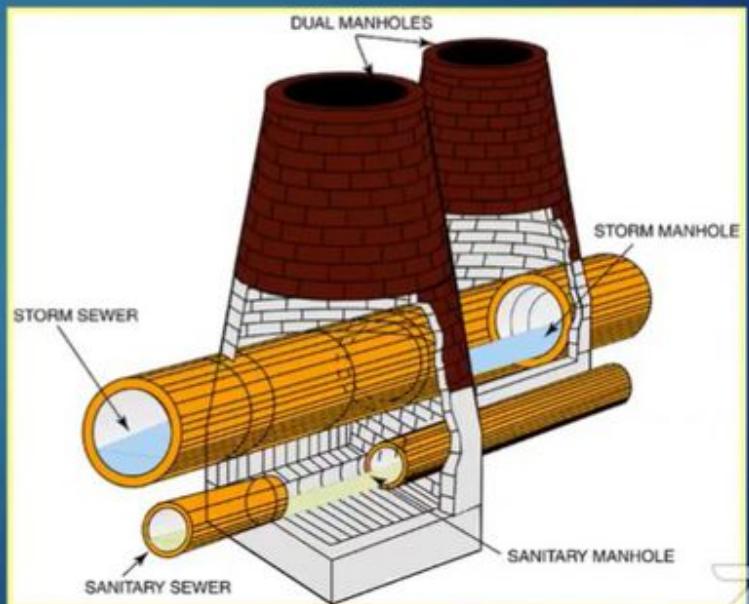
## UNDERSTANDING THE TYPES OF SEWERS IN BEREA

- ▶ Three Types of Sewers:
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  - ▶ **Sanitary Sewers**- Carry sanitary wastewater from inside homes and businesses to the Wastewater Treatment Plant
  - ▶ **Combined Sewers**- Carry both Storm and Sanitary in the same pipe. NONE exist in Berea's public system but may occur on private property

North End Sewer Committee

City of Berea, Ohio

### COMMON TRENCH SEWER



While common trench sewers are not built anymore due to inflow and infiltration issues, an estimated 500 to 600

By Beth Mlady, Special to cleveland.com

BEREA, Ohio -- In what was likely the last meeting of the Berea north end flooding committee, Mayor Cyril Kleem and Public Works Director/City Engineer Tony Armagno laid out a four-step plan to address longstanding basement flooding.

"From my perspective, with the things that Tony is going to present, I don't know that there is anything more we're going to do at this time," Kleem prefaced as the meeting got under way Monday (April 25).

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"Some of these things are going to take time to perform, and we would need a couple of years to perform and test them ... to see how things go. I believe we need to move forward."

Armagno outlined the following multi-point plan:

- Complete a current project, known as North End Phase 2, that includes lining main sewers and some manholes, upsizing pipes, etc., and performing post-construction flow monitoring and testing.
- Proceed with building a new flow connection in the north end as recommended by the Northeast Ohio Regional Sewer District (NEORSD), which involves taking the existing large sewershed where all the flows converge and separating it into two pipes

to better manage capacity. Armagno predicted that it “will greatly reduce the risk of basement flooding.”

- Replace a section of old clay pipe under the roadway near Shelley Parkway and Emerson Drive so it better connects to 27 newer homes’ existing PVC pipes.
- Institute a program for Berea residents to voluntarily replace the laterals on their private property at their own cost -- estimated at \$4,000 to \$6,000 for “an average-setback home, about 35 feet from the house to the sidewalk, with a typical grass-front lawn,” Armagno said. The city would then replace and pay for its section of lateral that falls within the public right-of-way.

The laterals replacement program would be open to all residents whose pipes connect to common trench sewer systems.

Approximately 9 percent of the city’s sewers are “over-under” sewers, where storm sewer and sanitary lines are stacked on top of each other, Armagno explained. That can cause inflow and infiltration, which leads to storm water flow from a damaged pipe seeping into the sewage system and backing up into basements.

Armagno estimated that 500 to 600 homes throughout Berea connect to a common trench sewer.

The mayor said the north end flow connector project will be built regardless of whether a proposed nearby townhouse development proceeds. North end residents frequently have shared worries about additional wastewater that would be generated by the 70 townhomes.

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"I hope the plans presented will be sufficient enough that you won't hear about this (flooding issue) anymore," Shelley Parkway resident Marty Lott said.

"We all just want resolution," his wife, Eydie, added. "I'm ready for the process to start ... and I want things to move forward."

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Baker Mayfield is still a Cleveland Brown with no team seemingly willing to trade for him.

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Community News

# Common trench sewer program aims to curb Berea flooding

Updated: May. 12, 2022, 12:27 p.m. | Published: May. 12, 2022, 10:14 a.m.

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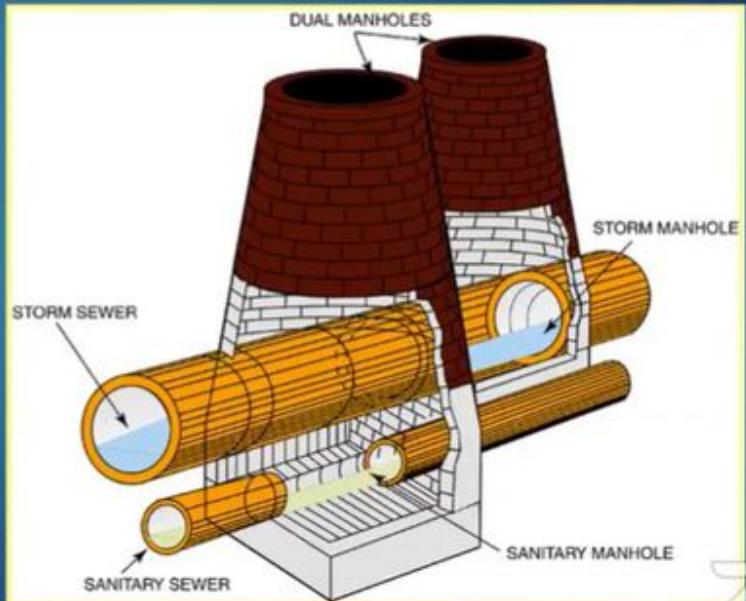
## UNDERSTANDING THE TYPES OF SEWERS IN BEREA

- ▶ Three Types of Sewers:
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North End Sewer Committee

City of Berea, Ohio

### COMMON TRENCH SEWER



While common trench sewers are not built anymore due to inflow and infiltration issues, an estimated 500 to 600

By Beth Mlady, Special to cleveland.com

BEREA, Ohio -- With specific details yet to come, City Council on May 2 heard the first public reading -- in title only -- of an ordinance establishing the Common Trench Improvement Partnership Program, which will enable residents to work with the city to stem flooding on their properties.

Homeowners whose residences are serviced through a common trench sewer, in which their sanitary and stormwater lines are stacked in the same underground channel, will be eligible to participate in the program.

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Groundwater and stormwater can flow into broken underground sewer pipes and connections, causing what is known as inflow and infiltration, which, in turn, leads to sewer backups into basements.

A list of Berea addresses serviced by a common trench sewer, estimated at between 500 and 600 homes, will be included with the legislation.

"The city will commit to improving the portion of the lateral sewer line located on public property when the owner of the property served by the common trench sewer makes the necessary improvements to the lateral sewer line on private property," the ordinance indicates.

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Council President Jim Maxwell said he presented to the law director a list of ideas council representatives have proposed so she can draft the ordinance. His goal is to have council enact a detailed, finalized piece before recessing for the summer.

“When the legislation is passed, anybody in the community would know whether or not they qualify for the program,” Maxwell said.

An explanation of the homeowner’s responsibility, and the city’s commitment, would be included in the ordinance. He said he wants a time frame, in years, listed for the partnership “so there is a distinct beginning and potential distinct end.”

Maxwell envisions a comprehensive packet of information for residents. The application process should be defined, he said, as well as how citizens can pursue outside assistance in helping to pay for their repairs.

“I’m not suggesting the city fund it, but the city can help point residents in the right direction for low-cost home improvement loans or potential NEORSD programs to assist on private property,” Maxwell said.

He emphasized that the common trench program is just “one piece of the puzzle” when addressing residential flooding, noting that any reduction in inflow and infiltration will lessen the problem.

“We want to make sure we get as many people’s (lateral pipes) fixed as possible in the (Ward 1) neighborhood,” Councilwoman Erika Coble said. “That’s the goal.”

Councilman Chris McManis said the new program “encourages participation.”

“Let’s try to get as many people involved as possible, with as much information up front, so that the money can be spent responsibly and we can maximize the program,” McManis advised.

## City-owned house on Jacob Street sold

A City-owned house on Jacob Street has sold for above the asking price.



