

# PROJECT PLAN

WATER MAIN AND  
LEAD SERVICE  
REPLACEMENT  
PROGRAM

May 17, 2023



5-17-2023  
EXPIRES 11-30-2023

PREPARED BY:

Hampton, Lenzini and Renwick, Inc.

380 Shepard Drive

Elgin, IL 60123

(847) 697-6700

## Contents

Introduction.....	3
Loan Applicant Information.....	5
Existing Public Water Supply.....	6
Supply.....	7
Treatment.....	7
Storage.....	7
Distribution Network.....	8
System Deficiencies.....	9
Inter-governmental Agreements and Water Service Agreements.....	9
Water System Compliance.....	9
Program Description.....	9
Basis of Design.....	10
Environmental Impacts.....	11
Archeological and Historic Preservation.....	11
Rare and Endangered Species Impacts.....	11
Floodway and Floodplain Impacts.....	11
Wetland Impacts.....	11
Stream Crossings.....	12
Agricultural Land and Open Space Impacts.....	12
Tribal Consultations.....	12
Temporary Impacts.....	12
Air Quality Impacts.....	13
Green Compliance.....	13
Cost Estimate.....	13
Existing Rate Structure.....	15
Loan Terms.....	16
Breakdown of Estimated Project Costs.....	16
Dedicated Source of Loan Repayment.....	17
Number of Customers.....	17
Current Average Monthly Residential Cost of Service.....	17
Monthly Residential Rate Calculated.....	18
Projected Average Monthly Residential Rate and Financial Impact.....	18
Financial Arrangements.....	18
Program Schedule.....	19
IEPA Construction Permit Status.....	22
Local Newspaper.....	22
Exhibits A: Program Limits	
Exhibit B: Geneva Service Area	
Exhibits C: City Zoning Map	
Exhibit D: Waterworks System	
Appendix A: Project Plan Submittal Checklist and O,M,&R Certification Sheet	
Appendix B: IEPA Environmental Checklist and Correspondence	
Appendix C: Cost Estimate	
Appendix D: Water Rate Structure	
Appendix E: Debt Service Plan	
Appendix F: Typical Notices and Waivers	

## Introduction

The City of Geneva has created a 15 Year Lead Service Line and Water Main Replacement Program. The purpose of this Program is to replace all lead and galvanized services throughout the City. Many of these lead and galvanized services are on extremely old, cast-iron water mains, warranting their replacement as well. The City's goal is to acquire funding assistance through the IEPA Public Water Supply Loan Program (PWSLP) for replacement of existing water mains and full lead service line replacements from the water main to the meters inside the properties. Over the next fifteen years, the number of services replaced on an annual basis will vary depending on available funds, but they will be replaced according to applicable sections of Section 17-12 from Public Act 102-0613. An inventory of the existing water service line materials within the City's water system as of March 8<sup>th</sup>, 2023, are shown in **Table 1: Water Service Inventory**.

Table 1: Water Service Inventory

<b>TYPE</b>	<b>NUMBER</b>
Lead	416
Galvanized	117
Copper	7185
Plastic	65
Cast/Ductile Iron	134
Unknown Material (Expected Lead/Galvanized)	367
Unknown Material (Not Lead/Galvanized)	181
<b>Total</b>	<b>8465</b>

Of the total 8,465 service lines reported to be connected to the City's distribution system, it is estimated there are approximately 900 lead, galvanized, or suspected lead/galvanized services. This is based on the age of the buildings and the surrounding area's known services. Many of the streets which contain several lead services have water main installed as part of the initial distribution system for the City of Geneva constructed in 1900. Due to the age of these water mains and the history of water main breaks, the City is concerned about the integrity of existing service taps and the brittleness of the main regarding new taps. The potential of lead used in the joints of the pipe is also a concern based on the age of the mains. The age of these mains also contributes to concerns about the integrity of the joints which may contribute to water loss from the distribution

system. The streets selected for water main and water service replacement are shown in **Exhibit A: Program Limits**. An estimated 284 lead, 65 galvanized, and 201 suspected lead/galvanized services are contained in these selected streets. Another 350 services are suspected to be lead or galvanized throughout several other streets within the City based on the age of the homes. These services would be replaced as part of this Program as well. The mains on these streets were not selected for replacement due to their age and current condition. The primary benefit of this Program will be to protect the health and safety of residents of the City of Geneva through improved drinking water quality. A listing of the significant information and where it can be found within this Project Plan is included in ***Appendix A: Project Plan Submittal Checklist and O,M,&R Certification Sheet***.

**Loan Applicant Information.**

The City of Geneva is located on the east side of Kane County. Latitude and Longitude of the approximate center of the Program limits are 41° 53' 20.4" N, 88° 18' 27.5" W. The Program limits are comprised of predominantly residential, but also includes commercial, and industrial uses. The City’s overall water service area is shown in **Exhibit B: Geneva Service Area**. Land use within the existing City limits includes a mixture of residential, commercial, and industrial districts as illustrated in **Exhibit C: City of Geneva Zoning Map**.

The City of Geneva currently serves a total population of 21,595 people according to the 2020 US Census, distributing potable water to 8,301 customers accounts within the limits of the City and 43 accounts outside the limits. The projected population for the City of Geneva based on US Census data through 2020, and Chicago Metropolitan Agency for Planning (CMAP) data from 2018, is presented in **Table 2: Projected Population**.

Table 2: Projected Population

<b>Year</b>	<b>Geneva Population</b>	<b>% Increase</b>
<b>2010</b>	<b>21,495</b>	
<b>2015</b>	<b>21,495</b>	<b>0.00%</b>
<b>2020</b>	<b>21,595</b>	<b>0.47%</b>
<b>2025</b>	<b>24,367</b>	<b>12.84%</b>
<b>2030</b>	<b>25,415</b>	<b>4.30%</b>
<b>2035</b>	<b>26,455</b>	<b>4.09%</b>
<b>2040</b>	<b>27,557</b>	<b>4.17%</b>
<b>2045</b>	<b>28,240</b>	<b>2.48%</b>
<b>2050</b>	<b>28,495</b>	<b>0.90%</b>

At the time of the 2010 census, the City of Geneva had a population of 21,495. The US Census population in 2020 was 21,595. The population projection for 2050 is 28,495 based on CMAP data. The population increase in the 40 years from the 2010 census to the 2050 projection is an increase of ~32.5%. This represents an average annual increase of 0.7%. Median household income of the City’s population is \$116,083 according to the U.S. Census Bureau, 2016-2020 American Community Survey 5-year Estimates. The total water withdrawn is reflected in **Table 3: Total Water Withdrawal** using City data and 2018 CMAP data for projections.

Table 3: Total Water Withdrawal

	2003 (MGD)	2013 (MGD)	2020 (MGD)	ESTIMATED 2040 (MGD)
Residential	1.76	2.39	1.40	2.15
Non-Residential	1.02	1.33	1.02	1.02
Total Withdrawal	2.78	3.72	2.42	3.17

Currently, the City has 8,344 water system accounts per **Table 4: Water Accounting Data 2022**. The replacement of the water mains and lead and galvanized water services will significantly reduce or eliminate the sources of lead in the potable water system. This will beneficially reduce health risks to pregnant women, infants, young children, and adults with certain health conditions by reducing exposure to lead through drinking water. There are 3 schools, 1 childcare facility, 3 elder care facilities, and 4 health care facilities located within the Program area. Overall, the number directly served by the entire Program is estimated to be 1,426 residences, businesses, and stakeholders. However, the entire City will benefit by improved water quality resulting from the removal of lead sources within the system. All water system users will also benefit from improved water quality and a potential reduction in water loss from the system resulting from fewer main breaks and improved pipe joint integrity associated with the replacement of old brittle cast-iron mains which have served beyond their useful design life and are susceptible to breaks caused by crossing or adjacent utility work.

Table 4: Water Accounting Data 2022

Account Type	# of Water Accounts	Actual Water Billed in 2022 (CF)	Monthly Average Billed (CF)
Residential	7,628	59,602,327	4,966,861
Commercial	635	16,888,960	1,407,413
Governmental	37	5,229,305	435,775
Industrial	44	12,884,320	1,073,693
<b>Total</b>	<b>8,344</b>	<b>94,604,912</b>	<b>7,883,743</b>

**Existing Public Water Supply**

Currently, the water system is supplied with groundwater from seven (7) primary wells. Water is

treated by reverse osmosis to remove impurities, minerals and hardness and is blended to produce a moderately soft water for distribution. Water is then distributed through 156.9 miles of water main, across two pressure zones. **Exhibit D: Waterworks System** indicates locations of the City's active wells, water storage tanks, and water treatment plant.

### **Supply**

The City's existing water supply is made up of four shallow, sand and gravel aquifer wells and three deep, bedrock aquifer wells. The City of Geneva has had a total of 13 wells in its history since the adoption of its water system. Six of these wells are now inactive. The remaining seven supply the entirety of the City's water. Wells 8, 9, 10, and 11 are shallow sand and gravel aquifer wells whereas Wells 6, 12, and 13 are deep bedrock aquifer wells. The City does not have surface water sources.

### **Treatment**

The City of Geneva operates treatment processes that provide drinking water that meets or exceeds federal and state drinking water quality standards.

A majority of City water is treated as follows at the Keslinger Road Water Treatment Plant (IEPA: TAP 01) 4000 Keslinger Rd:

- 1) Green Sand Filtration
- 2) Reverse Osmosis treatment
- 3) Chlorination to control microbes
- 4) Fluoridation

A percentage of water flows through the green sand filtration and then is blended into the system. The City's water treatment plant was constructed in 2008 and is designed for the growing needs of the City. It is designed to handle up to 8 MGD. The plant has significantly softened the water and has nearly eliminated the radium in the water which were both issues prior to this facility's construction.

### **Storage**

The City currently maintains up to 2.75 MG of water storage. The Elevated Water Storage Tanks in the City account for 1.75 MG of this storage and the remaining 1.00 MG of storage is in the City's Ground Storage Tank. A summary of the existing water storage is provided in **Table 5: Water Storage Summary**.

Table 5: Water Storage Summary

Location	Year Constructed	Storage Type	Capacity (gallons)
Dodson St	1957	Elevated	500,000
Kirk Rd	1994	Elevated	500,000
Logan Ave	1997	Elevated	750,000
Keslinger Rd	2008	Ground	1,000,000
Total Elevated Storage			1,750,000
Total Ground Storage			1,000,000
Total Storage			2,750,000

**Distribution Network**

The City of Geneva’s water distribution system delivers water through approximately 828,344 feet (approximately 156.9 miles) of piping, ranging in size from 3” to 24”, providing water to the public for residential, commercial, industrial, and fire protection purposes. **Table 6: Water Distribution System Breakdown** shows the lengths of the different size water mains throughout the City’s distribution system. The system also has 545,664 ft of water services ranging from 5/8” to 6” diameter.

Table 6: Water Distribution System Breakdown

Size (in)	Length (ft)
3	2,249
4	50,946
6	167,303
8	305,504
10	57,165
12	204,553
16	23,634
20	1,432
24	7,337
Unknown	14,682

Over the past 10 years, the City has experienced 275 water main breaks with 22 (~8%) of these breaks occurring on streets within the Program area. This is an average of approximately 28 main breaks per year over 156.9 miles of water main. The City's distribution system has approximately 18 breaks per year per 100 miles of main, which is within the 25 or fewer breaks per year per 100 miles of water main recommended by the American Water Works Association for a fully optimized distribution system (Distribution System Performance Evaluation, 1995).

The average daily water pumped through the system, based on City information, is approximately 2.4 mgd (million gallons per day) with a peak daily demand of approximately 4.0 mgd. The average monthly demand is 72,930,000 gallons. The system is served by two pressure zones and contains two interconnections with the City of Batavia and five with the City of St. Charles.

### **System Deficiencies**

Currently, the City's water system has no known deficiencies other than lead and galvanized services.

### **Inter-governmental Agreements and Water Service Agreements**

There are no current or necessary inter-governmental or water service agreements required to complete this Program.

### **Water System Compliance**

There have been no health-based violations of State or Federal laws. The City has had 2 monitoring violations in its history, both in 2021, due to the lab not obtaining results for combined radium and gross alpha particle activity in time. Compliance was achieved March 10<sup>th</sup>, 2022.

### **Program Description**

The scope of work to replace service lines includes both partial water service replacements (from water main to buffalo box or buffalo box to house) as well as full water service replacements from the water main to the water service meter or 18" inside the building, whichever is closer. There are an estimated 284 lead and 65 galvanized water services with 201 more suspected lead or galvanized on streets scheduled for water main replacement. Another 350 services in various locations throughout the city are lead, galvanized, or suspected to be lead/galvanized, and are scheduled to be replaced as a part of this program. The program has been planned to facilitate the

replacement of at least 7% of the lead or galvanized services per year, thus fully eliminating all lead and galvanized services with the proposed 15-year Program. This will result in the replacement of a minimum of 60 lead or galvanized services per year. This number may fluctuate slightly depending on the actual number of anticipated lead or galvanized services which are currently classified as unknown.

Lead services will be replaced using trenchless methods (directional drilling) when possible, to minimally impact land-owner property. The City also intends to replace most of the water main on the streets containing lead services. This is primarily due to the age of the water main, the extent of lead services on these streets, and to meet water use demand increases since the initial construction in 1900. New water main will be installed by traditional open-cut excavation. Location of the proposed water main will be determined case by case based on the location of existing utilities. The goal is to impact these streets and parkways as little as possible. Wherever possible the proposed water main will be in the north or west parkways per City of Geneva Ordinance 9-3-4: Water Distribution Systems Standards and Requirements. Material for water main and water services will be ductile iron and copper respectively. For water services greater than 100 ft in length from the buffalo box to the meter, the material will be high density polyethylene. These materials have been chosen due to their durability, compatibility, and reliability. The main Program benefit is the reduction/elimination of the public's potential exposure to lead when consuming potable water from the City's distribution system. Replacing the water main will also decrease the risk of main breaks and provide uniform pressure and flow within the system.

### **Basis of Design**

The improvements will be designed in accordance with 35 Ill. Adm. Code 651 through 654 and AWWA/ANSI Standard C810-17 "Replacement and Flushing of Lead Service Lines". Water main will be designed in accordance with the most recent edition of the Standard Specifications for Water and Sewer Construction in Illinois. Water mains and fittings will be constructed of zinc coated, cement lined ductile iron and shall have a rated working pressure of three hundred fifty (350) psi plus a surge allowance of one hundred (100) psi. Thickness design shall be in conformance with ANSI/A.W.W.A. C150 requirements. The Program will follow Federal Use of American Iron and Steel (AIS) requirements.

