



2021 PPII Work Plan

This checklist / template serves as the standard form for submitting a Work Plan to MMSD as a request to commit funds from your Municipal Funding Allocation Account to a project proposed for reimbursement through the MMSD PPII Reduction-M Program. If approved, the Work Plan will be the basis for a Funding Agreement between the municipality and MMSD. Please complete all fields comprehensively and submit this electronically-fillable-form and supporting document attachments via email.

I. CONTACT INFORMATION

Municipality	
Applicant Name: Jerrel Kruschke, P.E.	Municipality: City of Milwaukee
Mailing Address: 841 N. Broadway, Room 821 Milwaukee, WI 53202	
Phone #: 414-286-2400	Email: jkrusc@milwaukee.gov
Primary Contact: Robert Seleen, P.E.	Primary Contact email: rselee@milwaukee.gov
Primary contact phone #: 414-286-2465	
Consultant (if applicable)	
Firm:	Consultant's PM's Name:
Consultant Email:	Consultant Phone number:

II. PROPOSED SCOPE OF WORK

1. What type of work will be included in this work plan application? Check all applicable. <input type="checkbox"/> Planning <input type="checkbox"/> Investigative <input type="checkbox"/> Construction/Rehab <input type="checkbox"/> Post Project Evaluation <input type="checkbox"/> Training <input type="checkbox"/> Other	
2. What is the total value of the request by the municipality for funding through the PPII program for work outlined in this work plan?	\$ 840,000.00
3. Provide the scope of work that will be included in this work plan. Full sanitary lateral replacement from the connection point at the sanitary sewer main to the building's sanitary sewer clean out. The City will be developing our bid documents to allow the contractor to choose between open cut rehabilitation or pipe bursting.	
4. What entity is responsible for each work scope item e.g. municipality staff, consultant, contractor, District, etc. The City of Milwaukee will be generating its own contract, plans, and specifications for the lateral replacement project. All copies of plans and specifications will be provided to MMSD prior to awarding a contract for their review and comments. The project will be inspected by City of Milwaukee Public Works inspectors who will be on site during construction documenting the progress and work completed. Department of Neighborhood Services plumbing inspectors will also be involved in the inspection process. Daily construction reports and photos will be available for viewing of the work performed by the contractor. City of Milwaukee Environmental Engineering staff will also periodically inspect the site.	
5. What is the total number of properties in the project area?	64
6. What is the assumed number of participating properties?	64
7. What is your justification for the assumed participation rate? <input checked="" type="checkbox"/> Prioritization of properties based on investigative work <input type="checkbox"/> Assumed percent of total based on previous projects <input type="checkbox"/> Existing ROE agreements <input type="checkbox"/> Other (Fill in Blank):	