The former rental property at 106 Jacob St. sold for \$326,000. After closing costs and property taxes, the City cleared \$313,000. The asking price was \$295,000.

The City rehabbed the house, which was one of five former rentals donated to the City by developer DiGeronimo Companies in 2016. DiGeronimo ceded the properties to Berea in exchange for a small parking lot on Front Street next to Kulas Hall. The developer wanted the parking lot property as part of the construction of the University Marketplace project.

As part of the purchase agreement, the new owners signed a deed restriction that the house will be owner-occupied and will not be rented. The house was also made a part of the Century Home Garden District Homeowners Association, which was designed to maintain the integrity of the neighborhood.

The two-story, 2,912-square-foot house has a detached garage. The house was listed on Zillow and sold "as is."

According to Finance Director Andrea Morris, proceeds from the sale of the Jacob Street house will go into the Neighborhood Capital Improvement Fund and can be used to fix up another house.

## New design studio has local appeal with international look

Therese Kress Kish grew up in Olmsted Falls but always felt a connection to Berea. So, when she wanted to move her interior design business out of Strongsville, she found a new home for New York Textiles & Design on Bagley Road.

She and husband, Randy, bought the West Pointe Professional Building at 1433 W. Bagley Road last year and are busy renovating and reconfiguring the space.

"This is the ideal place for our business," Kish said. "Berea has been an integral part of my life."

New York Textiles is a full-service design studio for homes and businesses. Kish specializes in window treatments but can provide complete services from painting to carpeting to upholstery. She has a staff of 12 employees including five designers and two installers. "These are skilled craft people," Kish said. "They are hard to find."

Clients include Southwest General Health Center, the Cleveland Metropolitan School District, J'Bella restaurant, plus local churches and synagogues, among other businesses and institutions. "We cater to all sectors of business," Kish said. New York Textiles also has residential clients for whom Kish said she can design rooms to fit any budget. Designers make home visits to make sure colors and fabrics work with each individual client's situation.

Kish said the business has changed over the years with today's economy being globally centered. Fabrics now are imported from several countries as well as domestically sourced.

Her current challenge is to complete the changes to the building, which previously housed a day care center but has been vacant for several years. Kish obtained an SBA loan and put on a new roof, painted, installed flooring and a mini-kitchen.

"If we could do it ourselves, we did," she said, with family members pitching in.

The space has been subdivided. Kish leases space to Kids at Play Day Care and Abundant Life Ministries. There is room for a third small business as well.



Therese Kish, owner of New York Textiles & Design, displays some of the fabric options in her showroom.

The New York Textiles space is nearly complete. There is office space, a warehouse area and a showroom, which is awaiting some final touches.

Although her husband is her business partner, Kish runs New York Textiles while he travels, often internationally, for a large corporation. "We complement each other," she said. She focuses on a local, small business; he has a more global outlook. They bounce ideas off each other.

"It's good to get another perspective," she said.

Kish credits her parents for her business sense and drive to succeed. Her late father owned a piping manufacturing business and Kish and her two sisters worked there.

"I grew up in a business atmosphere," she said. "And I was used to working in a male-dominated field."

Mom, Jeanene Kress, is an Olmsted Township trustee who is looking for her "next big adventure," Kish said.

Kish is a member of the Home Builders Association and has received the association's Interior Design Project of the Year Award. She also is president of the American Society of Interior Design North East Ohio Chapter.

Giving back to the industry is important to her. Kish sponsors interior design interns from Cuyahoga Community College from which she graduated.

She admits she is a pretty busy lady. "I do a little bit of everything," she said.

New York Textiles is open daily but make an appointment for a consultation. Call (440) 235-7460, email tkish@nytextiles-oh.com or visit nytextiles-oh.com.

## 4-point program proposed to alleviate North End flooding

### Implement common trench lateral partnership program.

Many homes in the North End are served by a common trench system with storm sewers and sanitary sewers sharing the same trench. This can contribute to infiltration and inflow when sanitary sewers leak into storm sewers. About 9 percent of the homes in Berea are connected to a common trench system. In a volunteer program, the City will replace the public portion of the lateral connection to a residence, if the homeowner opts to replace the lateral connection on private property. Currently, the City replaces the public portion of the lateral only if the public portion is damaged or has issues. Under this new plan, the City will replace or reline the public portion regardless of its condition as long as the homeowner has a new private lateral installed or relined. This will ensure that both the private and public portions are new and in good working order.

This will be a three-year pilot project. The City has budgeted \$250,000 to cover sewer improvements in the North End for this year.

Mayor Kleem said the goal is to proceed quickly to implement the four-point plan.

City Council is studying a proposed ordinance that would codify the Common Trench Sewer Lateral Improvement Partnership. Eligible residents will need to apply to have the public portion of their laterals replaced. A list of eligible properties is available at the Public Service Department and on the City's Web site – www.cityofberea.org. Financial assistance for homeowners is available through the Heritage Home Program, a non-profit based in Cleveland. Go to heritagehomeprogram.org or call (216) 426-3116. Homeowners also can contact the Housing Enhancement Loan Program at cuyahogacounty.us/development or call (216) 443-2149.

**PACK THE PARK**  
A night of fundraising for the Tri-City Bark Park  
(Brook Park, Middleburg Heights & Berea)  
**Friday, June 10, 2022**  
**7:00 PM - 10:00 PM**  
Teamz Bar & Restaurant  
6611 Eastland Road, Middleburg Heights  
\$25/PERSON INCLUDES UNLIMITED PIZZA, WINGS,  
SALAD, BEER & SOFT DRINKS  
Please make checks to:  
City of Middleburg Heights with Tri-City Bark Park in the memo  
For tickets or more info, please contact:  
Lauren Perko 216.926.2076

## The Berea Fine Arts Club Inc. Kids Summer Art Camp

At the historic Little Red School House  
323 E. Bagley Rd., Berea, OH 44017

Age/grade levels:  
Completed kindergarten through completed 4th grade

**Monday, July 11 - Friday, July 15  
9 a.m. - 4 p.m.**

\$125 (\$110 for each additional child per family)

This is a non-profit event. Fees go towards materials, expenses & activities.

Space is limited! Register at BereaArts.org

### Line older clay pipes in Shelley Parkway Emerson neighborhood.

Houses in this neighborhood were built in the 1990s but they are connected to an older sewer system of clay pipes installed in the 1950s. New pipes are PVC. The clay pipes are prone to cracks and leaks. The City will line the clay pipes. About 27 properties will be affected. The City will make this project part of the North East Ohio Regional Sewer District grant proposal.