## **Environmental Impacts**

The IEPA Loan Applicant Environmental Checklist, WPC 703-2652, has been completed and can be found in *Appendix B: IEPA Environmental Checklist and Correspondence*. The City intends to comply with all required environmental impact conditions and recommendations and they will incorporate these recommendations into the project construction bidding and contract specifications.

### **Archeological and Historic Preservation**

The City of Geneva requested a review of the Program Area by the Illinois Department of Natural Resources State Historic Preservation Office (SHPO) in 2023, subject to Section 106 of the Illinois State Agency Historic Resources Preservation Act (20 ILC 3420/6). A sign-off from the SHPO was issued on March 9th, 2023, indicating no historic properties are affected. Clearance has been issued for 2 years. All correspondence can be found in *Appendix B: IEPA Environmental Checklist and Correspondence*.

### **Rare and Endangered Species Impacts**

The City of Geneva requested a review of the Program by the Illinois Department of Natural Resources (IDNR). Five submissions were required due to the overall size of the Program area. Four requests were submitted on January 4<sup>th</sup>, 2023, and one on February 13<sup>th</sup>, 2023. Two of the submissions (#2308572 and #2308574) were terminated upon submission and three submissions (#2308570, #2308575, and #2310159) required further review by the IDNR. Letters from the IDNR were issued on January 4<sup>th</sup>, 2023 (#2308570 and #2308575) and February 14<sup>th</sup>, 2023 (#2310159) stating that the review provided by EcoCAT was completed and terminated. All correspondence can be found in *Appendix B: IEPA Environmental Checklist and Correspondence*.

### **Floodway and Floodplain Impacts**

The Program limits include a regulatory floodway of the Fox River. Program work will be limited to underground water service improvements with no changes or additions to the above-grade existing conditions. Since the work will not involve changes to the existing floodway, the work is covered under IDNR Regional Permit 3 and USACE Regional Permit 8. No construction will be performed within stream banks or wetlands. FEMA maps for the Program Area have been included in *Appendix B: IEPA Environmental Checklist and Correspondence*.

### **Wetland Impacts**

Proposed improvements will occur on both private property and public right of way. There are no

anticipated disturbances to wetlands. If wetlands are identified adjacent to the construction area, the appropriate precautions (i.e., soil erosion and sedimentation control) will be implemented during construction to ensure these sites are not impacted. However, as stated previously, the disturbance of wetlands is not anticipated. A wetland boundary map is included in ***Appendix B: IEPA Environmental Checklist and Correspondence***.

### **Stream Crossings**

There are no stream crossings identified within the Program limits. Therefore, there will be no impacts to any streams because of this Program.

### **Agricultural Land and Open Space Impacts**

The Program area is predominately comprised of residential, commercial, and business districts. No agricultural land is present within the Program limits. Furthermore, there will be no permanent impacts to open spaces or park areas.

### **Tribal Consultations**

According to Section 106 of the National Historic Preservation Act of 1966 (NHPA) consultation with the Tribal Historic Preservation Office of all federally recognized interested tribes is required. The City of Geneva mailed letters to the interested parties on January 11<sup>th</sup>. The letters addressed the interested tribes and described the general scope of the Program as well as the Program area for the recipients to review and comment. A typical letter sent to each of the tribes and all correspondence is included in ***Appendix B: IEPA Environmental Checklist and Correspondence***. No responses have been received. The eight interested tribes that received letters are as follows:

- 1) Citizen Potawatomi Nation
- 2) Forest County Potawatomi Community of Wisconsin
- 3) Hannahville Indian Community
- 4) Kickapoo Tribe of Oklahoma
- 5) Little Traverse Bay Bands of Odawa Indians
- 6) Menominee Indian Tribe of Wisconsin
- 7) Miami Tribe of Oklahoma
- 8) Prairie Band Potawatomi Nation

### **Temporary Impacts**

There will be some temporary environmental impacts during construction including dust, noise emissions due to construction equipment, minor soil erosion, sedimentation, and minor traffic

disruptions but these impacts will be relatively short, create no long-term environmental effects, and would be nearly impossible to eliminate. The temporary impacts during construction will be minimized through provisions defined in the plans and specifications. The benefits of completion of the Program include removal of lead water service lines from the City. This improvement of the drinking water quality for residents will far outweigh the minimal temporary impacts during construction.

**Air Quality Impacts**

The proposed Program will have some temporary impacts to air quality however these impacts will be minimal. There will be an insignificant amount of air quality degradation during construction due to the operation of construction equipment and excavation. The effects will be very minimal and have little to no impact on the environment. Dust control measures will be implemented, and routine maintenance of construction equipment should reduce short-term impacts.

**Green Compliance**

Lead service line replacements are included in this program. Lead service line replacement will improve water quality by removing a potential source of lead in the drinking water. The health benefits associated with this infrastructure improvement qualify this as a green infrastructure improvement.

**Cost Estimate**

Over the next fifteen years, the City plans to replace all lead services within the City’s distribution system. The City would request IEPA funding each year for water main and lead service replacement. The overall Program cost in 2023 dollars (without inflation) is shown below.

1) Design Engineering	\$ 2,316,293.54
2) Construction Engineering	\$ 2,316,293.54
3) Construction	\$ 28,953,669.20
4) Contingency	\$ 2,895,366.92
<b>Total</b>	<b>\$ 36,481,623.19</b>

A breakdown of the estimated cost for the total fifteen-year Program Plan is shown in **Table 7: Cost Estimate** and associates yearly work with the indicated color groups in **Exhibit A: Program**

**Limits.** The cost for each section was determined on a street-by-street basis. Pay items which were estimated include 8” ductile iron water main, 6” ductile iron water main for services, 1 ½” short and long partial water services, 1 ½” private side lead replacement water services into the building, fire hydrant assembly, 6” and 8” water valves, 4’ valve vaults, trench backfill, landscape restoration, pavement patching, traffic control and protection, and construction layout. The cost breakdown also separates lead service replacements on streets not scheduled for water main replacement as the scope of work is different and requires more mobilization of equipment from service to service. These are included on a yearly basis to meet a lead service replacement rate of 7% per year per EPA guidelines. Inflation is estimated at 3% annually. Design and construction engineering are each estimated at 8% of the cost of construction and contingency at 10%. A cost estimate for the entire project broken down by pay items is shown in *Appendix C: Cost Estimate*.

Table 7: Cost Estimate

SECTION	LENGTH OF WM (FT)	# OF SERVICES REPLACED	# OF LEAD SERVICES REPLACED	COST
LIME	2000	81	60	\$1,629,194.93
BLACK	2272	73	60	\$1,789,660.47
YELLOW	4045	100	60	\$3,004,871.76
TAN	3035	93	60	\$2,128,992.35
RED	3775	93	60	\$3,373,078.81
MAROON	3320	74	60	\$2,058,687.56
BLUE	4950	104	60	\$3,476,449.19
PINK	4270	89	60	\$2,839,850.55
PURPLE	3770	111	60	\$2,802,585.94
ORANGE	4320	93	60	\$3,181,155.83
GREEN	3345	96	61	\$3,055,950.98
LIGHT BLUE	5370	112	65	\$3,718,320.79
OLIVE	5240	98	60	\$3,583,666.58
BROWN	5270	105	60	\$3,914,049.05
GREY	4350	104	54	\$3,220,797.74
<b>TOTAL</b>	<b>59332</b>	<b>1426</b>	<b>900</b>	<b>\$43,777,312.52</b>

Furthermore, due to the separate sources of funding for Lead Service Line Replacement and other water system improvements within the Public Water Supply Loan Program (PWSLP), estimates

in **Table 8: Cost Breakdown** show the expected amount to be requested each year for the program as well as the expected number of lead services to be replaced each year.

Table 8: Cost Breakdown

SECTION	# OF LEAD SERVICES REPLACED	CUMULATIVE # OF LEAD SERVICES REPLACED	ESTIMATED COST FOR LSLR	ESTIMATED COST FOR MAINS FUNDING
LIME	60	60	\$697,622.56	\$931,572.37
BLACK	60	120	\$585,764.10	\$1,203,896.37
YELLOW	60	180	\$1,198,279.13	\$1,806,592.63
TAN	60	240	\$843,653.49	\$1,285,338.87
RED	60	300	\$771,962.14	\$2,601,116.67
MAROON	60	360	\$670,314.20	\$1,388,373.36
BLUE	60	420	\$1,315,253.84	\$2,161,195.35
PINK	60	480	\$926,580.41	\$1,913,270.14
PURPLE	60	540	\$869,371.43	\$1,933,214.51
ORANGE	60	600	\$1,115,556.06	\$2,065,599.78
GREEN	61	661	\$1,234,684.72	\$1,821,266.26
LIGHT BLUE	65	726	\$956,399.37	\$2,761,921.42
OLIVE	60	786	\$984,979.46	\$2,598,687.12
BROWN	60	846	\$1,093,157.04	\$2,820,892.01
GREY	54	900	\$874,407.34	\$2,346,390.40
TOTAL	900	900	\$14,137,985.28	\$29,639,327.25

**Existing Rate Structure**

The City currently bills their water customers monthly consisting of two charges: a water volume charge based on water consumption of the customer per 100 cubic feet and a monthly service charge based on meter size. A copy of the current rate structure is provided in **Appendix D: Existing Rate Structure**. The average resident uses approximately 651 CF of water per month. Consumption under 1,500 CF is billed at a rate of \$5.31 per 100 CF. Meter sizes for residential buildings vary but typical rates are \$11.15 for 5/8”, \$14.54 for 3/4”, \$21.40 for 1”, and \$38.41 for 1½”.

**Loan Terms**

**Breakdown of Estimated Project Costs**

The City’s 15 Year Lead Service Line and Water Main Replacement Program is composed of 15 projects which would occur over the next 15 years. The City intends to apply for PWSLP funds for both water main and lead service replacement on a yearly basis. Green infrastructure (lead service line replacement) will account for \$14,137,985.28 of the total amount requested which is approximately 32.3% of the Program cost. The total anticipated amount requested each year is broken down by the type of funding and is shown in **Table 9: Anticipated PWSLP Funding Request**.

Table 9: Anticipated PWSLP Funding Request

Project ID	WATER MAIN REPLACEMENT		LEAD SERVICE LINE REPLACEMENT	
	ESTIMATED Funding To Be Requested	Annual Debt Service	ESTIMATED Funding To Be Requested	Annual Debt Service
Lime	\$931,572.37	\$56,743.19	\$697,622.56	\$34,881.13
Black	\$1,203,896.37	\$73,330.77	\$585,764.10	\$29,288.20
Yellow	\$1,806,592.63	\$110,041.72	\$1,198,279.13	\$59,913.96
Tan	\$1,285,338.87	\$78,291.53	\$843,653.49	\$42,182.67
Red	\$2,601,116.67	\$158,437.13	\$771,962.14	\$38,598.11
Maroon	\$1,388,373.36	\$84,567.48	\$670,314.20	\$33,515.71
Blue	\$2,161,195.35	\$131,640.99	\$1,315,253.84	\$65,762.69
Pink	\$1,913,270.14	\$116,539.57	\$926,580.41	\$46,329.02
Purple	\$1,933,214.51	\$117,754.41	\$869,371.43	\$43,468.57
Orange	\$2,065,599.78	\$125,818.15	\$1,115,556.06	\$55,777.80
Green	\$1,821,266.26	\$110,935.51	\$1,234,684.72	\$61,734.24
Light Blue	\$2,761,921.42	\$168,231.94	\$956,399.37	\$47,819.97
Olive	\$2,598,687.12	\$158,289.14	\$984,979.46	\$49,248.97
Brown	\$2,820,892.01	\$171,823.91	\$1,093,157.04	\$54,657.85
Grey	\$2,346,390.40	\$142,921.45	\$874,407.34	\$43,720.37

An annual interest rate of 2% and 0% are assumed for water main and lead service replacement loans respectively. The annual loan amount requested would be amortized over 20 years. *Appendix E: Debt Service Plan* shows the expected annual payments for each year and the expected rate increases to fund loan repayment for both types of PWSLP funding expected to be requested. The peak cumulative annual debt service would be \$2,512,266.13 which would occur

at the end of the Program after year 15 until the first project loan is retired after year 20.

**Dedicated Source of Loan Repayment**

The City of Geneva proposes to repay the loan using the sewer and water fund. Due to the size of the Program, the City is expecting a rate increase. The City plans to implement a consumption-based rate increase. User consumption is assumed to remain constant in calculating the new rate. Operation, maintenance, and repair costs are assumed to remain constant for estimation purposes, however, they would be expected to decrease slightly as there will be fewer main breaks and new operational valves.

**Number of Customers**

The City of Geneva water system serves a total population of 21,595 people. There are 8,344 water customer accounts billed by the City which includes 7,628 residential, 635 commercial, 37 industrial, and 44 institutional users. The debt service calculations included in this report conservatively assume there will be no growth in the number of user accounts or water consumption over the duration of this 15-year Program. Any increase in the number of accounts or overall water consumption could result in a decrease in the associated rate increases necessary to fund these improvements.

**Current Average Monthly Residential Cost of Service**

Based on City of Geneva data, the 2022 average monthly water consumption and consumption charge for each type of customer can be found in **Table 10: Average Water Consumption Charge**.

Table 10: Average Water Consumption Charge

Account Type	# of Water Accounts	Monthly Average Billed (CF)	Monthly Average Billed per Customer (CF)	Consumption fee per 100 CF Based on Average Consumption	Average Monthly Consumption Charge
Residential	7,628	4,966,860	651.14	\$5.31	\$34.58
Commercial	635	1,407,413	2,216.40	\$4.91	\$108.83
Governmental	37	435,775	11,777.71	\$4.91	\$578.29
Industrial	44	1,073,693	24,402.12	\$4.75	\$1,159.10

The 2022 total average monthly charge for water consumption is shown in **Table 11: Average Monthly Water Charge**. An average meter size for each type of customer is based on the average water consumption.

Table 11: Average Monthly Water Charge

Account Type	# of Water Accounts	Average Monthly Consumption Charge	Average Meter Size	Average Monthly Meter Charge	Average Monthly Total Charge
Residential	7,628	\$34.58	3/4"	\$14.54	\$49.12
Commercial	635	\$108.83	1 1/2"	\$38.41	\$147.24
Governmental	37	\$578.29	4"	\$175.02	\$753.31
Industrial	44	\$1,159.10	6"	\$345.66	\$1,504.76

**Monthly Residential Rate Calculated**

The City bills water customers monthly consisting of two charges: a water volume charge based on water consumption of the customer per 100 cubic feet and a monthly service charge based on meter size. The average residential customer uses approximately 651 CF per month which equates to \$34.58 per month and has an average meter size of 3/4” which equates to \$14.54 per month. In total the average residential customer pays \$49.12 per month.

