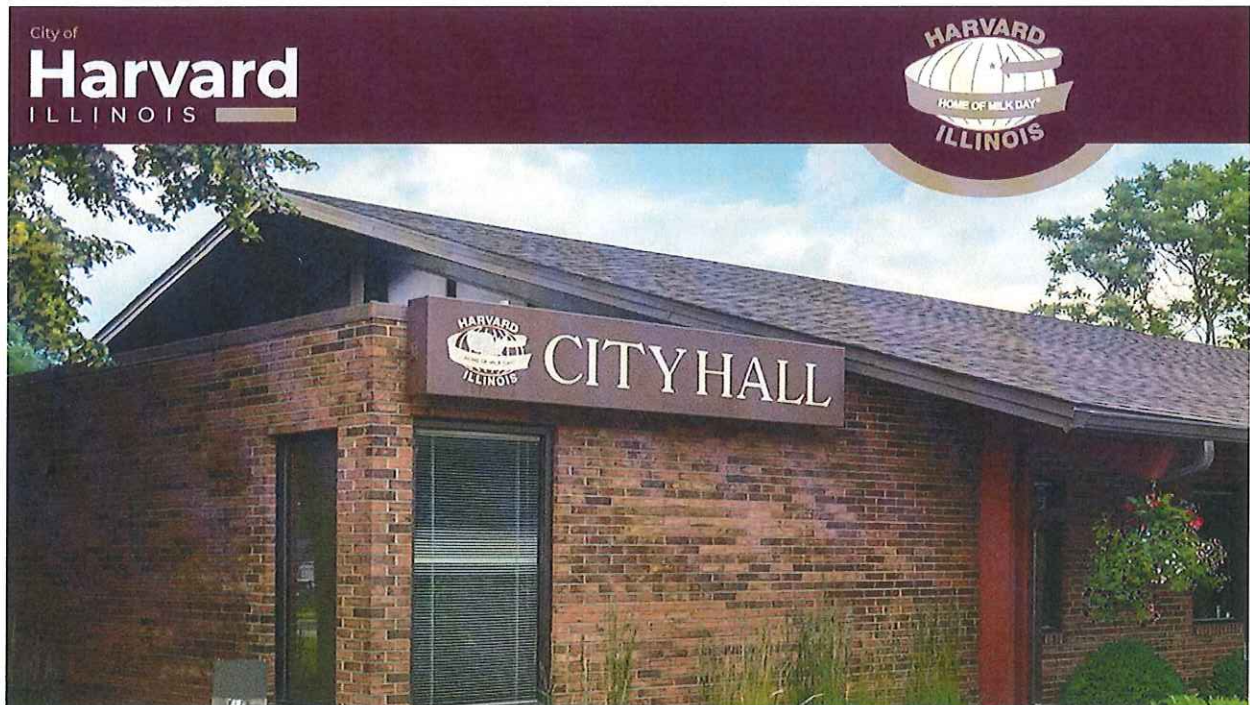


# CITY OF HARVARD



# 2022-2027 CAPITAL IMPROVEMENT PLAN

May 2022

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## Introduction

A Capital Improvement Plan (CIP) is a multi-year plan used to identify, prioritize, and schedule capital projects and purchases, as well as to identify sources of funding. Capital improvement projects consist of major expenditures not typical of yearly operational expenses. These types of projects include the rehabilitation or new construction of infrastructure, the maintenance and purchasing of new equipment, and the acquisition of land for public use.

In 2021, the City committed to formally developing a CIP and received technical assistance from the Chicago Metropolitan Agency for Planning (CMAP). This involved a multi-step process that included participation from the Mayor and members of staff from each of the City's six departments: Administration, Community Development, Police Department, Parks & Recreation, Public Works and Utilities. Through a series of workshops, staff determined the relative importance of each project or purchase by utilizing a ranking system, estimating the project cost, and suggesting a timeline for completion.

The following City of Harvard CIP covers a 5-year period, but may extend beyond that timeline. The capital asset minimum dollar threshold is set at \$5,000. Improvements have been prioritized and broken down by department, and include a description of the project, evaluation, estimated cost, and potential funding sources. Lower priority projects for subsequent years beyond this CIP have also been identified for future planning, or in the event that additional funding becomes available within this CIP timeline. These projects are included in Appendix I.

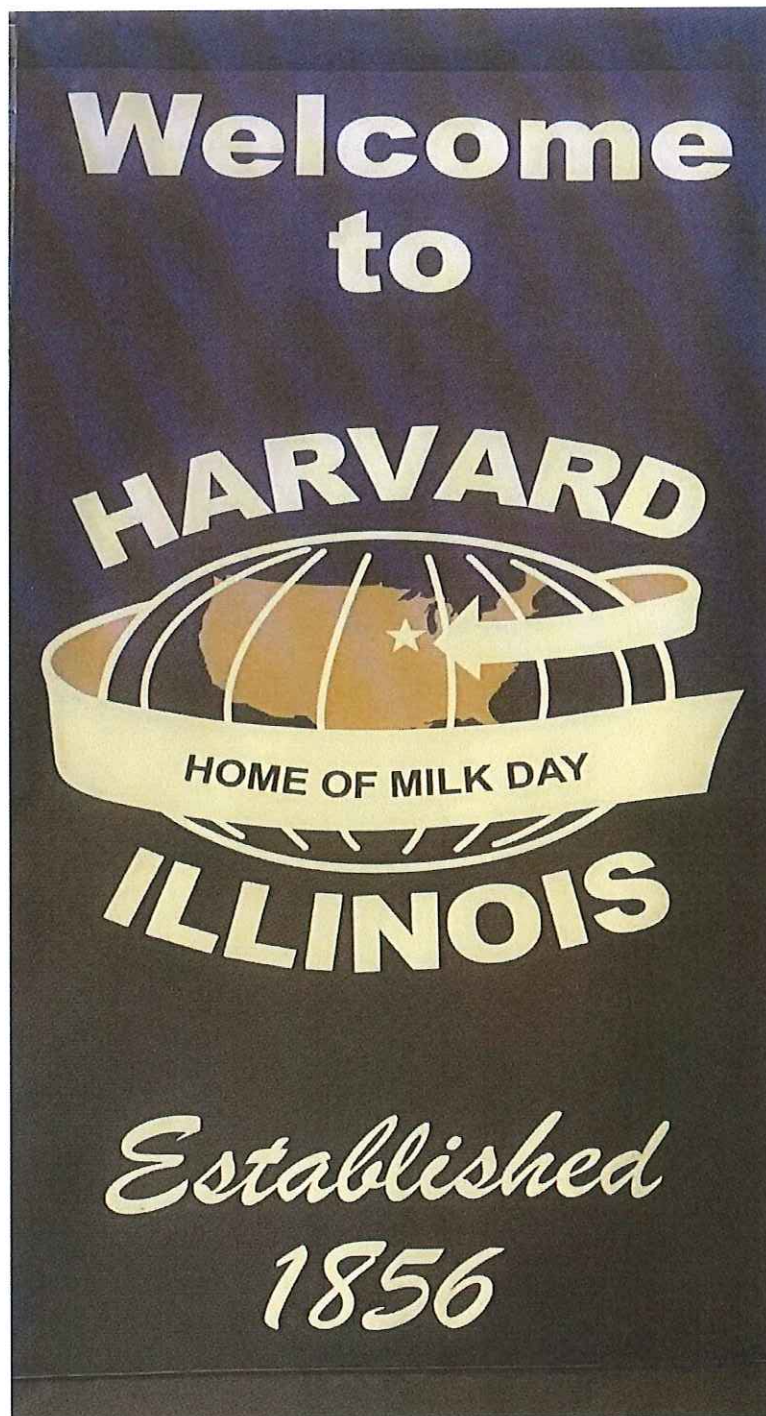
The purpose of these proposed improvements is to increase the useful life of the City's existing assets, and to add new assets when feasible. Projects adopted from this CIP should become part of the annual budgeting process for each respective department, as revenue sources become available. City Staff intends to work directly with Elected Officials to evaluate this CIP on an annual basis, to allow for informed decision-making in the updating and implementation of this plan.

City of Harvard - Capital Project Inventory

Project Identifier/Page #	Department	Capital Project/ Asset Title	Scope - Description/Priority	Location	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Five Year Total Cost	Suggested Method of Funding (X)		
											Budget Appropriation	Bond	Grant
HAR01/5	Admin	Storefront/Window Replacement	Replace outer storefront/windows/ADA entry system (Medium)	City Hall - 201 W. Diggins St.	NA	NA	\$105,000	NA	NA	\$105,000	X		
HAR02/6	Admin	Partial HVAC System Replacement	Demolition/Replacement of outdated HVAC Air Handler (Low)	City Hall - 201 W. Diggins St.	NA	NA	NA	NA	NA	\$175,000	X		Contingency
HAR03/7	Admin	Flooring Replacement	Replace carpeting in upstairs offices (Low)	City Hall - 201 W. Diggins St.	\$0	\$0	\$12,000	\$0	\$0	12,000	X		Contingency
HAR04/9	Comm Devel	Last Mile Broadband Initiative	Establishing equitable access broadband connectivity (Medium)	City-Wide	\$0	\$200,000	TBD	TBD	TBD	TBD	X		AMERICAN RESCUE (2)
HAR05/10	Comm Devel	Geographical Information Systems	Continue building the City GIS System (Medium)	City-Wide	\$35,000	\$35,000	\$35,000	TBD	TBD	\$105,000	X		IDHA
HAR06/11	Comm Devel	Property Acquisition	Acquire distressed/vacant properties (Low)	City-Wide	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000	X		
HAR07/13	Police	Body-Worn Cameras	Body Cameras with provisions for new equipment and software upgrades (High)	Police Dept - 203 W Diggins St.	\$8,500	\$8,500	\$8,500	\$8,500	\$20,000	\$54,000	X		ILETSB
HAR08/14	Police	Squad Car Replacements	New squad cars based on yearly replacement rotation (High)	Police Dept - 203 W Diggins St.	\$140,000	\$110,000	\$110,000	\$110,000	\$110,000	\$580,000	X		
HAR09/16	Parks/Rec	Parking Lot Improvement	Hard surface park gravel parking lot (Medium)	Milky Way Park - 300 Lawrence Rd.	\$0	\$0	\$0	\$500,000	\$0	\$500,000	X		Donations
HAR10/17	Parks/Rec	Electric Upgrade	Additional power and transformer boxes south side (Medium)	Milky Way Park - 300 Lawrence Rd.	\$0	\$0	\$100,000	\$0	\$0	\$100,000	X		
HAR11/18	Parks/Rec	Park Entrance Signs	New identifying park signs (Low)	Mary's Park, Milky Way Park, Northfield Park and Lion's Park	\$0	\$2,500	\$2,500	\$2,500	\$2,500	\$10,000	X		Donations/Sponsors
HAR12/19	Parks/Rec	Athletic Field	Build new combination football/soccer field (Low)	Milky Way Park - 300 Lawrence Rd.	\$0	\$0	\$30,000	\$0	\$0	\$30,000	X		OSLAD
HAR13/20	Parks/Rec	Pool Pumps	Replace pool filter pumps (High)	Aquatic Center - 607 Galvin Pkwy.	\$0	\$13,000	\$13,000	\$13,000	\$13,000	\$52,000	X		
HAR14/21	Parks/Rec	Roof Replacement	Roof replacement with gutters and downspouts (Medium)	Aquatic Center - 607 Galvin Pkwy.	NA	NA	NA	NA	NA	\$30,000	X		
HAR15/23	Public Works	New water meters	Purchase 100 new water meters (Low)	City-Wide	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$100,000	X		Contingency
HAR16/24	Public Works	MXU radio readers	Purchase 100 MXU readers (Low)	City-Wide	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$70,000	X		Contingency
HAR17/25	Public Works	Dump Truck Replacement	Replace dump trucks on every other year rotation (Low)	Public Works - 900 W. Diggins St.	\$0	\$175,000	\$0	\$185,000	\$0	\$360,000	X		Contingency
HAR18/26	Public Works	Road Improvements	Resurface select roads city-wide based on condition evaluation (High)	<ul style="list-style-type: none"> <li>W. McKinley/Eighth to Division</li> <li>Second St./McKinley to Northfield</li> <li>Third St./Burbank to McKinley St.</li> <li>Fourth St./Burbank to McKinley St.</li> </ul>	\$210,000	\$210,000	\$220,000	\$220,000	\$220,000	\$1,080,000.00	X		MFT Road Program
HAR19/27	Public Works	Road Improvements	Resurface Diggins Street w/ shoulder improvements/drainage (High)	West Diggins St. - Lawrence Rd. to Front St.	\$76,169	\$523,622	\$0	\$0	\$0	\$599,791	X		IDOT - 80/10% Match
HAR20/28	Public Works	Bridge Replacement	Construct new bridge Marengo Rd (High)	Marengo Rd. - Crossing Rush Creek	\$90,000	\$90,000	\$120,000	\$1,115,000	\$0	\$1,415,000	X		IDOT - 80/20% Match
HAR21/29	Public Works	Road Improvements	Resurface South Marengo Road (Medium)	Marengo Rd. - Airport Rd. to Route 23	N/A	N/A	N/A	N/A	N/A	\$2,000,000+	X		IDOT - 80/20% (TBD)
HAR22/30	Public Works	Road/Sidewalk Improvements	Downtown Ayr St. - Streetscape Project (Medium)	South Ayr St. - Park St. to Washington St.	NA	NA	\$600,000	NA	NA	\$600,000	X		MFT/RBI Grant
HAR23/31	Public Works	Sidewalk Improvements	Resurface select sidewalks city-wide based on condition evaluation (High)	<ul style="list-style-type: none"> <li>Second St./Burbank to Brown (Both Sides)</li> <li>St./Brown to Blackman (West Side)</li> </ul>	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$975,000	X		MFT
HAR24/32	Public Works	Sidewalk Improvements	Improve Post Office sidewalk, elevators and parking (Medium)	300 Eastman St.	\$1,500	\$8,000	\$10,500	\$0	\$0	\$20,000	X		MFT
HAR25/34	Utilities	WWTP Upgrade-Phase IA	Rehabilitation and new construction to several areas of the plant process (High)	805 W. Brink St.	\$7,000,000	\$7,000,000	\$7,000,000	\$0	\$0	\$21,000,000	X		EPA Loan/DCO Grant