# Cleveland Reporter

Tuesday, June 7, 2022

Local Government

Business

Sports

Real Estate

Politics

Schools

Ethics

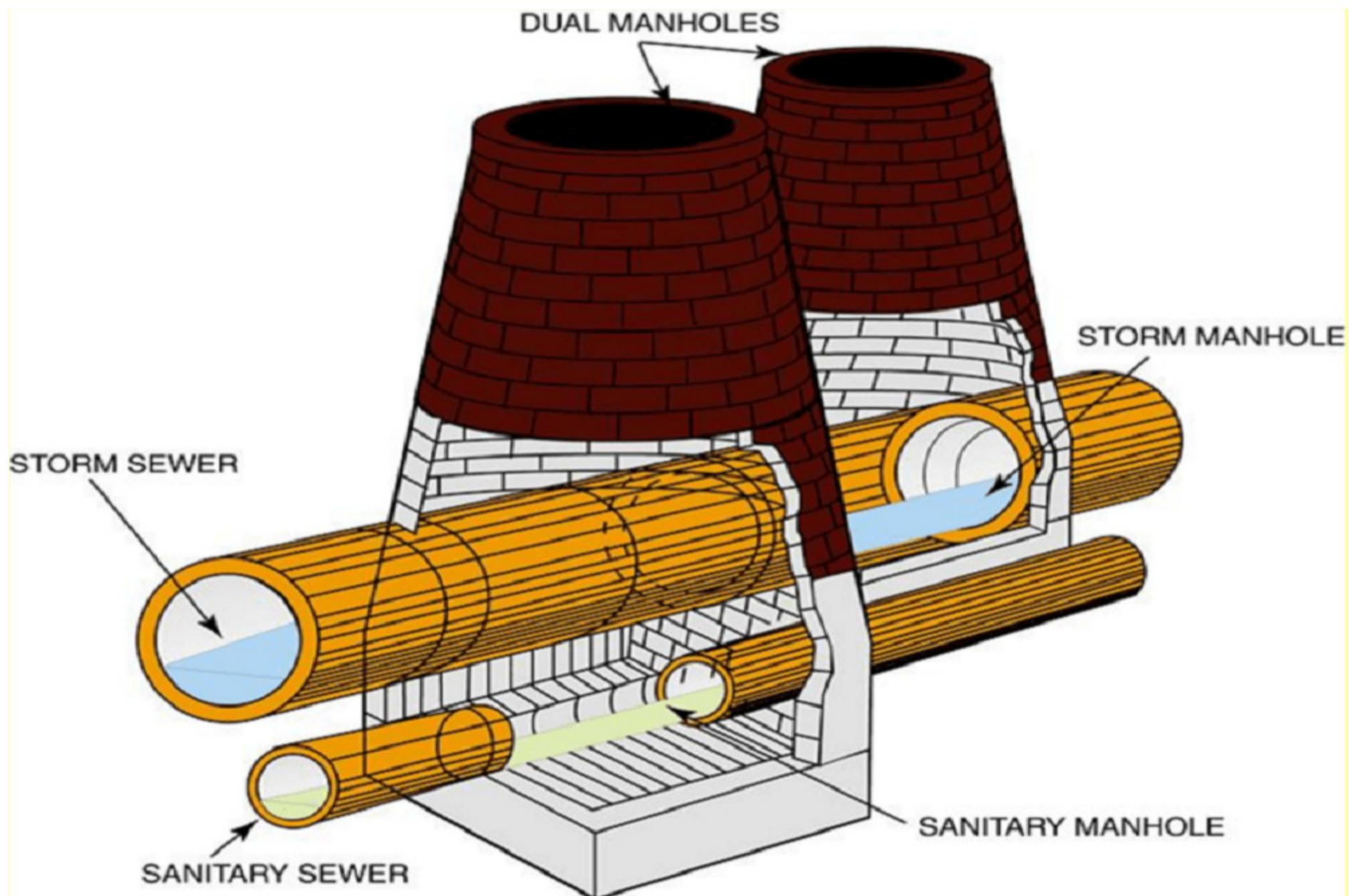
Christmas Gift Guide

Directory



## Committee to Study North End Flooding

LOCAL GOVERNMENT



By Press release submission

Jan 30, 2022

### City of Berea recently issued the following announcement.

Mayor Cyril Kleem has formed a Northend Committee to study flooding issues in Ward 1 – the northern part of the City.

The 18-member committee will study the history of flooding in the area and discuss various options for mitigating basement flooding.

Members of the committee include City officials, area residents and City Council members. They are:

### ORGANIZATIONS IN THIS STORY

#### ! RECEIVE ALERTS

The next time we write about any of these orgs, we'll email you a link to the story. You may edit your settings or unsubscribe at any time.

[Sign-up](#)

#### DONATE

Help support the Metric Media Foundation's mission to restore community based news.

[Donate](#)

- Mayor Kleem
- Gail Grizzell, resident
- Dennis Knowles, resident
- Eydie Lott, resident
- Marty Lott, resident
- Mary Kushlak, resident
- Randall Gettys, resident
- Tony Betts, resident
- Lori Overbaugh, resident
- Rich Skoczen, former City employee with knowledge of sewer system; member of the Inflow & Infiltration Committee in 2012
- Jim Maxwell, President of City Council
- Gene Zacharyasz, Council-at-Large
- Leon Dozier, Council Ward 1
- Lisa Weaver, Council Ward 3
- Rick Skoczen, Council Ward 5
- Tony Armagno, Public Works Director & City Engineer
- Ryan Theberge, Assistant City Engineer & Service Department Supervisor
- Matt Madzy, Development & Planning Director
- Guy Turner, Assistant to the Mayor & Community Affairs Administrator, resident of the North End.

Residents who are members of the committee either volunteered or were selected by the Mayor to serve. Some have experienced flooding. Others were selected because they live in other portions of the neighborhood and may be impacted by a planned townhouse development. Others were selected because of their experience with flooding and development.

“My goal is to gain a diverse perspective on both sewers and development,” Mayor Kleem said.

Some residents have expressed concerns that a proposed townhouse development on the former Williams Ford property in the North End could adversely affect flooding.

Mayor Kleem has asked members of the committee to become familiar with a power point presentation that outlines the types of sewers and explains inflow and infiltration. Inflow is surface water that leaks into the sanitary sewer because of improper connections. Infiltration is groundwater that seeps into cracks in underground pipes.

The power point also explains what has been done by the City to mitigate these problems. Copies of the power point were sent to committee members. It will be discussed at the committee's first meeting.

The Mayor has submitted a four-point plan.

- The sanitary sewers now in place have the capacity for the proposed townhouse development. The problem remains inflow and infiltration. The developer must manage this.

- Possible storm water connections for the development.

There could be a connection to Front Street, to a new connection on North Rocky River Drive or other alternatives.

- There might be a flooding solution not tied to the townhouses – perhaps a sanitary line connected to the regional line.

- Create a Tax Increment Financing (TIF) district, with funds paid by the development. It could generate \$250,000 in revenue with 45 percent of that going to the City to be used for roads and sewers.

The Committee will be asked to study these four points.

Meetings will be open to the public and some of the committee's work may be conducted via email, the Mayor said.

"It is my goal to have several meetings over the next few months," Mayor Kleem said.

"I hope that by working together and sharing ideas we can come to a workable solution."