**Projected Average Monthly Residential Rate and Financial Impact**

Given the size of the Program, a rate increase is expected to pay off the debt services. Distributing the water consumption rate charge evenly among all users would result in an annual monthly rate increase between \$0.10 to \$0.25 per 100 CF, with a cumulative peak rate increase of \$2.68 per 100 cubic feet (CF) monthly after all the projects have been completed and continuing until the first loan has been retired. The average residential customer uses approximately 651 CF per month which would equate to a cumulative increase of \$17.45 per month or \$209.41 annually. At the end of year 15, the average residential customer would pay \$66.57 per month, or \$798.84 per year. Median household income of the City’s population is \$116,083 according to the U.S. Census Bureau, 2016-2020 American Community Survey 5-year Estimates. The projected total annual water cost is 0.7% of the MHI for the area. This would be considered affordable according to State and Federal load program criteria.

**Financial Arrangements**

The City plans to apply for PWSLP funds. There is no other funding expected to be involved in the Program. Debt services from PWSLP loans will be paid from the water and sewer fund. The City has done an independent rate study, FY 2023 Water & Sewer Rate Study, February 27<sup>th</sup>,

2023, Stantec Consulting, which included this Program and several other expected programs to estimate the rate increase necessary to fund these programs.

### **Program Schedule**

Tables 12, 13, and 14 lay out the projected schedule for the implementation of the projects included in this Program Plan. The first year of the Program is based on achieving Project Plan approval sometime after March 31<sup>st</sup>, 2023. Therefore, the first-year project will not be included on the Intended Funding List for Fiscal Year 2024 (July 1, 2023-June 30, 2024). However, the plan and permit development are intended to position the Year 1 Project for eligibility for FY 2025 funding to become available July 1<sup>st</sup>, 2024.

The remainder of the projected Schedule (Year 2 through Year 15) is based upon obtaining IEPA planning approval and submittal of the Funding Nomination Form and Loan Application each year by March 31<sup>st</sup> to facilitate inclusion on the Intended Funding List (IFL) on July 1<sup>st</sup>. This will reserve funding for the project for that fiscal year. The planning is based on bidding the project and acquiring loan commitments in the early spring to facilitate summer construction.

This initial Program Plan is identified in Year 1. This Program Plan identifies all the projects over the 15-year duration of the Program, including estimated costs. Once approved, the Project Plan is valid for a period of 5 years. The Project Plan will have to be updated and resubmitted in years 6 and 11 of the Program. The updates should include any changes in the Lead Services Inventory, project scope, scheduling, cost estimates, or environmental conditions.

Table 12: Program Plan Schedule (Years 1-6)

	Year 1	Year 2	Year 3
<b>FNF / Loan Application</b>	March 31, 2023	March 31, 2024	March 31, 2025
<b>Project Plan Submittal</b>	March 31, 2023	March 31, 2023	March 31, 2023
<b>IEPA Project Plan Review</b>	April – Sept. 2023	---	---
<b>Public Comment / Hearing</b>	September 2023	---	---
<b>Project Plan Approval</b>	October 2023	August 2023	August 2023
<b>Design Plans and Specifications</b>	Sept.2023 - Jan. 2024	July - October 2024	July - October 2025
<b>Submit PS&amp;E for Permits</b>	January 2024	October 2024	October 2025
<b>Permits Issued</b>	April 2024	December 2024	December 2025
<b>Loan Funding Reserved</b>	July 2024	July 1, 2024	July 1, 2025
<b>Advertise for Bids</b>	July 2024	January 2025	January 2026
<b>Receive Bids</b>	August 2024	February 2025	February 2026
<b>Obtain Loan Commitment</b>	September 2024	March 2025	March 2026
<b>Award Contracts</b>	September 2024	March 2025	March 2026
<b>Start of Construction</b>	September 2024	April 2025	April 2026
<b>Final Completion of Contract</b>	March 2025	October 2025	October 2026
	Year 4	Year 5	Year 6
<b>FNF / Loan Application</b>	March 31, 2026	March 31, 2027	March 31, 2028
<b>Project Plan Update Submittal</b>	March 31, 2023	March 31, 2027	March 31, 2027
<b>IEPA Project Plan Review</b>	---	April-June 2027	---
<b>Public Comment / Hearing</b>	---	July 2027	---
<b>Project Plan Approval</b>	August 2023	August 2027	August 2027
<b>Design Plans and Specifications</b>	July - October 2026	July - October 2027	July - October 2028
<b>Submit PS&amp;E for Permits</b>	October 2026	October 2027	October 2028
<b>Permits Issued</b>	December 2026	December 2027	December 2028
<b>Loan Funding Reserved</b>	January 2027	July 1, 2027	July 1, 2028
<b>Advertise for Bids</b>	January 2027	January 2028	January 2029
<b>Receive Bids</b>	February 2027	February 2028	February 2029
<b>Obtain Loan Commitment</b>	March 2027	March 2028	March 2029
<b>Award Contracts</b>	March 2027	March 2028	March 2029
<b>Start of Construction</b>	April 2027	April 2028	April 2029
<b>Final Completion of Contract</b>	October 2027	October 2028	October 2029

Table 13: Program Plan Schedule (Years 7-12)

	Year 7	Year 8	Year 9
<b>FNF / Loan Application</b>	March 31, 2029	March 31, 2030	March 31, 2031
<b>Project Plan Submittal</b>	March 31, 2027	March 31, 2027	March 31, 2027
<b>IEPA Project Plan Review</b>	---	---	---
<b>Public Comment / Hearing</b>	---	---	---
<b>Project Plan Approval</b>	August 2027	August 2027	August 2027
<b>Design Plans and Specifications</b>			
<b>Design Plans and Specifications</b>	July - October 2029	July - October 2030	July - October 2031
<b>Submit PS&amp;E for Permits</b>	October 2029	October 2030	October 2031
<b>Permits Issued</b>	December 2029	December 2030	December 2031
<b>Loan Funding Reserved</b>	July 1, 2029	July 1, 2030	July 1, 2031
<b>Advertise for Bids</b>	January 2030	January 2031	January 2032
<b>Receive Bids</b>	February 2030	February 2031	February 2032
<b>Obtain Loan Commitment</b>	March 2030	March 2031	March 2032
<b>Award Contracts</b>	March 2030	March 2031	March 2032
<b>Start of Construction</b>	April 2030	April 2031	April 2032
<b>Final Completion of Contract</b>	October 2030	October 2031	October 2032

	Year 10	Year 11	Year 12
<b>FNF / Loan Application</b>	March 31, 2032	March 31, 2033	March 31, 2034
<b>Project Plan Submittal</b>	<b>March 31, 2032</b>	March 31, 2032	March 31, 2032
<b>IEPA Project Plan Review</b>	<b>April-June 2032</b>	---	---
<b>Public Comment / Hearing</b>	<b>July 2032</b>	---	---
<b>Project Plan Approval</b>	<b>August 2032</b>	August 2032	August 2032
<b>Design Plans and Specifications</b>			
<b>Design Plans and Specifications</b>	July - October 2032	July - October 2033	July - October 2034
<b>Submit PS&amp;E for Permits</b>	October 2032	October 2033	October 2034
<b>Permits Issued</b>	December 2032	December 2033	December 2034
<b>Loan Funding Reserved</b>	July 1, 2032	July 1, 2033	July 1, 2034
<b>Advertise for Bids</b>	January 2033	January 2034	January 2035
<b>Receive Bids</b>	February 2033	February 2034	February 2035
<b>Obtain Loan Commitment</b>	March 2033	March 2034	March 2035
<b>Award Contracts</b>	March 2033	March 2034	March 2035
<b>Start of Construction</b>	April 2033	April 2034	April 2035
<b>Final Completion of Contract</b>	October 2033	October 2034	October 2035

Table 14: Program Plan Schedule (Years 13-15)

	Year 13	Year 14	Year 15
<b>FNF / Loan Application</b>	March 31, 2035	March 31, 2036	March 31, 2037
<b>Project Plan Submittal</b>	March 31, 2032	March 31, 2032	March 31, 2032
<b>IEPA Project Plan Review</b>	---	---	---
<b>Public Comment / Hearing</b>	---	---	---
<b>Project Plan Approval</b>	August 2032	August 2032	August 2032
<b>Design Plans and Specifications</b>			
<b>Design Plans and Specifications</b>	July - October 2035	July - October 2036	July - October 2037
<b>Submit PS&amp;E for Permits</b>	October 2035	October 2036	October 2037
<b>Permits Issued</b>	December 2035	December 2036	December 2037
<b>Loan Funding Reserved</b>	July 1, 2035	July 1, 2036	July 1, 2037
<b>Advertise for Bids</b>	January 2036	January 2037	January 2038
<b>Receive Bids</b>	February 2036	February 2037	February 2038
<b>Obtain Loan Commitment</b>	March 2036	March 2037	March 2038
<b>Award Contracts</b>	March 2036	March 2037	March 2038
<b>Start of Construction</b>	April 2036	April 2037	April 2038
<b>Final Completion of Contract</b>	October 2036	October 2037	October 2038

**IEPA Construction Permit Status**

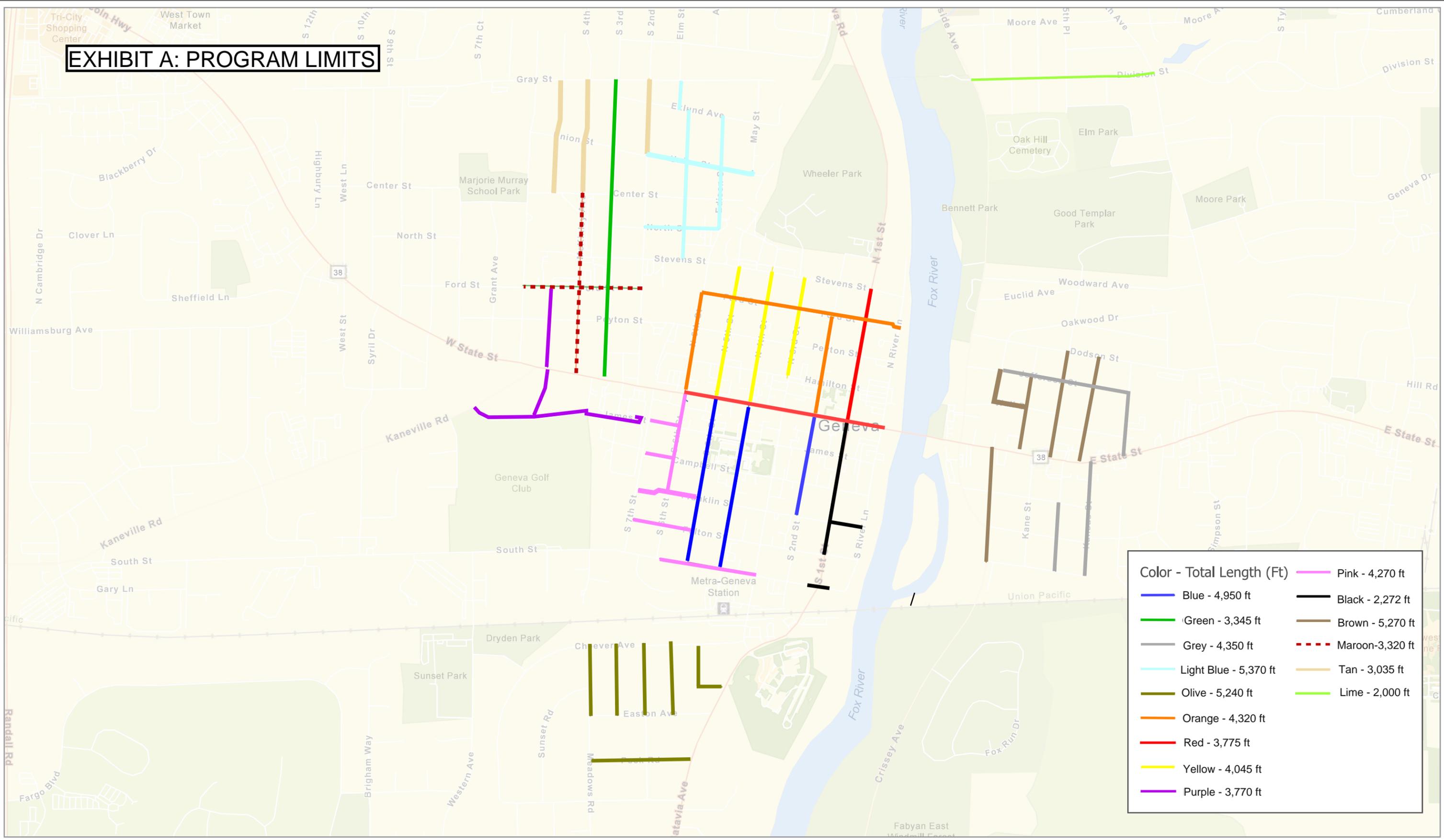
An IEPA Construction Permit was submitted for S 1<sup>st</sup> Street (Route 31) from South Street to W State Street (Route 38) on December 30<sup>th</sup>, 2022. The status is pending review from the IEPA. The remainder of streets included in the Program will be submitted as they are designed and prepared for construction.

**Local Newspaper**

The local newspaper is the Kane County Chronicle.