Project Identifier/Page #	Department	Capital Project/Asset Title	Scope - Description/Priority	Location	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Five Year Total Cost	Suggested Method of Funding (X)			
											Budget Appropriation	Bond	Grant	
HAR26/35	Utilities	Waste Burner Replacement	Replace Waste Gas Burner Flare (High)	801 W. Brink Sts	\$45,000	\$0	\$0	\$0	\$0	\$45,000	X			
HAR27/36	Utilities	Mechanical Equipment Replacement	Replacing mechanical equipment in primary clarifiers (High)	801 W. Brink Sts	\$40,000	\$0	\$0	\$0	\$0	\$40,000	X			
HAR28/37	Utilities	Well Replacement	Replace Well #6 (Medium)	11000 E. Brown St.	\$0	\$0	\$450,000	\$0	\$0	\$450,000	X			
HAR29/38	Utilities	Pole Barn Painting	Pole 1977 pole barn roof to extend life (Medium)	801 W. Brink St.	\$0	\$10,000	\$0	\$0	\$0	\$10,000	X			
HAR30/39	Utilities	Back Up Generator	Purchase generator for Well #9 as emergency back-up (Medium)	6861 Harvard Hills Rd.	\$0	\$0	\$0	\$250,000	\$0	\$250,000	X			
HAR31/40	Utilities	Tuckpointing	Tuckpoint Primary Digester - WWTP (Low)	801 W. Brink St.	\$0	\$0	\$0	\$0	\$20,000	\$20,000	X			
HAR32/41	Utilities	Tuckpointing	Tuckpoint Office/Lab/Electrical Room Building - WWTP (Low)	801 W Brink St.	\$0	\$0	\$0	\$0	\$20,000	\$20,000	X			
HAR33/42	Utilities	Sanitary Sewer Improvements Program	Sanitary Sewer Improvements (High)	City-Wide	NA	NA	NA	NA	NA	\$6,000,000			TBD	
HAR34/43	Utilities	Televising and Inspection	Yearly televising water mains and inspecting manholes (High)	Older areas of Ward 1, Ward 3 and Ward 2	\$46,000	\$46,000	\$46,000	\$46,000	\$46,000	\$230,000	X		X	AMERICAN RESCUE (1)
HAR35/44	Utilities	Water main lining	Line cast iron water main - approximately 800 feet (High)	Route 14 - Route 173 to East Park St.	\$300,000	\$0	\$0	\$0	\$0	\$300,000	X		X	AMERICAN RESCUE (2)
HAR36/46	Utilities	Water Main Extension/looping	Water Main Extension/Looping - Metzzen St/Marango Rd. (High)	Metzen St. and Marango Rd.	\$220,000	\$0	\$0	\$0	\$0	\$220,000	X		X	AMERICAN RESCUE (1)
HAR37/47	Utilities	Water Main Extension/looping	Water Main Extension/Looping - Dewey St. (High)	Dewey Street - Park Pointe Subdivision to Kennedy Dr.	NA	\$50,000	NA	NA	NA	\$50,000			X	AMERICAN RESCUE (1)
HAR38/48	Utilities	Water Main Extension/looping	Water Main Extension/Looping - S. Howard St. (High)	South Howard St. to WWTP		\$20,000	\$0	\$0	\$0	\$20,000	X			
HAR39/49	Utilities	Water Main Extension/looping	Water Main Extension/Looping - Randall St. (Medium)	Randall Street-E. Thompson to E. Washington	\$0	\$0	\$50,000	\$0	\$0	\$50,000	X			
HAR40/50	Utilities	Water Main Extension/looping	Water Main Extension/Looping - Brink St. (Medium)	Brink St. - Kennedy Dr. to Jefferson St.	\$0	\$0	\$0	\$230,000	\$0	\$230,000	X			
HAR41/51	Utilities	Water Main Extension/looping	Water Main Extension/Looping - Forest Downs (Low)	Autumn Glen - Forest Downs to Wildflower Ln.	\$0	\$0	\$0	\$0	\$115,000	\$115,000	X			
HAR42/52	Utilities	Water Main Extension/looping	Extend 12" water main - Well #10 to 22500 W. Rt. 173 (Low)	Well #10 - Lawrence Rd. to 22500 W. Rt. 173 (Moose Lodge)	NA	NA	NA	NA	NA	\$450,000				TBD
HAR43/53	Utilities	Water Main Replacement	Water Main Replacement - South Park Ave. (Medium)	South Park Ave. Ridge Lane to Rt. 14	NA	NA	NA	NA	\$180,000	\$180,000	X			
HAR44/54	Utilities	Sanitary Sewer Replacement	Sanitary Sewer Replacement - Division St. (Medium)	Division St. - Admiral Dr. to Airport Rd.	NA	NA	NA	NA	NA	\$850,000				TBD
HAR45/55	Utilities	Sanitary Sewer Replacement	Sanitary Sewer Replacement - Dewey St. (Low)	Dewey St. - Kennedy Dr. to 709 1/2 (Lift Station).	NA	NA	NA	NA	NA	\$300,000				TBD
HAR46/56	Utilities	Storm Sewer Replacement	Storm Sewer Replacement - Northfield Ave. (Low)	Northfield Ave - Route 14 to Green Meadows Ln.	NA	NA	NA	NA	NA	\$600,000				TBD
APPENDIX G/57	All Depts.	Future Projects	Projects for future planning beyond 5-Year CIP	City-Wide	NA	NA	NA	NA	NA	NA				TBD

# ADMINISTRATION



**ADMINISTRATION:**

**Project Title:** Storefront and Window Replacement (HAR01)

**Date Submitted:** January, 2022

**Project Location:** City Hall – 201 W. Diggins St.

**Project Description:** Remove and replace storefront and windows of current City Hall building. The project includes replacement of the current outer storefront only, with an upgrade to the handicapped-accessibility system on both the inner and outer doors. Also included is the replacement of all outer ground level windows, to be upgraded to double-pane glass on the east and south sides of the building.

**Project Evaluation:** The current windows and storefront are part of the original building construction dating back to 1972. The current handicapped-accessible controls were added at some point after original construction, and are in need of an upgrade. Window replacement would contribute to energy efficiency and temperature regulation within the building.

**Project Priority:** Medium

**Multi-year Project:** No

**Cost Estimate:** \$105,000

**Funding Source(s):** Budget Appropriation



**ADMINISTRATION:**

**Project Title:** Partial HVAC System Replacement (HAR02)

**Date Submitted:** October, 2021

**Project Location:** City Hall – 201 W. Diggins St.

**Project Description:** Demolition and removal of the outdated air handling system to be replaced with a compatible system to more efficiently regulate building temperature.

**Project Evaluation:** The current air handler is part of the original building construction dating back to 1972. Temperature regulation is a consistent problem season to season, causing inefficiency in total HVAC system operation, functionality problems with office equipment, and increased system maintenance costs.

**Project Priority:** Low

**Multi-year Project:** No

**Cost Estimate:** \$175,000

**Funding Source(s):** Budget Appropriations





**ADMINISTRATION:**

**Project Title:** Flooring Replacement (HAR03)

**Date Submitted:** March, 2022

**Project Location:** City Hall – 201 W. Front St.

**Project Description:** Replace carpeting in all upstairs offices and conference room of City Hall.

**Project Evaluation:** Carpeting in the upper level of City Hall is approximately 13 years old. It was replaced in 2009 when the City purchased the building. While the carpeting in the general area is still in decent condition, the carpeting in the six offices and the conference room has not held up well. This carpet is a solid color, and shows staining and extreme wear. Although carpet cleaning has been done in the past, this has not made much difference to the appearance or life of the carpet. It is recommended that office carpeting be replaced with a patterned product that is more durable.

Pricing was obtained in 2022. As the carpet was glued down to concrete, there are two replacement options for consideration:

Option 1 – Tear out all carpet and replace. This requires soaking the carpet first in order to dissolve the glue: \$12,000.

Option 2 – Keeping existing carpet in place as a pad, and laying new carpet over it: \$11,000.

**Project Priority:** Low

**Multi-year Project:** No

**Cost Estimate:** \$12,000.00

**Funding Source(s):** Budget Appropriations



# COMMUNITY DEVELOPMENT



**COMMUNITY DEVELOPMENT:**

**Project Title:** Last Mile Broadband Initiative (HAR04)

**Date Submitted:** September, 2021

**Project Location:** City-Wide

**Project Description:** This initiative includes potential partnering with an internet provider for improved broadband connectivity throughout the community. Initial funding for the cost estimate below is allowable through the American Rescue Plan Act (ARPA). Grant funding may be available for additional project costs in access-challenged areas through Connect Illinois.

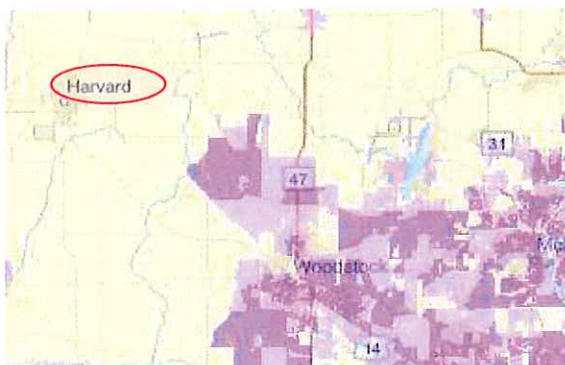
**Project Evaluation:** This project serves as a starting point to address the need for equitable access to affordable and high-speed broadband services for residents, schools and business development within the community.

**Project Priority:** Medium

**Multi-year Project:** Yes

**Cost Estimate:** \$200,000 – Initial

**Funding Source(s):** ARPA



**DSL Broadband**

Speed

- At Least 100 Mbps x 20 Mbps
- At Least 25 Mbps x 3 Mbps

**Fiber Broadband**

Speed

- At Least 1 Gbps x 1 Gbps
- At Least 100 Mbps x 20 Mbps
- At Least 25 Mbps x 3 Mbps

\*Map Source: [The Illinois Broadband Map \(connectednation.org\)](http://connectednation.org)

**COMMUNITY DEVELOPMENT:**

**Project Title:** Geographical Information System Development (HAR05)

**Date Submitted:** January, 2022

**Project Location:** City-Wide

**Project Description:** Continued development of the City's Geographical Information System (GIS).

**Project Evaluation:** The City mainly relies on digital and hard copy maps, with data stored in many different types of formatting. Through GIS, a large amount of this information can be stored in one system for every department to access. Pertinent information can also be provided to the community at large through the City's website.

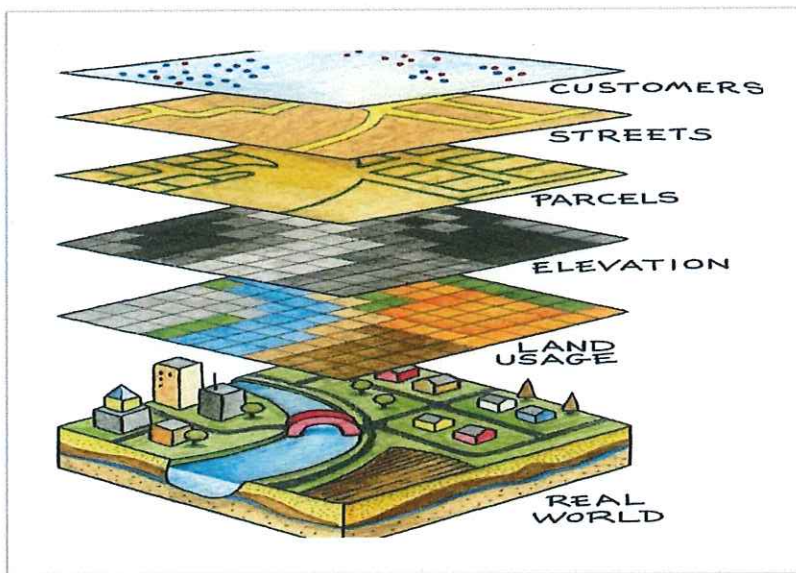
In 2018, initial steps were taken to begin development of a GIS database. At that time, ARCGIS software was purchased, with a subscription that is renewed yearly. Learning the system and collecting the data is a lengthy process, and staffing limitations previously stalled this effort. In 2020, a summer intern was hired for one season to further develop the system. This proved beneficial and progress was made; however, more work is needed to build the database. The cost estimate for this on-going project includes continued subscription costs, as well as salary appropriations for this intern position.

**Project Priority:** Medium

**Multi-year Project:** Yes

**Cost Estimate:** \$105,000 – 3 Year Total (\$35,000/year then TBD)

**Funding Source(s):** Budget Appropriations



**COMMUNITY DEVELOPMENT:**

**Project Title:** Property Acquisition (HAR06)

**Date Submitted:** October, 2021

**Project Location:** City-Wide

**Project Description:** Assess vacant, abandoned and derelict properties and budget yearly for future acquisition. This acquisition is to be based on assessment level and funding available. Funding includes cost for necessary demolition and/or preparation for public sale. (See Appendix A for current assessments.)

**Project Evaluation:** These properties decrease surrounding property values, attract criminal activity and increase municipal costs. The City periodically has an opportunity to acquire properties in an attempt to return them to productive conditions. This provides improvements to the quality of residential and commercial areas, and the overall well-being of the community. In addition to yearly budget appropriations, potential grant funding may also be available through the Illinois Housing Development Authority (IHDA).

**Project Priority:** Medium

**Multi-year Project:** Yes

**Cost Estimate:** \$50,000 – Five Year Total (\$10,000/year)

**Funding Source(s):** Budget Appropriations/Grant Funding - IDHA



507 N. Howard St. (Obtained with grant funding and sold)

# POLICE DEPARTMENT



**POLICE DEPARTMENT:**

**Project Title:** Body-Worn Cameras (HAR07)

**Date Submitted:** January, 2022

**Project Location:** Police Department – 203 W. Diggins St.

**Project Description:** Body-Worn Camera (BWC) upgrade and/or replacement of both equipment and software on a yearly basis. Grant funding is available through the Illinois Law Enforcement Training and Standards Board (ILETSB).

**Project Evaluation:** BWCs are necessary equipment for each uniformed officer as a way to improve accountability, transparency and legitimacy. Yearly cost is based on training requirements, annual software upgrades and equipment replacement when needed. The cost estimate is correlative for the first four years, with a significant increase at year five for a complete system upgrade (required per vendor contract).