III. PROJECT AREA CHARACTERISTICS

1. What is the predominant age of the homes in the project area? <input checked="" type="checkbox"/> Pre 1940's <input checked="" type="checkbox"/> 1940 – 1960 <input type="checkbox"/> 1961-1980 <input type="checkbox"/> 1981-Present			
2. What is the average lot size within the project area?		0.12	<input checked="" type="checkbox"/> SF <input checked="" type="checkbox"/> Acres
3. In this area, is it typical that foundation drains are connected?			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4. What sewershed(s) or metershed(s) is this project located in? Sewershed# MI4141, MI4010, MI5147, MI4046, MI5051, MI1137, MI3096, MI6129, MI1102, MI7109 & MI6107			
5. Collection system characteristics in project areas:			
Approximate year sanitary sewer was installed:	Host Pipe Material(s):	Pipe Size(s):	Pipe Shape(s):
1955	<input checked="" type="checkbox"/> VCP <input type="checkbox"/> Ductile Iron <input type="checkbox"/> Cast-Iron <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Asbestos <input checked="" type="checkbox"/> PVC	8",12"&18"	<input checked="" type="checkbox"/> Circular <input type="checkbox"/> Other
6. Within the project area, is the mainline rehabilitated?			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If "Yes," provide details on the year(s) the work was completed, the type and location of rehabilitation used, and if any rehabilitation of the sanitary sewer laterals within the ROW was completed.			
The following locations were completed between 2010 though 2021 or about to be completed during the 2022 construction season for relay/lining:			
W. Medford Av. - W. Custer Av. to W. Sheridan Av. "Sanitary Sewer Lining"			
N. 52nd St. - W. Center St. to W. Burleigh St. "Sanitary Sewer Lining"			
N. 53rd St. - W. Chambers St. to W. Burleigh St. "Sanitary Sewer Relay"			
N. 53rd St. - W. Chambers St. to W. Burleigh St. "Sanitary Sewer Relay"			
W. Center St. - N. 52nd St. to N. 53rd St. "Sanitary Sewer Lining"			
W. Locust St. - N. 53rd St. to N. 54th St. "Sanitary Sewer Relay"			
Area Bounded By: W. Oklahoma Ave. to E. Bottsford Ave. from S 13th St. to S. Kansas Ave. "Sanitary Sewer Lining"			
Area Bounded By: N. 68th St. to N. 91st St. from W. Hampton Ave. to W. Villard Ave. "Sanitary Sewer Lining"			

7. Will public infrastructure work be contracted or completed with the private property work?

☐ Yes ☒ No

If "Yes", provide details of the public work.

8. Include with your application, two maps; one of the limits of the sewershed(s) or metershed(s) the project is in, and one of the project limits. The maps shall meet the following requirements.

- Maps shall use a streets or aerial view as base map.
- Major street names shall be labeled and legible.
- Limits of the sewershed(s), metershed(s), and project limits shall be defined by a bold red line.
- Sanitary and storm system line work shall be shown at a scale appropriate to the scale of the drawing
- A north arrow and legend shall be included.
- Maps shall be between 5 and 40 scale and to a standard paper size i.e. 8.5"x11, 11"x17", etc.
- Maps shall be submitted as PDF electronic files.

IV. PROJECT JUSTIFICATION

1. Has any planning and/or investigative work within the project area been completed to date? (i.e. Flow monitoring, interior home inspections, sewer CCTV, analysis of flooding/backup issues in the area, etc.) ☒ Yes ☐ No

If "Yes," was the work completed through a previous PPII funding agreement? ☐ Yes ☒ No

If the answer is "Yes" to both questions, describe the work completed and cite report names and funding agreement reference numbers the work was completed under.

If work was completed independent of the PPII program, included the report(s) with application in electronic format and list the name of the report in this section.

Properties have been identified through the City's Storm Sewer Outfall testing program as defined in the City's Wisconsin Pollutant Discharge Elimination System (WPDES) Permit with the State of Wisconsin Department of Natural Resources (DNR). The City conducts tests to identify sources of sanitary wastewater that are entering the Menomonee River watershed. If a home is suspected of contributing sanitary wastewater to the storm sewer a dye test is ordered by the Department of Neighborhood Services. Dye is introduced into the homes lowest plumbing fixture if dye is observed in the City's storm sewer main or not seen in the City's sanitary sewer main the property is consider to have "failed" a dye test and orders are issued for the property owner to repair the homes sanitary sewer lateral.

Smoke and dye tests were completed by the City of Milwaukee. Please find detailed spreadsheet attached along with this report named under "PROPOSED LOCATIONS FOR FULL LATERAL REPLACEMENT.xls" for further details

2. Describe how the project area and approach was chosen and prioritized.

Knowing that these sanitary laterals are contributing sanitary wastewater to the storm sewer we are assuming that these properties are currently a source of inflow and infiltration into the sanitary sewer system. The properties are all owner occupied one or two family homes that have been unable to fix their laterals. These properties were unaware of the condition of their lateral prior to the City's dye testing and they have been cooperating with the City's plumbing inspectors. Prioritizing the full private sanitary sewer laterals replacement will reduce the amount of I/I entering the system.