Kane County Chronicle  
 333 N Randall Rd  
 Saint Charles, IL 60174

# EXHIBIT A: PROGRAM LIMITS



Color	Total Length (Ft)
Blue	4,950 ft
Green	3,345 ft
Grey	4,350 ft
Light Blue	5,370 ft
Olive	5,240 ft
Orange	4,320 ft
Red	3,775 ft
Yellow	4,045 ft
Purple	3,770 ft
Pink	4,270 ft
Black	2,272 ft
Brown	5,270 ft
Maroon	3,320 ft
Tan	3,035 ft
Lime	2,000 ft

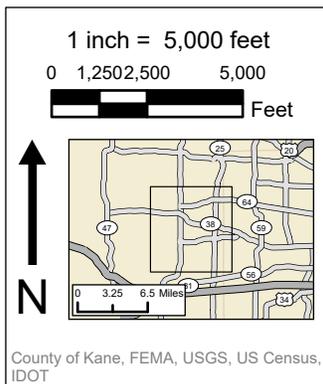
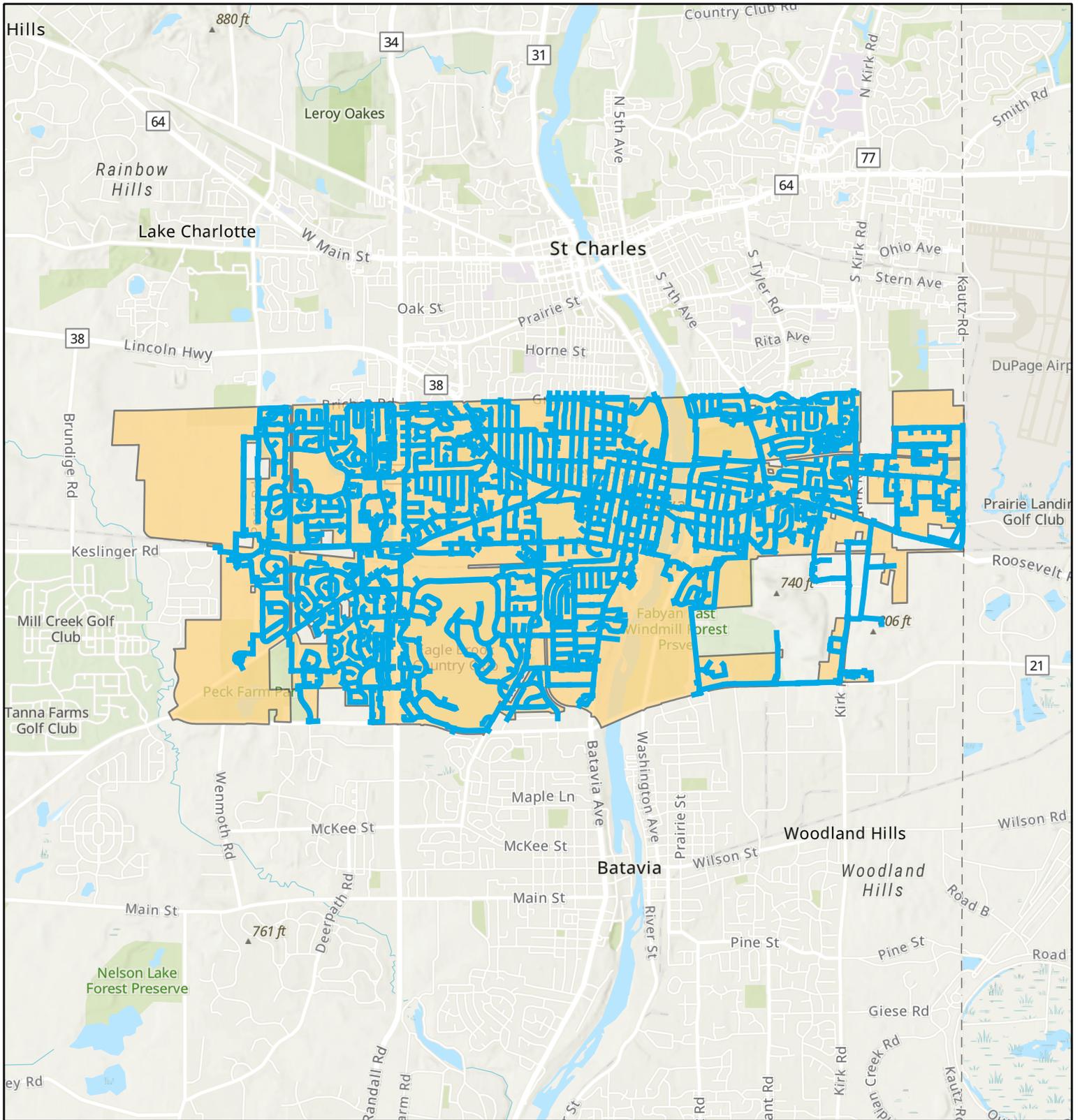
N  
Not to Scale

## Geneva Lead Service Replacement (All Zones)

Information shown on this map is schematic in nature and accuracy is not guaranteed. It is the responsibility of the user to field verify all information shown. The data is subject to change without notice. Original base maps provided via intergovernmental agreement with Kane County GIS- Technologies. Reproduction without permission from the City of Geneva is forbidden.

GENERATED BY:  
City of Geneva, Illinois  
Engineering/GIS Division  
July 2022





- Project Description**
- Project Area
  - Water Main
  - Geneva Municipal Boundary

## Exhibit B: Geneva Service Area

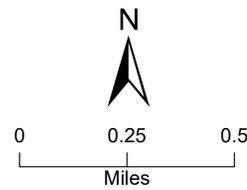
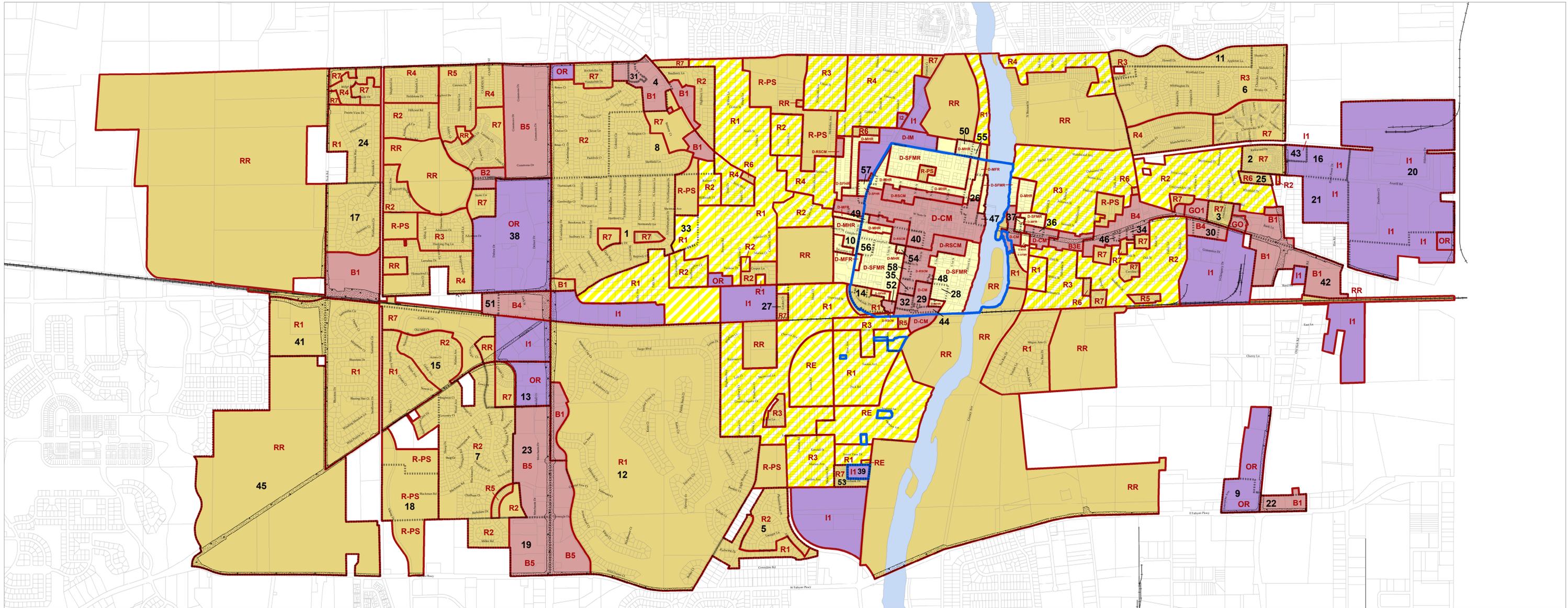
**Project Location Map**  
Scale: 1:60,000

Hampton, Lenzini and Renwick, Inc.



# EXHIBIT C

# CITY OF GENEVA ZONING MAP 2022



GENERATED BY:

City of Geneva, Illinois  
Planning Division  
February 2022

Original base maps provided via  
intergovernmental agreement with  
Kane County GIS-Technologies.

- PARCEL BOUNDARY**
- HISTORIC DISTRICT / LANDMARK**
- PLANNED UNIT DEVELOPMENT BOUNDARY**
- CORRIDOR OVERLAY**

- BUSINESS**
- OFFICE RESEARCH / INDUSTRIAL**
- RESIDENTIAL**
- RESIDENTIAL - AREA 1**
- RESIDENTIAL - AREA 2**

**Zoning District Description**

- B1 Business
- B2 Business
- B3E Business
- B4 Business
- B5 Business
- D-CM Commercial Mixed-Use
- D-IM Light Industrial Mixed-Use
- D-MFR Multiple-Family Residential
- D-MHR Mixed High Density Residential
- D-RSCM Residentially Scaled Commercial Mixed-Use
- D-SFHR Single-Family High Density Residential
- D-SFMR Single-Family Medium Density Residential
- GO General Office
- GO1 General Office Area 1
- I1 Light Industrial
- I2 General Industrial
- OR Office Research
- R1 Low Density Single-Family
- R2 Medium Density Single-Family
- R3 Medium to High Density Single-Family
- R4 High Density Single-Family
- R5 Low Density Two- and Three-Family
- R6 Medium Density Two- and Three-Family
- R7 Multiple-Family
- RE Estate Single-Family
- R-PS Public School Districts
- RR Rural Residential

**Planned Unit Developments (PUD)**

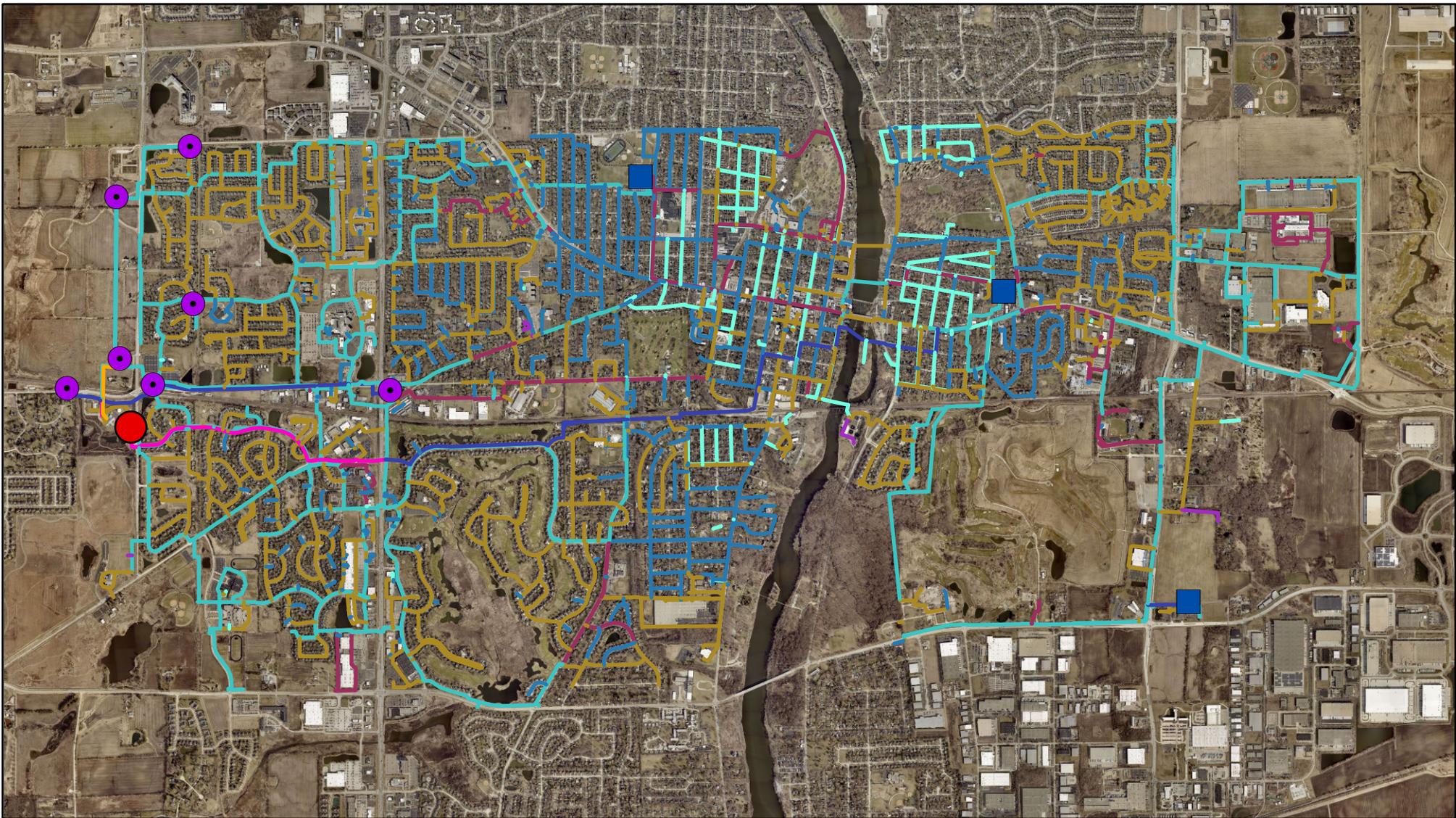
Map Number	PUD Name
1	Pepper Valley
2	Kirkwood
3	Glenarry Commons
4	Blackberry
5	Allendale
6	Geneva East
7	Randall Square (Residential)
8	Williamsburg
9	Waste Management
10	Garden Courts
11	Geneva Knolls
12	Eagle Brook
13	Randall Center
14	Herrington's Trail
15	Sterling Manor
16	Industrial Hard Chrome
17	Westhaven
18	Geneva Middle School
19	Fabyan Crossings
20	Geneva Business Park

Map Number	PUD Name
21	Continental Envelope
22	Fabyan & Kirk Development
23	Randall Square (Commercial)
24	Fisher Farms
25	Averill's Arbor
26	North Riverfront
27	Fox Meadow
28	Dodson Place (Residential)
29	Dodson Place (Commercial)
30	E. State St. Retail Center
31	Blackberry Commons
32	Dodson Place Bldg #8
33	St. Peters
34	Valley Animal Hospital
35	Lappin
36	Youngberg
37	Geneva Place on the Fox
38	Delnor Community Hospital
39	Riverbank Laboratory
40	Courthouse PUD

Map Number	PUD Name
41	Geneva Quality Water
42	East Gateway Development
43	Kirk Road Business Center
44	Third Street Parking Deck
45	Peck Farm Park
46	Nicolaou
47	Geneva on the Dam
48	City Parking Lot
49	7th Street Terrace
50	Park Place
51	Keslinger Medical Campus
52	4th Street Parking Lot
53	Riverbank Crossings
54	Campbell Row
55	First Street Rowhomes
56	Geneva Public Library
57	Cetron Place
58	St. Mark's Episcopal Church

Adopted by the City of Geneva: Resolution 2022-11

Please note that property located in a Planned Unit Development (PUD) may be subject to regulations that vary from the underlying zoning districts displayed on the map. Please contact the Community Development Department at (630) 232-0818 for more information on properties located within Planned Unit Developments.