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** \$54,000 – Five Year Total (\$8,500/4 years & 20,000/year 5)

**Funding Source(s):** Budget Appropriations/Grant Funding - ILETSB



**POLICE DEPARTMENT:**

**Project Title:** Squad Car Replacements (HAR08)

**Date Submitted:** January, 2022

**Project Location:** Police Department – 203 W. Diggins St.

**Project Description:** Squad car replacement is based on a yearly rotation schedule as determined by current fleet and equipment condition. Funding cost includes vehicle purchase, decaling, lightbars, sirens and necessary police equipment purchase and installation. These purchases are made through the Illinois State Bid Process to obtain the lowest cost possible.

**Project Evaluation:** Due to the nature and routine use of police vehicles, yearly rotation to incorporate new, reliable squad cars into the fleet is vital. The current plan budgets for two new squad cars and one new detective car in the first year. Future cost is estimated for two new squad cars for the remaining four years. Squad cars rotated from the police fleet are generally transferred to other City Departments and remain in use until such time as deemed appropriate for auction.

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** \$580,000–Five Year Total (\$140,000/Year 1 & 110,000/Yr 2-5)

**Funding Source(s):** Budget Appropriations





# PARKS AND RECREATION



**PARKS AND RECREATION:**

**Project Title:** Hard Surface Gravel Parking Lot (HAR09)

**Date Submitted:** October, 2021

**Project Location:** Milky Way Park – 300 Lawrence Rd.

**Project Description:** Hard surface the remaining 66,500 square feet of gravel parking lot to asphalt.

**Project Evaluation:** Hard surface in this park will allow for cleaner area, safer parking, upgrade storm water management, and adherence to municipal code for hard surface parking lots.

**Project Priority:** Medium

**Multi-year Project:** No

**Cost Estimate:** \$500,000

**Funding Source(s):** Budget Appropriations, Grant Funding, Donation (Park Foundation)



**PARKS AND RECREATION:**

**Project Title:** Electrical Upgrade (HAR10)

**Date Submitted:** October, 2021

**Project Location:** Milky Way Park – 300 Lawrence Rd.

**Project Description:** Add additional power and transformer boxes to the south side of the park.

**Project Evaluation:** Adding additional power to the south side of the park will allow for future amenities to that area such as lighted baseball fields, softball fields, football fields, soccer fields and any future buildings or structures.

**Project Priority:** Medium

**Multi-year Project:** No

**Cost Estimate:** \$100,000

**Funding Source(s):** Budget Appropriations



**PARKS AND RECREATION:**

**Project Title:** New Park Signage (HAR11)

**Date Submitted:** January, 2022

**Project Location:** Mary's Park, Milky Way Park, Lion's Park, and Northfield Park

**Project Description:** Remove all current identifying park name signs and replace with new signage.

**Project Evaluation:** Signs are outdated and damaged. Replacing these signs will provide a new, uniform look to our park identifiers. Cost could be allocated yearly per park. This also provides a potential sponsorship/advertising opportunity for community businesses.

**Project Priority:** Low

**Multi-year Project:** Yes

**Cost Estimate:** \$10,000 – 5 year total (\$2,500/year 2-5)

**Funding Source(s):** Budget Appropriations, Donations, Sponsors



**PARKS AND RECREATION:**

**Project Title:** Athletic Field - Combination Football/Soccer Field (HAR12)

**Date Submitted:** January, 2022

**Project Location:** Milky Way Park – 300 Lawrence Rd.

**Project Description:** Build a new combination football and soccer field on the southeast side of the park.

**Project Evaluation:** Additional field space provides the ability to expand youth football and soccer programs. Open Space Lands Acquisition and Development (OSLAD) grant funding may be available.

**Project Priority:** Low

**Multi-year Project:** No

**Cost Estimate:** \$30,000

**Funding Source(s):** OSLAD Grant



**PARKS AND RECREATION:**

**Project Title:** Replace Pool Filter Pumps (HAR13)

**Date Submitted:** January, 2022

**Project Location:** Aquatic Center – 607 Galvin Pkwy

**Project Description:** Remove two existing filter pumps for small tanks. Replace pumps with one Bell and Gossett pump and one Pentair pump including necessary plumbing. Remove and replace two existing outdoor pumps connected to the outdoor water features.

**Project Evaluation:** These pumps are required for mechanical functioning of the day-to-day pool operation. Pumps are old and showing yearly signs of degradation. If one pump becomes non-functional, the Aquatic Center must be shut down until the pump can be replaced.

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** \$52,000 (\$13,000/pump)–5 year total (\$13,000 year 2-5)

**Funding Source(s):** Budget Appropriations



**PARKS AND RECREATION:**

**Project Title:** Roof Replacement with Gutters/Downspouts (HAR14)

**Date Submitted:** January, 2022

**Project Location:** Aquatic Center – 607 Galvin Pkwy

**Project Description:** Remove existing shingles and repair any water damaged areas. Install new architectural shingles. Roofing work to include the removal of existing solar panels to repair holes in the roof, with subsequent reinstallation of the panels. Project also includes the installation of seamless aluminum gutters and 4" aluminum downspouts.

**Project Evaluation:** The current shingles date back to original building construction in 2000. Fading and damage has occurred due to solar panels, weather and the extended length of time. These shingles currently have some life left, however this is limited and replacement within the next three to five years will be necessary.

**Project Priority:** Medium

**Multi-year Project:** No

**Cost Estimate:** \$30,000 (current 2022 market)

**Funding Source(s):** Budget Appropriations



# PUBLIC WORKS





**PUBLIC WORKS:**

**Project Title:** New Water Meters (HAR15)

**Date Submitted:** October, 2021

**Project Location:** City-Wide

**Project Description:** Purchase 100 new water meters contingent on yearly inventory need and budget availability.

**Project Evaluation:** As brass flow water meters throughout the City age and develop operating issues, they are replaced with a new, updated model. This type of meter gives a more accurate measurement by capturing all metered water used. Having a supply in stock eliminates the down-time in waiting for orders to be shipped, and allows immediate replacement of the problem water meter.

**Project Priority:** Low

**Multi-year Project:** Yes

**Cost Estimate:** \$100,000 - 5 year total (\$20,000/year)

**Funding Source(s):** Budget Appropriations



**PUBLIC WORKS:**

**Project Title:** MXU Radio Readers (HAR16)

**Date Submitted:** October, 2021

**Project Location:** City-Wide

**Project Description:** Purchase 100 new MXU radio readers contingent on yearly inventory needs and budget availability.

**Project Evaluation:** These readers allow a meter reading to be taken from a truck, as opposed to the old method of walking house to house. Through a software program, the meter is read into a computerized system. This has reduced the meter-reading time from 40 hours to 8 hours. The majority of residences throughout the City now have these readers. In the next year, we will begin converting business meters throughout the community. The useful life of these meters is approximately 8 to 10 years.

**Project Priority:** Low

**Multi-year Project:** Yes

**Cost Estimate:** \$70,000 – 5 year total (\$14,000/year)

**Funding Source(s):** Budget Appropriations



**PUBLIC WORKS:**

**Project Title:** Dump Truck Replacement (HAR17)

**Date Submitted:** February, 2022

**Project Location:** Public Works – 900 W. Brink St.

**Project Description:** Replace Public Works dump trucks on a 2-year rotation until fleet is up-to-date.

**Project Evaluation:** The current fleet consists of six dump trucks, ranging in year from 1990 to 2008. These trucks are used for snow-plowing, as well as for hauling stone, cold patch and spoils. The fleet is aging and over time has required more frequent and costly repairs.

**Project Priority:** Low

**Multi-year Project:** Yes

**Cost Estimate:** \$360,000 – 5 year total (\$175,000/year 2 & \$185,000/year 4)

**Funding Source(s):** Budget Appropriations



**PUBLIC WORKS:**

**Project Title:** Road Improvements (HAR18)

**Date Submitted:** October, 2021

**Project Location:** W. McKinley from Eighth to Division  
Second St from McKinley to Northfield  
Third St from Burbank to McKinley  
Fourth St from Burbank to McKinley

**Project Description:** Resurface select roads for condition improvements.

**Project Evaluation:** Per the yearly Motor Fuel Tax Program, these above-listed locations have been selected for the 2023 resurfacing project. Selection is based on evaluation of road conditions and these areas are determined to be high-priority for resurfacing needs.

Resurfacing will continue over the remaining four years at an estimated yearly cost of \$220,000. The quantity of improvement areas as well as cost may increase or decrease due to market conditions and the potential for future sales tax funds. During the Summer of 2023, the Chicago Metropolitan Agency for Planning (CMAP), will be conducting a city-wide road evaluation to provide data for more accurate future project locations.

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** \$1,080,000.00 – 5 year total (\$210,000/\$220,000 year)

**Funding Source(s):** MFT Program



**PUBLIC WORKS:**

**Project Title:** Road Improvements (HAR19)

**Date Submitted:** September, 2021

**Project Location:** West Diggins Street – Lawrence Road to Front Street

**Project Description:** Roadway resurfacing including shoulder, driveway and drainage improvements.

**Project Evaluation:** This project includes three phases of civil engineering prior to construction. Phase I-III Engineering services include data collection, surveys, environmental coordination, drainage evaluation, roadway plans and project development. Construction includes roadway mill and resurface, shoulder replacement, culvert replacement for drainage improvements and driveway replacement. Phase III engineering and final construction completion is scheduled for 2023/2024. This project is federally funded through the Illinois Department of Transportation (IDOT) at 90%, with a 10% City match. Federal funding is based on a periodic reimbursement process, so funds must be available for initial project payments. (Refer to Project Schedule Appendix B.)

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** Phase I Engineering: \$ 33,327  
Phase II Engineering: \$ 42,842  
Phase III Construction: \$523,622  
**Total Estimated Cost: \$599,791 (\$539,812/\$ 59,979)**

**Funding Source(s):** IDOT/MFT Budget Appropriations – 90/10% Match



**PUBLIC WORKS:**

**Project Title:** Bridge Replacement (HAR20)  
**Date Submitted:** October, 2021  
**Project Location:** Marengo Road Crossing Rush Creek  
**Project Description:** Replace bridge in accordance with sufficiency rating of condition.  
**Project Evaluation:** The Illinois Department of Transportation (IDOT) requires the City to schedule periodic structural inspections of all bridges within the city limits. Through these routine inspections, this bridge has been determined to be in deteriorating condition and will require replacement. This project is in the beginning stages, in which funding has been requested, and Phase I Engineering services have been approved for reimbursement. A breakdown of estimated costs from Phase I through construction is listed below. This project is eligible for federal funding through IDOT at 80%, with a 20% City match. (Refer to Project Schedule Appendix B).  
**Project Priority:** High  
**Multi-year Project:** Yes  
**Cost Estimate:**  
Phase I Engineering: \$ 90,000  
Phase II Engineering: \$ 90,000  
Phase III Construction: \$1,235,000  
**Total Project Cost: \$1,415,000 (\$1,132,000/\$283,000)**  
**Funding Source(s):** IDOT/MFT Budget Appropriations- 80/20% Match



**PUBLIC WORKS:**

**Project Title:** Road Improvements (HAR21)

**Date Submitted:** October, 2021

**Project Location:** Marengo Road – Airport Road to Route 23.

**Project Description:** Full reconstruction of the roadway.

**Project Evaluation:** Marengo Road was originally planned for future milling and resurfacing. However, upon recent inspection, the surface has deteriorated further and full reclamation has been recommended. Federal funding through the Illinois Department of Transportation (IDOT) may be available, and a Phase I Engineering request is pending. More cost effective planning combines this project with the Marengo Bridge resurfacing project (HAR20), as both projects require construction in the same areas of roadway. (Refer to Project Schedule Appendix B).

**Project Priority:** Medium

**Multi-year Project:** Yes

**Cost Estimate:** \$2,000,000 (TBD)

**Funding Source(s):** IDOT/MFT Budget Appropriations–90/10% Match (\$400,000 committed 2025–Council of Mayors)



**PUBLIC WORKS:**

**Project Title:** Road Improvements (HAR22)

**Date Submitted:** October, 2020

**Project Location:** South Ayer Street from Park Street to Washington St.

**Project Description:** Extension of the City's current downtown streetscape one block to the south to further include the Business District of Ayer Street (Refer to Project Schedule Appendix B and full map included in Appendix C).

**Project Evaluation:** In 2007, the City of Harvard initiated the Downtown Streetscape Project to stimulate the downtown economy and bring more people to the Business District. This current project allows the City to continue to move forward with this goal.

This project includes funding for road resurfacing, ADA-compliant sidewalk reconstruction, brick crosswalks, and street lights, decorative benches and planters. Phase I Engineering has been completed and reimbursed through the Regional Transit Authority (RTA). Phase II and III Engineering and Construction funds are available through the REBUILD Illinois (RBI) capital grant program.

Note: See Appendix I (Page 81) for future planning of the streetscape, as well as an Access to Transit sidewalk extension plan.

**Project Priority:** Med

**Multi-year Project:** No

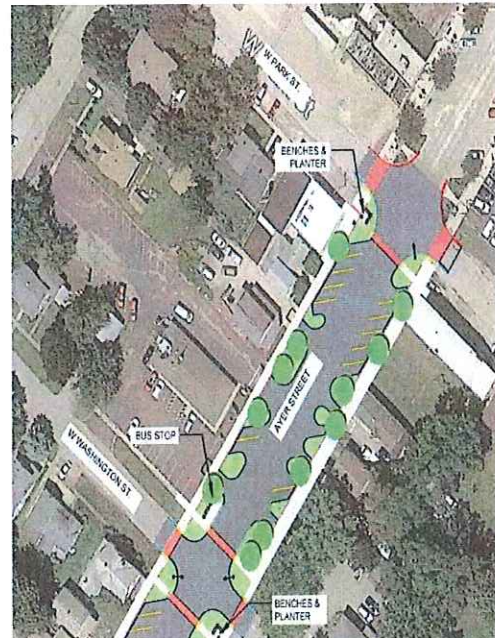
**Cost Estimate:** \$ 600,000

**Funding Source(s):** MFT/RBI Grant

Proposed S. AYER ST. STREETScape  
Harvard, IL



S. AYER Street at E. Washington Street Looking South





**PUBLIC WORKS:**

**Project Title:** Sidewalk Improvement Program (HAR23)

**Date Submitted:** November, 2021

**Project Location:** Second St.- Burbank to Brown St. (East & West Sides)  
Second St. -Brown to Blackman St. (West Side)  
(22/23 Budget Year).

**Project Description:** Resurface select sidewalks for condition improvements including all intersection corners improved to ADA standards.

**Project Evaluation:** Per the yearly sidewalk program, these above-listed locations have been selected for the 2023 improvement project. Selection is based on evaluation of sidewalk conditions and these areas are determined to be high-priority for resurfacing needs. (Refer to Project Schedule Appendix B).

