

RESOLUTION NO. 2022 – 83

RESOLUTION AUTHORIZING INTERGOVERNMENTAL AGREEMENTS FOR ASSISTANCE WITH WATER INFRASTRUCTURE PROJECTS

WHEREAS, Section 10 of Article VII of the Illinois Constitution of 1970 and the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/1 et. seq. enables units of local government to enter into agreements among themselves and provide authority for intergovernmental cooperation; and

WHEREAS, The County of Champaign and local units of government desire to repair, improve, and/or expand rural water infrastructure; and

WHEREAS, intergovernmental agreements between the County of Champaign and the following local units of government will be prepared to outline the responsibilities of each party for assistance of water infrastructure improvements according to the attached spreadsheet for: Sangamon Valley Public Water District, Penfield Water District, Triple Fork Drainage District, Village of Ludlow, Village of Thomasboro, Village of Ogden, Village of Royal, Village of St. Joseph, Pesotum Consolidated Drainage District, Village of Ivesdale, Village of Pesotum, and Village of Tolono;

NOW, THEREFORE, BE IT RESOLVED that the County Board of Champaign County authorizes the County Executive to negotiate and sign intergovernmental agreements on behalf of Champaign County with the units of government specified, to assist water infrastructure projects.

PRESENTED, ADOPTED, APPROVED, AND RECORDED this 21st day of April, A.D. 2022.

Kyle Patterson, Chair
Champaign County Board

Recorded
& Attest: _____
Aaron Ammons, County Clerk
and ex-officio Clerk of the
Champaign County Board
Date: _____

Approved: _____
Darlene A. Kloeppe, County Executive
and Presiding Officer of the Board
Date: _____

Proposals for ARPA Funds for Water Projects

As of 4/19/2022

County Board District	Requesting Body	Project	Total Project Cost	ARPA Request	Page #	Recommended from ELUC 4/7/22	Alternate Plan from ELUC	ARPA Funds Purpose	Timeline - ARPA Funded Portion	Matching Funds Status
1	Sangamon Valley Public Water District	Advance Water Main Project in Gas Leak Affected Area of Mahomet Aquifer	\$10,020,000	\$500,000	1-20	\$500,000		Design work	Completion by mid 2023	No match needed for design work
	District One Subtotal			\$500,000						
2	Penfield Water District	Replacement of Hydropneumatic Water Tank	\$105,000	\$70,000	21-22	\$70,000	\$70,000	Replacement Tank Cost	Completion in 2023	Matching funds ready
2	Triple Fork Drainage District	Culvert Replacement	\$120,000	\$120,000	23-25		\$60,000	Culvert replacement	Completion by mid 2023	Village of Rantoul can pay \$30,000
2	Village of Ludlow	Upgrades to Community Water Supply Distribution System	\$2,850,000	\$400,000	26-27	\$330,000	\$370,000	Water mains installation	Completion in 2023	Matching funds ready
2	Village of Thomasboro	Stormwater Drainage Improvements	\$450,000	\$450,000	28	\$100,000		<i>Requested details</i>	<i>Requested timeline</i>	<i>Requested status</i>
	District Two Subtotal			\$1,040,000						
3	Village of Ogden	Broadway Street Drainage	\$240,000	\$120,000	29-33	\$200,000 for Ogden drainage projects - proposed 1st priority is Northeast Drainage, 2nd priority is Rail Trail		Storm drainage improvements	Completion in 2023	Matching funds ready
3	Village of Ogden	Northeast Drainage - priority	\$250,000	\$125,000	34-35			Storm drainage improvements	Completion by mid 2023	Matching funds ready
3	Village of Ogden	Rail Trail Area Drainage - priority	\$190,000	\$95,000	36-37			Storm drainage improvements	Completion by mid 2023	Matching funds ready
3	Village of Ogden	Wastewater Treatment Plant-least priority	\$150,000	\$75,000	38-39			Plant upgrades	Completion in 2023 or 2024	Matching funds ready
3	Village of Royal	Update to Water Plant	\$950,000	\$250,000	40-41	\$200,000		Design work	Completion by 2023	Matching funds ready
3	Village of St. Joseph	Storm Sewer	\$500,000	\$250,000	42-45	\$100,000		Design work	Completion in 2023	Matching funds ready
	District Three Subtotal			\$915,000						
4	Pesotum Consolidated Drainage District	Replacement of Main Tiles	\$363,000	\$181,484	46-60	\$75,000		Replace tile	<i>Requested timeline</i>	<i>Requested status</i>
4	Village of Ivesdale	Upgrades to Community Water Supply Distribution System	\$1,100,000	\$250,000	61-62	\$175,000		Design work	Completion by mid 2023	Matching funds ready
4	Village of Pesotum	(Revised) Storm Sewer Drainage	\$224,000	\$175,000	63-64	\$175,000		Upgrade drainage	Completion by mid 2023	Matching funds ready

Proposals for ARPA Funds for Water Projects

As of 4/19/2022

4	Village of Tolono	Construction of Wastewater Treatment Plant	\$12,550,000	<i>no specific ask</i>	65-69	\$75,000		Design work; cost is \$665,900	Completion in 2022	Temporarily already using Village funds
	District Four Subtotal			\$606,484						

ARPA Rural Water Project Assistance Request

County Board District #1

Sangamon Valley Public Water District

April 2022

Sangamon Valley
Public Water District
709 North Prairieview Road
Mahomet, Illinois 61853

Date: March 7, 2022

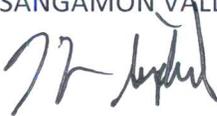
To: Darlene Kloeppe, Champaign County Executive

From: Kerry Gifford, General Manager
Sangamon Valley Public Water District

Re: Request for ARPA Funds in the amount of \$500,000.

Please see the attached following items: Engineer agreement, Engineer design cost and a Project summary of the gas leak affected area. The Water District respectfully request the use of ARPA Funds in order to advance the water main project to the shovel ready stage.

Sincerely,
SANGAMON VALLEY PUBLIC DISTRICT

A handwritten signature in black ink, appearing to read "Kerry Gifford", written over the printed name.

Kerry Gifford
General Manager

**TASK ORDER NO. 033
TO
CONTINUING PROFESSIONAL SERVICES AGREEMENT
Between Sangamon Valley Public Water District (Owner) and
Donohue & Associates, Inc. (Donohue)
Date of Original Executed Agreement: August 26, 2014
Date of this Task Order: February 25, 2022**

TASK ORDER NAME/DESCRIPTION

Northward Expansion Design Services 2022

A. TASK ORDER GOALS

The goals of this Task Order are as follows:

The Sangamon Valley Public Water District (District) desires to expand its boundaries to the north by extending water mains to nearby subdivisions that are currently served by private wells, jointly driven by interest from potential users in this area.

The northernmost portion of the present SVPWD Service Area along Illinois Route 47 ends at the Thornewood North Subdivision. SVPWD's treatment facility provides customers with softened finished water that is sourced from the Mahomet Aquifer (the primary groundwater source of drinking water supply for much of Champaign County). Residents who live outside the SVPWD Service Area, including those residents in Newcomb Township (located north of Thornewood North Subdivision), obtain drinking water from private wells. Most of those wells were drilled into a more northern portion of the Mahomet Aquifer. The rural area to the north of SVPWD's present Service Area also contains the Manlove Field natural gas storage facility, operated by Peoples Gas Light & Coke Company. The facility is an underground storage unit 4,000 feet below ground in a sandstone, saltwater-bearing formation, below the Mahomet Aquifer. Various reports indicate that in 2016, a leak occurred in a vertical pipeline that extends into the gas storage area and natural gas escaped through the leak and into the Mahomet Aquifer.

In September 2018, a group of residents affected by this event met with SVPWD officials to determine whether SVPWD could provide potable water to their residences, for domestic use only. SVPWD agreed to examine that possibility and to evaluate the actions needed and cost thereof to extend public water mains to the affected properties.

The SVPWD has requested that Donohue & Associates, Inc. perform design engineering and bidding services to design improvements that consist of the installation of a booster pump station and a water main system expansion north along Illinois Route 47 to serve prospective customers located near the gas plant, with additional loops to the east and west to serve gas-affected customers, and provide water services to new developments. The combined length of all proposed water mains is 141,300 lineal feet. Due to the nature of the existing development in this area, and to provide a high level of water quality, this main extension is planned to provide rural water service but will not be sized for any degree of fire protection.

Due to funding availability, this project will be developed into three separate phases to be bid individually as construction funding becomes available.

B. SCOPE OF SERVICES

Basic Services to be provided by ENGINEER for this Project under this Agreement are as follows:

1. Project Development and Management

- 1.1. Assign Terry Boyer, PE, as the Project Manager who will coordinate Project activities and will be the principal liaison between the OWNER and ENGINEER.
- 1.2. Prepare a Project plan that addresses the Project background and location; the Project purpose and description; OWNER and Project team member information and roles; a work outline for design services; Project schedule; Project budget by work tasks; and additional information that may be appropriate.
- 1.3. Conduct a project kick-off meeting with the OWNER's representatives to review Project goals and objectives and to review the proposed Project schedule.
- 1.4. Provide monthly progress reports to the OWNER to document services performed and schedule status. This is typically performed as part of the monthly Project invoicing routine.

2. Design Services

2.1. Process Design and Layout Phase

- 2.1.1. Review applicable available studies, reports, drawings, design summaries, and other existing facility information regarding the OWNER's existing facilities.
- 2.1.2. Prepare and submit environmental clearance letters for IHPA, IDNR and USACE.
- 2.1.3. Perform utility coordination for utilities in the proposed project area.
- 2.1.4. Perform preliminary equipment selection based on preferences of OWNER's staff and ENGINEER recommendations.
- 2.1.5. Prepare water main design calculations for expansion of the system. A WaterGEMS model for the entire proposed rural water main network will be developed.
- 2.1.6. Contract for topographic site survey services as needed to design the Project. The rural water main drawings will be developed using Champaign County GIS aerials and 2' contour lidar data in lieu of detailed survey. Detailed topographic survey will be performed at the pump station site only.
- 2.1.7. Contract as needed for geotechnical engineering services for subsurface geotechnical exploration to determine the likely subsurface foundation conditions for bore and jack locations.
- 2.1.8. Assist the District in preparation of easement plats. The easement plats will be developed for 120 easements, which covers the gas impacted customers. The Owner

will develop the legal easement documentation with the District's attorney and will be responsible for all easement negotiations.

- 2.1.9. Prepare flow sheets for the proposed improvements and conduct an internal flow sheet review meeting.
- 2.1.10. Prepare preliminary process and instrumentation diagrams (P&IDs) after the flow sheet meeting.
- 2.1.11. Develop new process motor list and other electrical loads.
- 2.1.12. Identify major utilities and their approximate locations within the Project site limits.
- 2.1.13. Utilizing available facility drawings and mapping, field visit observations, and discussions with OWNER, prepare preliminary layout drawings for Project facilities and conduct an internal preliminary layout review meeting.
- 2.1.14. Prepare a process design and layout phase submittal consisting of written descriptions of the Project indicating the proposed facilities along with the basis for selection, the final design criteria, a summary of preliminary hydraulic design calculations, a listing of any potential conflicts including environmental impacts and recommended solutions, any special construction requirements/procedures that may be known at the preliminary design stage, and the process design and layout phase drawings.
- 2.1.15. Prepare a preliminary opinion of the probable construction cost based on the preliminary layout drawings.
- 2.1.16. Perform an internal quality review of the preliminary layout drawings, project design description, and preliminary opinion of the probable construction cost.
- 2.1.17. Submit a PDF copy of the process design and layout phase submittal to the OWNER for review and comment.
- 2.1.18. Conduct a process design and layout review workshop with the OWNER's representatives to get their review comments and input on any necessary changes for the Project design. Prepare workshop notes documenting proposed changes to the process design and layout phase completion documents and incorporate comments and any necessary changes into the design.