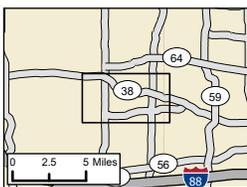


1 inch = 3,000 feet

0 1,000 2,000 3,000



Feet



Kane County GIS-Technology Dept.,  
USGS, US Census, IDOT

Imagery: 2022 Kane County Imagery

 Water Tower

 Well

 Water Treatment Plant/  
Ground Reservoir

Water Main

 3"

 4"

 6"

 8"

 10"

 12"

 16"

 20"

 24"

## Exhibit D: Waterworks System

Project Location Map  
Scale: 1:36,000

Hampton, Lenzi and Renwick, Inc.

Civil & Structural Engineers • Land Surveyors • Environmental Specialists



ELGIN • CRYSTAL LAKE • SPRINGFIELD • MT. CARMEL

www.hlrengineering.com

# APPENDIX A

## PROJECT PLAN SUBMITTAL CHECKLIST AND O,M,&R CERTIFICATION SHEET



# Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

## Drinking Water Project Planning Submittal Checklist **Planning File**

Before the Agency will begin review of a Project Plan, all of the items below comprising the basic minimum requirements of a Project Plan must be included and the page number(s) of all items noted. Project planning must contain all pertinent information detailed in Ill. Adm. Code 35 Section 662.320(e). The loan applicant should be familiar with their planning responsibilities as detailed in Sections 662.320 and 662.330.

Complete this form online using Adobe Acrobat Reader, save it to your computer, then print and sign it.

Loan Applicant: City of Geneva

Consulting Engineer: Hampton, Lenzini, & Renwick, Inc. Phone Number: (847) 697-6700

**Project Description:**

The project will replace water main and city owned portion of the water service lines for the indicated streets. Lead service lines on the private portion of the service line will also be replaced. Approximately 59,000 feet of water main would be replaced with the associated services on each street. An estimate of 550 total lead and galvanized services would be replaced on these streets and 350 replaced elsewhere throughout the city to the water meter or 18 inches inside the building.

Fill in the blank with the page(s) where each item below is found in the project plan. Additional information and/or examples for each item number are provided by corresponding numbers contained in the attached instructions.

No.	Page(s) or Comment	Information
1.	4,5, Exhibits A, B, C	Loan applicant's background, total population served by the applicant, customer base, and project location information.
2.	5-8, Exhibit D	Detailed description of the EXISTING public water supply source(s), treatment facilities, water storage facilities, and distribution system.
3.	8,9	Project description that explains the need and justification of the proposed project, including the benefits of the project.
4.	8	Discussion of the system's compliance with all applicable laws and regulations governing public water systems.
5.	9	Basis of design for chosen alternative.
6.	10-12, Appendix B	Inventory of environmental impacts of selected alternative, a discussion of the required mitigation measures, and a completed IEPA Loan Applicant Environmental Checklist form with sign-off documentation.
7.	Exhibit A	Reproducible 8.5 X 11 inch map(s) showing the project(s) location(s) relative to the community.
8.	12-14, Appendix C	An estimate of the total project costs and a detailed estimate of construction item costs.
9.	15-17, Appendix E	Estimated loan terms, including: IEPA loan amount, interest rate, repayment period in years, and the annual loan repayment.
10.	17, 18	Financial arrangements for assuring adequate annual debt service and O, M, and R coverage, a description of the dedicated source of revenue necessary for loan repayment, and any other funding involved in the project.

No.	Page(s) or Comment	Information
11.	14, 16-17, Appendix D	Detailed description of the existing residential rate structure, water consumption, any proposed rate changes, and an example of the existing and the proposed average monthly residential bill because of the project(s).
12.	Appendix A	One copy of completed Existing User Charge and O, M, and R Certification Sheet found on page 3 (attached) should be submitted with the Project Plan.
13.	12	Discussion of any "green" project components that are part of the proposed project.
14.	18-21	Schedule for project implementation.
15.	N/A	Copies of inter-governmental and/or service agreements.
16.	21	IEPA construction permit status.
17.	21	Name and address of the local newspaper(s).

Three (3) copies of the Project Plan and related documents should be submitted along with one (1) copy of this completed checklist (pages 1 through 3) to:

Infrastructure Financial Assistance Section (IFAS)  
 Illinois Environmental Protection Agency  
 1021 North Grand Avenue East  
 P.O. Box 19276  
 Springfield, IL 62794-9276

IFAS will distribute the planning documents to the appropriate Agency staff for review, comment, and approval. IFAS will contact the loan applicant if further information is needed. Please use the box below for any special instructions or notes.



# Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

## Existing User Charge and O, M, and R Certification Sheet

7,628 Number of current residential customers served by the system.  
651.14 CF Actual average residential water use per customer per month (based on historical billing data)  
\$49.12 Current average monthly residential bill

### Provide details that apply to your specific user rate charges:

Water use charges: \_\_\_\_\_ per \_\_\_\_\_ gallons  
\$5.31 per 100 cubic feet

Flat Fee or Monthly User Charge: \_\_\_\_\_

Debt Service Charge: \_\_\_\_\_

Capital Improvement Charge: \_\_\_\_\_

Wholesale Charge: \_\_\_\_\_

Meter Service Fee (average-sized meter): \$14.54

Other Charge: \_\_\_\_\_ Explain: \_\_\_\_\_

Other Charge: \_\_\_\_\_ Explain: \_\_\_\_\_

1. Is the water/sewer fund annually operating in a positive or negative balance at this time? (select one)

Positive     Negative

2. Based upon your most recent annual budget please indicate the net operating income for your water/sewer fund:

\$2,719,235.00

- Net Operating Income = Total Revenue - Total Cost of Providing Service
- Total Revenue = Revenue from user charges, commercial, residential, or wholesale, plus any other dedicated water/sewer fund revenue
- Total Cost of Providing Service = All Operation and Maintenance costs (including replacement fund) plus dedicated water/sewer fund debt

3. Will a rate increase or other revenue generating action be necessary to pay for this project? (select one)

Yes     No

4. If a rate increase (or other cost increase) is necessary, please provide the proposed user rate charges and proposed average monthly residential water bill as an attachment.

**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

Robert T Van Dyseghem  
Authorized Representative (Printed)

Superintendent Water & Wastewater  
Title

Robert Van Dyseghem  
Signature

March 28, 2023  
Date

APPENDIX B

IEPA ENVIRONMENTAL  
CHECKLIST AND  
CORRESPONDENCE

**IEPA Loan Applicant Environmental Checklist and Certification Form**

Loan Applicant: City of Geneva

L17#: \_\_\_\_\_

**This form must be signed by the loan applicant's Authorized Representative. All loan applicants must provide items 1 and 2 below. The information that must be provided for items 3-8 are specific to conditions of the project. See the attached instructions that explain the requirements and provide contact information. If you believe an item is not required for your project, enter N/A instead of the date of response and provide an explanation in the planning report. For checklist items marked as N/A, also indicate the page number of the planning report where the explanation is located.**

---

Provide records of consultation with Illinois Department of Natural Resources (IDNR), State Historic Preservation Office (SHPO) for the National Historic Preservation Act, Section 106 sign-off.

1) **Date of IDNR, SHPO response:** 03/09/2023

---

Provide records of consultation with IDNR's Impact Assessment Section for evaluation pursuant to the Illinois Endangered Species Protection Act [520 ILCS 10/11], the Illinois Natural Areas Preservation Act [525 ILCS 30/17], Title 17 Illinois Administrative Code, Part 1075, and Interagency Wetlands Policy Act of 1989 (Illinois Administrative Code, Part 1090).

2) **Date of EcoCAT printout:** 01/04/2023 & 02/14/2023

**Date of IDNR follow-up letter (when protected resources are identified):** 01/04/2023 & 02/14/2023

---

For projects located within any wetland, river, stream, flood plain, floodway, waterway, any body of water, or construction located within 250 feet of a wetland; provide records of consultation from:

3) **U.S. Army Corps of Engineers (USACE) Date of USACE response:** N/A

---

For projects located within a flood plain or floodway, or along a jurisdictional river, lake, or stream without a mapped floodway or flood plain, provide records of consultation from:

4) **IDNR Office of Water Resources (OWR) Date of IDNR OWR response:** N/A

---

If the project involves conversion of prime agricultural land to other uses, provide records of consultation from:

5) **Illinois Department of Agriculture (IDOA). Date of IDOA response:** N/A

---

If the project includes 30% or more reserve capacity for future growth in the existing or proposed service areas, provide records of consultation from all applicable environmental regulatory entities listed on this form for the known growth/development areas associated with the identified secondary/indirect environmental impacts.

6) **Secondary impacts list of applicable regulatory entities and date of their responses:** N/A

---

---

---

If any project with secondary impacts is located in a county under the jurisdiction of a Designated Water Quality Management Agency (DWQMA), which are the Greater Egypt Regional Planning & Development Commission (GERPDC), the Southwestern Illinois Metropolitan and Regional Planning Commission (SIMAPC), and the Chicago Metropolitan Agency for Planning (CMAP), provide records of consultation from:

7) **Date of DWQMA response:** N/A

For certain projects, Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires consultation with all interested, federally recognized Indian tribes. Consultation is required if construction has the potential to affect properties that have religious or cultural significance to Indian tribes previously residing in Illinois. Check all boxes below that apply to this project. If applicable, consultation is required with the Tribal Historic Preservation Office of each interested tribe. If a response is not received in 30 days, consider consultation closed.

- Significant ground disturbance (digging)**  
Examples: new sewers, utility lines (above and below ground), foundations, footings, grading, access roads. This does not include sewer lining; in-place sewer or water main replacements without an increase to the trench size; or re-building a lift station, well, or above-ground building without increasing the footprint.
- New construction in undeveloped natural areas**  
Examples: treatment plants, pipelines, or other new facilities in undeveloped natural areas such as forests, etc.
- Visual changes and/or audible changes**  
Examples: construction of a focal point that is out of character with the surrounding natural area, impairment of the view from an observation point in the natural landscape, impairment of the historic scenic qualities of an area, or an increase in noise levels above an acceptable standard in areas known and appreciated for their quietness.
- Atmospheric changes**  
Example: introduction of lights that create skyglow in an area with a dark night sky.
- Work on a building with significant tribal association**  
Examples: rehabilitation, demolition, or removal of a surviving ancient tribal structure(s), or a structure that is believed to be the location of a significant tribal event or that served as a tribal school or community hall.
- Transfer, lease, or sale of a historic property of religious and cultural significance**  
Examples: Involves properties that contain archaeological sites, burial grounds, sacred landscapes or features, ceremonial areas, or structures with significant tribal association.
- None of the above apply – Tribal Consultation is Not Applicable**

8) **Date Submitted to Interested Tribes** 01/11/2023 **List tribes contacted below or attach a list. Indicate contact date and if a response was received. Copies of all responses must be submitted to IEPA.**

**Certification:** By signing this form, the Loan Applicant certifies that the applicable environmental evaluations were conducted for the proposed project locations, and if the review results for any of these environmental evaluations include recommendations, conditions, certifications, and/or permits, the Loan Applicant agrees to comply.

Signed: Robert Van Dyke  
Loan Applicant's Authorized Representative

Date: March 28, 2023



Illinois  
Department of  
**Natural  
Resources**

JB Pritzker, Governor • Natalie Phelps Finnie, Director  
One Natural Resources Way • Springfield, Illinois 62702-1271

[www.dnr.illinois.gov](http://www.dnr.illinois.gov)

Kane County  
Geneva  
Various locations throughout city  
Section:3-Township:39N-Range:8E  
IEPA LOAN  
Lead service line replacement

PLEASE REFER TO: SHPO LOG #002020323

March 9, 2023

William G. Nelson  
Hampton, Lenzini and Renwick, Inc.  
380 Shepard Drive  
Elgin, IL 60123-7010

Dear Mr. Nelson:

We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you are an applicant, please submit a copy of this letter to the state or federal agency from which you obtain any permit, license, grant, or other assistance. If further assistance is needed contact Jeff Kruchten, Chief Archaeologist at 217/785-1279 or [Jeffery.kruchten@illinois.gov](mailto:Jeffery.kruchten@illinois.gov).