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** \$375,000 – 5 year total (\$75,000/year)

**Funding Source(s):** Budget Appropriations



**PUBLIC WORKS:**

**Project Title:** Sidewalk Improvements (HAR24)

**Date Submitted:** July, 2021

**Project Location:** Harvard Post Office – 300 N. Eastman St. (southwest corner at Brainard St.).

**Project Description:** Replace sidewalk steps and ramp on the southwest corner of the intersection at Brainard St., including curb and parking space reconfiguration on the south side and front of the building.

**Project Evaluation:** Ongoing problems exist with parking at this location, with the railing and portions of the ramp retaining wall on the south side corner being struck by parking vehicles. Repairs to this infrastructure is currently needed. There are also issues with the curb and steps having different heights, tread depths and landing areas. Initial design engineering alternatives have been developed from simple field measurements, aerials and field photographs. These alternatives were previously presented to City Council.

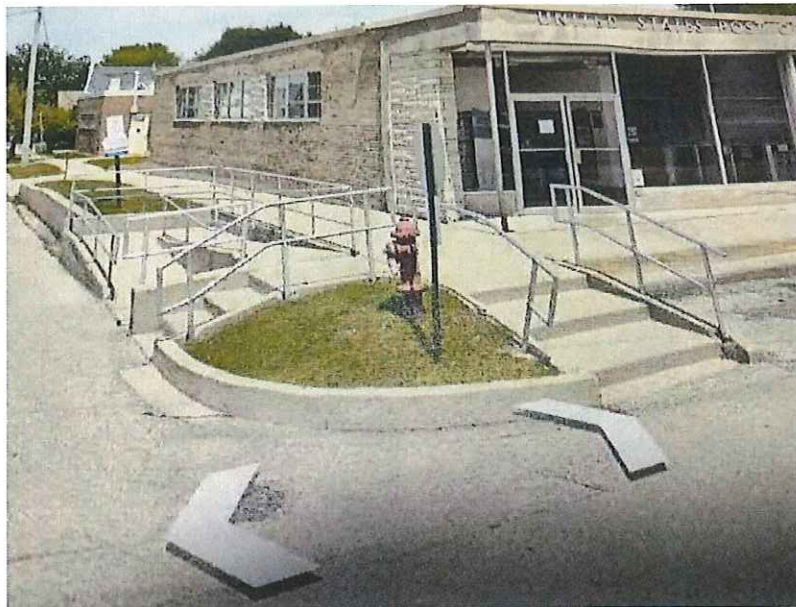
Continuation of the project requires alternative selection, further preliminary engineering services, construction engineering, and final construction.

**Project Priority:** Medium

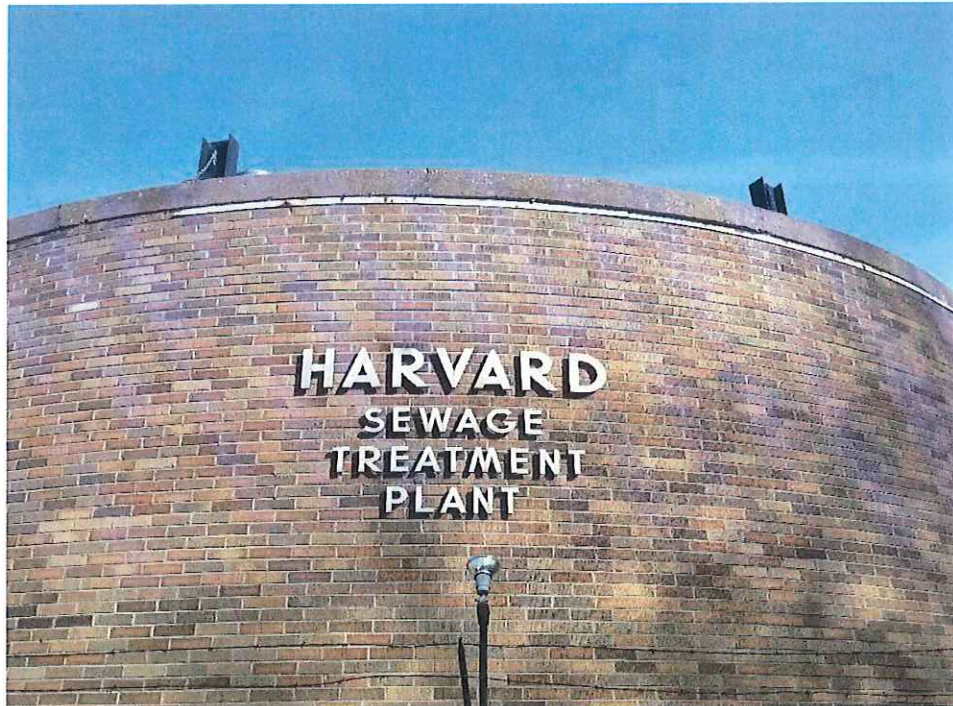
**Multi-year Project:** Yes

**Cost Estimate:** \$50,000 (\$1500 initial design completed)

**Funding Source(s):** Budget Appropriations



# UTILITY DEPARTMENT



**UTILITY DEPARTMENT:**

**Project Title:** Waste Water Treatment Plant Phase IA (HAR25)

**Date Submitted:** July, 2019

**Project Location:** Waste Water Treatment Plant – 805 W. Brink St.

**Project Description:** This project includes the rehabilitation of the raw sewage pumping station, grit removal system, primary effluent pumping station, and primary sludge pumping station. Also included is the replacement of the lid and roofing system for the anaerobic digestion complex.

New construction includes a three-ring oxidation ditch, Mixed Liquor Suspended Solids diversion structure, two tertiary clarifiers, a Raw Activated Sludge/Waste Activated Sludge pumping station, sludge storage barn and sludge handling building.

Remodeling of an existing building to serve as a new office and laboratory is also included the Phase IA plan.

**Project Evaluation:** Ongoing operational issues due to aging infrastructure has over time caused failure to maintain National Pollutant Discharge Elimination System (NPDES) compliance standards. Following an initial study in 2014, and full plan development in 2015, property was purchased in 2017 for Phase 1A WWTP improvements. Improvement work began in 2021, with an estimate completion timeline of mid-2023. A loan was obtained through the Illinois Environmental Protection Agency (IEPA) and \$2,000,000 in grant funding through the Department of Commerce and Economic Development (DCEO). (See Appendix D for Loan Details).

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** 21,000,000 – 3 year total (7,000,000/year)

**Funding Source(s):** Budget Appropriations for IEPA Loan/Fast Track Grant



**UTILITY DEPARTMENT:**

**Project Title:** Replace Waste Gas Burner Flare (HAR26)

**Date Submitted:** October, 2021

**Project Location:** Waste Water Treatment Plant – 801 W. Brink St.

**Project Description:** Replace existing Methane Waste Gas Burner Flare, incorporating this replacement with the new technology of the Phase IA WWTP expansion. Possible funding could be provided through the American Rescue Plan Act (ARPA).

**Project Evaluation:** The Waste Flare allows the discharge of excess methane gas from the anaerobic digesters. The original waste flare dates back to 1958 and no longer functions properly. The piping is corroded and must be lit manually to obtain an adequate flare.

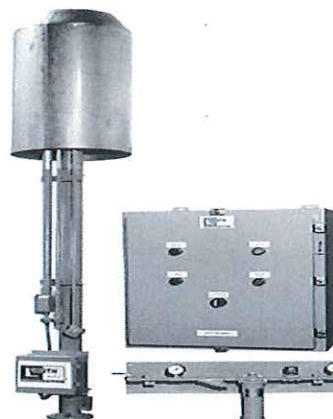
Prioritizing this project with the current WWTP expansion project in Budget Year 2022/2023 would prove to be more efficient, as excavating and pipe replacement are part of the work required.

**Project Priority:** High

**Multi-year Project:** No

**Cost Estimate:** \$45,000

**Funding Source(s):** ARPA (Tranche 2)



**UTILITY DEPARTMENT:**

**Project Title:** Replace Mechanical Equipment - Primary Clarifiers (HAR27)

**Date Submitted:** October, 2021

**Project Location:** Waste Water Treatment Plant - 801 W. Brink St.

**Project Description:** Replace auger, drive units and gear boxes in the Primary Clarifiers.

**Project Evaluation:** The original tanks date back to 1977, and the mechanical equipment is in need of an upgrade. All wastewater that enters the plant flows through these clarifier tanks, where sludge is settled and pumped to the digester. Repairs to the equipment have been previously made, but because the auger and other mechanical parts sit in an extremely corrosive environment, future repairs will be unlikely. Full part replacement is recommended.

**Project Priority:** High

**Multi-year Project:** No

**Cost Estimate:** \$40,000

**Funding Source(s):** Budget Appropriations



**UTILITY DEPARTMENT:**

**Project Title:** Well Replacement – Well #6 (HAR28)

**Date Submitted:** October, 2021

**Project Location:** 1000 E. Brown St.

**Project Description:** Update Well #6 with full well replacement.

**Project Evaluation:** Well #6 was originally installed in the 1960s. In the 1970s, the well was updated to the current status of an iron removal treatment system. In 2020, the well began pumping sand, and modifications were made in pumping procedure operations. Evaluation concluded this problem will likely reoccur and the best option in the future is to develop another well onsite.

**Project Priority:** Medium

**Multi-year Project:** No

**Cost Estimate:** \$450,000 (Estimate breakdown included in Appendix G)

**Funding Source(s):** Budget Appropriations



**UTILITY DEPARTMENT:**

**Project Title:** Pole Barn Painting - Roof (HAR29)

**Date Submitted:** October, 2021

**Project Location:** Waste Water Treatment Plant – 801 W. Brink St.

**Project Description:** Repaint the roof of the pole barn located at the WWTP.

**Project Evaluation:** This building serves as a plant workshop and is used to house city vehicles and equipment. The original construction dates back to 1977, and the roof of the building has deteriorated. Painting the roof would extend the life possibly seven years or more before full replacement would be needed.

**Project Priority:** Medium

**Multi-year Project:** No

**Cost Estimate:** \$10,000

**Funding Source(s):** Budget Appropriations





**UTILITY DEPARTMENT:**

**Project Title:** Back-Up Generator (HAR30)

**Date Submitted:** October, 2021

**Project Location:** Well #9 – 6861 Harvard Hills Rd.

**Project Description:** Purchase a new generator to provide back-up power to Well #9.

**Project Evaluation:** In the event of a major, long-term power outage, a back-up generator would allow Well#9 to provide water flow for fire suppression and potable water needs of the community. A previous estimate breakdown was done for this project and can be found in Appendix H.

**Project Priority:** Medium

**Multi-year Project:** No

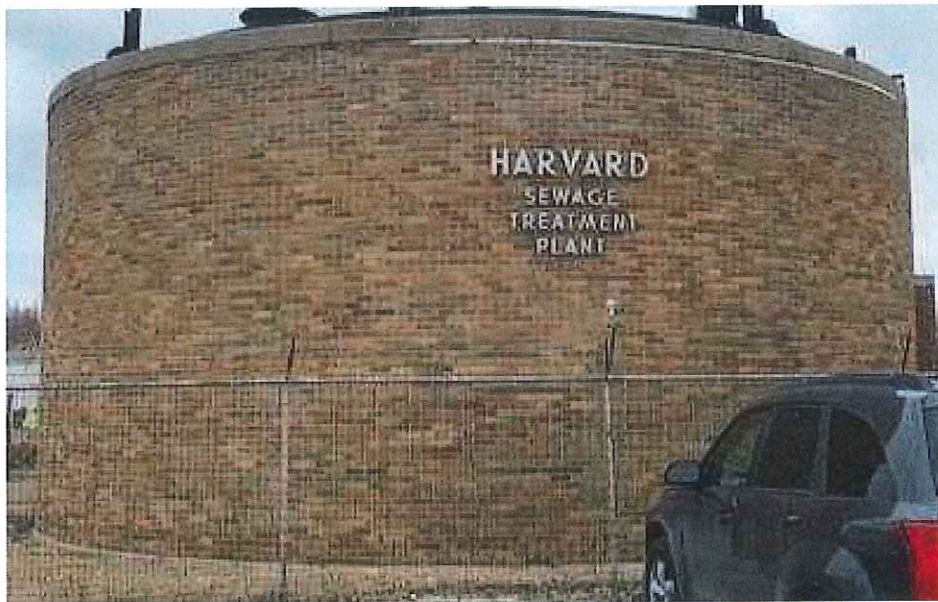
**Cost Estimate:** \$250,000

**Funding Source(s):** Budget Appropriations



**UTILITY DEPARTMENT:**

**Project Title:** Tuckpointing – Anaerobic Primary Digester (HAR31)  
**Date Submitted:** October, 2021  
**Project Location:** Waste Water Treatment Plant – 801 W. Brink St.  
**Project Description:** Tuckpoint the brick on the primary digester. Rehabilitation of this building is not included in the WWTP Phase IA improvements, and will still be in use once the new area of the plant is functional.  
**Project Evaluation:** The digester is the primary point in the water treatment processing system. This building was constructed in 1958. The brick is showing wear and tuckpointing will prevent moisture buildup and further cracking, extending the life of the structure.  
**Project Priority:** Low  
**Multi-year Project:** No  
**Cost Estimate:** \$20,000  
**Funding Source(s):** Budget Appropriations



**UTILITY DEPARTMENT:**

**Project Title:** Tuckpointing–Office, Laboratory & Electrical Room (HAR32)

**Date Submitted:** October, 2021

**Project Location:** Waste Water Treatment Plant – 801 W. Brink St.

**Project Description:** Tuckpoint the brick on the main office building that also houses the current WWTP laboratory and electrical room.

**Project Evaluation:** This building dates back to 1940, and began being utilized as the office building in 1977. The brick is showing wear and tuckpointing will prevent moisture buildup and further cracking, extending the life of the structure. Although the functions of this building will be moving to the newly renovated space as part of WWTP Phase IA in 2022, this building will need to be maintained for electrical use and storage space.

**Project Priority:** Low

**Multi-year Project:** No

**Cost Estimate:** \$20,000

**Funding Source(s):** Budget Appropriations



**UTILITY DEPARTMENT:**

**Project Title:** Sanitary Sewer Improvements (HAR33)

**Date Submitted:** 2014

**Project Location:** City-Wide

**Project Description:** This project involves improvements to areas of the City's sanitary sewer system where the presence of Infiltration and Inflow (I/I) has been identified.