2.2. Final Layout Phase

- 2.2.1. Complete hydraulic, structural, and other computations to define final size and location of new structures or existing structure modifications.
- 2.2.2. Develop rural water main drawings and associated details.
- 2.2.3. Develop final layout drawings, with designer notes for final layout review and approval.

- 2.2.4. Perform internal P&ID critique and final layout meetings. Revise P&IDs and final layout drawings after these meetings.
- 2.2.5. Prepare an index of proposed specifications for the final layout submittal.
- 2.2.6. Update the opinion of the probable construction cost based on the completed final layout design documents.
- 2.2.7. Submit for review and comment by the OWNER a PDF copy of the final layout drawings (half size), specifications index, the final design criteria, a summary of final hydraulic design calculations, any special construction requirements/procedures that may be known at the final layout design phase, a listing of permits required for construction approval, and the updated opinion of the probable construction cost.
- 2.2.8. Conduct a final layout review workshop with the OWNER to get the OWNER's review comments and input on any necessary changes for the Project design including design changes to reduce the construction cost. Prepare workshop notes documenting proposed changes to the final layout design completion documents and incorporate comments and any necessary changes into the design.

2.3.Final Design Construction Drawings Phase

- 2.3.1. After incorporation of the final layout workshop review comments and requested changes, prepare and distribute base sheet drawings to design disciplines in order to develop construction drawings for one bid package to be advertised for bids and to be constructed by one prime contractor.
- 2.3.2. Finalize P&ID drawings.
- 2.3.3. Prepare construction specifications utilizing the ENGINEER's master specifications.
 - 2.3.3.1. Front end bidding and contract documents will be prepared using applicable Engineers Joint Contract Documents Committee (EJCDC) documents for Division 0 and will be prepared for one bid package to be advertised for bids and to be constructed by one prime contractor.
 - 2.3.3.2. Technical specifications will be prepared using the Construction Specifications Institute (CSI) 3-part format for 50 Divisions.
- 2.3.4. Conduct an internal meeting to coordinate location and specifications of wired components.
- 2.3.5. Perform an internal designer review of the prepared final design construction drawings and specifications and then incorporate review comments.
- 2.3.6. The opinion of the probable construction cost will be updated based on the prepared final design construction drawings and specifications after designer review comments are incorporated. Also, revise the opinion of probable construction cost if necessary after the quality review comments are incorporated.

- 2.3.7. Perform an internal quality review of the final construction drawings and specifications after designer review comments are incorporated. Incorporate quality review comments.
- 2.3.8. After incorporation of quality review comments, submit a PDF copy of the final design construction drawings (half size), specifications, and updated opinion of the probable construction cost to the OWNER for review and comment.
- 2.3.9. Conduct a final construction drawings and specifications review workshop with the OWNER's representatives to get their review comments and input on any necessary changes for the Project design. Prepare workshop notes documenting proposed changes to the final construction drawings and specifications.
- 2.3.10. Prepare and assist the OWNER in submitting applications after incorporating the final design construction drawings and specifications workshop review comments into the final design documents to file for a construction permit from the Illinois Environmental Protection Agency (IEPA). Provide technical input and assist the OWNER in consultations with appropriate authorities as required to secure permits or approvals from the IEPA. The OWNER shall pay the fee cost for submitting all regulatory agency permit applications.
- 2.3.11. Incorporate review comments received from the OWNER and from the government agencies to which construction permit applications were submitted to finalize the drawings and specifications for bidding. Drawings for bidding purposes will be reproduced at half size unless electronically distributed. The final documents will be signed and sealed by a registered Professional Engineers in the State of Illinois. The drawings and specifications will be prepared for the designed improvements to be bid for up to three projects.

C. PROJECT CONDITIONS

The scope of services, timing of services, and compensation for services set forth in this Agreement are based on the following conditions:

1. Environmental investigations, including archaeological surveys; wetland delineation and mitigation design services; hazardous or contaminated area investigations and design of remediation; rare, threatened, or endangered species habitat investigations; or other sensitive area investigations are not included with this agreement.
2. Engineering services for bidding phase services, construction administration, construction observation and application engineering for the project improvements are not included and will be negotiated as an agreement amendment or separate agreement.
3. District will reimburse Consultant for any permitting fees incurred.

D. PROJECT TIMING

Donohue shall be authorized to commence the Services set forth herein upon execution of this Task Order and as per the existing Continuing Services Agreement covering this Agreement. The deliverables under this Task will be completed as follows:

Easement Development: Within 180 calendar days of receipt of a notice to proceed.

Preliminary Layout Phase: Within 210 calendar days of receipt of a notice to proceed.

Final Layout Phase: Within 240 calendar days of receipt of a notice to proceed.

Construction Documents Phase/Permit Application Submittal: Within 300 calendar days of receipt of a notice to proceed.

E. COMPENSATION

Donohue’s charges shall be in accordance with Donohue’s standard charge-out rates in effect at the time the Services are performed. Routine expenses will be billed at cost. The cost for these Basic Services for this Task Order will not exceed **\$499,530.00** without written approval from Owner.

F. APPLICABILITY TO CONTINUING SERVICE AGREEMENT

The terms and conditions included in the existing Continuing Professional Services Agreement executed between the District and Donohue on August 26, 2014 remain in force and apply to this Task Order. Included in said Agreement, under Part III on page 3 are stipulations and constraints on how often Donohue may invoice the District and when and those provisions remain in force upon this Task Order.

APPROVED FOR OWNER

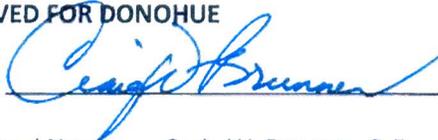
By: _____

Printed Name: Meghan Hennesy

Title: Board Chairman

Date: _____

APPROVED FOR DONOHUE

By: 

Printed Name: Craig W. Brunner, P.E.

Title: President

Date: February 25, 2022

Sangamon Valley Public Water District
Northward Expansion - Design Entire System
 Engineering Fee Estimate

Donohue & Associates, Inc.

24-Feb-22

Task	Boyer \$240	Safford \$185	Proc/Civ \$150	Proc/Mech \$150	Mech \$200	Elect. QC \$220	Electrical \$150	I&C QC \$200	I&C \$185	Str. QC \$185	Struct. \$170	Oper \$220	Total Hours	Total Labor	Travel	Printing & Shipping	Sub Consult	Sub- Total	Total Cost
FINAL DESIGN PHASE																			
Kick-off Site Visit	4			8									12	\$2,160	\$400				\$ 2,560
Geotech. Report			4								4		8	\$1,280			\$7,500		\$ 8,780
Topographic Survey and Easements			24	8									32	\$4,800			\$111,500		\$ 116,300
Hydraulic Analysis	8	180	22										210	\$38,520		\$ 6,000			\$ 44,520
Preliminary Design Memo	2			8			8		8		4	4	34	\$5,920					\$ 5,920
Process Flow Sheets and P&IDs	4		6	8				4	16			4	42	\$7,700		\$160			\$ 7,860
Process Design Workshop	4		8	8	4		8		4		4	4	44	\$7,660	\$900				\$ 8,560
Equipment Selection	2			52									54	\$8,280		\$50			\$ 8,330
Preliminary Layout preparation, including coord. meetings	12		160	12	12	4	32	4	16	8	12	8	280	\$45,800					\$ 45,800
Field verify piping locations vs. "As-Builts"	4		32	8									44	\$6,960					\$ 6,960
Review Preliminary Layout Drawings with SVPWD	8		8	8			4		4		4	4	40	\$7,220	\$600	\$220			\$ 8,040
Compile Final Layouts	4		320	12	8	8	12	4	12	4	24	12	420	\$66,400					\$ 66,400
Finalize Motor List & One Line Diagrams	4		8	8	2	4	28		12				66	\$11,060					\$ 11,060
Prepare Final Layouts Phase Cost Opinion	4		24	8	4		8		8		8	4	68	\$11,480					\$ 11,480
Review Final Layout Drawings with SVPWD	8		8	8									24	\$4,320	\$600				\$ 4,920
Prepare Final Contract Documents to 95% completion level	12		160	88	24		80	12	32		36	12	456	\$73,960					\$ 73,960
Internal QA-QC review and incorporation	12		48	12	4	8	6	6	6	4	8	8	122	\$21,510					\$ 21,510
Update Cost Opinion	8		16	8	8		8		8		4		60	\$10,480					\$ 10,480
Review 95% complete Drawings w/ SVPWD + incorp. comments	12		12	10			4		4		4	4	50	\$9,080	\$800	\$110			\$ 9,990
Provide IEPA-permit documents to SVPWD	6		8	2									16	\$2,940					\$ 2,940
IEPA permit approval of bidding documents	4		4	8			8						24	\$3,960					\$ 3,960
Public Information Meetings	40		60										100	\$18,600	\$600				\$ 19,200
																			\$ 499,530
BID PHASE																			
Issue bidding documents planholders														\$0					\$ -
Prepare for & attend Pre-Bid Conference														\$0					\$ -
Respond to bidders' questions														\$0					\$ -
Prepare & issue addenda														\$0					\$ -
Attend Bid Opening & evaluate bids														\$0					\$ -
Assemble Notice of Award & Proceed														\$0					\$ -
Print Executed Copies & Owner copy														\$0					\$ -
Letter of award recommendation														\$0					\$ -
Compile conformance project manual copies for UCSD														\$0					\$ -
Compile conformance project drawing copies for UCSD														\$0					\$ -
																			\$ -
Total	162	180	932	284	66	24	206	30	130	16	112	64	2,206	\$370,080	\$3,900	\$6,540	\$119,000		\$ 499,530



Sangamon Valley Public Water District

709 N. Prairieview Road. P.O. Box 285, Mahomet, Illinois 61853 -0285

Phone: (217) 586-2534 E-mail: kgifford@svpwd.com

Meghan Hennesy Board Chairman

Kerry Gifford General Manager

**NORTHERN EXPANSION
SANGMON VALLEY WATER
SYSTEM.**

PROJECT SUMMARY

The Sangamon Valley Public Water District northernmost portion of its present service Area along Illinois Route 47 ends at the Thornwood North Subdivision. SVPWD's treatment facility provides customers with softened finished water that is sourced from the Mahomet Aquifer (the primary groundwater source of drinking water supply for much of Champaign County). Residents who live outside the SVPWD Service Area, including those residents in Newcomb Township (located just north of Thornwood North Subdivision), obtain drinking water from private wells. Most of those wells were drilled into a more northern portion of the Mahomet Aquifer where a natural gas leak occurred.

The rural area that is north of SVPWD's Service Area contains the Manlove Field natural gas storage facility, operated by Peoples Gas Light & Coke Company. The facility is an underground storage unit that was opened in the 1960's. The Illinois State Geological Survey indicates that it is capable of storing around 150 billion cubic feet of natural gas. The storage facility is 4,000 feet below ground in a sandstone, saltwater-bearing formation, below the Mahomet Aquifer. In 2016, a leak occurred in a vertical pipeline that extends into the gas storage area and natural gas escaped through the leak and into the Mahomet Aquifer. Shortly thereafter, local residents near the leak reported observing signs of the gas, with the residents noticing cloudy or milky well water, tiny bubbles in the well water, a film left on the body after taking a shower and in some cases, flammable water.