3. What is the status of all project area sewershed(s)/metershed(s) as related to the District Chapter 3 rules for wet weather performance?

☐ Non-compliant ☐ Compliant ☐ Inconclusive ☐ Not Analyzed

If "Noncompliant," has PPII work been completed to date within the Project Area metershed(s)? If yes, provide details on the scope of work completed and location.

MS0407(MI4141& MI4010) COMPLIANT : MS0541 (MI5147) NOT ANALYZED
MS0418 (MI4046) NON-COMPLIANT (NO PPII) : MS0534 (MI5051) NOT ANALYZED
MS0104 (MI1137) COMPLIANT
MS0305 (MI3096) NON-COMPLIANT (NO PPII)
MS0620 (MI6129) COMPLIANT
MS0126 (MI1102) COMPLIANT
MS0703 (MI7109) COMPLIANT
(MI6107) NOT METERED

<p>4. Does the municipality have any permitted (or unpermitted) wet-weather bypass locations in the project area?</p> <p>If "Yes," provide approximate frequency and average volume per frequency for over the last ten years.</p> <p>There are a total of five we-weather bypass pumps that are located near/within the scattered 64 properties city wide "Please refer to the attached spreadsheet "Pump run times.xls" for more details</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>5. Does the project area have a history of CSOs or SSOs?</p> <p>If "Yes," provide the frequency of occurrences over the last ten years.</p>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<p>6. Does the municipality have recurring basement backup reports in the project area?</p> <p>If "Yes", please provide the average annual number of reports in the last ten years and the estimated storm recurrence interval that typically causes basement backups.</p> <p>Out of the 7 different scattered areas city wide per the attached "MAP 2", there are a total of 127 properties that experienced backups between 2015 through 2021.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>7. Do you have metering, lift station run time, bypass pumping, basement backup, or any other pre-project baseline data?</p>	<input checked="" type="checkbox"/> Yes – go to item 8 <input type="checkbox"/> No – go to item 9
<p>8. Describe and detail information on the pre-project baseline data you have collected including type, location, and date ranges. If a MMSD meter is used as a source for this data, provide meter name and location.</p> <p>Please refer to "MAP 2" regarding to the flow monitors locations within the entire City of Milwaukee.</p> <p>Due to the scale of the project along with the scattered locations throughout the whole City of Milwaukee, the City will not be able to provide pre and post lateral rehabilitation flow data to MMSD.</p>	

9. Do you plan on collecting pre-project baseline data as part of this project? ☐ Yes – go to item 10
☒ No – go to item 11

10. Describe the pre-project data that will be collected to provide a baseline for improvement? If you intend to use the MMSD portable meters, list the quantity, expected time frame installation and monitoring period.

SEE #8

11. How do you intend to report project performance results? (metrics and target objectives of the project)

SEE #8, also these homes will have post construction dye tests performed to assure that the sanitary wastewater is entering into the sanitary sewer.

V. PROJECT GOALS

1. What are the municipality's goals and objectives for the completed project? Please provide qualitative and quantitative measurables for success as they relate to the goals and objectives.

The goal of this project is to reduce the number of known instances where sanitary wastewater is entering the storm sewer system. By using the resources of the PPI/I program to achieve the water quality goals stated in our DNR WPDES permit and we'll also be eliminating additional sources of inflow and infiltration from the sanitary sewer system.

VI. SCHEDULE

Include a schedule of the work with all major tasks and milestone dates for completion including District and municipal administrative approvals, local board/council approvals, work task start and finish, public outreach, deliverables, and reimbursements. The schedule needs to be realistic and achievable based on District approval timelines, local approval timelines, bidding process timelines, work production rates, and weather-related considerations. Identify and highlight any milestone dates by which the municipality is requesting the District to meet to keep your schedule (e.g. local council or board agenda deadlines). Provide the schedule in PDF format.