**Project Evaluation:** Infiltration occurs when groundwater enters the system through joints and structural defects, most often due to aging infrastructure. Inflow is caused by storm runoff discharged directly into the system through connected downspouts, sump pumps and drains. Minimal flow from these sources is expected, however, an excessive increase of flow into the collection system can lead to surcharging, basement backups and overflows.

Problem areas were previously identified and a comprehensive identification plan recommended. Prioritized areas have been listed in the 2015 Wastewater Master Plan (page 3-23 – see Appendix E), Some evaluation steps have been taken to identify sources; however, the scope of this project is large and will extend past this 5-year plan. Yearly funding for televising, smoke testing, and sump pump and drain inspection programs can identify sources for future rehabilitation plans, such as sewer and manhole lining and spot repair programs. (See Appendix F for location priority listing).

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** \$6,000,000

**Funding Source(s):** TBD



Infiltration



Inflow

**UTILITY DEPARTMENT:**

**Project Title:** Televising and Inspection Program (HAR34)

**Date Submitted:** October, 2021

**Project Location:** As Prioritized

**Project Description:** Televising of sanitary sewer mains and inspection of sanitary manholes as needed throughout the City based on age of infrastructure and problem areas. Initial funding for the program is available through the American Rescue Plan Act (ARPA) Tranche 1 revenue received.

**Project Evaluation:** Televising and inspection allows a visual image indicating where infiltration has become a problem, as well as an evaluation of the structural integrity of the sewer mains and manholes. Main lining is an affordable alternative to extending the life of aging infrastructure over main replacement. Structural lining is less intrusive and less costly. Lining helps eliminate water leaks and improve water quality. Once inspected, a plan for repairs, lining or replacement can more accurately be formulated.

Current areas of priority concern are the older areas in Ward 1, Ward 3, and Ward 2, respectively. (See Appendix F for specific priority listing).

**Project Priority:** High

**Multi-year Project:** Yes

**Cost Estimate:** \$230,000 – 5 year total (\$46,000/year)

**Funding Source(s):** ARPA – Tranche 1 (for first year)



**UTILITY DEPARTMENT:**

**Project Title:** Water Main Lining (HAR35)

**Date Submitted:** October, 2021

**Project Location:** Route 14 from Route 173 to East Park St.

**Project Description:** Contract the lining of approximately 800 feet of cast iron water main. Funding is available through the American Rescue Plan Act (ARPA).

**Project Evaluation:** Water main lining is an affordable alternative to extend the life of aging infrastructure over main replacement. Structural lining is less intrusive and less costly. Lining helps eliminate water leaks, main breaks and improves water quality.

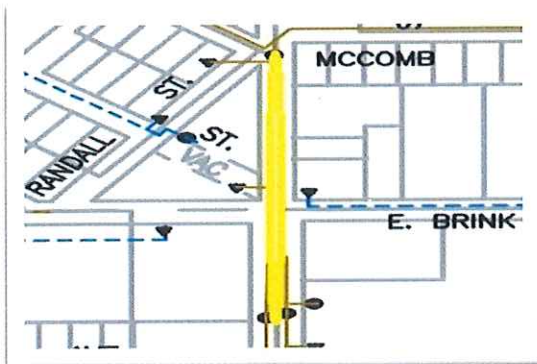
This is an older water main within the City's infrastructure. A portion of this main has experienced 7 main breaks in the past 18 months in one general location (Burger King), and 3 main breaks in the past 10 years in the area that runs under Mokeler Creek. This water main serves as the main loop for the area west of Route 14 and south of Route 173.

**Project Priority:** High

**Multi-year Project:** No

**Cost Estimate:** \$300,000

**Funding Source(s):** ARPA - Tranche 2



**UTILITIES:**

**Project Title:** Water Main Extension/Looping  
(HAR36, HAR37, HAR38, HAR39, HAR40, HAR41 & HA42)

**Project Evaluation:** Water main extension and looping is beneficial in dead-end water distribution systems. Extending a water main provides for better water flow. Looping water mains provide multiple routes in the system for water transmission points of demand.

Water main systems become less vulnerable to main breaks. When a break does occur, the area can be isolated while water service to other areas is continued through alternate loops. Looped systems also reduce stagnation for improved water quality.

The following six pages identify and evaluate extension and looping projects needed throughout the city to aid in alleviating historical problems with the water system.



**UTILITIES:**

**Project Title:** Water Main Extension/Looping (HAR36)

**Date Submitted:** October, 2021

**Project Location:** Marengo Rd. to E. Metzen St.

**Project Description:** Extending and looping approximately 420 feet of water main at Marengo Rd. (Rt 173 intersection) to Metzen St. Funding is available through the American Rescue Plan Act (ARPA) Tranche 1.

**Project Evaluation:** Looping approximately 420 feet of main at this location will connect another area of the system south of the railroad tracks. There is a history of main breaks which affect this older area. Looping the system will allow pressure to be maintained on the south side of the city during repairs. Work will be more extensive as this extension will run under Mokeler Creek and Rt. 173.

**Project Priority:** High

**Multi-year Project:** No

**Cost Estimate:** \$220,000

**Funding Source(s):** ARPA – Tranche 1





**UTILITIES:**

**Project Title:** Water Main Extension/Looping (HAR37)

**Date Submitted:** October, 2021

**Project Location:** Dewey St. to Kennedy Dr.

**Project Description:** Extending and looping approximately 200 feet of water main at Dewey St., from the Park Point Subdivision to Kenney Dr.

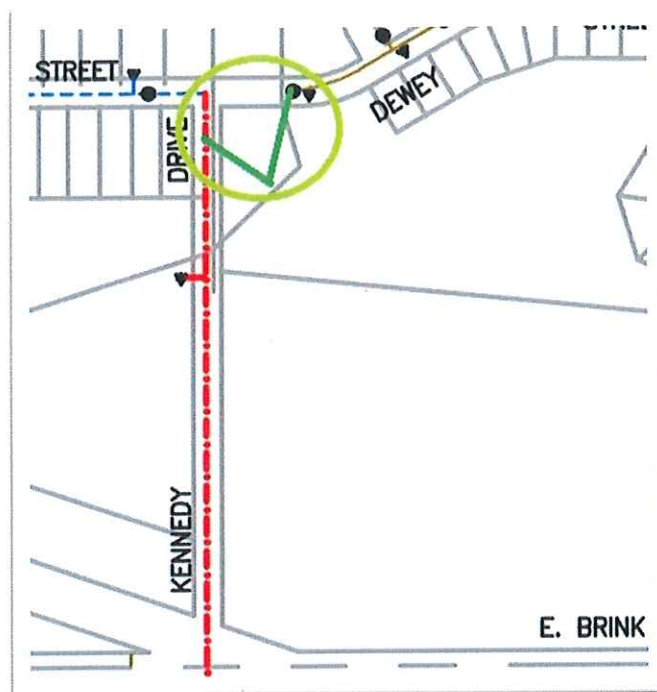
**Project Evaluation:** This water system services the Park Point Subdivision and is currently a dead-end at Dewey St. Connecting this area of the system to Kennedy Drive will complete the system loop allowing for better flow.

**Project Priority:** High

**Multi-year Project:** No

**Cost Estimate:** \$50,000

**Funding Source(s):** ARPA - Tranche 1



**UTILITIES:**

**Project Title:** Water Main Extension/Looping (HAR38)

**Date Submitted:** January, 2022

**Project Location:** S. Howard St. at Waste Water Treatment Plant back entrance.

**Project Description:** Extending and looping approximately 100 feet of water main from South Howard to the new WWTP extension.

**Project Evaluation:** A portion of the water main will be extended from the south end of Howard Street as part of the WWTP construction Phase IA. Extending the main from S. Howard to this new main will complete the looping in this area, eliminating another dead-end in the system.

**Project Priority:** High

**Multi-year Project:** No

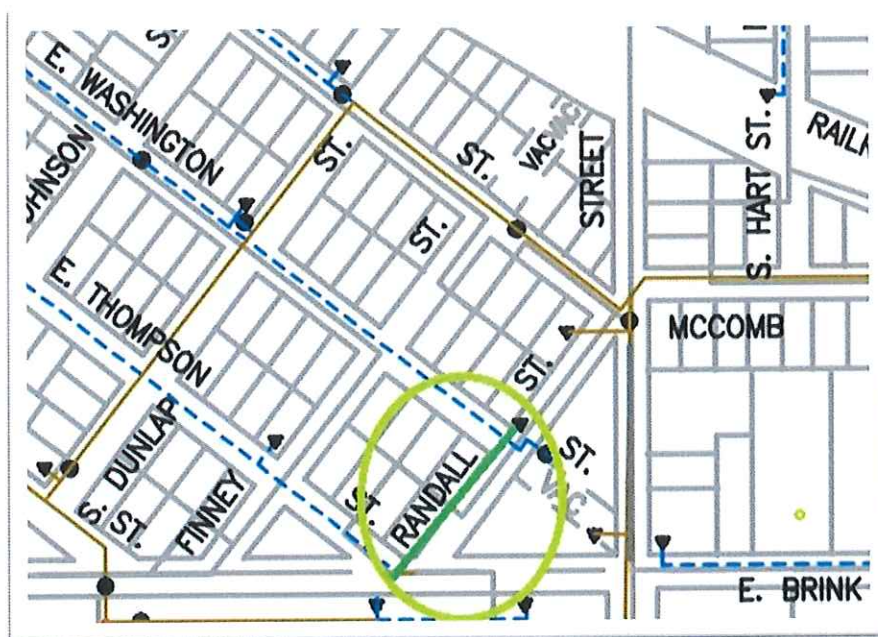
**Cost Estimate:** \$20,000

**Funding Source(s):** Budget Appropriations



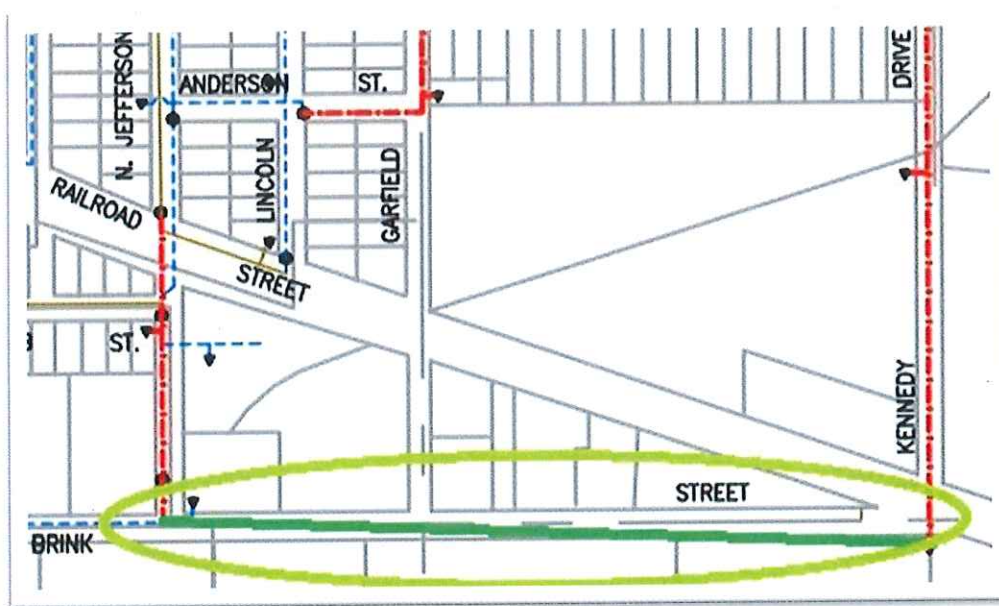
**UTILITIES:**

- Project Title:** Water Main Extension/Looping (HAR39)
- Date Submitted:** October, 2021
- Project Location:** Randall St. – East Thompson to East Washington St.
- Project Description:** Extending and looping approximately 300 feet of water main on Randall St. from E. Thompson to E. Washington St.
- Project Evaluation:** This area has older infrastructure and is more susceptible to main breaks and servicing needs. Looping at this location will allow for further isolation of the system during servicing, allowing flow to be maintained to surrounding areas.
- Project Priority:** Medium
- Multi-year Project:** No
- Cost Estimate:** \$50,000
- Funding Source(s):** Budget Appropriations



**UTILITIES:**

- Project Title:** Water Main Extension/Looping (HAR40)
- Date Submitted:** October, 2021
- Project Location:** E. Brink St. from Kennedy Dr. to Jefferson St.
- Project Description:** Extending and looping the water main system on East Brink Street from Kennedy Drive to Jefferson Street.
- Project Evaluation:** This water system is currently a dead-end point that is affecting water pressure to homes and businesses in that area. Future connection will require approximately 2000 feet of connection to loop the system. This will alleviate some of water pressure problems, as well as eliminate dead-end points in both the east and west tie-in locations.
- Project Priority:** Medium
- Multi-year Project:** No
- Cost Estimate:** \$230,000
- Funding Source(s):** Budget Appropriations



**UTILITIES:**

**Project Title:** Water Main Extension/Looping (HAR41)

**Date Submitted:** October, 2021

**Project Location:** Forest Downs to Wildflower Ln.

**Project Description:** Extending and looping approximately 900 feet of water main from Forest Downs to Wildflower Lane

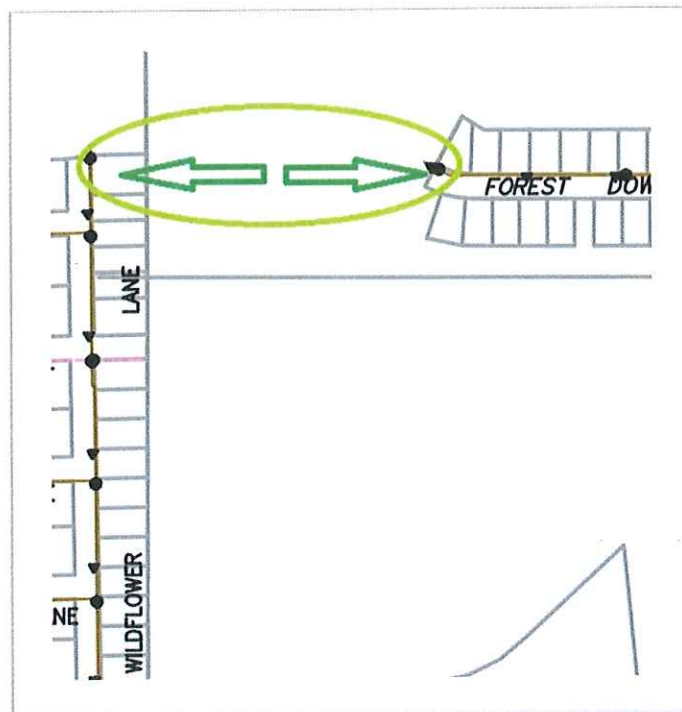
**Project Evaluation:** This water system services Autumn Glen. The system currently meets a dead-end point at Forest Downs. Future connection will loop the system with the Oak Grove Crossing Subdivision. There are currently no consistent problems in this area as the infrastructure is relatively new.