Currently, residents in the proposed gas leak proposed expansion area are served with private wells varying in age. Over 50% of these wells are more than 20 years old and may be in need of mechanical/electrical rehabilitation and/or replacement for even older wells. The water main extension could offer reliable, potable water service to these people at fairly comparable costs for wells that are in need of rehab/replacement. **Rather than drilling a new well into a potential methane contaminated aquifer, the residents would be able to connect to the district's water main which provides safe clean drinking water.**

The Sangamon Valley Public Water District request Champaign County government provide **\$500,000** in ARPA funding to complete the water main extension design work and bring the project to the point of “shovel ready”. The total cost for the proposed project is projected to be \$10,020,000. The District is seeking a grant from the Illinois Department of Commerce & Economic Opportunity in the amount of \$3.8 million. The 3.8 million will cover the initial phase of water service to the known gas leak affected homes. The balance of 6,220,000 is to be financed through future grants. These future water main phases will be for homes with older wells and who are close to the gas contamination affected area. These areas will be addressed as state or federal grants monies become available.

Budget summary of the projected cost for the entire water main extension is listed below:

LEGAL, BOND COUNSEL, & ADMIN	\$10,000
ENGINEERING DESIGN & BIDDING	\$562,000
CONSTRUCTION ENGINEERING SERVICES	\$593,000
CONSTRUCTION CAPITAL COSTS	\$7,001,000
LAND ACQUISITION FOR BOOSTER STATION	\$80,0
00 PRIVATE WELL DISCONNECTIONS (226 USERS)	\$791,
000OTHER COSTS (EASEMENT DEVELOPMENT & PURCHASE)	\$283,
000CONSTRUCTION CONTINGENCY	\$700,
000	
TOTAL	\$10,020,000

Project Summary

Northward Expansion



Sangamon Valley Public Water District

Date: August 23, 2021
To: Sangamon Valley Public Water District Board of Directors
Kerry Gifford, General Manager, Sangamon Valley Public Water District
From: Terry Boyer, Donohue & Associates
Re: Northward Expansion Project Summary

The Sangamon Valley Public Water District seeks to expand water service to the northern parts of the new District boundaries, primarily to provide potable water to households whose private wells are contaminated with natural gas from the Peoples Gas storage reservoir.

Project Phases

Phase 1 – Install booster pump station north of Thornewood subdivision and transmission mains to the north to serve the Peoples Gas impacted homes. Cost Opinion = \$3,800,000.

Future Phase(s) – Expand service area and water services to the areas further east of Route 47 and further west of Route 47.

Schedule

Projected grant funding from State	Aug 2021
Initiate Design	Sep 2021
Environmental Clearances	Sep – Dec 2021
Easements	Sep 2021 – Jan/Feb 2022
Preliminary Design	Sep – Dec 2021
Final Design	Jan – May 2022
Permitting	Feb – May 2022
Bidding	May – Jun 2022
Construction	July 2022 – July 2023
Water Available to New Customers	July 2023

Critical Items

Easements – approximately 120 easements
Environmental Clearances – Archaeological Phase I and Phase II
WaterGems Model for entire potential system
DCEO Administration – can request up to 25% upfront to pay for soft costs
Conceptual Drawings

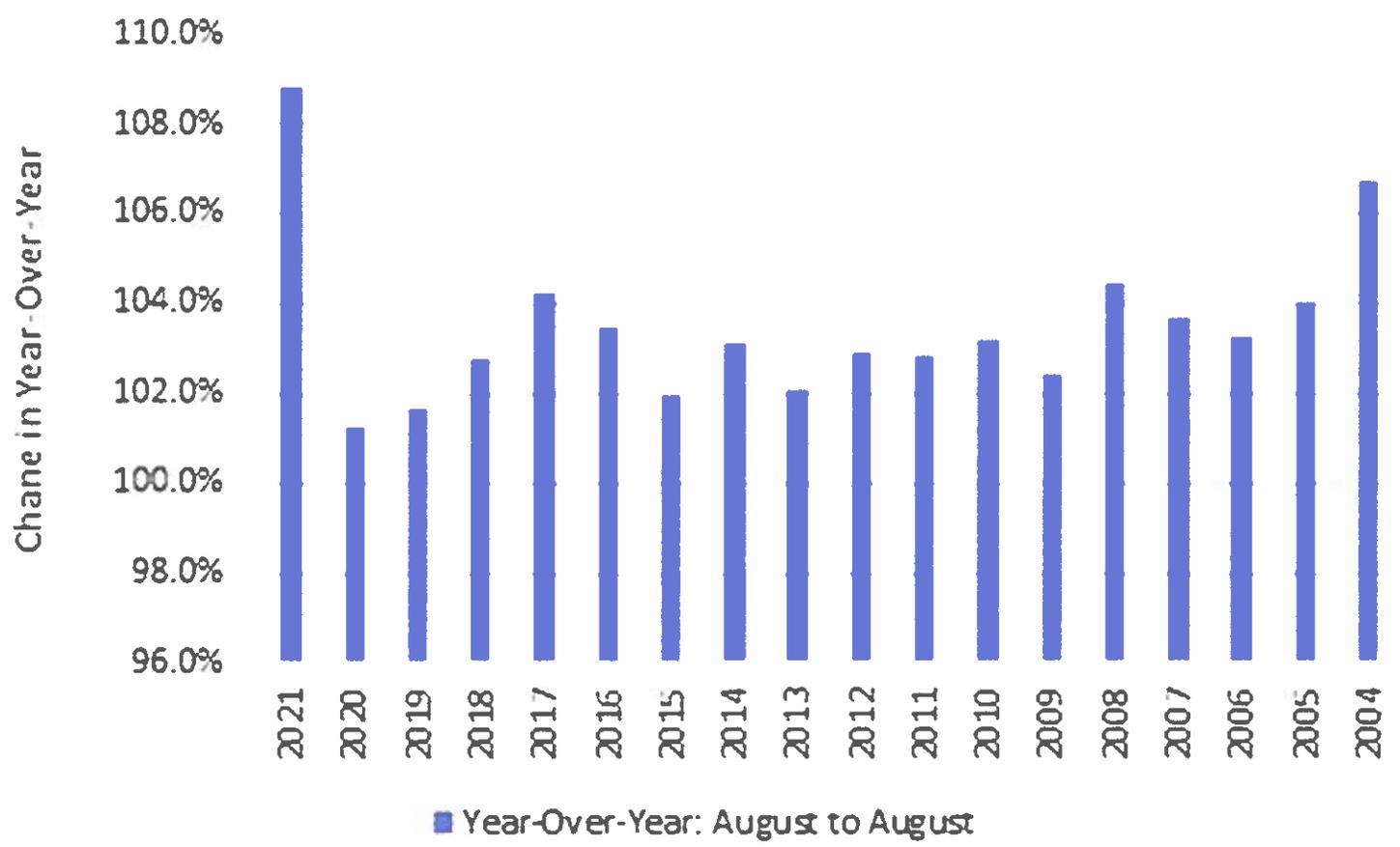
Sangamon Valley Public Water District
 Northward Expansion of Water System
 Mahomet, Illinois

PHASE 1 - BASE
OPINION OF PROBABLE PROJECT COST
 August 2021

<u>WATER MAIN OR STRUCTURE NO. AND NAME</u>	Initial Cost
Line 100: 6" water main along 350E/IL-47 from Quarry Rd to Booster Station North of 2425 N	\$126,000
Line 101: 6" water main along IL-47 from Booster Station North of 2425 N to 2500 N	\$175,000
Line 102: 6" water main along IL-47 from 2500 N to 2600 N	\$232,000
Line 103-A: 4" water main along IL-47 from 2600 N to 2700 N	\$105,000
Line 103-B: 4" water main along 350 E/Rte 47 from 2650 N to 2700 N	\$137,000
Line 104: 3" water main along 2700 N and 425 E from IL-47	\$272,000
Line 105: 3" water main along IL-47 and 2800N from 2700 N to Gas Plant	\$171,000
Line 122: 3" water main along 2650 N from 350 E/Rte 47 to 300 E	\$131,000
Line 123: 3" water main off 300 E	\$62,000
Line 130: 3" water main along 2800 N from 350 E/Rte 47 to Gas Plant	217,000
Line 131: 3" water main along 2800 N from 350 E/Rte 47 to 400 E	81,000
Item 201: Booster Pump Station, Hydropneumatic Tank & Ground Storage Tank	\$1,060,100
Total Construction Cost of all Project Cost Items = \$2,769,100	
Contingency = \$277,000	
Design Engineering = \$252,300	
Bid Assistance = \$15,000	
Construction Engineering = \$225,000	
Easements (120 easements estimated) = \$84,000	
Private Well Disconnection (46 users) = \$92,600	
Land Acquisition for Booster Station = \$80,000	
Legal Fees = \$5,000	
TOTAL PROJECT COST = \$3,800,000	



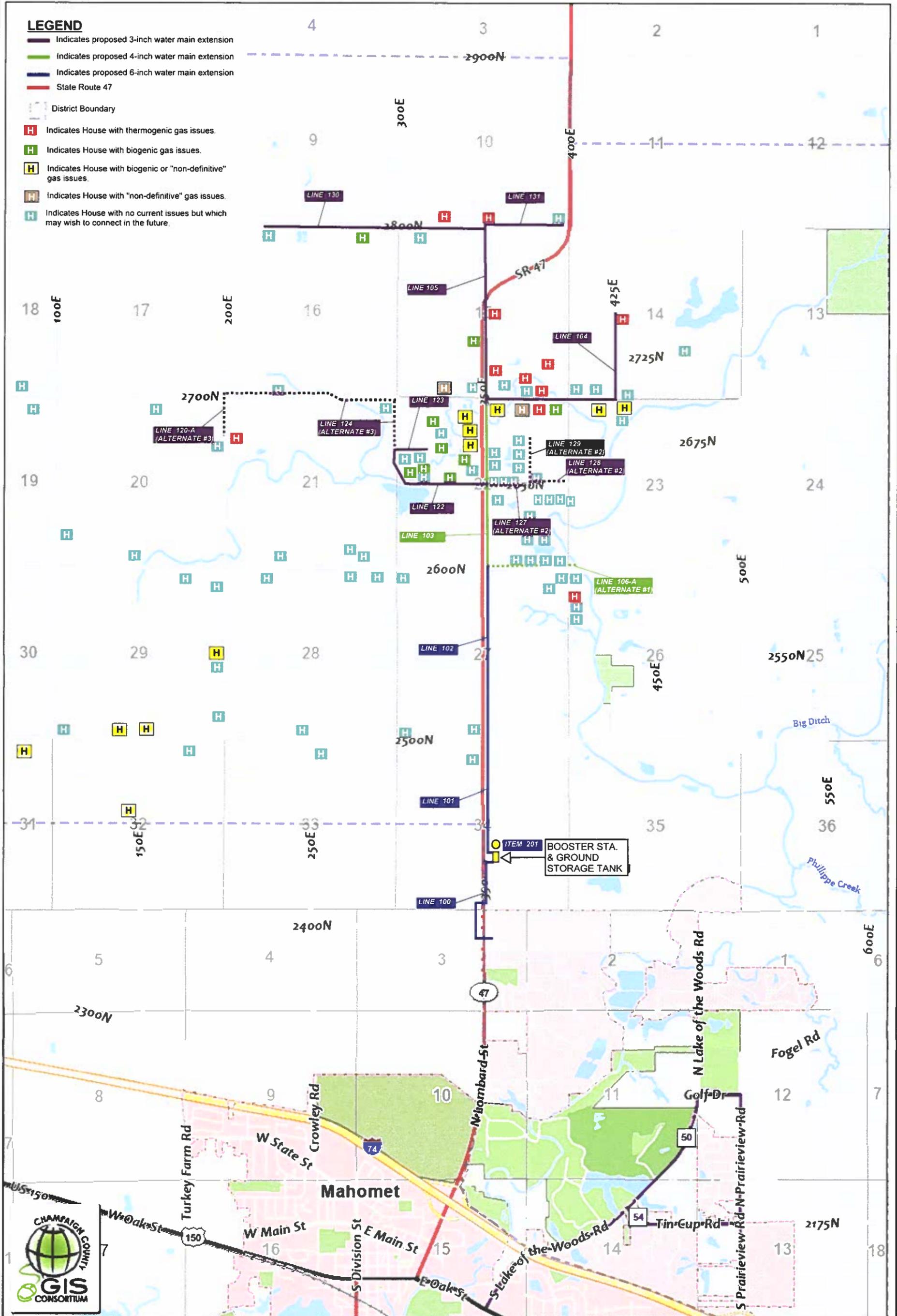
ENR Construction Cost Index – 2003 to 2021