VII. FINANCIALS

1. Include a comprehensive cost estimate broke down to the task level which includes costs for: all internal municipal staff time which is being requested to be reimbursed, professional services including hours estimates and rates, construction costs by estimated units and estimated unit costs, inspection services, public outreach, and staff training. Attach an Excel version of the estimate to the application when submitting.

2. Are other funding sources, besides MMSD PPII funds, contributing to the total project ☒ Yes ☐ No
cost? i.e. municipal funds, grant funding, property owner cost share, etc.

If "Yes," list all addition funding sources, the specific work which will be covered by an additional funding sources, and the value.

Additional costs, including public outreach and engineering will be paid for by the City. The costs for the lateral replacement include restoration will be paid for using MMSD's PPI/I funds.

3. Describe your anticipated frequency of reimbursement requests to the District. (The funding agreement terms may dictate this frequency depending on the type of work).

The City anticipates to submit reimbursement requests for materials every three weeks.

4. What department/individual/entity will be submitting and processing the reimbursement requests?
Please include the name and contact information.

City of Milwaukee/ DPW -Infrastructure Services Division/ Administration department

Name: Yuliang Cao

Email: ycao@milwaukee.gov

5. MMSD requires all invoicing to be submitted via e-Builder. Will e-Builder training be necessary for the department/individual/entity that will be submitting and processing the reimbursement requests?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
6. Describe the municipal process(es) for procurement of all professional and non-professional (field work and construction) components of work and the basis for each. The City of Milwaukee will be generating its own contract, plans, and specifications for the lateral replacement project. All copies of plans and specifications will be provided to MMSD prior to bidding for their review and comments. Once the bid results are received they will be delivered to MMSD.													
7. Explain the means and methods for segregating the costs (MMSD reimbursable costs and public work costs). The City of Milwaukee will be generating its own contract, plans, and specifications for the project. The intention is to have no overlapping bid items in the contract to make segregating pay items easy for City of Milwaukee construction inspection staff. All copies of plans and specifications will be provided to MMSD prior to bidding for their review and comments. Once the bid results are received they will be delivered to MMSD.													
8. Provide the names and position titles of all municipal staff that will be required to sign the funding agreement. (i.e. mayor, city/village administrator, city/village clerk, city attorney, etc.) <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Name: Jerrel Kruschke, P.E.</td> <td style="width: 50%;">Position Title: Interim Commissioner of Public V</td> </tr> <tr> <td>Name:</td> <td>Position Title:</td> </tr> <tr> <td>Name:</td> <td>Position Title:</td> </tr> <tr> <td>Name:</td> <td>Position Title:</td> </tr> <tr> <td>Name:</td> <td>Position Title:</td> </tr> <tr> <td>Name:</td> <td>Position Title:</td> </tr> </table>		Name: Jerrel Kruschke, P.E.	Position Title: Interim Commissioner of Public V	Name:	Position Title:	Name:	Position Title:	Name:	Position Title:	Name:	Position Title:	Name:	Position Title:
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VIII. PUBLIC OUTREACH

1. Describe in detail your public outreach approach and what entity/individuals/departments will be responsible for the public outreach. Describe the venues and platforms that will be used. Describe the timing and anticipated level of effort that is anticipated to be necessary for the public outreach effort. Describe any public outreach work that has already been completed or is in progress. If a specific person or entity is responsible for public outreach, include the name and contact information. (Examples of public outreach include, but are not limited to; mailings, websites, social media, canvassing, public meetings, etc.)

All of the homes in this project have already been notified by the Department of Neighborhood Services that their sanitary sewer lateral is in need of repair. Notices will be sent to the property owners informing them about the City's goal of fully replacing their faulty lateral to correct their current issues.

Mr. Robert Seleen of the City of Milwaukee Environmental Engineering Section (EES) and DNS Plumbing inspectors will be available to answer any questions, concerns, and complaints regarding the schedule and results of the inspection project.

Before the project is bid, the City will assess the number of participants and evaluate the need to use additional informational tools to gain further project participation.