**PUBLIC MEETING NOTICE: WEDNESDAY, FEB.**

**2**Original source can be found [here](#).

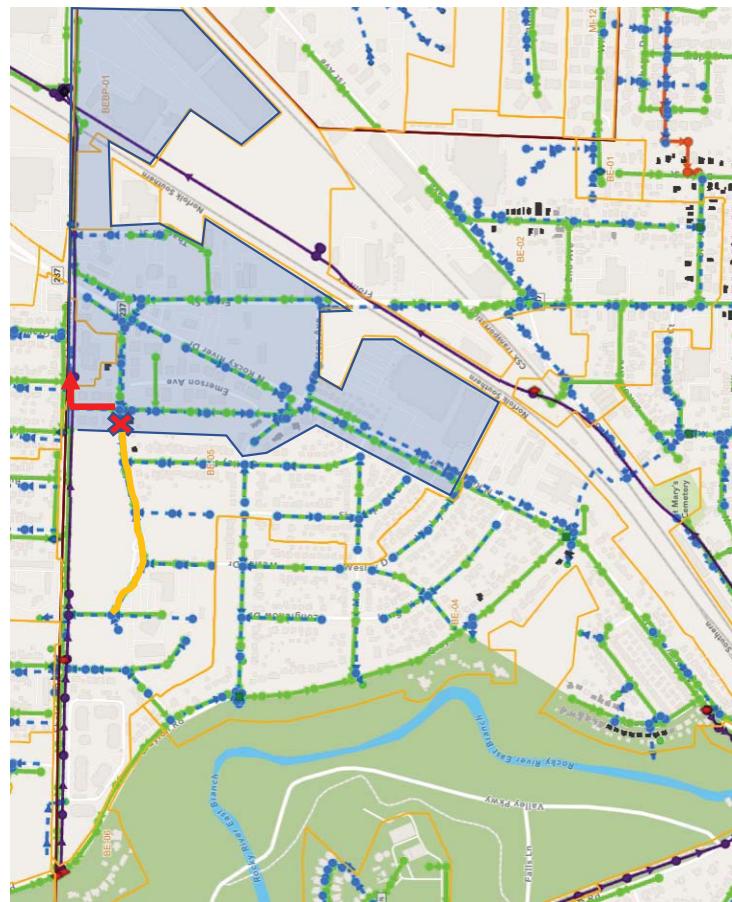


**MORE NEWS**

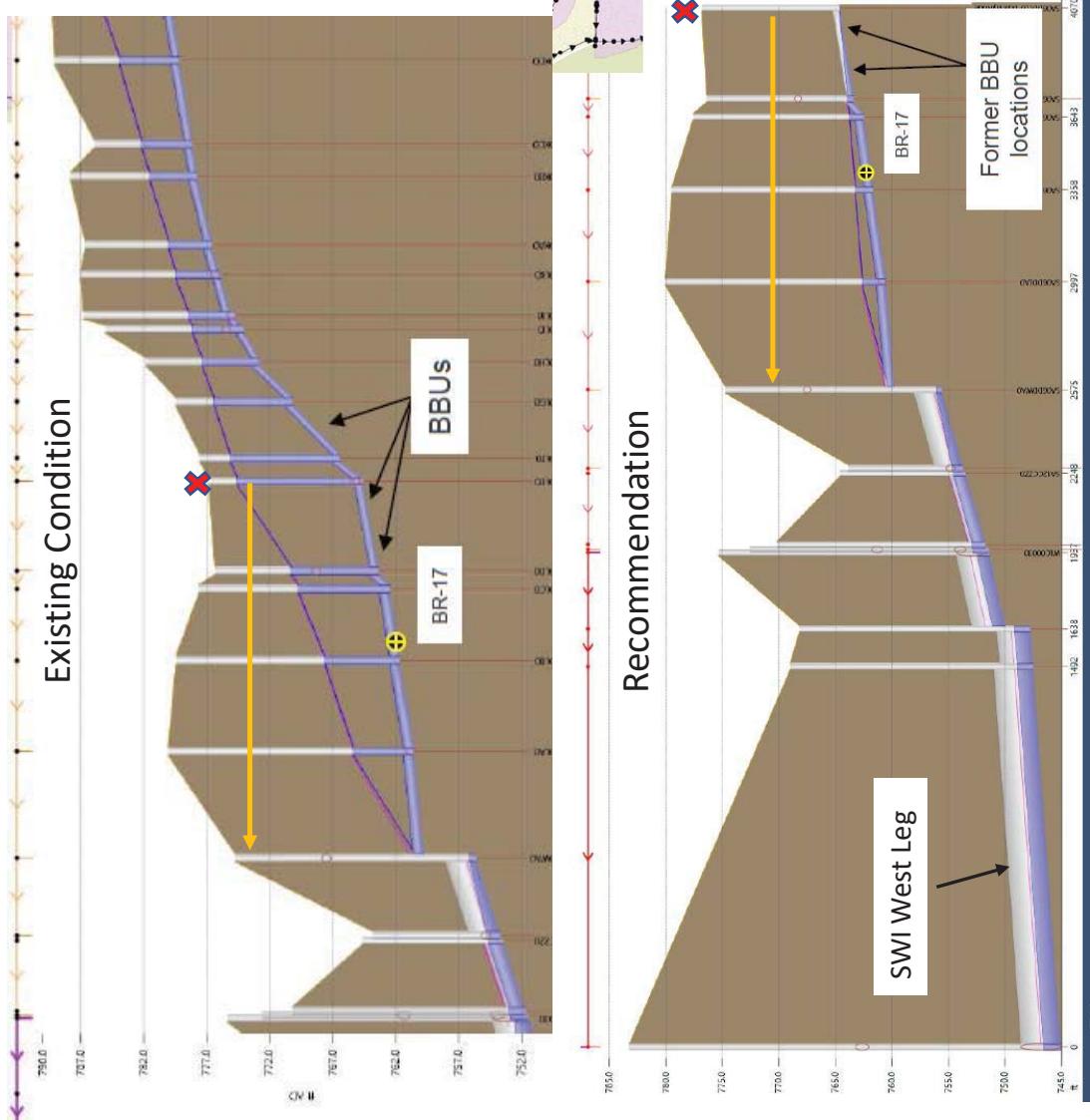
# MODEL PREDICTED BASEMENT BACKUPS

SWI LSSES BE-05 Recommendation – Bulkhead and  
Relief Sewer Connection to SWI

Sewer Profile (Orange Line) of *Unshaded* Area

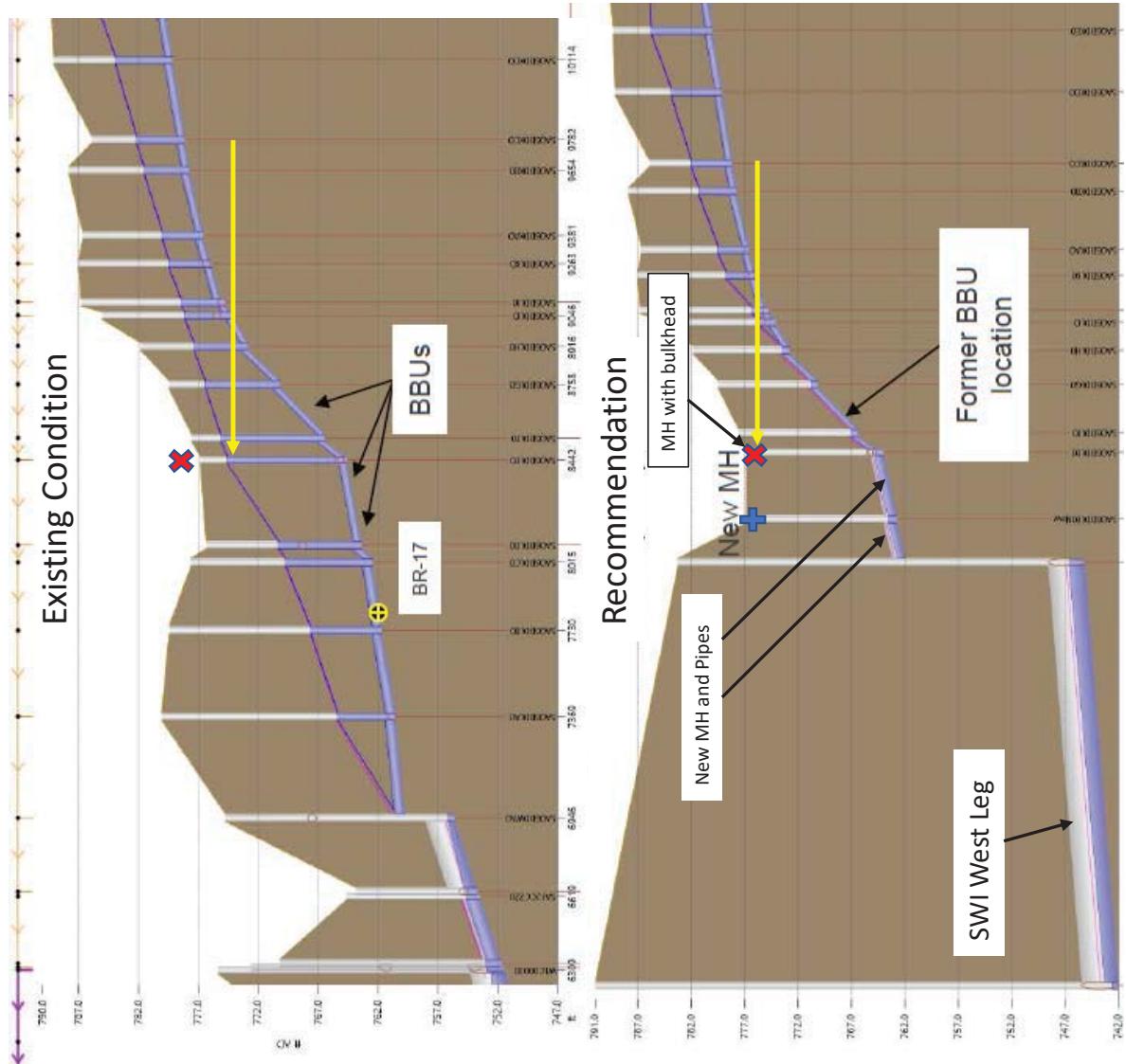


Existing Condition

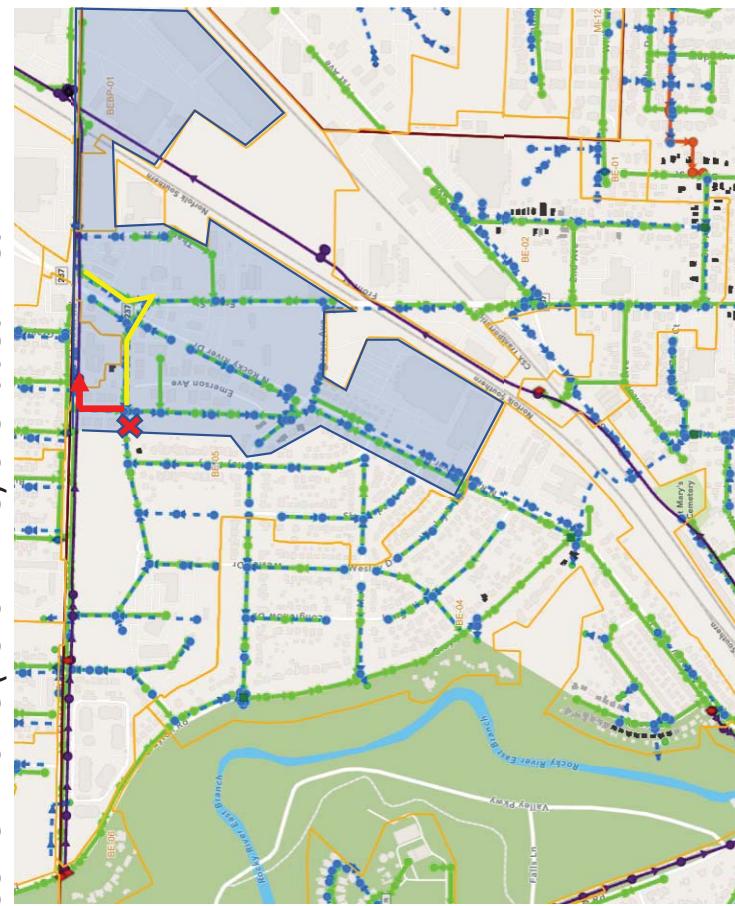


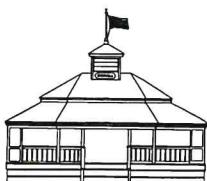
# MODEL PREDICTED BASEMENT BACKUPS

SWI LSSES BE-05 Recommendation – Bulkhead and Relief Sewer Connection to SWI



Sewer Profile (Yellow Line) of Shaded Area





# CITY OF BERE A

*"The Grindstone City"*

**Cyril M. Kleem**  
*Mayor*

11 Berea Commons  
Berea, Ohio 44017  
(440) 826-5800  
Fax. (440) 826-1446  
Website [www.cityofberea.org](http://www.cityofberea.org)

April 27, 2022

Ed Kagel, PE  
Regional Services Director  
American Structurepoint  
600 Superior Avenue, Suite 1305  
Cleveland, Ohio 44114

Re: North End Flow Monitoring

Dear Mr. Kagel:

We have had the opportunity to review your attached proposal for the above referenced project. We have accepted your proposal and you are authorized to proceed upon receipt of this letter. We are selecting Alternative A, 1-2 for a total cost of \$49,176.00. Enclosed is the proposal that has been executed by the City of Berea.