Sangamon Valley Public Water System Northward Expansion – Phase 1 with Alternates

LEGEND

- Indicates proposed 3-inch water main extension
- Indicates proposed 4-inch water main extension
- Indicates proposed 6-inch water main extension
- State Route 47
- District Boundary
- H Indicates House with thermogenic gas issues.
- H Indicates House with biogenic gas issues.
- H Indicates House with biogenic or "non-definitive" gas issues.
- H Indicates House with "non-definitive" gas issues.
- H Indicates House with no current issues but which may wish to connect in the future.



1,700 Feet

This map application was prepared with geographic information system (GIS) data created by the Champaign County GIS Consortium (CCGIS), or other CCGIS member agency. These entities do not warrant or guarantee the accuracy or suitability of GIS data for any purpose. The GIS data within this application is intended to be used as a general index to spatial information and not intended for detailed, site-specific analysis or resolution of legal matters. Users assume all risk arising from the use or misuse of this application and information contained herein. The use of this application constitutes acknowledgement of this disclaimer.



SVPWD Northward Expansion

Design and Bidding Task Listing
August 16, 2021

ID	Task Name	Duration	Start	Finish	Predecessors	% Complete	2022												2023															
							Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1	District Boundary Revision Legislative Process	240 days	Fri 07/31/20	Thu 07/01/21		100%	[Gantt bar from July 2020 to July 2021]																											
2	Funding Availability	22 days	Tue 08/03/21	Wed 09/01/21	1	0%	[Gantt bar from Aug 2021 to Sep 2021]																											
3	Easements and Routing	88 days	Thu 08/19/21	Mon 12/20/21		0%	[Summary bar from Aug 2021 to Dec 2021]																											
4	Start Design	0 days	Wed 09/01/21	Wed 09/01/21	2	0%	[Milestone diamond at 09/01]																											
5	Determine Easement Requirements	10 days	Thu 08/19/21	Wed 09/01/21	4FF	0%	[Gantt bar from Aug 2021 to Sep 2021]																											
6	Order and obtain title reports	22 days	Thu 09/02/21	Fri 10/01/21	4	0%	[Gantt bar from Sep 2021 to Oct 2021]																											
7	Review title reports	10 days	Mon 10/04/21	Fri 10/15/21	6	0%	[Gantt bar from Oct 2021 to Oct 2021]																											
8	Utility review	45 days	Thu 09/02/21	Wed 11/03/21	4	0%	[Gantt bar from Sep 2021 to Nov 2021]																											
9	Preliminary layouts with aerial backgrounds for initial contact with property owners	24 days	Thu 09/02/21	Tue 10/05/21		0%	[Summary bar from Sep 2021 to Oct 2021]																											
10	Obtain aerials	5 days	Thu 09/02/21	Wed 09/08/21	5	0%	[Gantt bar from Sep 2021 to Sep 2021]																											
11	Obtain GIS / property lines	5 days	Thu 09/09/21	Wed 09/15/21	10	0%	[Gantt bar from Sep 2021 to Sep 2021]																											
12	Develop aerials for each property	5 days	Thu 09/16/21	Wed 09/22/21	11	0%	[Gantt bar from Sep 2021 to Sep 2021]																											
13	Drive route and review drawings / mark	2 days	Thu 09/23/21	Fri 09/24/21	12	0%	[Gantt bar from Sep 2021 to Sep 2021]																											
14	Review route adjustments	2 days	Mon 09/27/21	Tue 09/28/21	13	0%	[Gantt bar from Sep 2021 to Sep 2021]																											
15	Final aerial route drawings	5 days	Wed 09/29/21	Tue 10/05/21	14	0%	[Gantt bar from Sep 2021 to Oct 2021]																											
16	Discussion with property owners for concept agreement on routing and easement	10 days	Wed 10/06/21	Tue 10/19/21	15	0%	[Gantt bar from Oct 2021 to Oct 2021]																											
17	Topographic Survey - Drone Survey	22 days	Thu 09/02/21	Fri 10/01/21	4	0%	[Gantt bar from Sep 2021 to Oct 2021]																											
18	Prepare final easement plats	22 days	Wed 10/20/21	Thu 11/18/21	16,17	0%	[Gantt bar from Oct 2021 to Nov 2021]																											
19	Prepare easement agreements from plats (attorney)	22 days	Wed 10/20/21	Thu 11/18/21	18FF	0%	[Gantt bar from Oct 2021 to Nov 2021]																											
20	Easement agreements signed by owners	22 days	Fri 11/19/21	Mon 12/20/21	19	0%	[Gantt bar from Nov 2021 to Dec 2021]																											
21	Environmental Clearances	253 days	Mon 03/01/21	Wed 02/16/22		0%	[Summary bar from Mar 2021 to Feb 2022]																											
22	IHPA archeological review - Phase I	50 days	Thu 09/02/21	Wed 11/10/21		0%	[Summary bar from Sep 2021 to Nov 2021]																											
23	Prepare request for quote and drawing	7 days	Thu 09/02/21	Fri 09/10/21	4	0%	[Gantt bar from Sep 2021 to Sep 2021]																											
24	Submit request for quote to U of I	0 days	Fri 09/10/21	Fri 09/10/21	23	0%	[Milestone diamond at 09/10]																											
25	Quote from U of I	5 days	Mon 09/13/21	Fri 09/17/21	24	0%	[Gantt bar from Sep 2021 to Sep 2021]																											
26	Quote to District for Approval	0 days	Fri 09/17/21	Fri 09/17/21	25	0%	[Milestone diamond at 09/17]																											

Project: SVPWD Northward Expansion
Date: Mon 08/16/21

Task		Project Summary	Inactive Milestone		Manual Summary Rollup		Deadline	
Split		External Tasks	Inactive Summary		Manual Summary		Progress	
Milestone		External Milestone	Manual Task		Start-only		Manual Progress	
Summary		Inactive Task	Duration-only		Finish-only			

ARPA Rural Water Project Assistance Request

County Board District #2 **Penfield**

April 2022

Project Summary: The Village of Penfield has a 12,000 gallon hydropneumatic tank that serves to maintain pressure in the Village's water distribution system. The tank is original to the water treatment plant and was constructed in 1965. The Village hired a contractor to clean and inspect the interior of the tank in 2019. The tank was found to be in poor condition and should be replaced. The Village wishes to obtain ARPA funding for the replacement of the hydropneumatic tank.

Project Timeline

Design & Permitting: April 2022

Bidding: July 2022

Construction: August 2022

Substantial Completion: February 2023

ARPA Funds:

The Village is requesting \$70,000 from County ARPA funds.

Total Funding:

ARPA Funding: \$70,000

Village Funding: \$35,000

Impact/ Importance

The Village of Penfield is a community of 130 people in northeast Champaign County. It does not have a water tower and instead relies on a hydropneumatic tank to maintain proper pressure in the water distribution system. The hydropneumatic tank is original to the water treatment plant which was constructed in 1965. The water treatment plant filters and pumps were upgraded in 2012. The hydropneumatic tank has outlived its useful lifespan and needs to be replaced. If the tank were to fail, the Village's water distribution system would lose pressure and the community would be placed on a boil order.

ARPA Rural Water Project Assistance Request

County Board District #2
Triple Fork Drainage District

April 2022

Triple Fork Drainage District – Request for ARPA Funds

We have received only one bid so far it is \$60,000 to remove the culvert East of the road and \$60,000 to remove the part West of the road leaving the part under the road to serve as a bridge.

John Cooper from the County Engineer's office was at the site and states that a bridge may or may not be warranted in an email I received from him and we need to have a consultant determine that. He estimates a bridge would cost \$300K-\$500K.

Attached are photos I took showing our problem when we have several inches of rain.



This is Corky's Auto center on Rt. 45 in the background is the entrance to Fountain Valley trailer park, at times the water is in the building a foot or more deep when the culvert has some debris in it and we have a lot of rain.



This is the West end of the culvert during a normal rain.



This is the same culvert taken the same day as the first photo of Corky's Auto. I have seen the water higher than this then the water will flow beside the culvert all the way to the other end of the culvert 700 feet away and the flooding at Corky's and Fountain Valley is very bad.

ARPA Rural Water Project Assistance Request

County Board District #2 **Village of Ludlow**

April 2022

Project summary - The Village of Ludlow (Village), Illinois, completed planning documents for financing improvements to its community water supply. The planning for the project split recommended improvements into several phases. Phase 1 included replacement of the equipment at the water treatment plant, replacement of all 6-inch water distribution mains, and replacement of approximately half of the 4-inch water distribution mains. Phase 2 included work to the water tower, refurbishment of the wells, a new building and instrumentation and control at the water treatment plant, replaced the generator and replaced the remaining 4-inch water distribution mains.

Phase 1 was designed in 2019 and bid at the end of 2020. The Phase 1 low bidder's bid was significantly below the budget for Phase 1. The Village with USDA's concurrence has decided to spend the remaining Phase 1 budget replacing a majority of the 4-inch water distribution mains originally included in Phase 2. The installation of the 4-inch water mains originally included in Phase 2 that will now be designed in 2021 and built in 2022.

Project timeline from the feasibility study -

Complete Design and Submit Plans/Specs to IEPA for Permitting	May 13, 2021
IEPA Permit Review and Approval	June 29, 2021
Advertise for Bids	July 1, 2021
Issue Notice of Intent to Award	July 26, 2021
Issue Notice of Award	September 6, 2021
Issue Notice to Proceed	September 15, 2021
Substantially Completion	November 30, 2022
Final Completion	May 15, 2023

ARPA Funds - The preliminary cost for the project is \$2,850,000. USDA also has the potential for grant funds for \$1,910,000. That would leave \$550,000 to come out of Village funds. The Village would like to ask for \$400,000 from the Champaign County ARPA funds.

Total Funding

Village funds – \$550,000
Potential USDA grant funds - \$1,910,000
ARPA funds – \$400,000

Impact/importance of project needing completed - The water treatment plant and distribution system have both outlived their useful lifespans. Failure of any equipment would affect effluent water quality and may even halt the production of water. The recent water main breaks could be a precursor for breakdowns in the future that could result in mandated boil orders. Therefore, it is necessary for the Village to complete this project to maintain system integrity and meet public health and safety needs.