**Project Priority:** Low

**Multi-year Project:** No

**Cost Estimate:** \$115,000

**Funding Source(s):** Budget Appropriations



**UTILITIES:**

**Project Title:** Water Main Extension/Looping (HAR42)

**Date Submitted:** October, 2021

**Project Location:** Well #10 – Lawrence Rd. to 22500 W. Route 173 (Moose Lodge).

**Project Description:** Extension and looping of the water main from Well #10 on Lawrence Rd. to W. Route 173, and then east to Moose Lodge.

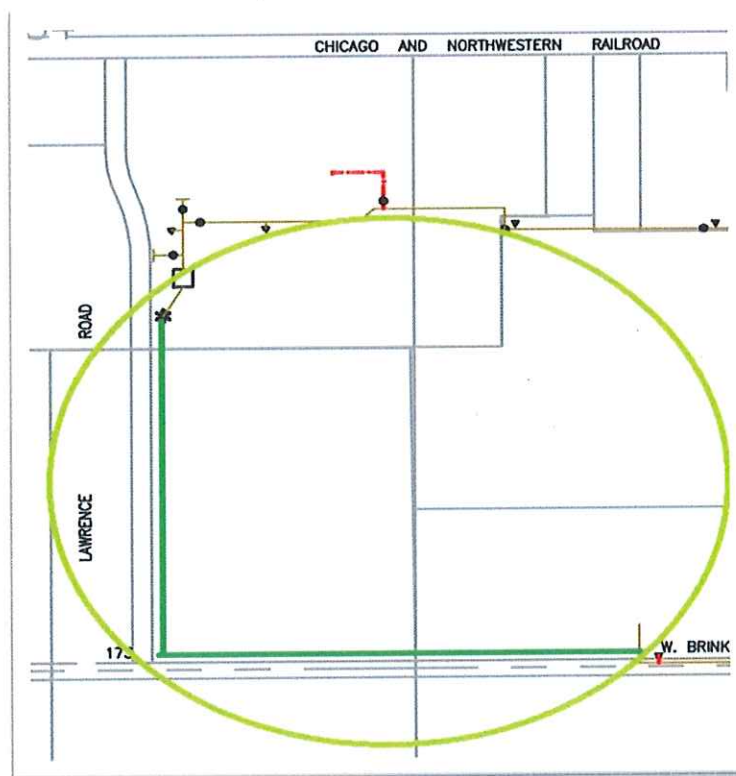
**Project Evaluation:** This project includes extension and looping of the 12-inch water main that currently runs from West Diggins Street to Well #10 (approximately 2,600 ft). A previous water study has shown a water pressure issue on the south side of the City. Extending the main from Well #10 south to Route 173, and then east tapping on at the Moose Lodge area, will help alleviate this issue.

**Project Priority:** Low

**Multi-year Project:** No

**Cost Estimate:** \$450,000

**Funding Source(s):** Budget Appropriations



**UTILITIES:**

**Project Title:** Water Main Replacement (HAR43)

**Date Submitted:** October, 2021

**Project Location:** South Park Ave. – Ridge Ln. to Route 14.

**Project Description:** Replacement of approximately 900 feet of 6-inch water main on South Park Avenue, from Ridge Lane to Route 14.

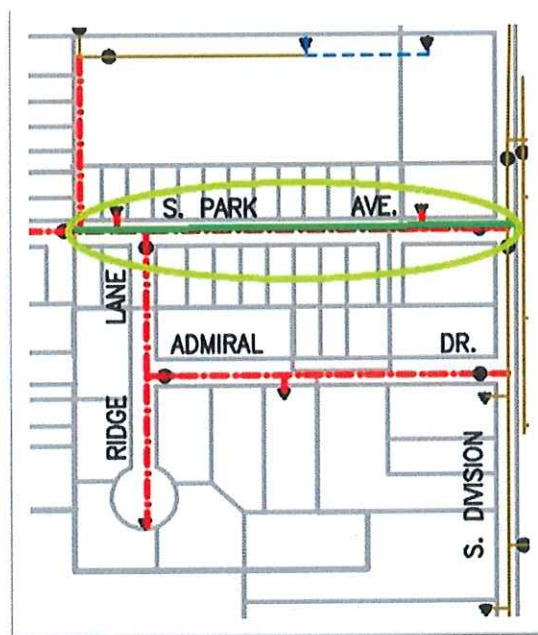
**Project Evaluation:** The water main in this location is part of the City's older infrastructure. Due to aging, there have been several breaks in this main over the years. This project cost is estimated based on main replacement; however, it is possible that lining the main may be effective and less costly. This project has also been placed on the televising list found in Appendix F.

**Project Priority:** Med

**Multi-year Project:** No

**Cost Estimate:** \$180,000

**Funding Source(s):** Budget Appropriations



**UTILITIES:**

**Project Title:** Sanitary Sewer Replacement (HAR44)

**Date Submitted:** October, 2021

**Project Location:** Division St. – 333 S. Division to Airport Rd.

**Project Description:** Replacement of approximately 1,225 feet of sanitary sewer line.

**Project Evaluation:** The sanitary sewer piping in this location is part of the City's older infrastructure, dating back to the 1960's. Sanitary sewer replacement has been completed from South Park Avenue to Admiral Drive, and lining has been installed from Admiral Drive to the Chevrolet Dealership. Continuing this project to Airport Road is recommended.

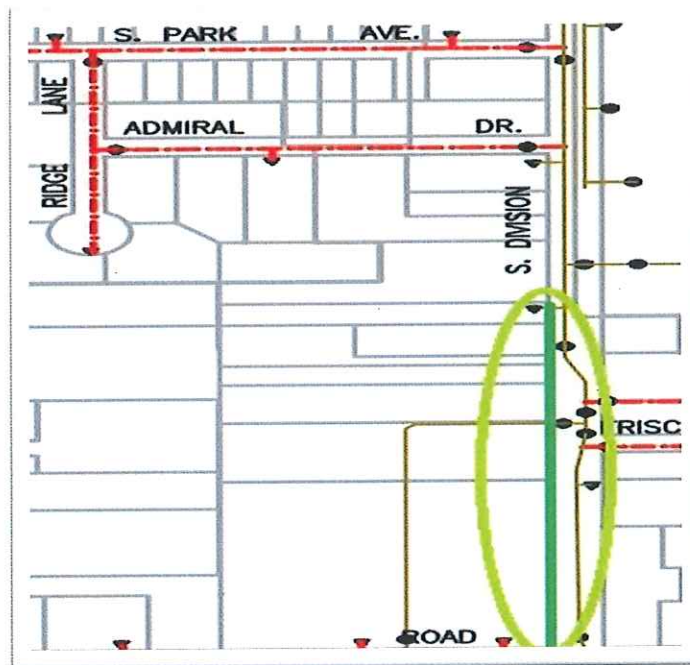
Cost is estimated based on full replacement, and may need to be pushed out beyond the scope of this current plan. Planning time should be allowed for Illinois Department of Transportation (IDOT) permitting (at least one year in advance). Lining is a possibility and may be effective and less costly. This project has also been placed on the televising list found in Appendix F.

**Project Priority:** Med

**Multi-year Project:** No

**Cost Estimate:** \$850,000

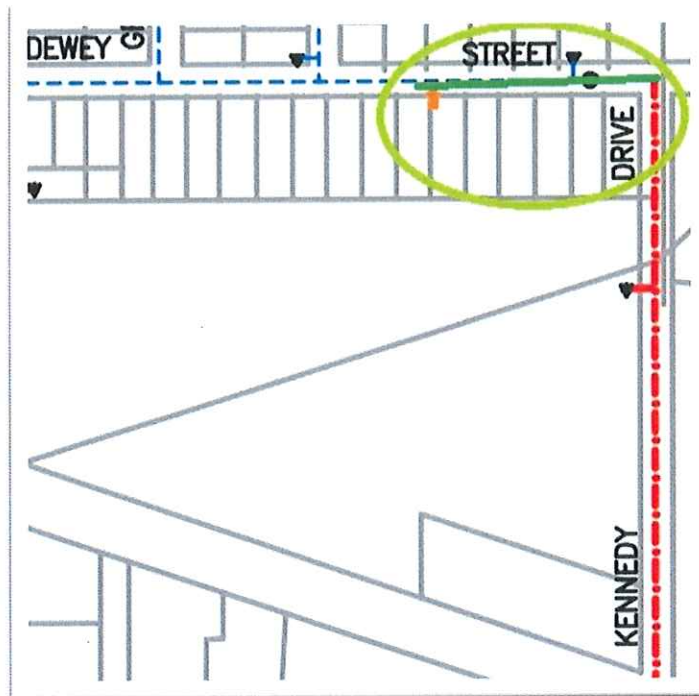
**Funding Source(s):** Budget Appropriations





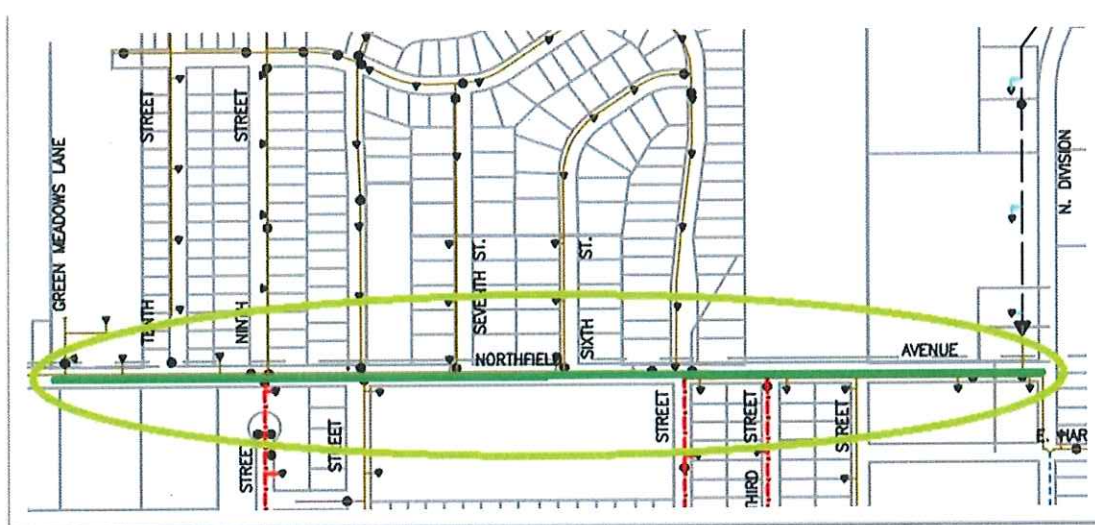
**UTILITIES:**

**Project Title:** Sanitary Sewer Replacement (HAR45)  
**Date Submitted:** October, 2021  
**Project Location:** Dewey St. – Kennedy Dr. to 709 ½ Dewey St. (Lift Station)  
**Project Description:** Replacement and rerouting of approximately 475 feet of sanitary sewer line.  
**Project Evaluation:** This project includes replacing and rerouting of the sanitary sewer line. Currently, the lift station located at 709 ½ Dewey Street is small, periodically loses power, and experiences functioning issues. During replacement, it is possible to reroute this line to the west, allowing for gravity flow, at which time the lift station can be abandoned.  
**Project Priority:** Low  
**Multi-year Project:** No  
**Cost Estimate:** \$300,000  
**Funding Source(s):** Budget Appropriations



**UTILITIES:**

- Project Title:** Storm Sewer Replacement (HAR46)
- Date Submitted:** October, 2021
- Project Location:** Northfield Ave. – Route 14 to Green Meadow Ln.
- Project Description:** Replacement of approximately 3,600 feet of storm sewer line.
- Project Evaluation:** There are capacity issues with the storm sewer in this location. Periodically the system size has not been adequate enough to handle the volume of storm runoff. This has caused manhole cover disruption and flooding issues on Northfield Avenue at times of heavy storm flow conditions. A larger system is recommended with greater capacity to handle these heavier storm flows. Engineering of the storm sewer will be needed in order to determine adequate size of replacement.
- Project Priority:** Low
- Multi-year Project:** No
- Cost Estimate:** \$600,000
- Funding Source(s):** Budget Appropriations



# APPENDICES



# APPENDIX A

(HAR06)

VACANT HOMES 2022

---

## 204 E. Park – Priority 1



- Vacant since 2013
- Owner deceased in 2022
- Taxes paid/no mortgage
- Foundation breach/rotting windows
- Researching Grant Availability

## 307 Grant – Priority 2



- Vacant since 2018
- No record of foreclosure pending
- Taxes paid/unknown payor
- City Liens to date: \$2,370.90
- Windows boarded up/interior unknown

## 607 W. Blackman – Priority 3



- Vacant since 2017
- Foundation into basement exposed
- City Liens to date: \$4,381.85
- Property purchased 01/13/2020
- Sale not recorded until 01/11/2022
- Abatement notice send March, 2022

# APPENDIX B

(HAR19, HAR20, HAR21, HAR22 & HAR23)



## ROADWAY ENGINEERING UPDATE PROJECT SCHEDULES

	2022				2023				2024				2025				
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Diggins Street	PHASE I		PHASE II		CONSTRUCTION												
2022 Sidewalk Program (2nd Street)		DESIGN	CONST														
2023 Sidewalk Program (Rte. 14)	DESIGN		IDOT SPECIAL WASTE		CONSTRUCTION												
Marengo Road Bridge (Over Rush Creek)				PHASE I				PHASE II				CONSTRUCTION					
Marengo Road Resurfacing/ Reconstruction (Rte. 23 to Airport Rd.)					PHASE I				PHASE II				CONSTRUCTION				
Ayer Street Streetscape (Park to Washington)			DESIGN		CONSTRUCTION												