Sincerely,

Carey L. Mayer, AIA  
Deputy State Historic  
Preservation Officer

*Applicant:* Hampton, Lenzini and Renwick, Inc.  
*Contact:* Bill Nelson  
*Address:* 380 Shepard Drive  
Elgin, IL 60123

*IDNR Project Number:* 2308570  
*Date:* 01/04/2023

*Project:* City of Geneva Watermain and Lead Service Plan  
*Address:* 101 W State St, Geneva

*Description:* Watermain and water service replacement including lead service replacement

---

### Natural Resource Review Results

---

#### Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

#### Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

**An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.**

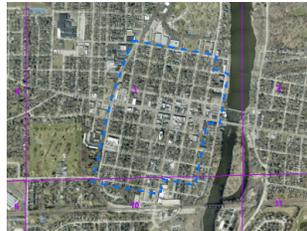
#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

*County:* Kane

*Township, Range, Section:*

39N, 8E, 3  
39N, 8E, 10



---

#### **IL Department of Natural Resources Contact**

Adam Rawe  
217-785-5500  
Division of Ecosystems & Environment

#### **Government Jurisdiction**

IL Environmental Protection Agency  
Gary Bingenheimer  
1021 North Grand Ave. East  
P.O. Box 19276  
Springfield, Illinois 62794 -9276

---

#### **Disclaimer**

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

## **Terms of Use**

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

## **Security**

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

## **Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
<http://dnr.state.il.us>

JB Pritzker, Governor

Colleen Callahan, Director

January 04, 2023

Bill Nelson  
Hampton, Lenzini and Renwick, Inc.  
380 Shepard Drive  
Elgin, IL 60123 7010

**RE: City of Geneva Watermain and Lead Service Plan**  
**Project Number(s): 2308570**  
**County: Kane**

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe  
Division of Ecosystems and Environment  
217-785-5500

*Applicant:* Hampton, Lenzini and Renwick, Inc.  
*Contact:* Bill Nelson  
*Address:* 380 Shepard Drive  
Elgin, IL 60123

*IDNR Project Number:* 2308572  
*Date:* 01/04/2023

*Project:* City of Geneva Watermain and Lead Service Plan  
*Address:* 101 W State St, Geneva

*Description:* Watermain and water service replacement including lead service replacement

### Natural Resource Review Results

#### Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. **Therefore, consultation under part 1075 is terminated.**

#### Wetland Review (Part 1090)

The Illinois Wetlands Inventory does not show wetlands within 250 feet of the project location. **Therefore, the wetland review under Part 1090 is terminated.**

This review is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, Natural Areas, or wetlands are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

*County:* Kane

*Township, Range, Section:*

39N, 8E, 3  
40N, 8E, 34



**IL Department of Natural Resources**  
**Contact**  
Adam Rawe  
217-785-5500  
Division of Ecosystems & Environment

**Government Jurisdiction**  
IL Environmental Protection Agency  
Gary Bingenheimer  
1021 North Grand Ave. East  
P.O. Box 19276  
Springfield, Illinois 62794 -9276

## **Disclaimer**

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

## **Terms of Use**

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

## **Security**

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

## **Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

*Applicant:* Hampton, Lenzini and Renwick, Inc.  
*Contact:* Bill Nelson  
*Address:* 380 Shepard Drive  
Elgin, IL 60123

*IDNR Project Number:* 2308574  
*Date:* 01/04/2023

*Project:* City of Geneva Watermain and Lead Service Plan  
*Address:* 101 W State St, Geneva

*Description:* Watermain and service replacement including lead service replacement

### Natural Resource Review Results

#### Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. **Therefore, consultation under part 1075 is terminated.**

#### Wetland Review (Part 1090)

The Illinois Wetlands Inventory does not show wetlands within 250 feet of the project location. **Therefore, the wetland review under Part 1090 is terminated.**

This review is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, Natural Areas, or wetlands are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

*County:* Kane

*Township, Range, Section:*

39N, 8E, 2  
39N, 8E, 11



**IL Department of Natural Resources**  
**Contact**  
Adam Rawe  
217-785-5500  
Division of Ecosystems & Environment

**Government Jurisdiction**  
IL Environmental Protection Agency  
Gary Bingenheimer  
1021 North Grand Ave. East  
P.O. Box 19276  
Springfield, Illinois 62794 -9276

## **Disclaimer**

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

## **Terms of Use**

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

## **Security**

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

## **Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

*Applicant:* Hampton, Lenzini and Renwick, Inc.  
*Contact:* Bill Nelson  
*Address:* 380 Shepard Drive  
Elgin, IL 60123

*IDNR Project Number:* 2308575  
*Date:* 01/04/2023

*Project:* City of Geneva Watermain and Lead Service Plan  
*Address:* 101 W State St, Geneva

*Description:* Watermain and water service replacement including lead service replacement

---

### Natural Resource Review Results

---

#### Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Black-Crowned Night Heron (*Nycticorax nycticorax*)

#### Wetland Review (Part 1090)

The Illinois Wetlands Inventory does not show wetlands within 250 feet of the project location.

**An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.**

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

*County:* Kane

*Township, Range, Section:*  
39N, 8E, 10



**IL Department of Natural Resources**  
**Contact**  
Adam Rawe  
217-785-5500  
Division of Ecosystems & Environment

**Government Jurisdiction**  
IL Environmental Protection Agency  
Gary Bingenheimer  
1021 North Grand Ave. East  
P.O. Box 19276  
Springfield, Illinois 62794 -9276

---

#### Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

## **Terms of Use**

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.
2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.
3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

## **Security**

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

## **Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
<http://dnr.state.il.us>

JB Pritzker, Governor

Colleen Callahan, Director

January 04, 2023

Bill Nelson  
Hampton, Lenzini and Renwick, Inc.  
380 Shepard Drive  
Elgin, IL 60123 7010

**RE: City of Geneva Watermain and Lead Service Plan**  
**Project Number(s): 2308575**  
**County: Kane**

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe  
Division of Ecosystems and Environment  
217-785-5500

*Applicant:* Hampton, Lenzini and Renwick, Inc.  
*Contact:* Bill Nelson  
*Address:* 380 Shepard Drive  
Elgin, IL 60123

*IDNR Project Number:* 2310159  
*Date:* 02/13/2023

*Project:* City of Geneva Watermain and Lead Service Plan  
*Address:* 101 W State St, Geneva

*Description:* Replacement of water main and water services including full lead service replacement into buildings.

### Natural Resource Review Results

#### Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

#### Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

**An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.**

#### Location

The applicant is responsible for the accuracy of the location submitted for the project.

*County:* Kane

*Township, Range, Section:*

39N, 8E, 2  
40N, 8E, 35



#### IL Department of Natural Resources Contact

Adam Rawe  
217-785-5500  
Division of Ecosystems & Environment

#### Government Jurisdiction

IL Environmental Protection Agency  
Gary Bingenheimer  
1021 North Grand Ave. East  
P.O. Box 19276  
Springfield, Illinois 62794 -9276

#### Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

## **Terms of Use**

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

## **Security**

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

## **Privacy**

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.



# Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271  
<http://dnr.state.il.us>

JB Pritzker, Governor

Natalie Phelps Finnie, Director

February 14, 2023

Bill Nelson  
Hampton, Lenzini and Renwick, Inc.  
380 Shepard Drive  
Elgin, IL 60123 7010

**RE: City of Geneva Watermain and Lead Service Plan**  
**Project Number(s): 2310159**  
**County: Kane**

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe  
Division of Ecosystems and Environment  
217-785-5500



**FLOOD HAZARD INFORMATION**

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

<b>SPECIAL FLOOD HAZARD AREAS</b>	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
<b>OTHER AREAS OF FLOOD HAZARD</b>	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes Zone X
	Area with Flood Risk due to Levee Zone D
<b>OTHER AREAS</b>	NO SCREEN Area of Minimal Flood Hazard Zone X
	Effective LOMRs
	Area of Undetermined Flood Hazard Zone D
<b>GENERAL STRUCTURES</b>	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	20.2 Cross Sections with 1% Annual Chance
	17.5 Water Surface Elevation
	8 Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
<b>OTHER FEATURES</b>	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

**NOTES TO USERS**

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-6627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

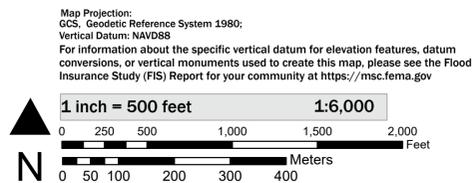
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 11/4/2023 3:46 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/118418>

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

**SCALE**

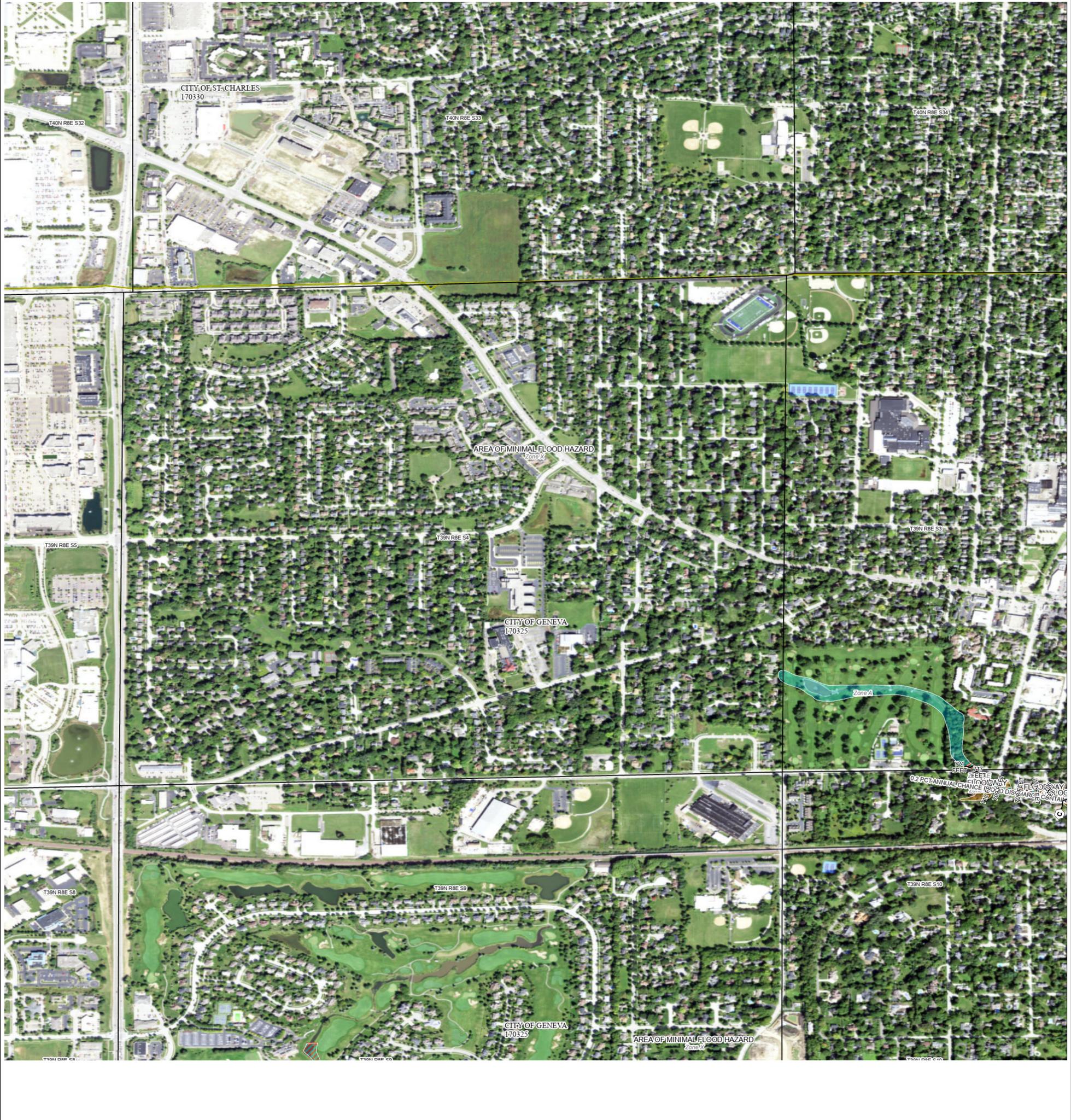


**NATIONAL FLOOD INSURANCE PROGRAM**  
FLOOD INSURANCE RATE MAP

PANEL 268 OF 410

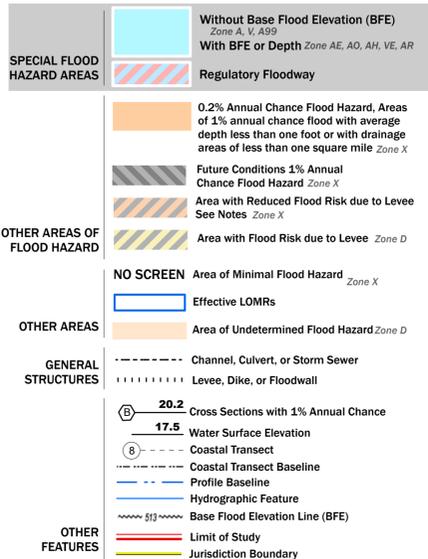
Panel Contains:

COMMUNITY	NUMBER	PANEL
KANE COUNTY	170896	0268
CITY OF GENEVA	170325	0268
CITY OF ST. CHARLES	170330	0268



**FLOOD HAZARD INFORMATION**

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT



**NOTES TO USERS**

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-6627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

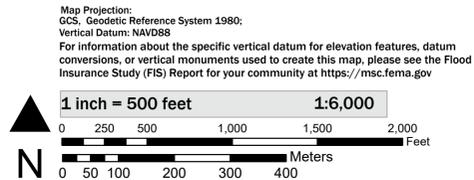
To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by the United States Geological Survey (USGS). The basemap shown is the USGS National Map: Orthoimagery. Last refreshed October, 2020.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on 11/4/2023 3:48 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at <https://www.fema.gov/media-library/assets/documents/118418>

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

**SCALE**



**NATIONAL FLOOD INSURANCE PROGRAM**  
FLOOD INSURANCE RATE MAP

PANEL 264 OF 410

Panel Contains:

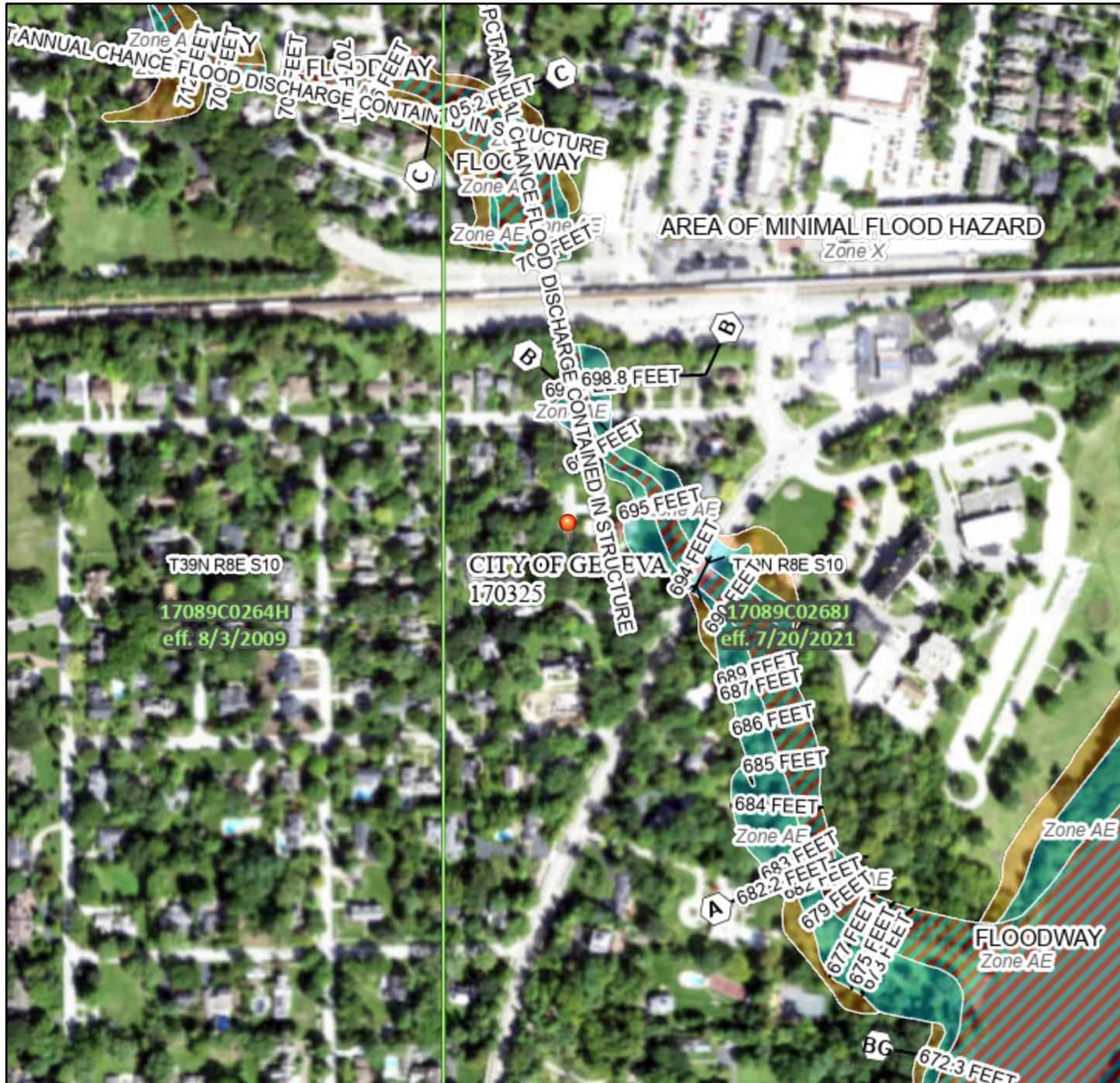
COMMUNITY	NUMBER	PANEL
CITY OF GENEVA	170325	0264
CITY OF ST. CHARLES	170330	0264