Well #3 serves as the primary well, with Well#1 as back up. However, due to its age and lesser capacity, Well#1 cannot be able to keep up with the water demand if the pumping system of Well#3 fails. In order to ensure compliance with the Illinois Environmental Protection Agency standards, it is necessary to refurbish or replace the aging components in a timely manner. The aging infrastructure has resulted in the Village's water supply being evaluated as under noncompliance advisory. If improvements are not made, then the IEPA may issue a formal violation notice.

Ludlow's median household income is \$49,643, the funds are needed to help offset the cost for the residents.

ARPA Rural Water Project Assistance Request

County Board District #2
Village of Thomasboro
(Information Requested)

April 2022

ARPA Rural Water Project Assistance Request

County Board District #3
Village of Ogden

April 2022

Village of Ogden

Champaign County • Ogden, Illinois 61859 • Ph. 217-582-2520

March 29, 2022

Champaign County Environmental Land Use Committee
C/O Ms. Darlene Kloeppe
Champaign County Executive
1776 East Washington Street
Urbana, Illinois 61802-4581

RE: ARPA FUND REQUEST
VILLAGE OF OGDEN, ILLINOIS

Ladies and Gentlemen:

The Village of Ogden requests that the Champaign County Environmental and Land Use Committee consider distribution of a portion of the ARPA funds received by Champaign County to the Village of Ogden. As a small community, Ogden faces challenges in funding large infrastructure projects. The ability of Ogden to collect sales tax revenues is limited, resulting in the primary sources of funds being real estate taxes, user fees, and IDOT MFT funds. This leaves stormwater drainage facilities as the element of infrastructure that must rely most heavily upon general corporate monies as the primary source of funding.

Ogden undertook a Comprehensive Drainage Study in 2015 and identified a backlog of needed drainage facility improvements. Ogden has spent more than \$400,000 over the past 6 years fixing drainage facilities, but still has a backlog of over \$2,000,000 more for uncompleted projects. Outside sources of funding are needed if these critical improvements are to be completed on a timely basis.

In 1984 Ogden constructed a community-wide sanitary sewer collection system and a municipal wastewater treatment facility. For the next 25 years our community was focused upon paying the millions of dollars of debt incurred for that massive project. Ongoing improvements to other existing infrastructure had to be deferred. Only during the past decade has the Village been able to begin addressing the backlog of deferred maintenance and repair of other infrastructure, particularly drainage facilities.

**Ms. Darlene Kloeppel, Champaign County Executive
Champaign County Environmental Land Use Committee**

March 29, 2022

Page 2 of 2

Ogden forwards three (3) drainage projects for your consideration. Each has unique circumstances that merit funding consideration. Without ARPA funds Ogden will likely be able to undertake only one of these projects. Undertaking a second project may be possible, dependent upon the level of ARPA funds provided. Ogden has suggested a 50% funding match with local funds, but could achieve more progress if the Village match were reduced.

Ogden also submits a Wastewater Treatment Facility Project for your consideration. As previously stated, the Village Wastewater Treatment Facility was constructed in 1984. Over the past few years, some of the treatment systems have reached their functional limit and are no longer performing at acceptable levels. The Illinois EPA recently issued a Notice of Non-Compliance to Ogden, and the Village is in the process of designing the necessary repairs / refurbishment / remodeling. Use of ARPA funds to pay for a portion of the project costs would reduce the rate increase anticipated to provide funds for those improvements.

Finally, I thank you for this opportunity to submit this request to you and to Champaign County. It is unexpected and most generous for Champaign County to offer funding of this type to the smaller communities of Champaign County.

Sincerely,

Village of Ogden

/S/ Gabe Clements

President of the Board of Trustees

Village of Ogden

Champaign County • Ogden, Illinois 61859 • Ph. 217-582-2520

BROADWAY STREET DRAINAGE PROJECT

VILLAGE OF OGDEN, CHAMPAIGN COUNTY, ILLINOIS

March 30, 2022

Project Description: This project involves improvements to the drainage system that serves as the primary outlet for the “downtown” portion of Ogden. An existing 18-inch diameter pipe constructed with open joints begins along Broadway Street and extends generally southeasterly. This pipe is in poor physical condition and must be routed annually to remove blockages caused by tree roots. In addition, a commercial building was constructed directly over the top of the drain line. Approximately 600 lineal feet of the existing line needs to be replaced. A 400-foot-long portion of Broadway Street currently floods after any significant storm event. Water depth exceeds 3 feet over the street pavement at its worst, and results in flooding of adjacent commercial buildings.

The existing 18-inch diameter storm drain connects to and outlets into an 18-inch diameter farm drainage tile that flows away from the Village, extending for more than one (1) mile before discharging into Camp Creek ditch. Because of the very limited capacity of the existing system this project also involves installation of a secondary overflow pumped drainage system. If the capacity of the 18-inch diameter drain line is exceeded, the drainage pumps will start and pump water to a new drainage system being installed by the Illinois Department of Transportation (IDOT) at the US Route 150 / IL Route 49 intersection

Why Funding Matters: While this project is not the highest priority drainage project for Ogden, it ranks closely behind others. The proposed construction of the Kickapoo Rail Trail in 2022 presents a funding dilemma for the Village. This project will cross the proposed trail improvements. Funding these improvements in 2022 would prevent funding of other more urgent drainage projects due to the limited funds available to the Village. This project provides a dramatically improved drainage outlet for the Village’s primary business district. This project is a part of a more than \$2 million backlog of drainage facility improvements needed within the Village.

Estimated Project Construction Cost: \$210,000

Estimated Total Project Cost: \$240,000

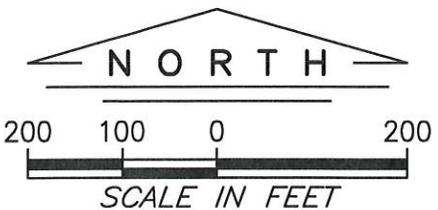
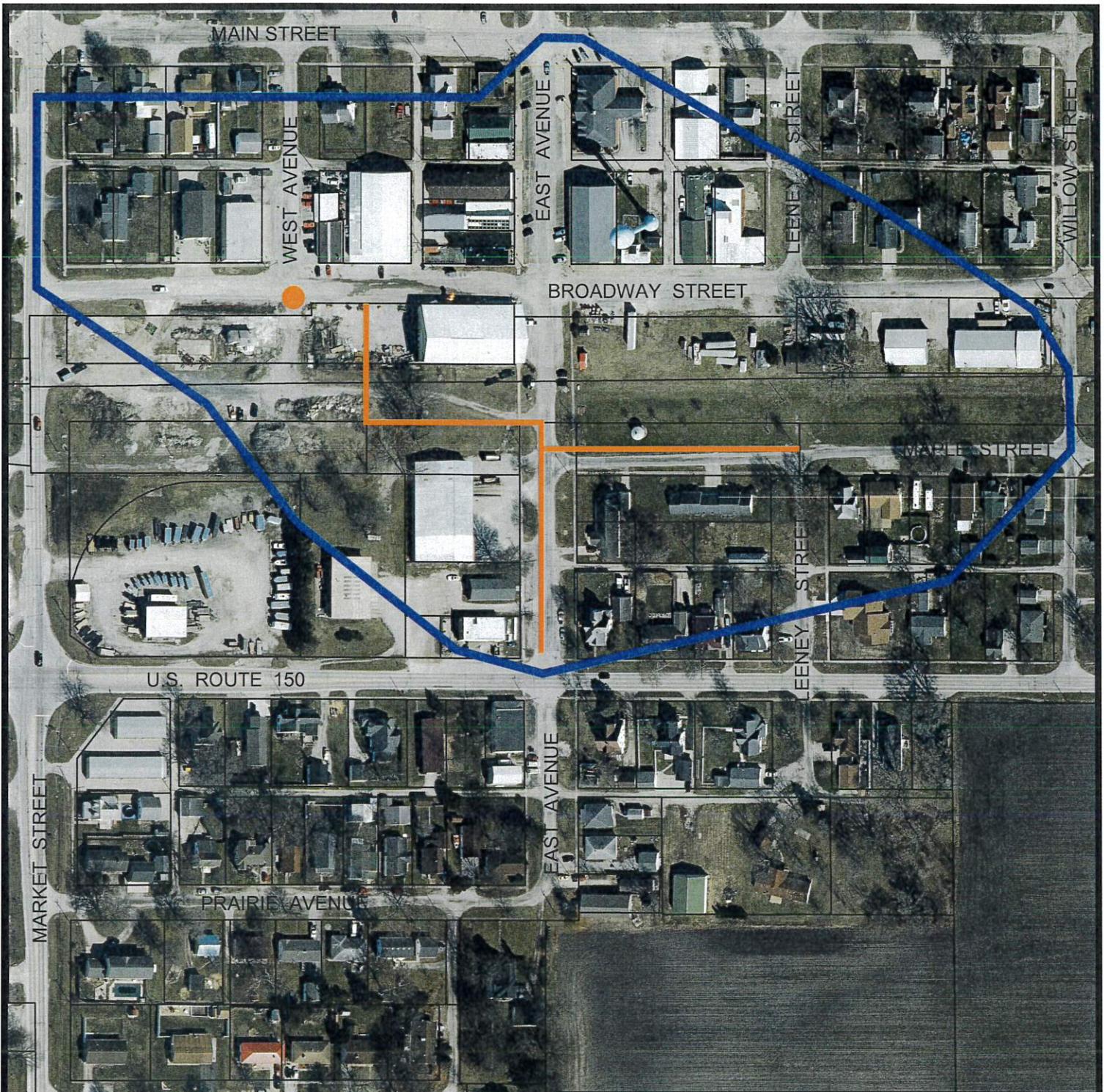
Proposed Village Cost Share: 50%

Project Timetable: Project under construction within 150 days ±

Design: 60 days ±

Permits: 45 days ±

Bidding / Award: 45 days ±



- PROJECT AREA
- PROJECT IMPROVEMENTS

BROADWAY STREET
DRAINAGE PROJECT
VILLAGE OF OGDEN
CHAMPAIGN COUNTY, ILL.



BERNS, CLANCY AND ASSOCIATES
ENGINEERS • SURVEYORS • PLANNERS
405 EAST MAIN STREET - POST OFFICE BOX 755
URBANA, ILLINOIS 61803-0755
PHONE: (217) 384-1144 - FAX: (217) 384-3355

AERIAL PHOTOGRAPHY FROM CHAMPAIGN COUNTY GIS CONSORTIUM. DATED OCTOBER 5, 2020.

SHEET 1 OF 1

DATE: 032822

JOB: 1770-43

Village of Ogden

Champaign County • Ogden, Illinois 61859 • Ph. 217-582-2520

NORTHEAST OGDEN DRAINAGE PROJECT - PHASE 2

VILLAGE OF OGDEN, CHAMPAIGN COUNTY, ILLINOIS

March 30, 2022

Project Description: This project is intended to provide drainage improvements to the northeastern portion of the Village. The project encompasses 6 full blocks with North Street on the North, West Avenue on the west, Main Street on the south, and Willow Street on the east. 100+ year old, small diameter drain tile lines currently provide the only drainage outlets for this area. The project is intended to replace these drain tile lines with modern storm sewers. The project provides drainage not only within the immediate work area, but also provides improved drainage outlets for the existing drains within an additional 3 blocks of the Village.

This project was identified in the Village 2015 Comprehensive Drainage Study as a high priority project. This project is actually Phase 2 of the improvements. In 2020 Ogden spent over \$250,000 to construct a new large diameter storm sewer line extending from North Street, northerly approximately one (1) mile to outlet into the Union Drainage District #1 Main Channel. Areas of North Street, Kyle Street, Main Street, East Avenue, and West Avenue all experience chronic annual flooding. This project will reduce or eliminate those drainage problems. The project involves the installation of approximately 1,000 lineal feet of storm sewer piping, 9 manholes, street repairs, and other associated improvements.