Please let me know if you have any questions.

Very truly yours,

CITY OF BERE A

Antonio C. Armagno, P.E.  
Director of Public Works/City Engineer

cc: Mayor Cyril M. Kleem  
Matthew Madzy, Director of Planning and Development  
Barbara Jones, Law Director  
Andrea Morris, Director of Finance  
Andrew Palcheff, Assistant Finance Director



*"City of Champions"*



600 SUPERIOR AVENUE EAST, SUITE 1305  
CLEVELAND, OHIO 44114  
TEL 216.302.3694

April 26, 2022

Mr. Tony Armagno, P.E.  
Director of Public Works/City Engineer  
City of Berea, Ohio  
11 Berea Commons  
Berea, Ohio 44017

**Subject:** Proposal for Professional Services  
***City of Berea North End Flow Monitoring***

Dear Mr. Armagno,

American Structurepoint, Inc., is pleased to present this proposal for professional services related to the ***City of Berea North End Flow Monitoring Project***.

The proposed scope and fee is presented below for consideration:

#### PROJECT UNDERSTANDING

##### 1. Project Limits

The City of Berea intends to perform post construction flow monitoring for ~~the~~ recently completed North End Sanitary Sewer Rehabilitation Project. This monitoring will also account for the pre-construction monitoring for the North End New Sewer Flow Connection Project.

##### 2. Scope of Work

American Structurepoint will perform flow monitoring and RDII analysis in existing sanitary sewers at the locations indicated in Attachment 'A'. This evaluation will be performed as described below:

###### A. Task 1 – Flow Monitoring

- i. A quantity of eleven (11) flow meters will be required, as shown within the Flow Meter Location Map per Attachment 'A'. Final locations will be verified, confirmed, and approved with subcontractors and the City of Berea prior to mobilization.
- ii. A quantity of one (1) rain gauge will be furnished and installed by subcontractor as needed to measure rainfall depths during monitoring period. Location of gauge will be determined and approved with the City of Berea prior to mobilization.
- iii. The flow meters will be furnished, installed, and maintained by selected subcontractor.

- iv. Selected subcontractor will be responsible for collecting, storing and furnishing the rainfall and flow data during the 4-week monitoring period, and during any extended monitoring periods beyond the initial contract duration
- v. Monitoring shall be conducted in accordance with NEORSD Flow Monitoring Guidelines

#### **B. Task 2 – Flow Data Analysis**

- i. Review existing plans & GIS data provided by the City of Berea to confirm existing sanitary sewer location, size, and slope, etc...
- ii. Review pre-construction flow data
- iii. Perform review and processing of Task 1 data
- iv. Perform RDII Analysis in accordance with NEORSD Standards utilizing USEPA SSOAP Toolbox software or City of Berea approved alternative.
- v. Perform RDII analysis of North End Sanitary Sewer Rehabilitation Project – Phase 2 (monitoring performed by Cuyahoga County)

#### **C. Task 3 – Summary of Findings Report**

- i. Summarize the results of the Task 2 analysis and compare pre- and post-construction flows.

#### **3. Deliverables**

American Structurepoint will provide the following deliverables:

- i. Flow monitoring raw data files (can be transferred digitally or provided on portable storage device(s))
- ii. Summary report analyzing results of post-construction flow monitoring RDII Evaluation

#### **4. Compensation**

American Structurepoint proposes two alternatives to provide the professional services as described in the above Scope of Services for the following lump sum, not to exceed fees. Alternative A carries a potentially longer lead time. Please refer to Section 6 for detailed schedule information.

Task 1 – Mobilization, Meter Installation, Flow Monitoring Services, \$36,776

Data Analysis, data QA/QC by *ADS Environmental Services*

Task 2 – RDII Evaluation Report \$12,400

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Alternative A, 1-2. Total Fee (Base Services) \$49,176

Task 1 - Mobilization, Meter Installation, Flow Monitoring Services, data <i>QA/QC by KS Associates</i>	\$27,240
Task 2 – Data Analysis	\$26,300
Task 3 – RDII Evaluation Report	\$12,400
<b>Alternative B, 1-3. Total Fee (Base Services)</b>	<b>\$65,940</b>

In the event that an extension of flow monitoring services is needed to meet rainfall requirements, estimated weekly extension prices are provided below:

Weekly Monitoring Extension Price (ADS)	\$4,844
Weekly Monitoring Extension Price (KS Associates)	\$2,310

Invoices will be submitted monthly based on the progress of work and are payable upon receipt.

**5. Invoicing**

If payment is not made within 30 days of the date when the payment is due, we may, at our option, and effective upon the delivery of written notice of our intention to do so, terminate the contract or suspend further performance of our services under the contract, and we shall have no liability for delay or damage that results from the termination of the contract or suspension of services.

**6. Schedule**

The American Structurepoint design team is ready to begin work upon notice to proceed, and will coordinate with the City and our subcontractors to finalize the project schedule. The monitoring period will run for the 4-week period or until storm requirements are met per NEORSD Guidelines. Upon completion of the monitoring, RDII analysis will be conducted and the findings will be summarized

KS Associates has indicated an approximate lead time of 2 weeks from NTP to begin installation. The monitoring period will then run for the 4-week period or until storm requirements are met per NEORSD Guidelines.

ADS has indicated an approximate lead time of 30 to 45 days from NTP to begin installation. The monitoring period will then run for the 4-week period or until storm requirements are met per NEORSD Guidelines.

The nature of flow monitoring analysis is generally dependent on monitoring during storm events and may be required to extend beyond the recommended 4-week monitoring period should viable storm events not occur. For convenience, prices to extend monitoring on a per-week basis were included in Section 4.

**7. Right-of-Entry**

It is understood that the Client hereby grants American Structurepoint, Inc. or represents and warrants (if the site is not owned by the Client) that permission has been duly granted for a Right-of-Entry by our firm, agents, staff, consultants and subcontractors, for the purpose of obtaining field information pertinent to the subject project.

**8. Terms and Conditions of Professional Service**

We appreciate the opportunity to be of service to the City of Berea and would be glad to review a standard contract provided by the city; or the attached EJCDC agreement can be used if agreeable to both parties. Upon review and signature of the agreed contract, we will accept the signed document as the notice to proceed.

**9. Clarifications and Exclusions**

The scope of work identified in this document is based on American Structurepoint's knowledge of the project requirements at the time when the document was prepared, and serves as the basis for the price proposal and agreed fee. However, changes in work may be required as the project develops and more complete information becomes available. Such changes also may be dictated by revisions to written procedures included in manuals or decisions made by the City or other reviewing agencies. Although American Structurepoint routinely incorporates minor design changes in our work, we will notify the City in writing of any significant changes in the work that may require modification of the agreement, and will maintain separate cost accounting for each specific issue.

The following services are excluded from our proposal:

1. MACP/PACP Analysis
2. CCTV analysis

If desired, these services can be provided under a separate authorization.

2022.00914

Mr. Tony Armagno  
April 26, 2022  
Page 5

We appreciate the opportunity to submit this fee proposal to you and look forward to working with you on this project. If the terms of this proposal are acceptable, please execute the attached agreement and return the executed copy to American Structurepoint. We will consider an executed agreement our notice to proceed. We are prepared to commence work upon receipt of your acceptance. If you have any questions or require additional information, please do not hesitate to contact me at 216-956-4892 or [rchappelle@structurepoint.com](mailto:rchappelle@structurepoint.com).