# National Flood Hazard Layer FIRMette



88°19'W 41°53'1"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS		17.5 Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/4/2023 at 3:42 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

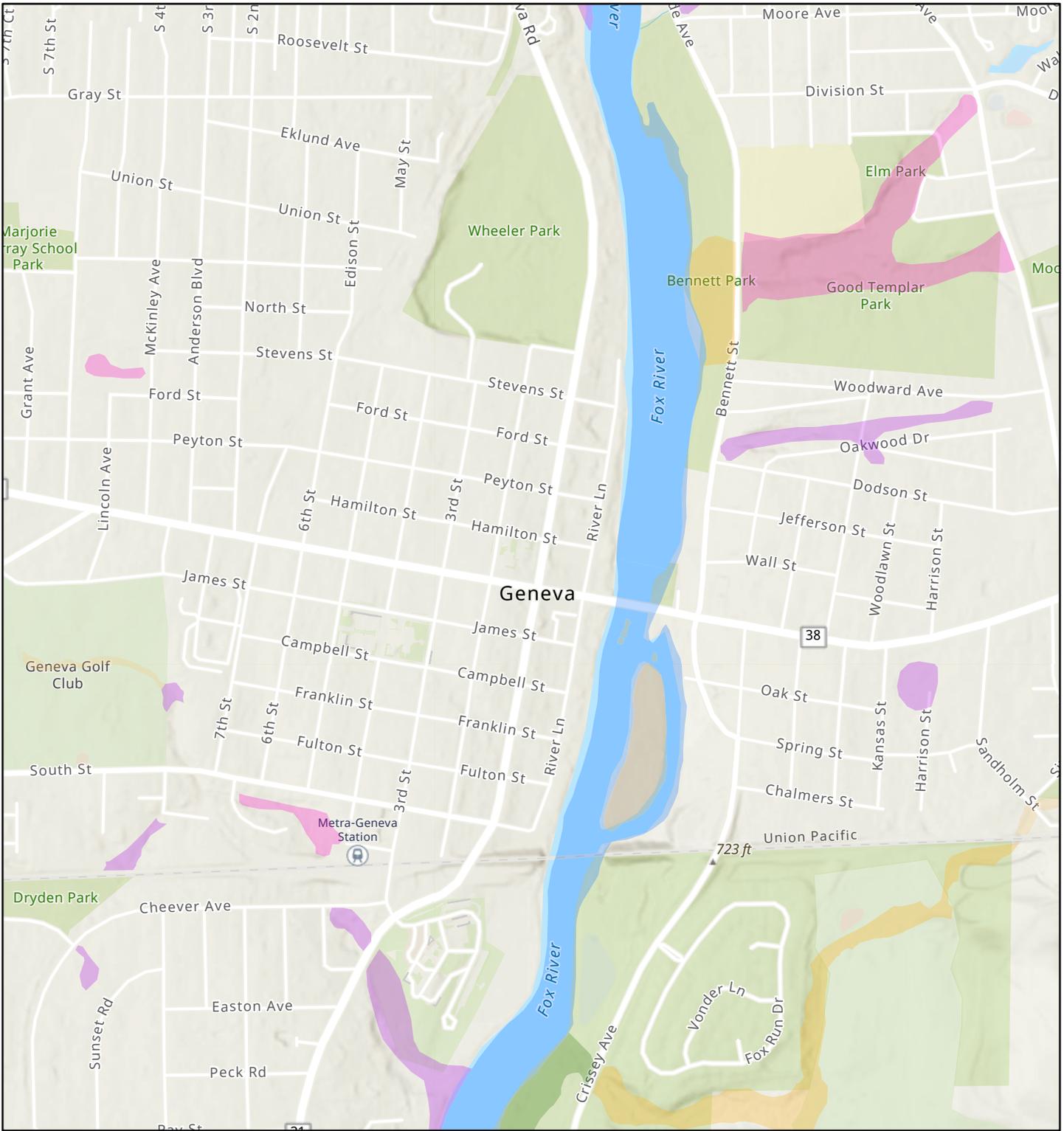
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

0 250 500 1,000 1,500 2,000 Feet 1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

88°18'22"W 41°52'34"N

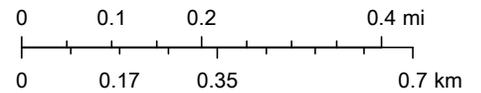
# Geneva Wetland Boundaries



1/4/2023, 9:37:55 AM

1:18,056

- ADID Wetlands**
- lwf
  - aph
  - w
  - is
  - HHQ
  - r
  - apn
  - HFV
  - nw



Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, County of Kane, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/ NASA, USGS, EPA, NPS, US Census Bureau, USDA

These layers do not represent a survey. No Accuracy is assumed for the records, including plats, surveys, recorded deeds, and contracts, and only contains information required for local government purposes. See the recorded documents for more detailed legal



## Hampton, Lenzini and Renwick, Inc.

Civil Engineers • Structural Engineers • Land Surveyors • Environmental Specialists  
www.hlrengineering.com

---

1/10/2023

Kelli Mosteller, THPO  
Citizen Potawatomi Nation  
1601 S. Gordon Cooper Drive  
Shawnee, OK 74801

Re: Section 106 Review – City of Geneva, Kane County

Dear THPO Mosteller,

The City of Geneva will be applying for funding from the Illinois Environmental Protection Agency (IEPA) for watermain and lead service replacement. IEPA provides low interest loans through the State Revolving Fund (SRF), which receives annual federal capitalization funding from USEPA. Prior to receiving planning approval, IEPA requires review of all projects to assure compliance with federal cross-cutting authorities, including Section 106 of the National Historic Preservation Act (NHPA).

The City of Geneva has retained the engineering services of Hampton, Lenzini and Renwick, Inc. to assist with this planning effort. In cooperation with IEPA, The City of Geneva will conduct a review of this proposed project's location to comply with Section 106 of the National Historic Preservation Act according to procedures outlined in 36 CFR Part 800. Due to tribal interests in Kane County, IL, we invite you to be a consulting party in this review to help identify properties in the project area that may have historical, religious, or cultural significance to your tribe. If such properties are identified and the project has the potential to impact historical or cultural resources, we request guidance regarding how to avoid, minimize, or mitigate any adverse effects.

Information regarding the project including a general map and project area map is attached. If you would like to be a consulting party on this project, please respond to this letter within 30 days. Your response should include any concerns about the impact of this project. We value your opinion and if you have further questions regarding this project, please contact Bill Nelson at [bnelson@hlreng.com](mailto:bnelson@hlreng.com).

Sincerely,

A handwritten signature in blue ink, appearing to read 'Bill Nelson', is written over a faint blue circular stamp.

Bill Nelson

Project Manager, P.E.

Hampton, Lenzini, Renwick, Inc.

APPENDIX C  
COST ESTIMATE

# RETURN WITH BID



## ESTIMATE OF COST (Engineer's Estimate)

County Kane  
 Local Public Agency City of Geneva  
 Section LSLR MASTER PLAN  
 Route Various

Combination Letter	Sections Included in Combinations	TOTAL
EE	ENGINEERS ESTIMATE	\$ 43,777,312.52

(For complete information covering these items, see plans and specifications)

### ENGINEER'S ESTIMATE

Item No.	Items	Unit	Est. Unit Price	Quantity	Total
1	WATER MAIN 8"	FT	\$ 160.00	57060	\$ 9,129,600.00
2	WATER MAIN 6" SERVICE LINE	FT	\$ 120.00	535	\$ 64,200.00
3	SHORT SERVICE 1 1/2"	FT	\$ 90.00	4535	\$ 408,150.00
4	LONG SERVICE 1 1/2"	FT	\$ 100.00	12765	\$ 1,276,500.00
5	SERVICE REPLACEMENT COMPLETE 1 1/2"	FT	\$ 175.00	37760	\$ 6,808,000.00
6	FIRE HYDRANT ASSEMBLY	EACH	\$ 8,000.00	152	\$ 1,216,000.00
7	WATER VALVES 8"	EACH	\$ 2,000.00	288	\$ 576,000.00
8	WATER VALVES 6"	EACH	\$ 2,000.00	10	\$ 20,000.00
9	VALVE VAULTS 4' DIA	EACH	\$ 3,000.00	298	\$ 894,000.00
10	TRENCH BACKFILL	CY	\$ 35.00	43737	\$ 1,530,795.00
11	LANDSCAPE RESTORATION	SY	\$ 12.00	24409	\$ 292,909.20
12	PAVEMENT PATCHING	SY	\$ 60.00	33285	\$ 1,997,100.00
13	TRAFFIC CONTROL AND PROTECTION	LS	\$ 1,000,000.00	1	\$ 1,000,000.00
14	CONSTRUCTION LAYOUT	LS	\$ 200,000.00	1	\$ 200,000.00
15	RANDOM SERVICE REPLACEMENT	EACH	\$ 7,875.00	350	\$ 2,756,250.00
SUBTOTAL					\$ 27,969,504.20

S 1ST STREET ESTIMATE (SEE ATTACHED)	\$ 984,165.00
CONTINGENCY (10%)	\$ 2,895,366.92
DESIGN ENGINEERING (8%)	\$ 2,316,293.54
CONSTRUCTION ENGINEERING (8%)	\$ 2,316,293.54

TOTAL ESTIMATED COST (2023 DOLLARS) \$ 36,481,623.19

TOTAL ESTIMATED COST AT 3% INFLATION PER YEAR \$ 43,777,312.52

**APPENDIX D**  
**EXISTING RATE STRUCTURE**

9-3A-3:

**WATERWORKS USAGE RATES AND SERVICE CHARGES, METER RATES: A**

monthly customer service fixed charge shall be charged to all customers based upon the meter size servicing said customer which includes the first one hundred (100) cubic feet per equivalent as set forth below:

**CUSTOMER SERVICE FIXED MONTHLY CHARGE**

Meter Size	12-15-15-5-14-16	5-15-16-5-14-17	5-15-17-5-14-18	5-15-18-5-14-19	5/15/2019
5/8"	\$8.08	\$9.62	\$11.15	\$11.15	\$11.15
¾"	\$10.54	\$12.54	\$14.54	\$14.54	\$14.54
1"	\$15.51	\$18.46	\$21.40	\$21.40	\$21.40
1-1/2"	\$27.84	\$33.13	\$38.41	\$38.41	\$38.41
2"	\$42.69	\$50.79	\$58.89	\$58.89	\$58.89
3"	\$77.36	\$92.04	\$106.72	\$106.72	\$106.72
4"	\$126.87	\$150.95	\$175.02	\$175.02	\$175.02
6"	\$250.57	\$298.11	\$345.66	\$345.66	\$345.66

In addition to the customer service charge, a usage rate shall be charged based upon meter readings (or reasonable estimates thereof) at the end of each period as set forth below:

**CONSUMPTION FEE PER 100 CUBIC FEET**

	12-15-15-5-14-16	5-15-16-5-14-17	5-15-17-5-14-18	5-15-18-5-14-19	5/15/2019
Tier 1 (0-1,500 C.F.)	\$4.59	\$4.85	\$4.95	\$5.16	\$5.31
Tier 2 (1,501-20,000 C.F.)	\$4.25	\$4.48	\$4.58	\$4.77	\$4.91
Tier 3 (Above 20,001 C.F.)	\$4.11	\$4.34	\$4.43	\$4.62	\$4.75

- A. The usage rate, monthly, for water furnished to multiple user residential or commercial tenancies served by a single meter of the city shall be charged tier one (1) rate only.
- B. The city shall furnish water service only to those lands lying within the corporate limits of the city. However, water service may be furnished to residential areas outside the corporate limits if the city determines that annexation is not required.
- C. Waterworks usage rates and service charges for areas outside the corporate limits of the city shall be one and one half of those areas within the corporate limits. (Ord. No. 2013-36, § 1(Exh. A), 10-21-2013)