Why Funding Matters: This project is considered to be the most urgent Village drainage project. Over the past 6 years, Ogden has spent over \$400,000 for drainage system improvements. The 2015 Village Comprehensive Drainage Study identified over \$2.0 million in additional drainage facility project needs. The Village faces a 20-year backlog of needed drainage improvements. An outside source of funding for drainage improvements is urgently needed.

Estimated Project Construction Cost: \$220,000

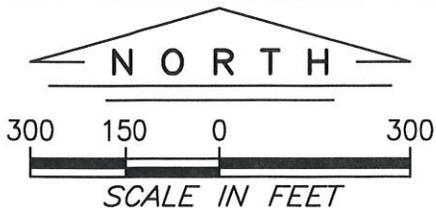
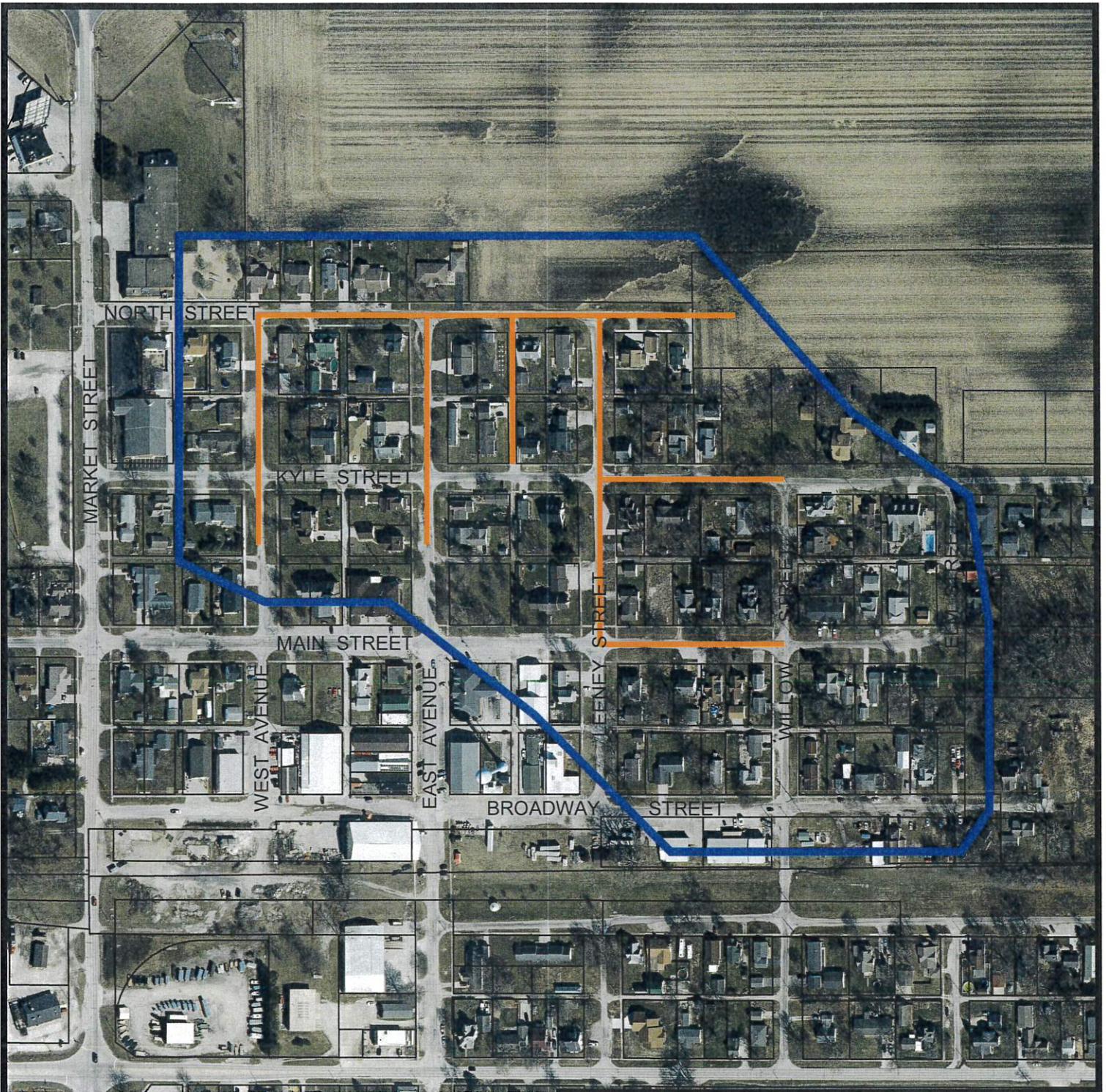
Estimated Total Project Cost: \$250,000

Proposed Village Cost Share: 50%

Project Timetable: Project under construction within 45 days ±

Design: Completed

Permits: Completed **Bidding / Award:** 45 days ±



- PROJECT AREA
- PROJECT IMPROVEMENTS

AERIAL PHOTOGRAPHY FROM CHAMPAIGN COUNTY GIS CONSORTIUM. DATED OCTOBER 5, 2020.

NORTHEAST DRAINAGE
PROJECT - PHASE 2
VILLAGE OF OGDEN
CHAMPAIGN COUNTY, ILL.



BERNS, CLANCY AND ASSOCIATES
ENGINEERS • SURVEYORS • PLANNERS
405 EAST MAIN STREET - POST OFFICE BOX 755
URBANA, ILLINOIS 61803-0755
PHONE: (217) 384-1144 - FAX: (217) 384-3355

SHEET 1 OF 1

DATE: 032822

JOB: 1770-43

35

Village of Ogden

Champaign County • Ogden, Illinois 61859 • Ph. 217-582-2520

RAIL TRAIL AREA DRAINAGE PROJECT

VILLAGE OF OGDEN, CHAMPAIGN COUNTY, ILLINOIS

March 30, 2022

Project Description: This project involves the construction of approximately 3,800 lineal feet of stormwater drainage facility improvements, including 1,400 lineal feet of new storm sewer piping. The project is located along the western portion of the Kickapoo Rails-to-Trails project within the Village of Ogden. This project was identified in the 2015 Village Stormwater Drainage Study as a high priority project. It is intended to solve chronic flooding along Broadway Street west of Market Street as well as chronic flooding adjacent to the prior railroad right-of-way. Providing relief to approximately 40 parcels.

This project parallels the corridor of the Kickapoo Rail-to-Trail project being constructed during the Summer of 2022 by the Champaign County Forest Preserve District (CCFPD). The project is coordinated with and compliments the Rail-to-Trail project. The project involves the installation of small diameter storm sewer lines to replace 100 ± year old field tile piping that is no longer serviceable. It also restores the surface waterway that existed during long ago railroad operations.

Why Funding Matters: Ogden faces a backlog of over \$2 million in drainage facility improvements. The Village has spent more than \$400,000 over the past 6 years building drainage facilities. However, outside funding sources are needed if the Village is to significantly reduce the backlog of work. Although this is not the highest priority project for the Village, the construction of the Kickapoo Rail-to-Trail project in 2022 by the CCFPD allows Ogden to piggy-back this project with that work.

Estimated Project Construction Cost: \$160,000

Estimated Total Project Cost: \$190,000

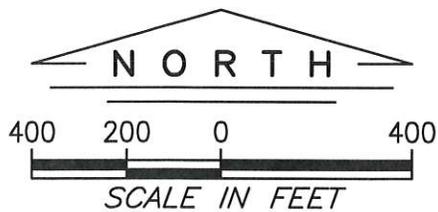
Proposed Village Cost Share: 50%

Project Timetable: Project under construction within 100 days ±

Design: 30 days ±

Permits: 30 days ±

Bidding / Award: 45 days ±



- PROJECT AREA
- PROJECT IMPROVEMENTS

AERIAL PHOTOGRAPHY FROM CHAMPAIGN COUNTY GIS CONSORTIUM. DATED OCTOBER 5, 2020.

RAIL TRAIL
DRAINAGE PROJECT
VILLAGE OF OGDEN
CHAMPAIGN COUNTY, ILL.



BERNS, CLANCY AND ASSOCIATES
ENGINEERS • SURVEYORS • PLANNERS
405 EAST MAIN STREET - POST OFFICE BOX 755
URBANA, ILLINOIS 61803-0755
PHONE: (217) 384-1144 - FAX: (217) 384-3355

SHEET 1 OF 1

DATE: 032822

JOB: 1770-43

37

Village of Ogden

Champaign County • Ogden, Illinois 61859 • Ph. 217-582-2520

WASTEWATER TREATMENT PLANT REMODELING

VILLAGE OF OGDEN, CHAMPAIGN COUNTY, ILLINOIS

March 30, 2022

Project Description: The Ogden Wastewater Treatment Plant Facility was originally constructed in 1984 and has provided admirable service since its construction. However, as with any constructed facility, it is reaching the end of its service life. It is time for the current treatment facility to be remodeled, refreshed, and improved to meet modern treatment standards. Over the past couple of years, the Treatment Facility has not always been able to meet the minimum treatment standards established by the Illinois Environmental Protection Agency (EPA). In December of 2020 the Illinois EPA issued a Notice of Non-Compliance to Ogden, requesting that the Village establish a timeline for completing improvements to the existing Wastewater Treatment Facility. The design of those improvements was authorized in February of 2020 and is now underway. Ogden assured Illinois EPA that the necessary improvements would be fully operational by the Summer of 2023.

This project primarily consists of remodeling, repairs, and maintenance to the existing wastewater treatment facilities. The entire electrical control system needs replacement with modern components. The entire filtering system needs to be removed and replaced with a more modern and more effective design. Aeration needs to be added to the treatment process. At various locations some of the piping is nearly worn out and needs replacement. Sludge has collected in the primary treatment lagoon and needs to be removed.

Why Funding Matters: The Village is obligated to undertake these improvements within the next 18 months. Village residents are facing significant rate increases for wastewater services to pay for this improvement. Outside funding can reduce the extent of those rate increases.

Estimated Project Construction Cost: \$120,000

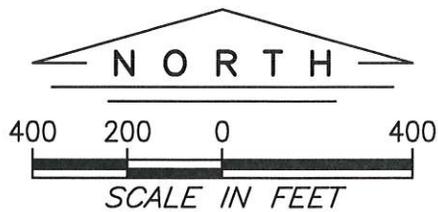
Estimated Total Project Cost: \$150,000

Proposed Village Cost Share: 50%

Project Timetable: Project under construction within 135 days ±

Design: Underway – completed in 30 days ±

Permits: 60 days ± **Bidding / Award:** 45 days ±



 PROJECT AREA

WASTEWATER TREATMENT
FACILITY REMODELING PROJECT
VILLAGE OF OGDEN
CHAMPAIGN COUNTY, ILL.



BERNS, CLANCY AND ASSOCIATES
ENGINEERS • SURVEYORS • PLANNERS
405 EAST MAIN STREET - POST OFFICE BOX 755
URBANA, ILLINOIS 61803-0755
PHONE: (217) 384-1144 - FAX: (217) 384-3355

AERIAL PHOTOGRAPHY FROM GOOGLE EARTH.
DOWNLOADED MARCH 28, 2022.