Respectfully submitted,



Rob Chappelle, PE

Senior Project Manager

RC:EK/mtw

Encl: EJCDC Contract



Edward D. Kagel, PE

Regional Services Director

2022.00914

Mr. Tony Armagno  
April 26, 2022  
Page 6

Acceptance and Authorization to Proceed *for Alternative A, 1-2*



Authorized Signature

Director of Public Works/City Engineer

Title

City of Berea

Organization

Tony Armagno, P.E. 4/27/22

Print Name and Date

2022.00914

**SHORT FORM OF AGREEMENT  
BETWEEN OWNER AND ENGINEER  
FOR PROFESSIONAL SERVICES**

THIS IS AN AGREEMENT effective as of the date of the latest required signature below ("Effective Date") between City of Berea, Ohio ("Owner") and American Structurepoint, Inc. ("Engineer").

Owner's Project, of which Engineer's services under this Agreement are a part, is generally identified as follows: City of Berea North End Flow Monitoring ("Project").

Engineer's services under this Agreement are generally identified as follows: Please see Engineer's fee proposal dated April 26, 2022 ("Services"). Owner has selected Alternative A, Tasks 1 and 2.

Owner and Engineer further agree as follows:

**1.01 Basic Agreement and Period of Service**

- A. Engineer shall provide or furnish the Services set forth in this Agreement. If authorized by Owner, or if required because of changes in the Project, Engineer shall furnish services in addition to those set forth above ("Additional Services").
- B. Engineer shall complete its Services as mutually agreed upon at the time notice to proceed is given.
- C. If, through no fault of Engineer, such periods of time or dates are changed, or the orderly and continuous progress of Engineer's Services is impaired, or Engineer's Services are delayed or suspended, then the time for completion of Engineer's Services, and the rates and amounts of Engineer's compensation, shall be adjusted equitably.

**2.01 Payment Procedures**

- A. *Invoices:* Engineer shall prepare invoices in accordance with its standard invoicing practices and submit the invoices to Owner on a monthly basis. Invoices are due and payable within 45 days of receipt. If Owner fails to make any payment due Engineer for Services, Additional Services, and expenses within 30 days after receipt of Engineer's invoice, then (1) the amounts due Engineer will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said due date, and (2) in addition Engineer may, after giving seven days written notice to Owner, suspend Services under this Agreement until Engineer has been paid in full all amounts due for Services, Additional Services, expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.
- B. *Payment:* As compensation for Engineer providing or furnishing Services and Additional Services, Owner shall pay Engineer as set forth in Paragraphs 2.01, 2.02 (Services), and 2.03 (Additional Services). If Owner disputes an invoice, either as to amount or entitlement, then Owner shall promptly advise Engineer in writing of the specific basis for doing so, may withhold only that portion so disputed, and must pay the undisputed portion.

V. 9-2021

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EJCDC® E-520, Short Form of Agreement Between Owner and Engineer for Professional Services.

2022.00914

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## 2.02 Basis of Payment

- A. Owner shall pay Engineer for Services as follows:
  1. A Lump Sum amount of \$49,176 for Alternative A, Tasks 1 and 2.
  2. The portion of the compensation amount billed monthly for Engineer's Services will be based upon Engineer's estimate of the percentage of the total Services actually completed during the billing period.
- B. Reimbursable expenses will be invoiced separately at 1.1 times their direct cost.

2.03 *Additional Services:* For Additional Services, Owner shall pay Engineer ~~an amount equal to the cumulative hours charged in providing the Additional Services by each class of Engineer's employees, times standard hourly rates for each applicable billing class; plus reimbursement of expenses incurred in connection with providing the Additional Services and Engineer's consultants' charges, if any. Engineer's standard hourly rates are attached as Appendix 1. a fee to be negotiated at the time such Additional Services are requested.~~

## 3.01 Termination

- A. The obligation to continue performance under this Agreement may be terminated:
  1. For cause,
    - a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the Agreement's terms through no fault of the terminating party. Failure to pay Engineer for its services is a substantial failure to perform and a basis for termination.
    - b. By Engineer:
      - 1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or
      - 2) upon seven days written notice if the Engineer's Services are delayed for more than 60 days for reasons beyond Engineer's control, or as the result of the presence at the Site of undisclosed Constituents of Concern, as set forth in Paragraph 5.01.l.
    - c. Engineer shall have no liability to Owner on account of a termination for cause by Engineer.
    - d. Notwithstanding the foregoing, this Agreement will not terminate as a result of a substantial failure under Paragraph 3.01.A.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of notice; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.
  2. For convenience, by Owner effective upon Engineer's receipt of written notice from Owner.

V. 9-2021

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B. In the event of any termination under Paragraph 3.01, Engineer will be entitled to invoice Owner and to receive full payment for all Services and Additional Services performed or furnished in accordance with this Agreement, plus reimbursement of expenses incurred through the receipt of notice of termination in connection with providing the Services and Additional Services, and Engineer's consultants' charges, if any.

#### 4.01 *Successors, Assigns, and Beneficiaries*

- A. Owner and Engineer are hereby bound and the successors, executors, administrators, and legal representatives of Owner and Engineer (and to the extent permitted by Paragraph 4.01.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the successors, executors, administrators, and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, money that is due or may become due) in this Agreement without the written consent of the other party, except to the extent that any assignment, subletting, or transfer is mandated by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise, nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Constructor, other third-party individual or entity, or to any surety for or employee of any of them. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.

#### 5.01 *General Considerations*

- A. The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Engineer. Subject to the foregoing standard of care, Engineer and its consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards. **The Owner shall furnish, at the Owner's expense, all information, requirements, reports, data, surveys and instructions required by this Agreement. The Engineer may use such information, requirements, reports, data, surveys and instructions in performing its services and is entitled to rely upon the accuracy and completeness thereof. The Engineer shall not be held responsible for any errors or omissions that may arise as a result of erroneous or incomplete information provided by the Owner, consultants or contractors which the Owner requires Engineer to hire, and/or the Owner's consultants and contractors.**
- B. Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Project site, nor for any failure of a Constructor to comply with laws and regulations applicable to such Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.

V. 9-2021

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- C. Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform its work.
- D. Engineer's opinions (if any) of probable construction cost are to be made on the basis of Engineer's experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by Engineer. If Owner requires greater assurance as to probable construction cost, then Owner agrees to obtain an independent cost estimate.
- E. Engineer shall not be responsible for any decision made regarding the construction contract requirements, or any application, interpretation, clarification, or modification of the construction contract documents other than those made by Engineer or its consultants.
- F. All documents prepared or furnished by Engineer are instruments of service, and Engineer retains an ownership and property interest (including the copyright and the right of reuse) in such documents, whether or not the Project is completed. Owner shall have a limited license to use the documents on the Project, extensions of the Project, and for related uses of the Owner, subject to receipt by Engineer of full payment due and owing for all Services and Additional Services relating to preparation of the documents and subject to the following limitations:
  - 1. Owner acknowledges that such documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project, on any other project, or for any other use or purpose, without written verification or adaptation by Engineer;
  - 2. any such use or reuse, or any modification of the documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or to its officers, directors, members, partners, agents, employees, and consultants;
  - 3. Owner shall hold harmless Engineer and its officers, directors, members, partners, agents, employees, and consultants from all claims, damages, losses, and expenses, including reasonable attorneys' fees, arising out of or resulting from any use, reuse, or modification of the documents without written verification, completion, or adaptation by Engineer; and
  - 4. such limited license to Owner shall not create any rights in third parties.
  - 5. Upon payment in full of all fees due by Owner, all right, title, and interest in any documents, plans, drawings, or instruments of service shall vest solely in the Owner. Notwithstanding the foregoing, Engineer shall retain its rights in pre-existing and standard scripts, databases, computer software, and other proprietary property. Rights to intellectual property that is not specifically created exclusively for the Owner in the performance of the services under this Agreement shall also remain the property of the Engineer.