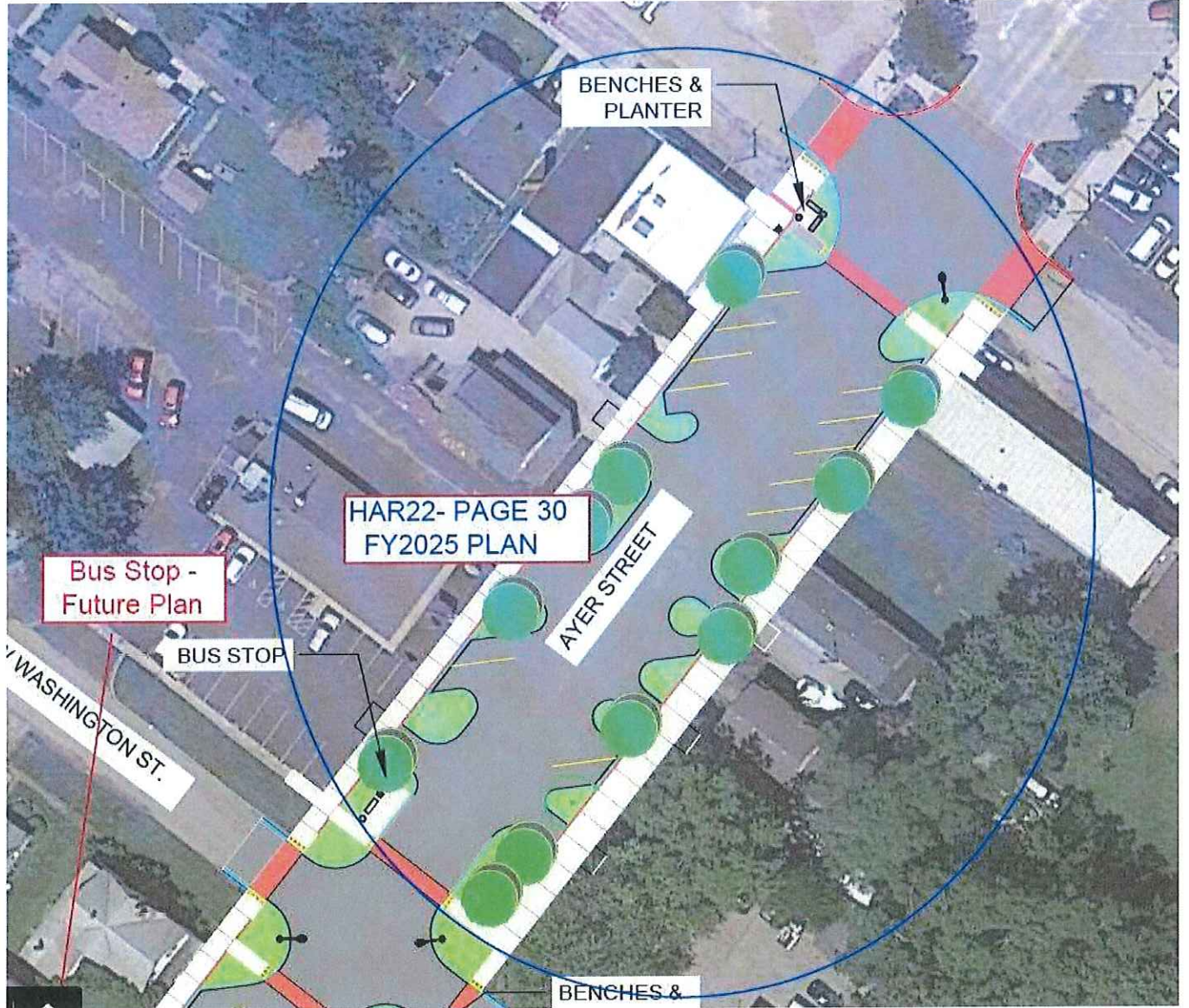
# APPENDIX C

(HAR22)

Proposed S. AYER St. STREETSCAPE  
Harvard, IL



S. AYER Street at E. Washington Street Looking South



# APPENDIX D

(HAR25)





## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

217/782-2027

CERTIFIED MAIL

DEC 23 2020

Mr. Dave Nelson, Administrator  
City of Harvard  
201 West Front Street  
P.O. Box 310  
Harvard, IL 60033-2708

Re: City of Harvard/L175549  
Loan Agreement

Dear Mr. Nelson:

It is a pleasure to advise you that your application for a Water Pollution Control loan, under the provisions of the Environmental Protection Act, has been approved in the amount of \$22,000,000.00 at a 0.81% simple annual interest rate. In accordance with the Procedures for Issuing Loans from the Water Pollution Control Loan Program Title 35 Ill. Adm. Code 365.210, this loan qualifies for the Small Community Rate; the base interest rate was reduced from 1.35% to 1.01% in accordance with 365.210. The loan also qualifies for an Environmental Discount Rate; the Small Community Rate was reduced from 1.01% to 0.81% in accordance with 365.210.

In accordance with the Procedures for Issuing Loans from the Water Pollution Control Loan Program Title 35 Ill. Adm. Code 365.250 (Loan Rules), \$3,300,000.00 of the loan amount will be forgiven by the State of Illinois (State) pursuant to principal forgiveness provisions contained in the Loan Rules. The State reserves the right to increase or decrease this amount through an amendment to the loan should this action be necessary to adjust the total amount of principal forgiveness provided by the State to the specific requirements of the federal capitalization grant.

The Loan Agreement is enclosed in triplicate. After the Agreement is reviewed, the original and one copy should be signed by the appropriate official and returned to the Infrastructure Financial Assistance Section, Bureau of Water, P.O. Box 19276, Springfield, IL 62794-9276 as soon as it is signed, but no later than February 12, 2021. The second copy is for your records. Receipt of a written refusal or failure to return the properly executed documents within the specified time may subject the Loan Agreement to cancellation consideration.

Your attention is invited to the Standard Conditions of the Loan Agreement which outline the requirements and terms of your loan. The schedule is based on your awarding of contracts and initiating project construction promptly. Your compliance with the loan conditions and terms will facilitate our processing and your receipt of loan disbursements. In addition, by acceptance of this loan agreement, the loan recipient agrees to comply with any future reporting and/or accountability requirements that may be associated with the State Revolving Fund programs in

2125 S. First Street, Champaign, IL 61820 (217) 278-5800  
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120  
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000  
595 S. State Street, Elgin, IL 60123 (847) 608-3131

2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200  
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022  
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

Illinois.

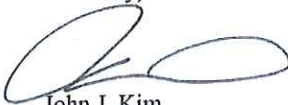
For each contract awarded, please submit a copy of the executed contract; a copy of the certificate of insurance; a copy of the performance and payment bonds; and the notice to proceed as soon as these documents are available.

You are reminded that it is your responsibility as the loan recipient to maintain copies of the bids for all firms that bid on prime contracts, or provide quotes on subcontracts in accordance with the Standard Conditions. It is also your responsibility to obtain copies of all subcontracts awarded by the prime contractor and verify these contracts conform to the Standard Conditions.

If you have any questions regarding this project, please contact Bill Jankousky, the project manager, Infrastructure Financial Assistance Section, at 217/782-2027.

Congratulations on the receipt of this Loan Agreement and we look forward to working with you during the project.

Sincerely,



John J. Kim  
Director

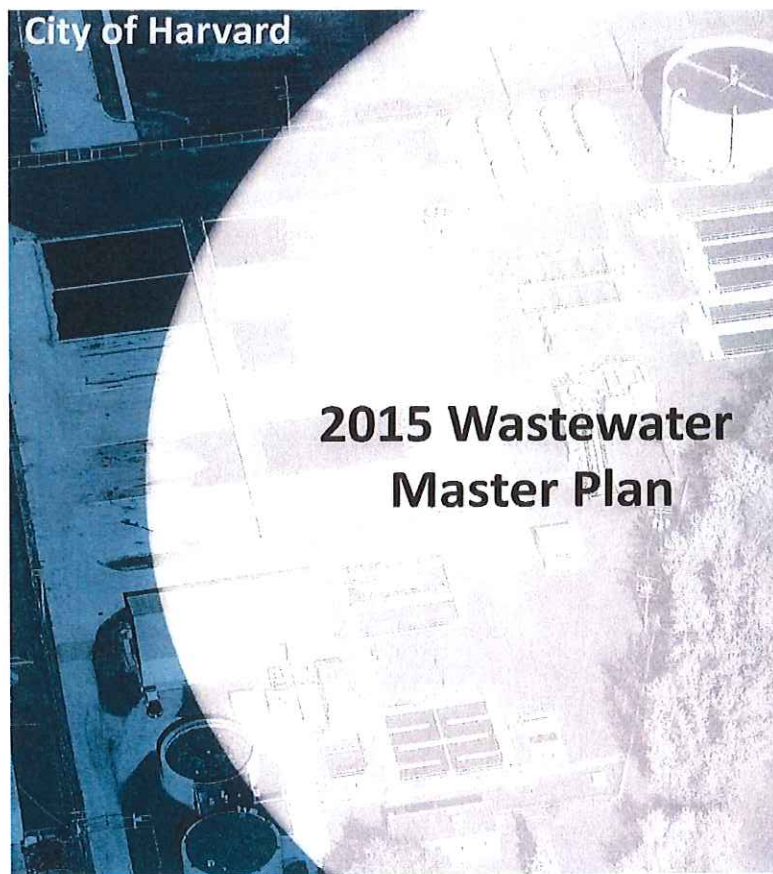
JJK:BJ

Attachments

cc: Trotter and Associates  
City Clerk

# APPENDIX E

(HAR26)



**Summary**

Infiltration and inflow was identified in several of the Harvard drainage basins. The levels of I/I in these areas are easily determined to be excessive. Efforts should be undertaken to locate and remove these sources of clear water.

It is recommended that a Sanitary Sewer Evaluation Study (SSES) be completed to further investigate and inspect the existing collection system, locate sources of I/I, and develop a long-term Collection System Rehabilitation Plan. The preceding analyses indicate that efforts be prioritized and that the initial SSES efforts include those areas listed in Table 3-8.

**Table 3-8: Sanitary Sewer Evaluation Study – Initial Focus Areas**

Priority	Service Area	Basin	Sub-Basins	Infiltration Rate (gal/PE/day)	Inflow Rate (gal/PE/day)	Inflow Volume (gal/day)
I	Northfield	Northern	I, T, U	157	394	743,400
II	Clay Tile Areas	Central	K, M, N, O, P, V	134	182	1,208,760
III	South Park	Southern	C, D	275	386	186,300
IV	Route 14	Southern	C	299	485	64,500
V	Dewey	Central	K	182	798	36,720
VI	Diggins	Central	L	153	268	16,320
VII	Autumn Glen	Northern	F	137	192	4,810

**3.6 SANITARY SEWER EVALUATION STUDY (SSES)**

A Sanitary Sewer Evaluation Survey (SSES) is a series of field investigation techniques used to identify specific sources of I/I. A variety of methods are typically used including manhole inspections, closed-circuit televised (CCTV) inspections, smoke testing, dyed-water testing, and sump pump inspections. Each of the inspection techniques mentioned above are discussed in further detail below, each has its most effective application. An effective SSES could include all or some of these methods depending on the unique character of each system.

A comprehensive investigation can identify I/I sources within the public sector (such as leaking manholes, leaking pipes, and cross-connections between sanitary and storm sewers) as well as within the private sector (leaking service laterals and illegally connected downspouts, sump pumps, foundation drains and area drains). Areas within the collection system that experience chronic I/I have been identified. It is recommended that the City implement the SSES program

# APPENDIX F

(HAR33 & HAR34)





CITY TELEVISION PRIORITY LIST	
LOCATION	PRIORITY
WARD 2:	
W. Roosevelt St. - All	High
Fourth St. - 500 and 600 block	High
W. Blaine St. - All	Medium
WARD 3:	
Lincoln St. - Diggins St. to Railroad St.	High
Church St. - Hart St. to Garfield St.	High
Garfield St. - Diggins St. to Railroad St.	Medium
W. Diggins St. - Second St. to Howard St.	Medium
W. Blackman St. - All	Medium
Hart St. - Diggins St. to Railroad St.	Medium
Jefferson St. - Diggins St. to Railroad St.	Low
WARD 4:	
South Park Avenue - Ridge Ln. to Route 14 (HAR42)	High
Division St. - Admiral Dr. to Airport Road (HAR43)	High
W. Metzen St.- Eastman St. to Hutchinson St.	Medium
WARD 1:	
E. Diggins St. - Grant St. to N. Division	Medium

# APPENDIX G

(HAR29)





**MUNICIPAL**  
WELL & PUMP

**Project Proposal**

Re: Harvard New Well

Item #	Item Description	Quantity	Units	Unit Price	Extended Price
1	Mobilization/Demobilization (Test Well)	1	LS	\$ 44,320.00	\$ 44,320.00
2	Drill & Advance 12" Casing	200	LF	254.00	50,800.00
3	Furnish & Install 12" TS Well Screen w/Blank	65	LF	370.00	24,050.00
4	Furnish, Install & Remove Test Pump	1	EA	13,010.00	13,010.00
5	Test Pumping	24	HR	283.00	6,792.00
6	Development w/Drill Rig	10	HR	852.00	8,520.00
7	Plumbness & Alignment	1	LS	3,410.00	3,410.00
8	Water Quality	1	LS	4,070.00	4,070.00
9				-	-
10	Mobilization/Demobilization (Final Well)	1	LS	45,100.00	45,100.00
11	Pull 12" Screen & Casing	200	FT	100.00	20,000.00
12	Drill & Advance 24" Casing	135	FT	509.00	68,715.00
13	Furnish & Install 16" Casing	135	FT	170.00	22,950.00
14	Drill & Advance 16"	65	FT	284.00	18,460.00
15	Furnish & Install 16" TS Well Screen w/Blank	65	FT	478.00	31,070.00
16	Grout Set Up	1	LS	9,540.00	9,540.00
17	Grout Well	250	BAGS	24.00	6,000.00
18	Furnish, Install & Remove Test Pump	1	EA	13,120.00	13,120.00
19	Test Pumping	24	HR	290.00	6,960.00
20	Development w/Drill Rig	10	HRS	852.00	8,520.00
21	Plumbness & Alignment	1	LS	3,410.00	3,410.00
22	TV Well	1	LS	2,820.00	2,820.00
23	Water Quality	1	LS	4,070.00	4,070.00
24				-	-
25				-	-
26				-	-
27				-	-
28				-	-
29				-	-
30				-	-
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48				-	-
<b>Total Project Proposal</b>					<b>\$ 415,707.00</b>

Dated: November 17, 2021

By:

**Brian Brodersen**

Brian Brodersen  
Senior Project Engineer  
Municipal Well & Pump

# APPENDIX H

(HAR31)