SHEET 1 OF 1

DATE: 032822

JOB: 1770-43

ARPA Rural Water Project Assistance Request

County Board District #3 **Village of Royal**

April 2022

Project summary - The Village of Royal (Village), Illinois owns and operates an Illinois Environmental Protection Agency (IEPA)-permitted public water supply system that serves the customers within the Village corporate limits. The Village's water treatment plant was originally constructed in 1960's and for the most part, portions of those facilities have been updated, replaced and well-maintained over the years. However, the treatment plant pressure filter is in poor condition. The treatment plant only has one filter, and the failure of this filter will cause a decrease in water quality. The Village is in the process of planning the replacement of the filter with two new filters to provide backup to ensure the water quality. In order to install the two filters, the existing building will need a small addition. As part of the project the Village will also upgrade the plant control system. The Village is currently evaluating applying for an IEPA loan or a loan from the United States Department of Agriculture.

Project timeline from the feasibility study -

Facilities Planning Study/Report Phase	May 2022 – July 2022
Design Phase (including Permit applications)	September 2022 – November 2022
Pass Rate Ordinance	November 2022 – March 2023
Pass Debt Ordinance	November 2022 – March 2023
Bidding/Negotiation	July 2023 – August 2023
Loan Application	September 2022 – April 2023
Construction	September 2023 – February 2024
Start-Up & Commissioning	February 2024

ARPA Funds - The preliminary cost for the project is \$950,000. The Village would like to ask for \$250,000 from the Champaign County ARPA funds.

Total Funding

Village funds – \$700,000
 ARPA funds – \$250,000

Impact/importance of project needing completed - The Village currently relies solely on one filter at the water treatment plant. The filter has out lasted its useful life and is poor condition. The filter is the only treatment the water receives besides chemical addition. The filter removes iron, arsenic, and manganese. This failure of the filter will have negative impacts on the water quality and the quality of life for the residents of the Village.

ARPA Rural Water Project Assistance Request

County Board District #3
Village of St. Joseph

April 2022

April 6th, 2022

Ms. Darlene Kloeppe
Office of the County Executive
1776 East Washington Street
Urbana, Illinois 61802-4581

Ms. Kloeppe:

As requested by your office, please see the attached request for a share of County ARPA funding. The Village has no shortage of need for project funding, so the allocation of ARPA funding is greatly appreciated. The following is our proposal:

Project Summary:

- Design of Douglas Street Storm Sewer Reconstruction

The project involves engineering for the construction of approximately 4,290 ft of 48" and 54" diameter storm sewer along Douglas St (from the intersection of Harlen Wise Dr and Douglas) to the intersection of South Elm St and Douglas St and along South Elm St (between north of Douglas St and Monroe St). The pipe would be 48-inch between Harlen Wise Dr and South Third St and 54-inch for remaining segment as shown in the layout Map. All work will be performed in previously disturbed area. Surface restoration will be included to match the existing surface conditions. The discharge point of the trunk sewer will be located north of Elm St where the Oxbow channel heads west to the Salt Fork River, and therefore the work will not affect the floodplain. Fill material will not be discharged.

Project Timeline:

Engineering (design) will last approximately 11 months. Design work can begin in July 2022 and completed in May 2023.

How much ARPA funding is requested for the project:

- The Village requests \$250,000.

The total cost of design work will be approximately \$500,000. While the Village would appreciate the full amount, a contribution of \$250,000 would be very beneficial to the overall effort. The Village is willing to commit local funds to the remainder of various infrastructure projects.

Impact/Importance of the project needing completed:

The storm sewer is being designed to collect stormwater runoff from the future development east of Harlen Wise and stormwater flow from the existing South Basin collection system, north of Ethel St; and to convey stormwater runoff from wet weather events to the oxbow channel.

This project will address Douglas Street Storm Sewer along with other various infrastructure needs. This has the potential to address historic drainage issues, as well as set the stage for further residential growth in the community.

If you have any questions or require further clarification on any of the information provided, please let me know.

Thank you for your consideration,

Joseph Hackney
Village Administrator
Village of St. Joseph, Illinois

CC:

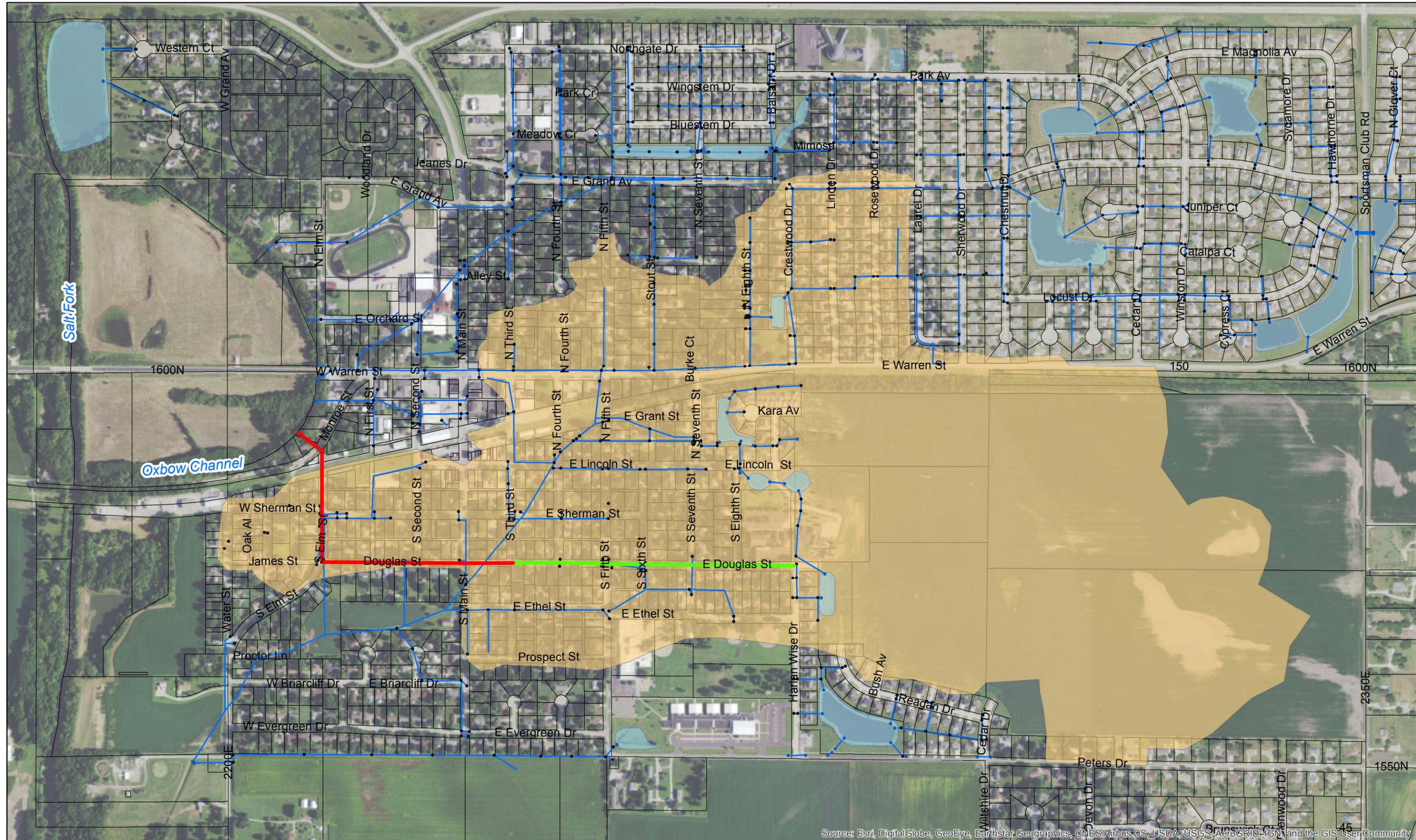
Tami Fruhling-Voges
Mayor

Sean Weidner
Clarke Dietz, Inc.

Village of St Joseph Douglas Street Trunk Sewer Project Area Map



48-inch Diameter Storm Sewer
54-inch Diameter Storm Sewer
Drainage Area



ARPA Rural Water Project Assistance Request

County Board District #4

Pesotum Consolidated Drainage District

April 2022



Pesotum Consolidated Drainage District

9-9-21



Overview

Pesotum Drainage district is made up of approx. 4,000 acres in Pesotum Township

Our main tiles provide drainage to the west side of the village of Pesotum

Most of the drainage system dates back to the early 1900's and is undersized and failing at alarming rate.

Requesting cost sharing funding to replace 8,185 feet of tile.



Project impact

Locally:

- Ensure that the approximately 300 Plus residents on the west side of down do not have flooding issues

- Help prevent Pesotum from having issues like we recently saw in Gibson City

- Improve Road stability and and culverts from being over run and failing

Improve safety for our community and those driving on our roads



GIBSON CITY: 8/12/21



When surface water is not controlled







Project Impact

Globally

- Help protect the health and safety of ground water
- Help reduce amount of nitrates getting into the water stream and making it down to the Gulf
- Reduce sediments in water - this will help reduce ditches filling up between our drainage district all the way to the Gulf of Mexico.





Pesotum Drainage District

- Help Protect the \$120,000 investment we made in drainage and tile work that Drains the west side of Pesotum
- Reduce the financial drain on our resources we see by repairing these tiles.
- Up-date our main tiles to the correct size and functionality needed for today's demands
- Demands are changing with 1 in 500 year events become more like 1 in 25 year events



Drainage is a Utility

We believe that drainage in Southern Champaign county should be looked at no differently than having utilities available to landowners and residents of the village of pesotum.



Request

We would like to request cost share funding for the 8,185 feet of tile that need replaced.

Over all cost is \$362,967.61

Would like to receive a minimum of \$181,483.80 - This would fund half of the project

We are prepared to work with the courts to levy funding for the other half of the project if you choose to help fund this project



Thank you for your time and consideration of this project to help us improve the infrastructure of the drainage in southern Champaign county.

ARPA Rural Water Project Assistance Request

County Board District #4
Village of Ivesdale

April 2022

Project summary -The Village of Ivesdale’s (Village) entire distribution system consists of approximately 2.5 miles of water mains that were mostly constructed in 1966 while the plant was constructed. Nearly all the mains within the system are 4-inch cement asbestos pipe and all fire hydrants are the two-hose connection type, with no steamer nozzle. In recent years, the Village has seen an increased number of water main breaks, leaks, and other effects of long-term deterioration of these 54-year-old mains.

Project timeline from the feasibility study -

Facilities Planning Study/Report Phase	December 1, 2021
Design Phase (including Permit applications)	February 21, 2022
Bidding/Negotiation Phase 1	May 4, 2022
Construction Phase 1	July 1, 2022
Start-Up & Commissioning Phase 1	December 1, 2022

ARPA Funds - The preliminary cost for Phase 1 is \$1,100,000. The Village anticipates receiving IEPA principal forgiveness of \$400,000 The Village would like to ask for \$250,000 from the Champaign County ARPA funds. Phase 2 and Phase 3 will be in consecutive years after Phase 1. Each phase is anticipated to cost the same amount unless prices continue to increase.

Total Funding

Village funds – \$450,000
Potential IEPA Principal Forgiveness - \$400,000
ARPA funds – \$250,000

Impact/importance of project needing completed – The Illinois Environmental Protection Agency’s (IEPA) Engineering Evaluations note that the "Unaccounted For" water percentage has risen to just under 15%, which is at the threshold of excessive losses. The number of main breaks and quality of these old "cement asbestos" mains had made the Village initiate a program of three phases of watermain replacement. Any water main replacement program should bring the sizes of the mains up to modern standards with new replacement mains to be sized at not less than 6-inch diameter. These projects will reduce the unaccounted-for water, thus relieving stress on the existing plant and well system. The new mains will also provide improved fire protection and life safety.