V. 9-2021

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2022.00914

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- G. Owner and Engineer may transmit, and shall accept, Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, in accordance with a mutually agreeable protocol.
- H. To the fullest extent permitted by law, Owner and Engineer (1) waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement or the Project, and (2) agree that Engineer's total liability to Owner under this Agreement shall be limited to **\$50,000** or the total amount of compensation received by Engineer, whichever is greater, notwithstanding applicable insurance coverage.
- I. The parties acknowledge that Engineer's Services do not include any services related to unknown or undisclosed Constituents of Concern. If Engineer or any other party encounters, uncovers, or reveals an unknown or undisclosed Constituent of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of Services on the portion of the Project affected thereby until such portion of the Project is no longer affected, or terminate this Agreement for cause if it is not practical to continue providing Services.
- J. Owner and Engineer agree to negotiate each dispute between them in good faith during the 30 days after notice of dispute. If negotiations are unsuccessful in resolving the dispute, then the dispute shall be mediated. If mediation is unsuccessful, then the parties may exercise their rights at law.
- K. This Agreement is to be governed by the law of the state in which the Project is located.
- L. Engineer's Services and Additional Services do not include: (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission; (2) advising Owner, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances; (3) providing surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements; or (4) providing legal advice or representation.
- M. **If the Project is constructed, Owner shall require the Constructor to purchase and maintain general liability insurance and to cause Engineer and Engineer's Consultants to be listed as additional insureds on a primary and non-contributory basis with respect to such liability insurance purchased and maintained by the Constructor for the Project.**
- N. **If required by the Contract Documents, Engineer shall review and approve, or take other action upon, the Constructor's submittals such as shop drawings, product data and samples, but only for the limited purposes of checking for conformance with the information given and the design concept expressed in the Contract Documents. Review of such submittals is not for the purpose of determining the accuracy or completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Constructor's responsibility. The Engineer's review shall not constitute approval of safety precautions or construction means, methods, techniques, sequences or procedures. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.**

V. 9-2021

EJCD® E-520, Short Form of Agreement Between Owner and Engineer for Professional Services.

2022.00914

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O. If Engineer is required to review any submittals prior to final approval of plans by Owner or any required approval by governmental authorities, the review shall be limited to confirm general conformance with the preliminary design concept expressed by the preliminary design documents that are subject to material revisions in the process of developing the Owner-approved Contract Documents that bear the professional seal of the Engineer. The Owner understands and agrees that it is the Constructor's obligation to assume all costs to comply with the Contract Documents even if the Contract Documents differ materially from the preliminary design concept that is the subject of the submittal. Any notes made by Engineer on the submittal shall not relieve the Constructor from its duty to ensure compliance with the Contract Documents. Design and certification of manufactured items that are not specifically designed and detailed in the Contract Documents are the responsibility of the registered professional engineer working for the Constructor. The Constructor is responsible for all dimensions, quantities, fabrication, fit, and the coordination with other trades. Dimensions shall be confirmed and correlate by the Constructor at the job site.

#### 6.01 *Total Agreement*

A. This Agreement (including any expressly incorporated attachments), constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

#### 7.01 *Definitions*

A. *Constructor*—Any person or entity (not including the Engineer, its employees, agents, representatives, and consultants), performing or supporting construction activities relating to the Project, including but not limited to contractors, subcontractors, suppliers, Owner's work forces, utility companies, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.

B. *Constituent of Concern*—Asbestos, petroleum, radioactive material, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, State, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

#### *Attachments:*

Engineer's Proposal Letter dated April 26, 2022

V. 9-2021

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IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on page 1.

Owner: City of Berea, Ohio

By: 

Print name: Tony Armagno, P.E.  
Title: Director of Public Works, City Engineer  
Date Signed: 4/27/22

Engineer: American Structurepoint, Inc.

By: 

Print name: Edward D. Kagel  
Title: Regional Services Director  
Date Signed: 4-26-22

Engineer License or Firm's Certificate No. (if required):

State of: Ohio

Address for Owner's receipt of notices:

Tony Armagno  
11 Berea Commons  
Berea, Ohio 44017

Address for Engineer's receipt of notices:

Willis R. Conner  
600 Superior Avenue East, Suite 1305  
Cleveland, Ohio 44114

V. 9-2021

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# EXHIBIT E

CITY OF BEREAL  
NORTH END SEWER NEW FLOW CONNECTION  
CHIEF FINANCIAL OFFICER'S CERTIFICATION OF LOCAL FUNDS

June 8, 2022

I, Andrea Morris, Director of Finance for the City of Berea, hereby certify that the funds required for the North End Sewer New Flow Connection Project are either in the Treasury of the City of Berea or in the process of collection. The City of Berea will have the amount of \$313,191.44 in the Capital Improvement Fund and this amount will be used to pay the local share for construction of the North End Sewer New Flow Connection Project.

Andrea D Morris  
Andrea Morris  
Director of Finance

# EXHIBIT F

## MEMBER COMMUNITY INFRASTRUCTURE PROGRAM POLICY

The Member Community Infrastructure Program (MCIP) is a funding program provided by the Northeast Ohio Regional Sewer District (District) to assist both member communities and other eligible political subdivisions that own, operate, and maintain public sewer infrastructure that is tributary to a District wastewater treatment plant, with cost-effective sewer infrastructure projects to address water quality and quantity issues associated with sewer infrastructure that adversely impact human health and the environment.

The intent of the MCIP is to provide an annual funding opportunity to member communities and eligible political subdivisions for sewer infrastructure repair and rehabilitation that will:

- Continue progress towards environmentally sustainable and healthy communities through protection and improvement of the region's water resources consistent with the vision of the District.
- Support efforts to assist member communities' compliance with the District's Community Discharge Permit Program.
- Improve function and condition of the local sewer system.
- Identify and remove sources of inflow and infiltration (I/I) from the sewer system. This reduction will preserve the hydraulic capacity of the local and District sewer system and alleviate problems such as basement flooding.

Subject to available funding and District Board of Trustee (BOT) approval, the District anticipates funds will be available annually through a competitive process. The District will annually review the terms and conditions of the MCIP and may modify these terms and conditions based on lessons learned from previous funding rounds. There are two mechanisms for funding under the MCIP: (a) MCIP Grant or (b) a Community Operating Lease. The District will determine the appropriate funding mechanism during the application review process. Applicants do not specify a funding preference.

All available MCIP funds will be provided by the District on a reimbursement basis to the member community or other eligible political subdivision for direct project costs, conditioned on the District's prior approval of the project and member community or eligible political subdivision compliance with this Policy and the District approved Project Agreement. Funds must be used in accordance with the authorized amount indicated. Any funds not expended for the purposes agreed to by the member community or eligible political subdivision and the District shall remain with the District.

If the member community or other eligible political subdivision fails to maintain a project funded through the MCIP in accordance with applicable agreements executed with the District, it shall be liable for the full amount of MCIP funds paid for the project.

The District will provide an annual update to the BOT and member communities on MCIP projects.

## MEMBER COMMUNITY INFRASTRUCTURE PROGRAM PROCESS OVERVIEW

### Project Eligibility

A project must meet all of the following minimum requirements to be eligible for MCIP funding:

- Reduce water quantity issues and address water quality issues that impact human health and the environment associated with combined or separate sanitary infrastructure problems, as determined by the District.
- Located in the District's sanitary sewer service area <http://arcg.is/2bPxzEt>.
- Include a minimum of 25% non-District funds dedicated to the project.
- Meet all applicable District, federal, state, and local regulations and requirements.
- Tributary to a District wastewater treatment plant.
- Owned, operated, and maintained by a member community of the District or by an eligible political subdivision, which shall be a political subdivision of the State of Ohio.
- Not be the subject of a contract which transfers ownership of the project to a private entity.

To be eligible for MCIP funding, eligible public entities submitting proposals must, in addition to all other MCIP program requirements, provide a resolution or ordinance adopted by the member community legislative body in support of the project. Member communities and eligible political subdivisions may use MCIP funds for planning, design, construction, and administrative costs directly associated with approved projects. Eligible projects include, but are not limited to the following:

- Mitigation of sanitary sewer overflows (SSOs) and illicit discharges,
- Mitigation of inflow and infiltration,
- Removal and elimination of failing home sewage treatment systems (HSTS),
- Increases to local sewer system's level of service, and
- Management of stormwater flow that enhance combined/sanitary sewer system level of service.

### Application Process Overview

1. For each year of funding the District will issue a RFP to its member communities.
2. The forms for the application process are located at  
<https://www.neorsd.org/community/member-community-infrastructure-program-mcip/>

3. All proposals will be reviewed based on the scoring criteria found in the RFP.
4. The District's review committee will make the determination if the proposed project will be recommended for a grant or community operating lease contract. If the community operating lease option is selected, the member community or eligible political subdivision will be contacted to discuss the terms of the lease agreement.
5. MCIP recommendations will be presented to the District's BOT for final approval.
6. Upon approval by the BOT, the District will enter into a MCIP Project Agreement for each awarded project with the applicable member community or eligible political subdivision.

### **Project Agreement**

Projects approved by the BOT will be either funded through a MCIP Project Agreement or a Community Operating Lease Agreement, depending on the District funding availability. The District's Legal Department will prepare the appropriate MCIP Project Agreement between the District and the member community or eligible political subdivision.