Description	Quantity	Unit	Unit Price	Total
<b>GENERAL CONDITIONS</b>				\$19,365
<b>DEMOLITION</b>				\$10,000
<b>SITEWORK</b>				\$11,950
<b>EQUIPMENT</b>				\$105,000
<b>INSTALLATION</b>				\$23,000
<b>ELECTRICAL</b>				\$17,000
<b>CONSTRUCTION SUBTOTAL</b>				\$186,315
<b>CONTINGENCY 10%</b>				\$18,631
<b>CONSTRUCTION TOTAL</b>				\$204,946
<b>DESIGN ENGINEERING 7%</b>				\$14,346
<b>CONSTRUCTION ENGINEERING 7%</b>				\$14,346
				<b>\$233,638</b>
<b>GENERAL CONDITIONS</b>				
Record Drawing	1	Lump Sum	\$1,000.00	\$1,000.00
Bonds & Insurance	1	Lump Sum	\$1,669.50	\$1,669.50
Overhead & Profit (10%)	1	Lump Sum	\$16,695.00	\$16,695.00
				<b>\$19,364.50</b>
<b>DEMOLITION</b>				
Various	1	Each	\$10,000.00	\$10,000.00
				<b>\$10,000.00</b>
<b>SITE WORK</b>				
Earth Excavation, generator pad	8	Cu. Yd	\$100.00	\$800.00
Gravel underslab	3	Cu. Yd	\$100.00	\$300.00
Concrete	5	Cu Yd	\$750.00	\$3,750.00
Conduit, 5" underground	30	Lin Ft	\$30.00	\$900.00
Conduit 1" underground	60	Lin Ft	\$20.00	\$1,200.00
Conductors, Underground	1	Lump Sum	\$5,000.00	\$5,000.00
				<b>\$11,950.00</b>
<b>EQUIPMENT</b>				
300 kW generator (use 350 kW)	1	Each	\$70,000.00	\$70,000.00
Sound/weather enclosure	1	Each	\$10,000.00	\$10,000.00
Transfer switch - 600 kVA	1	Each	\$10,000.00	\$10,000.00
Reduced Voltage starter - 250 hp	1	Each	\$15,000.00	\$15,000.00
				<b>\$105,000.00</b>
<b>INSTALLATION</b>				
Generator	1	Each	\$10,000.00	\$10,000.00
Transfer Switch	1	Each	\$2,000.00	\$6,000.00
Reduced Voltage Starter	1	Each	\$2,000.00	\$4,000.00
Startup	1	Each	\$2,000.00	\$3,000.00
				<b>\$23,000.00</b>
<b>ELECTRICAL</b>				
Interior large conductor wiring	1	Lump Sum	\$5,000.00	\$10,000.00
Interior control wiring	1	Lump Sum	\$2,000.00	\$5,000.00
Interior small load	1	Lump Sum	\$1,000.00	\$2,000.00
				<b>\$17,000.00</b>

Trotter and Associates, Inc  
 Harvard Well 9 Generator  
 Construction Cost Estimate

# APPENDIX I

(FUTURE PROJECT PLANNING)



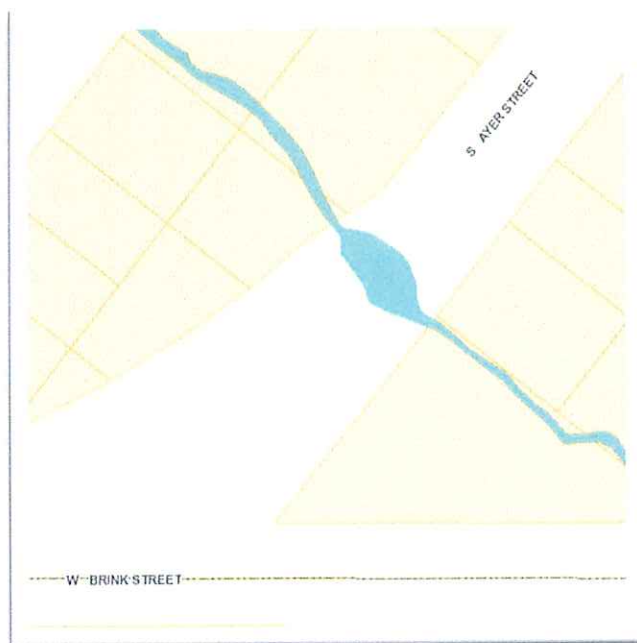
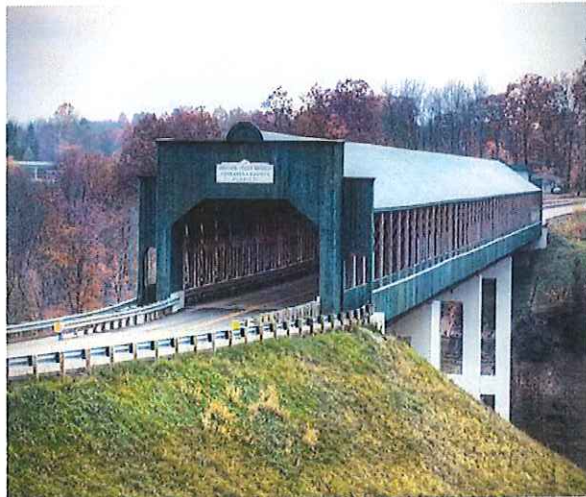
## COMMUNITY DEVELOPMENT

Construct a downtown sitting area with multi-seasonal use. Ideas include a small ice rink in the winter and fountain area in the summer. This project could be combined with other amenities such as providing WI-FI services, mural projects or other recreational activities. Vacant land in the downtown area would need to be acquired, and employing the services of a land planner is recommended.



## COMMUNITY DEVELOPMENT

Construct a covered bridge on Ayer Street over Moekler Creek, adding to the streetscape beautification and hospitality of the downtown area. This bridge underwent previous construction improvements and currently has the structural integrity to handle this covered addition.





## PARKS AND RECREATION

Construct a storage shed, approximately 60' x 100'. With the addition of added equipment and park recreational supplies, more storage space will be needed. The location for this shed, as well as pricing, is to be determined. At this time there is currently ample storage space for equipment in the existing building located behind the new Waste Water Treatment Plant area.



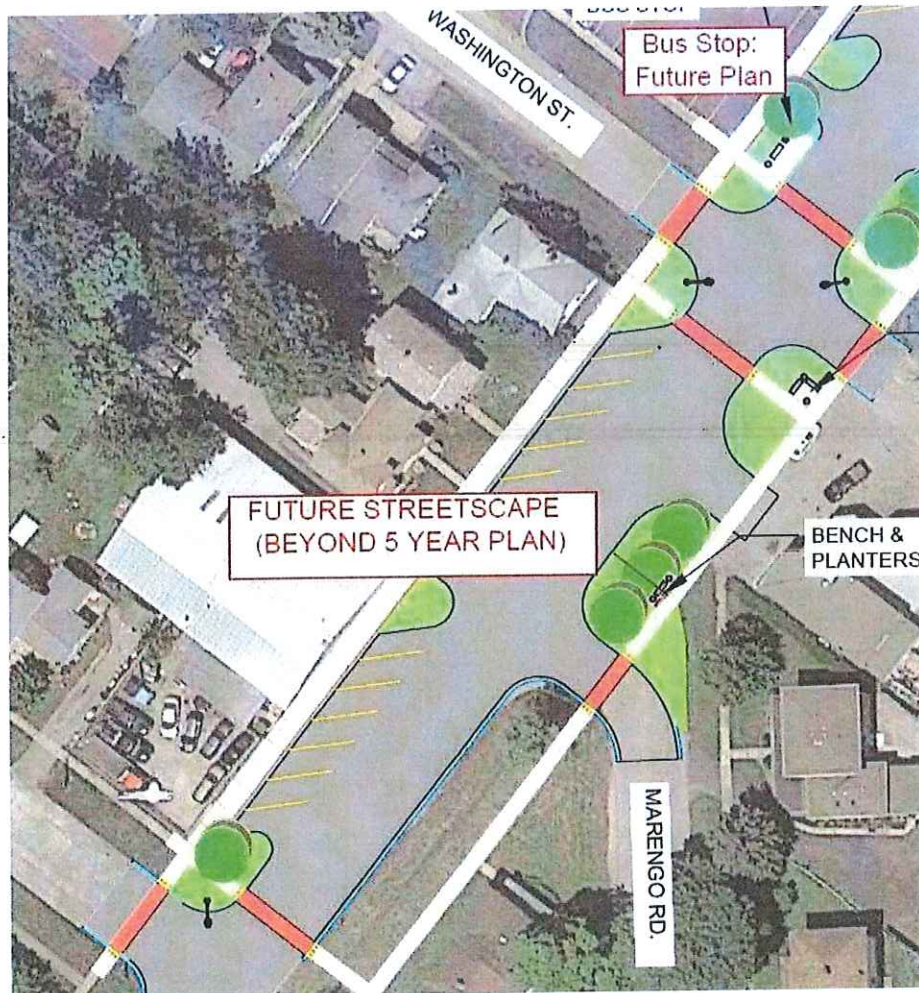
## PARKS AND RECREATION

Construct cement footings and a four-post shade shelter, with quick detach shade screen, to be placed in the northeast corner of the aquatic center (old sand play area) Metal picnic tables with rubber coating are included for placement under the shelter. This amenity adds a benefit to the pool area. Currently, pool parties or group events are held on the hill area at the pool, where shade and picnic tables are scarce. Removing the sand play area and converting this to grass allows for shade shelter placement. The estimated cost is approximately \$23,000 and includes \$13,000 for shelter installation and \$10,000 for six picnic tables. Landscaping costs are not included. Donations could be solicited to help fund the project.



## PUBLIC WORKS

Complete the final block of the Ayer Street streetscape for beautification of the downtown business district. This is a continuation of the project outlined in HAR22, page 30. Phase I Engineering is complete and has been reimbursed through the Regional Transit Authority (RTA). Remaining engineering and final construction cost for Ayer Street, from Washington Street to Thompson Street, is approximately \$700,000. This includes road resurfacing, ADA-compliant sidewalk reconstruction, brick crosswalks, streetlights, decorative benches and planters, and a PACE bus stop.



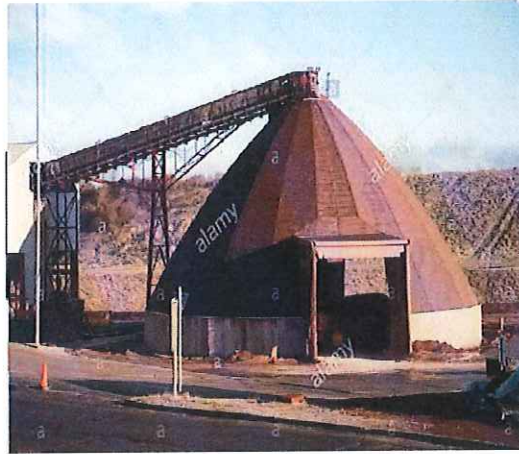
## PUBLIC WORKS

Construct ADA accessible sidewalk access from Ayer Street at Marengo Road, south to Route 173, east to Route 14, and south to Airport Road. The purpose of this project is to connect pedestrians with transit access from downtown to the south side of the City. The project will be done in phases, and in addition to sidewalks, includes the construction of a bus shelter at Route 14 and Airport Road. This project serves as access to the 808 Bus Route that runs through Harvard along these locations, as well as a safe community path of travel for walking, biking and wheelchair transportation.



## PUBLIC WORKS

Construct a new salt shed to replace the existing building currently used for salt storage. The current salt shed is an existing building acquired with the purchase of land in 2018, for the Waste Water Treatment Plant expansion. This building was reinforced in 2021 for salt storage, as a temporary storage location, and is expected to last approximately 7 to 8 more years. At that point, a new shed could be constructed in this same location. Two construction examples are shown below.



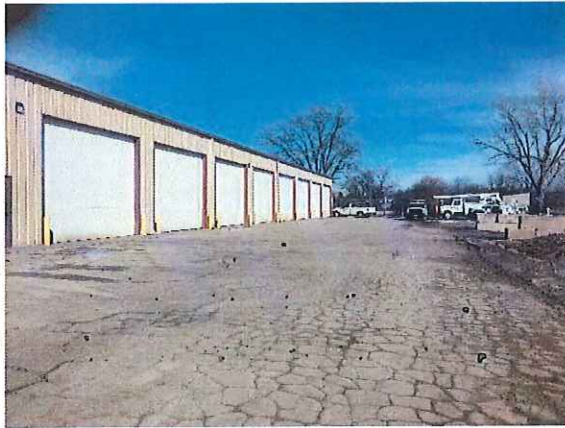
**Dome Style Shed:** Wood construction with approximately 1,600 ton storage capacity. 2016 quoted price was \$190,000. This price does not include concrete footings and slab. Current building demolition would also require slab removal prior to new reconstruction.



**Clear Span Style Shed:** Clear span fabric construction with approximately 1,850 ton storage capacity. 2016 quoted price was \$65,710, not including concrete foundation or walls. The fabric roof is not as durable as wood, but this style is more affordable. Concrete costs can be reduced by using the existing foundation to stack concrete masonry units to support the dome.

## PUBLIC WORKS

Construct a new addition to the current Public Works building, or erect a storage shed, approximately 60' x 100'. With future growth and added equipment, the Public Works facility will be in need of more work and storage space. The current land available to the east for a building addition is a flood plain, so re-evaluation of this area and land improvements may be required prior to build-out. A storage shed location is also yet to be determined. With prudent planning and organization, there is currently ample storage space for equipment in the existing building located behind the new Waste Water Treatment Plant area.



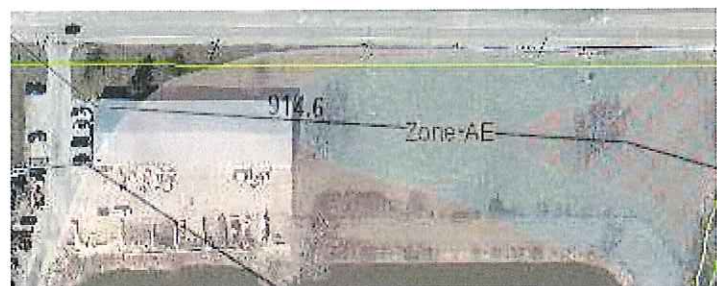
Current PW Building - Rear



Existing Storage Building - WWTP



60' x 100' Storage Shed



2018 Aerial Image