ARPA Rural Water Project Assistance Request

County Board District #4
Village of Pesotum

April 2022

April 18, 2022

**WEST PESOTUM DRAINAGE PROJECT
PHASE ONE
VILLAGE OF PESOTUM, CHAMPAIGN COUNTY, ILLINOIS**

Project Description:

This project involves the construction of approximately 1,600 lineal feet of storm sewer lines in the southwest portion of the Village. This area of Pesotum was constructed without subsurface drain tile lines. Sump pump and on-site wastewater treatment systems discharge into the roadside ditches, creating near-continual wetness and frequent ponding. Until recently the only subsurface drainage outlet was a decades-old 6-inch diameter clay farm tile line. However, Pesotum Consolidated Drainage District is in the process of updating their large-diameter outlet tile system. This presents Pesotum with the ability to begin the process of upgrading its drainage facilities within the western half of the Village, including this first phase project.

This project is the first step in a multi-phase upgrade planned for the entire subsurface stormwater drainage system that provides subsurface drainage for the western half of the Village. Existing 75 plus year old 6-inch and 8-inch diameter clay drain tile lines will be replaced with modern storm sewer lines which will provide a much greater flow capacity. These future storm sewer lines will provide an outlet for discharges from sump pumps and on-site wastewater treatment systems. Construction of the complete system is currently estimated to cost in excess of \$1.3 million.

Estimated Project Construction Cost:	\$170,000
Estimated Total Project Cost:	\$224,000
Proposed Village Cost Share:	22%
Project Timetable:	Project under construction within 135 days ±
Design:	60 days ±
Easements:	30 days ±
Bidding / Award:	45 days ±
Construction:	90 days ±

It is anticipated that the entire project can be completed by June 2023.

ARPA Rural Water Project Assistance Request

County Board District #4
Village of Tolono

April 2022

Project Summary and Preliminary Environmental Impacts Determination (PEID)

The following project summary and environmental assessment has been prepared by the IEPA to assist the loan applicant in complying with the public notice requirements. Information in this report was obtained, in part, from the following sources: Wastewater System Upgrades submitted August 21, 2020 by Donohue & Associates Inc. on behalf of the Village of Tolono; Applicant Environmental Checklist dated January 18, 2021; and other information gathered by the IEPA.

Part I – Project Information

Project Name: Wastewater System Upgrades

Loan Applicant: Tolono

County: Champaign

Project Number: L175849

Current Population: 3,449

Future Population (30 year): 5,174

Project Justification & Description: The Village of Tolono (Village) owns and operates a wastewater collection and treatment system that consists of approximately 80,100 lineal feet (LF) of sanitary sewers ranging from 8-inches to 12-inches in diameter, forcemains, manholes, 6 lift stations, and a conventional activated sludge wastewater treatment plant (WWTP). The original WWTP and most of the collection system was constructed in the early 1970's. The WWTP has a design daily average flow (DAF) of 0.235 million gallons per day (MGD) and design maximum flow (DMF) of 0.588 MGD. In 1984, a berm was added to the stormwater equalization basin to create a sludge storage lagoon. In 2011, a fixed film roughing filter was added to the primary clarifiers to reduce biochemical oxygen demand (BOD) loadings to the aeration basins. There is a tertiary filter and chemical feed building that are no longer used in the treatment process. The WWTP does not have a main headworks facility. Flows enter through a comminutor that grinds up sewage on a continuous basis. From there flows are pumped through the control building for primary treatment via two primary clarifiers. Secondary treatment consists of two aeration basins, two final clarifiers, chlorine disinfection and discharge to the receiving stream. The Village's current NPDES permit does not require year-round disinfection of the dry weather flows. Sludge from the primary clarifiers and waste activated sludge from secondary treatment are combined and digested in the aerobic digesters. Digested sludge is pumped to the sludge lagoon. Sludge is typically dredged and disposed of via land application by local farmers.

There are no influent flow meters; therefore, the plant operators must guess when the DMF has been reached and divert flows to the stormwater equalization basin. The plant contains only one stormwater pump without an influent meter. Many of the WWTP components are over 30-years old and have reached the end of their useful life, reached, or exceeded their design capacity, and in some cases are no longer being utilized in the treatment process.

The Village also examined their collection system for needed improvements. The Elizabeth Street and Watson Street Lift Stations (LS's) were constructed with the original collection system. They are still functioning, but they have dry pit areas that are susceptible to potential flooding with raw sewage should any of the piping fail; are not compatible with current systems and compliance

standards; and pose potential safety issues for maintenance staff. The Deerpath LS needs upgrades for operational and security needs. It was also determined that all 6 LS's needed to be equipped with communication telemetry for monitoring.

Additionally, within the corporate limits of the Village, there are unsewered areas that utilize septic systems or percolation fields for discharge. The Village would like to extend sanitary sewers to the Unity West Elementary School, Oaks Mobile Home Park, and Sunnyfield Subdivision. This will increase wastewater flows that must be treated.

The Village and their engineers evaluated various options for wastewater treatment including a no discharge option, sending flows to another community for treatment, or upgrading/expanding the existing WWTP. They determined the most feasible option for the community would be to upgrade & expand their current WWTP. They evaluated several different WWTP options and ultimately determined upgrading and expanding the existing WWTP utilizing an Oxidation Ditch system would be the best alternative.

The proposed project consists of expanding the WWTP DAF from 0.235 MGD to 0.51 MGD and the DMF from 0.588 MGD to 1.29 MGD, a sanitary sewer extension to serve unsewered areas, and lift station replacements and improvements. New WWTP improvements include: splitter box; fine screen; raw influent pump station; excess flow pump station and forcemain; new oxidation ditch, conversion of the existing clarifiers to aerobic digestors; new secondary clarifier; chlorination and dechlorination facilities; waste activated sludge (WAS) flow meter vault; convert the old chemical building to lab and control building; convert the old filter building to chemical and blower building; demolish the old control building; electrical and SCADA upgrades; and other related appurtenances. The sanitary sewer extension includes a new submersible lift station (LS #7); approximately 4,800 LF of 6-inch diameter forcemain; approximately 1,600 LF of 8-inch diameter sanitary sewer; approximately 1,200 LF of 10-inch diameter sanitary sewer; approximately 1,200 LF of 12-inch diameter sanitary sewer; 15 manholes; and other related appurtenances. Other construction includes: replacement of the Elizabeth Street LS; replacement of the Watson Street LS; upgrades to the Deer Path LS including chopper pumps to eliminate plugging of the pumps, grouting of the wet well joints, sandblasting and recoating of the piping, fencing, and other miscellaneous repairs. All 6 of the existing LS's will receive communication equipment upgrades.

It is anticipated the year-round disinfection exemption will no longer apply. The new WWTP will provide for biological phosphorus removal, ammonia reduction, and total nitrogen reduction. The proposed WWTP work will require a modification to the existing NPDES permit prior to receiving a construction permit and loan. The proposed improvements will increase system functionality, reliability, and allow the Village to maintain compliance with current and future wastewater regulations.

Project Location: The WWTP upgrade/expansion will occur at the existing WWTP location on South Bourne Street. The remaining work will occur at the lift station sites mentioned above and the sewer extension will occur to the west and south of the existing WWTP. The new lift station will be constructed at South Bourne Street and County Road 600 North. See attached map for locations.

Estimated Construction Start Date: October 2021

Estimated Construction Completion Date: April 2023

Project Cost Estimate: \$12,550,000

Part II – Environmental Review and Impacts

Project construction impacts: Temporary adverse environmental impacts such as construction-associated noise, blowing dust, air emissions, traffic disruption, and soil erosion will likely occur during construction.

The project was submitted for review through the Illinois Department of Natural Resources (IDNR) EcoCAT system for compliance with the Illinois Endangered Species Act, Illinois Natural Areas Preservation Act (Section 17 Illinois Administrative Part 1075) and the Illinois Wetlands Act (Section 17 Illinois Administrative Code Part 1090). Initial review contained no record of threatened or endangered species within the project vicinity; however, further assessment was necessary for the Part 1090 wetlands review because the EcoCAT review indicated the presence of wetlands within the project area. Upon further review a joint consultation for Part 1075 & Part 1090 was issued June 17, 2020 concluding that adverse effects are unlikely.

The IDNR State Historic Preservation Office (SHPO) reviewed the information submitted for the project review and provided a letter dated July 1, 2020 indicating there are no historic properties affected by the proposed project, therefore the project complies with section 106 of the National Historic Preservation Act of 1966.

Project information was submitted to the Illinois Department of Agriculture (IDOA) to assess the potential impact to agricultural land and determine consistency with the IEPA's Agricultural Land Preservation Policy and compliance with the Illinois' Farmland Preservation Act. The IDOA determined that all construction will be constructed on private easements or public road right-of way. Additionally, the IDOA concluded that all construction will be located within Tolono's corporate boundaries and agricultural land is not being converted. A letter was issued July 23, 2020 indicating the project will be constructed in accordance with the IDOA's water and Sewer Line Construction Standards and Policies; therefore, the IDOA determined the project complies with the Illinois Farmland Preservation Act.

The U.S. Army Corps of Engineers (ACOE) also reviewed the project information. The ACOE issued an email dated January 26, 2021 stating that it appears there are no jurisdictional waters of the U.S., including wetlands, that would be impacted by the discharge of dredged or fill material associated with construction of the project. Therefore, a Department of the Army Section 404 permit is not required.

8. Reason for Project: the current WWTP is running above capacity

If this project is compliance-related, or involves regionalization, indicate above.

9. Project Location(s): South Bourne Street, Tolono, IL 61880

(May be address, address start & end points, latitude/longitude, or brief description)

10. Does the applicant own and operate a Wastewater Treatment Plant or Facility? Yes No

If YES, complete a. through e. If Applicant has multiple treatment facilities, questions only apply to facilities impacted by the proposed project.

- a. NPDES Permit Number(s) of the Treatment Facility(s): IL0031453
- b. Name of Treatment Facility(s): Village of Tolono STP
- c. Design Average Flow (DAF) of the Treatment Facility: 0.235 MGD
- d. Latitude and Longitude of the discharge (from NPDES permit): 39.1544N/88.1523W
- e. Name of the receiving body of water (from NPDES permit): Hackett Branch

If NO, complete f. and g.

- f. Name of entity providing wastewater treatment: _____
- g. Average flow per day delivered to this facility by the applicant: _____ MGD

11. Loan Applicant's current service population: 3449

12. Protection of Assets (using an AMP or Equivalent)

- a. Has the loan applicant implemented a system-wide Asset Management Plan (AMP)? Yes No
- b. Is the loan applicant currently developing a system-wide Asset Management Plan? Yes No
- c. Will the loan be used to develop a system-wide Asset Management Plan? Yes No

13. Additional Questions regarding this Project

- a. Will the project result in a 20% or greater reduction in water or energy use by the applicant? Yes No
- b. Does the project include resiliency components, such as facilities built for redundancy? Yes No
- c. Does the project implement green infrastructure, such as green roofs, constructed wetlands, etc.? Yes No
- d. Does the project implement one or more agricultural best management practices (BMPs)? Yes No
- e. Will the project correct a situation that has resulted in overflows or basement backups? Yes No
- f. Will 50% or more of the project costs provide service to an unsewered area? Yes No

14. Project Schedule

- a. Project Plan Approval Date: 3/31/2021
- b. Advertise for Bids: 3/30/2022
- c. Construction Start Date: 8/1/2022
- d. Completion of Construction: 12/1/2023

Authorized Representative: _____ **Date:** _____