### **MCIP Project Agreement**

The member community or eligible political subdivision is responsible for the full implementation of the MCIP Project as defined in the annual request for proposal. At a minimum, the MCIP Project Agreement will contain the following provisions requiring the member community or eligible political subdivision to:

- Award and/or bid, design and/or construct, and manage the MCIP Project;
- Obtain all necessary approvals and permits and pay all applicable fees connected with the MCIP Project;
- Obtain all easements, rights of entry, and other legal agreements necessary to complete the MCIP Project;
- Maintain and operate the MCIP Project during construction and after project completion for the life of the project; and
- Any other provision the District determines is necessary to ensure compliance with this Policy and protect the interests of the District.

### **Community Operating Lease Agreement**

The member community or eligible political subdivision will be required to enter into an agreement containing, at a minimum, the following:

- A provision whereby the member community or eligible political subdivision leases the existing or planned sewer asset described in the MCIP Project proposal to the District for a nominal fee for a term to be agreed upon between the District and the member community or eligible political subdivision;

- A provision requiring the District to design, if design has not been finalized, and construct the MCIP Project;
- A provision requiring the member community or eligible political subdivision to waive all permit fees applicable to the MCIP Project during design and construction;
- A provision reverting the MCIP Project back to the member community or eligible political subdivision at the end of the lease term;
- A provision requiring the member community or eligible political subdivision to maintain and operate the MCIP Project for the duration of the lease term; and
- Any other provision that the District determines is necessary to ensure compliance with this Policy and protect the interests of the District.

**Budget Modification**

If in the event of qualifying unforeseen circumstances, a member community or eligible political subdivision may request additional funding for project eligible cost increases associated with said circumstances. All requests for additional funding will be contingent upon the availability of funds and justification of cost increases subject to District approval. The District is under no obligation to provide additional funds to MCIP awarded projects. The maximum amount of District funding for any approved budget modification will not exceed 75% of the revised MCIP project cost identified in the member community or eligible political subdivision proposal. The District, at its sole discretion, may waive the 25% non-District fund contribution requirement by a member community for a member community identified by the Office of the Auditor of the State of Ohio as being a local government in fiscal distress. This includes a member community in fiscal caution, watch or emergency as defined by the Office of the Auditor of the State of Ohio ([https://ohio\\_auditor.gov/fiscal/local.html](https://ohio_auditor.gov/fiscal/local.html)). The District reserves the right to authorize funding to address public health and water quality improvements.

**Requesting Additional Funds**

***Eligible requests include but are not limited to:***

- Costs identified due to unforeseen circumstances during the engineering or construction phase.
- Change orders during construction that are necessary to:
  - a. Complete the project as approved by the District without additional scope or project changes.
  - b. Meet required federal or state regulatory standards that are new or were unforeseen at the time project design was completed.
  - c. Address conditions not reasonably discoverable in the engineering and design phase of the project.

***Ineligible requests include but are not limited to:***

- Costs resulting from increased scope not needed to complete the original project without justification approved by the District.
- Funding a budget shortfall resulting from the project bids coming in higher than the estimate, without justification or explanation of unforeseen circumstances.
- Funding a budget shortfall in funding from other sources (i.e., local, state, federal and/or other sources).
- Cost overruns incurred during construction that were caused by engineering deficiencies and/or inadequate plan preparation.
- Cost overruns incurred as the result of contractor or project sponsor negligence or misfeasance.

**Reimbursement Overview**

1. MCIP funded projects are reimbursement only. All requests for reimbursement for the project shall be documented to the District in reasonable satisfaction. All requests shall be submitted in a form sufficient to allow the District to review, inspect and approve materials, labor, and quantities installed for the project.
2. The District's award will represent a percentage of the project cost (the "Award Percentage"), based on the cost estimate provided in the project application.
3. The member community or eligible political subdivision must demonstrate that their percentage of the project (the "MCIP Applicant Percentage"), as identified in the application, has been paid. Throughout the duration of the project, District reimbursements to the member community or eligible political subdivision for each invoice shall follow the established Award Percentages and MCIP Applicant Percentages for the project. In no circumstances shall the District's reimbursements exceed the initial award contribution to the project (the "Award Contribution").
4. If subsequent additional funds are requested and granted pursuant to these policies, then the District's final Award Contribution may represent a higher Award Percentage of the final project costs, but in no event will the District's final total Award Contribution exceed 75% of the final project costs.
5. If final project costs decrease from the project proposal estimate, then the amount of the District's final Award Contribution shall be reduced to maintain the same Award Percentage of the final project cost as the percentage of the original award in relation to the proposal estimate.

6. The member community or eligible political subdivision shall keep all records and documents relevant to the MCIP Project Agreement, including but not limited to, an accurate, current, and complete accounting of all financial transactions for the project. Such records and documents shall be available at reasonable times and places for inspection and copying by the District or any authorized representative thereof and shall be submitted to the District upon request together with any other compliance information which may be reasonably required.
7. The member community or eligible political subdivision shall bear the risk and remain solely responsible for any payments made to third parties for invoicing not approved for MCIP reimbursement by the District.
8. Upon request the member community or eligible political subdivision will provide a copy of any final accounting report prepared in connection with and specific to the project.

## MEMBER COMMUNITY INFRASTRUCTURE PROGRAM PROCEDURES

### **Request for Proposals**

The District intends to offer an annual Request for Proposals (RFP) to member communities and eligible public entities for the MCIP. The RFP includes project requirements, evaluation criteria, and schedule of deliverables.

### **Eligible Projects**

Within the annual RFP, the District will list eligible projects. Projects not listed can be discussed with the District for consideration.

### **Evaluation Criteria, Process, and Recommendations**

Proposals must be submitted no later than the specified due date and time in the RFP. Any materials that are not included in the initial submission will not be considered. The proposals are checked for completeness, filed electronically, and disbursed to the selection committee for review.

Final recommendations for funding will be based on the value of the Project Evaluation criteria in the RFP and past performance. The selection of projects is solely at the District's discretion.

The final recommendations to the BOT must be approved by a Chief Executive Officer Committee consisting of the Chief Executive Officer, Chief Financial Officer, Chief Operating Officer, Director of Engineering and Construction, and Director of Watershed Programs.

### **Project Agreement**

The District's Legal Department will send the MCIP Project Agreement to the primary project contact. The project commences under the MCIP when the MCIP Project Agreement is fully executed and a purchase order number has been issued by the District.

### **Request for Budget Modification**

Budget Modifications require the submission of a Request for Budget Modification form to the Watershed Funding Administrator. Budget Modification must be submitted with substantiating documentation. If approved, the Member Community or Political Subdivision will be required to enter into an amendment to the MCIP Grant Agreement or Community Operating Lease Agreement.

A Request for Budget Modification must be fully-executed prior to consideration of further reimbursement requests.

### **Progress Reports**

Progress Reports will provide a summary of the project status with respect to objectives, degree of project completion, difficulties encountered, and next steps toward project completion. The Progress Report is located at <http://www.neorsd.org/mcip>.

Progress Reports will be submitted:

- Within 30 days of written request from the District
- As an attachment to all Reimbursement Requests

**Reimbursement Request**

For reimbursement, 100% of the MCIP funds must be used for activities and/or expenses directly related to the project, as approved by the District. These activities and expenses may include design, construction, materials, equipment, project performance verification, and signage specifically related to the project. Only project components described in the MCIP Project Agreement and/or approved Budget Modifications are eligible for reimbursement. A Reimbursement Request for project costs cannot be submitted prior to a fully executed MCIP Project Agreement. Any Budget Modification must be documented by written District approval.

1. The Reimbursement Request forms can be found at <http://www.neorsd.org/mcip> or other location designated by the District.
2. A complete Reimbursement Request submission will include:
  - Reimbursement Request – Cover Sheet
  - Progress Report
  - Expenditure and Financing Progress Worksheet
  - Expense Worksheet w/ supporting documentation
3. Itemize all reimbursable project expenses on the Reimbursement Request Expense Worksheet. Include supporting documentation to justify the expenses recorded, such as an itemized bill, receipt, invoice, or timecard. This must be accompanied by proof of payment, such as a credit card receipt, cancelled check, bank verified electronic funds transfer and/or other documentation to substantiate purchase and/or payment by the District.
4. Demonstrate that the MCIP Applicant Percentage (project cost obligation), as identified in the application, has been satisfied, using the Expenditure and Financing Progress Worksheet. Include supporting documentation as needed if not included with the Expense Worksheet.
5. The Reimbursement Request shall be submitted to the Grant Programs Administrator. Send submissions to:

Linda Mayer, Grant Programs Administrator, [mayerl@neorsd.org](mailto:mayerl@neorsd.org)
6. Upon successful review of the submission by Grant Programs Administrator and Deputy Director of Watershed Programs, the District's Director of Watershed Programs will have the final review and approval of the Reimbursement Request for disbursement to occur.

7. The reimbursement can be anticipated within 30 days of the final approval of the Reimbursement Request.