APPENDIX E  
DEBT SERVICE PLAN

**City of Geneva**  
**LEAD SERVICE LINE REPLACEMENT PROGRAM**  
**DEBT SERVICE SCHEDULE**

Program Year	Project ID	WATER MAINS			LEAD SERVICE LINE REPLACEMENT			TOTAL			CUMULATIVE	
		Construction Cost	Annual Debt Service	User Rate Increase	Construction Cost	Annual Debt Service	User Rate Increase	Construction Cost	Annual Debt Service	User Rate Increase	MONTHLY USER RATE INCREASE PER 100 CF	DEBT SERVICE PAYMENT
1	Lime	\$ 931,572.37	\$ 56,743.19	\$ 0.06	\$ 697,622.56	\$ 34,881.13	\$ 0.04	\$ 1,629,194.93	\$ 91,624.32	\$ 0.10	\$ 0.10	\$ 91,624.32
2	Black	\$ 1,203,896.37	\$ 73,330.77	\$ 0.08	\$ 585,764.10	\$ 29,288.21	\$ 0.03	\$ 1,789,660.47	\$ 102,618.97	\$ 0.11	\$ 0.21	\$ 194,243.29
3	Yellow	\$ 1,806,592.63	\$ 110,041.72	\$ 0.12	\$ 1,198,279.13	\$ 59,913.96	\$ 0.06	\$ 3,004,871.76	\$ 169,955.67	\$ 0.18	\$ 0.39	\$ 364,198.96
4	Tan	\$ 1,285,338.87	\$ 78,291.53	\$ 0.08	\$ 843,653.49	\$ 42,182.67	\$ 0.04	\$ 2,128,992.36	\$ 120,474.20	\$ 0.12	\$ 0.51	\$ 484,673.16
5	Red	\$ 2,601,116.67	\$ 158,437.13	\$ 0.17	\$ 771,962.14	\$ 38,598.11	\$ 0.04	\$ 3,373,078.81	\$ 197,035.23	\$ 0.21	\$ 0.72	\$ 681,708.40
6	Maroon	\$ 1,388,373.36	\$ 84,567.48	\$ 0.09	\$ 670,314.20	\$ 33,515.71	\$ 0.04	\$ 2,058,687.56	\$ 118,083.19	\$ 0.13	\$ 0.85	\$ 799,791.59
7	Blue	\$ 2,161,195.35	\$ 131,640.99	\$ 0.14	\$ 1,315,253.84	\$ 65,762.69	\$ 0.07	\$ 3,476,449.19	\$ 197,403.69	\$ 0.21	\$ 1.06	\$ 997,195.28
8	Pink	\$ 1,913,270.14	\$ 116,539.57	\$ 0.12	\$ 926,580.41	\$ 46,329.02	\$ 0.05	\$ 2,839,850.55	\$ 162,868.59	\$ 0.17	\$ 1.23	\$ 1,160,063.87
9	Purple	\$ 1,933,214.51	\$ 117,754.41	\$ 0.13	\$ 869,371.43	\$ 43,468.57	\$ 0.05	\$ 2,802,585.94	\$ 161,222.98	\$ 0.18	\$ 1.41	\$ 1,321,286.85
10	Orange	\$ 2,065,599.78	\$ 125,818.15	\$ 0.13	\$ 1,115,556.06	\$ 55,777.80	\$ 0.06	\$ 3,181,155.84	\$ 181,595.96	\$ 0.19	\$ 1.60	\$ 1,502,882.80
11	Green	\$ 1,821,266.26	\$ 110,935.51	\$ 0.12	\$ 1,234,684.72	\$ 61,734.24	\$ 0.07	\$ 3,055,950.98	\$ 172,669.74	\$ 0.19	\$ 1.79	\$ 1,675,552.55
12	Light Blue	\$ 2,761,921.42	\$ 168,231.94	\$ 0.18	\$ 956,399.37	\$ 47,819.97	\$ 0.05	\$ 3,718,320.79	\$ 216,051.91	\$ 0.23	\$ 2.02	\$ 1,891,604.45
13	Olive	\$ 2,598,687.12	\$ 158,289.14	\$ 0.17	\$ 984,979.46	\$ 49,248.97	\$ 0.05	\$ 3,583,666.58	\$ 207,538.11	\$ 0.22	\$ 2.24	\$ 2,099,142.56
14	Brown	\$ 2,820,892.01	\$ 171,823.91	\$ 0.18	\$ 1,093,157.04	\$ 54,657.85	\$ 0.06	\$ 3,914,049.05	\$ 226,481.76	\$ 0.24	\$ 2.48	\$ 2,325,624.32
15	Grey	\$ 2,346,390.40	\$ 142,921.45	\$ 0.15	\$ 874,407.34	\$ 43,720.37	\$ 0.05	\$ 3,220,797.74	\$ 186,641.81	\$ 0.20	\$ 2.68	\$ 2,512,266.14
16											\$ 2.68	\$ 2,512,266.14
17											\$ 2.68	\$ 2,512,266.14
18											\$ 2.68	\$ 2,512,266.14
19											\$ 2.68	\$ 2,512,266.14
20											\$ 2.68	\$ 2,512,266.14
21	Lime	Debit Retired									\$ 2.58	\$ 2,420,641.82
22	Black	Debit Retired									\$ 2.47	\$ 2,318,022.85
23	Yellow	Debit Retired									\$ 2.29	\$ 2,148,067.17
24	Tan	Debit Retired									\$ 2.17	\$ 2,027,592.97
25	Red	Debit Retired									\$ 1.96	\$ 1,830,557.74
26	Maroon	Debit Retired									\$ 1.83	\$ 1,712,474.54
27	Blue	Debit Retired									\$ 1.62	\$ 1,515,070.86
28	Pink	Debit Retired									\$ 1.45	\$ 1,352,202.27
29	Purple	Debit Retired									\$ 1.27	\$ 1,190,979.29
30	Orange	Debit Retired									\$ 1.08	\$ 1,009,383.33
31	Green	Debit Retired									\$ 0.89	\$ 836,713.59
32	Light Blue	Debit Retired									\$ 0.66	\$ 620,661.68
33	Olive	Debit Retired									\$ 0.44	\$ 413,123.57
34	Brown	Debit Retired									\$ 0.20	\$ 186,641.81
35	Grey	Debit Retired									\$ -	\$ -

Assumptions:

1. no change in average monthly useage over the 35 years.
2. Constant Annual Inflation rate of 3% per year.
3. SRF Loan Rate of 2 % every year.

APPENDIX F  
TYPICAL NOTICES AND  
WAIVERS



525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • [www.dph.illinois.gov](http://www.dph.illinois.gov)

## WAIVER OF COMPLETE LEAD SERVICE LINE REPLACEMENT

You are receiving this form because your property has been identified by your community water supply (CWS) as being served by a lead service line or galvanized service line located downstream of lead and you are refusing to allow the community water supply (CWS) to replace your entire service line.

The purpose of this form is to provide you, the property owner, with information necessary to make an informed decision about replacing your service line. In accordance with the Lead Service Line Replacement and Notification Act, Public Act 102-0613, the owner or operator of your CWS is required to replace your lead service line in its entirety, including any portion of the service line running on private property and within the building's plumbing at the first shut-off valve or 18 inches inside the building, whichever is shorter. If you deny the CWS the ability to perform a complete lead service line replacement, then you, the property owner, must sign this waiver form in accordance with 415 ILCS 5/17.12 (ff)(1)(D) and 17.12 (ii).

The following items should be considered by property owners regarding lead service line replacement:

- **Lead service lines and galvanized service lines downstream of lead can be significant contributors of lead contamination in drinking (tap) water through the corrosion of these materials.** Service lines are pipes that carry drinking water from the CWS water main to a home or building. A study published by American Water Works Association (AWWA) Water Research Foundation (2008) "Contributions of Service Line and Plumbing Fixtures to Lead and Copper Rule Compliance Issues" (Sandvig et al, 2008) estimates that 50% – 75% of lead in drinking water comes from lead service lines.
- **Lead is a toxic metal that is harmful to human health even at low exposure levels.** Young children are particularly vulnerable to lead. The adverse health effects of lead exposure include damage to the brain and nervous system, slowed growth and development, learning and behavior problems, hearing and speech problems, lower IQ, decreased ability to pay attention, and underperformance in school. Please see the CDC's website, <https://www.cdc.gov/nceh/lead/prevention/health-effects.htm> for additional information regarding health effects of lead.
- **Partial lead service line replacements can increase lead levels for long periods of time.** Partial lead service line replacement means replacement of only a portion of a lead service line or a galvanized service line downstream of lead. Following a partial lead service line replacement, lead levels increase and construction activities such as digging and cutting release particulate lead. Particulate lead is a concern because the lead content can be very high. Additionally, new materials from partial lead service line replacements can increase corrosion or create galvanic corrosion.
- **Property owners of nonresidential properties or properties operating as rental property have responsibilities under the Lead Service Line Replacement and Notification Act after denial of complete lead service line replacement.** In accordance with 415 ILCS 5/17.12 (ff), owners of nonresidential buildings or a residence operating as a rental property shall be responsible for installing and maintaining certified point-of-use filters for the reduction of lead (NSF/ANSI Standard 53) and

particulates (NSF/ANSI Standard 42) at all plumbing fixtures intended to supply water for the purposes of drinking, food preparation, or making baby formula until such time that the property owner has affected the remaining portions of the lead or galvanized service line to be replaced.

- ***Unsafe conditions and knowledge of the remaining lead piping must be disclosed appropriately.*** Waiver or denial of complete replacement of a lead service line may create unsafe concentrations of lead and/or unsafe conditions relating to the remaining lead water pipe. If the property is a residential real property as defined by the Residential Real Property Disclosure Act (765 ILCS 77/5), appropriate disclosure shall be made at any transfer of sale, exchange, installment land sale contract, assignment of beneficial interest, lease with an option to purchase, ground lease, or assignment of ground lease.
- ***Service lines are plumbing and are required to be replaced by individuals authorized by the Plumbing License Law (225 ILCS 320/3).*** Service lines are plumbing as defined by the Plumbing License Law (225 ILCS 320/3). As plumbing, service lines are required to be repaired, replaced, and installed by authorized individuals and in accordance with the requirements of the Illinois Plumbing Code (77 Ill. Adm. Code 890).
- ***If the property is operating as a childcare operation, there are additional requirements regarding lead in drinking water under Department of Family and Children Services (DCFS) licensing standards.*** Under DCFS licensing standards, changes in water profile including changes to the water service line require retesting of the drinking water for presence of lead. Where lead is detected at or above DCFS's action level, a mitigation plan to reduce the concentration of lead is required.

More information about lead in drinking water and the effects of lead can be found at IDPH's website: <https://dph.illinois.gov>.

In consideration of the above information, IDPH strongly recommends you allow your CWS to replace your lead service line in its entirety. If you choose to waive and deny a complete lead service line replacement at your property, this form must be completed and returned to your CWS. Sections 1,2, and 3 of this form are to be completed by the CWS and Sections 4 and 5 of this form are to be completed by, you, the property owner of the affected property.

## WAIVER OF COMPLETE LEAD SERVICE LINE REPLACEMENT

Sections 1, 2, and 3 must be completed by the CWS prior to providing the form to the property owner.

<b>SECTION 1: COMMUNITY WATER SUPPLY INFORMATION</b>	
CWS Name	ID Number
Phone	Email
CWS Mailing Address	
CWS City	Zip Code
<b>SECTION 2: SERVICE LINE ACTIVITY INFORMATION</b>	
<input type="checkbox"/> Emergency Repair <input type="checkbox"/> Planned Replacement	Date of Activity
<b>SECTION 3: AFFECTED PROPERTY</b>	
Street Address	
City	Zip Code

Sections 4 and 5 must be completed by the owner of the affected building identified above and returned to the community water supply.

<b>SECTION 4: Property Owner Information</b>	
Full Name (First Name Last Name)	
Phone	Email
<b>SECTION 5: DENIAL OF COMPLETE LEAD SERVICE LINE REPLACEMENT</b>	
<input type="checkbox"/> By signing this waiver, I acknowledge that I am the property owner of the affected property located at the address listed in Section 3 of this form and I have been informed by the CWS that my property has a lead service line. I have read and understand the information provided within this waiver regarding the hazards of lead in drinking water, partial lead service line replacement, and Illinois laws about responsibilities of property owners for providing filters, disclosing the presence of lead water service lines, and requirements for child care facilities.	
<input type="checkbox"/> By signing this waiver, I acknowledge that I am waiving the community water supply's requirement to replace my lead service line in its entirety. I acknowledge that this waiver will result in a partial lead service line replacement and it may be unsafe to drink, cook with, or otherwise consume water from the tap, unless it has been filtered with a filter certified to meet NSF/ANSI Standard 53 and 42.	
Signature	Date

All parties should retain a copy of this form for their records. The Community Water Supply must also provide notification to IDPH using the electronic forms located at <https://dph.illinois.gov/topics-services/environmental-health-protection/lead-in-water.html>.

**LEAD & GALVANIZED WATER SERVICE PROGRAM  
PARTICIPATION AGREEMENT**

---

**THIS AGREEMENT** made on this \_\_\_\_ day of\_, 20\_\_\_\_, between the **CITY OF GENEVA, an Illinois municipal corporation**, 22 S. First Street, Geneva, Illinois (hereinafter referred to as “City”) and \_\_\_\_\_(Property Owner(s)) at \_\_\_\_\_(address), \_\_\_\_\_(PIN / PINs) in Geneva, Illinois (hereinafter referred to collectively as “Property Owner”).

**WITNESSETH:**

**WHEREAS**, Property Owner is the owner of the real property located at the address indicated above and such real property contains a lead or galvanized water service; and

**WHEREAS**, the Illinois Statutes 415 ILCS 5/17.12 relating to replacing existing lead & galvanized water services, a copy of said program is available on the Illinois General Assembly website (<https://www.ilga.gov/legislation/ilcs/ilcs.asp>); and

**WHEREAS**, the Property Owner desires to participate in said Program and the City and the Property Owner desire to enter into this Agreement governing the installation of plumbing improvements in the Property Owner’s real property. The City’s will replace the water service at no expense to the property owner.

**NOW, THEREFORE**, in consideration of the above and the terms and conditions set forth below and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree as follows:

**Section 1:** The preamble paragraphs set forth above are hereby expressly made a part of and operative provisions of the Agreement as fully as if set forth at length in this Section 1.

**Section 2: Definitions.** The following terms shall have the following meaning when used in this Agreement unless the context clearly indicates a contrary meaning.

“Contractor” shall mean a contractor who has obtained the necessary licenses from the State of Illinois to do the work under the Program.

“Program” is the replacement program established by Illinois Statutes 415 ILCS 5/17.12 , plumbing improvements to replace lead or galvanized water service

“Water Service” is the pipe used to convey potable water that is located between the main and the water meter

**Section 3: Inspections.** Two inspections by a representative of the City, its consultants, and/or their hired contractor must be performed: one prior to any work performed within the boundaries of the above-referenced property lines and one at the time of installation to verify the proper connection of the water service.

**Section 4: City Responsibility.**

- (a) Do a pre-inspection of the water service line as it enters inside the building and connects to the meter to determine if the meter setting is correct and if the meter should be replaced. If necessary, either or both of these items will be corrected/replaced at no cost to the undersigned owner of the property and building. Pre-Inspection will include photographic and/or video evidence of the existing water service, entrance through the foundation, and condition of surrounding area to ensure proper restoration to preconstruction conditions.
- (b) Have a new non-lead “copper or polyethylene” private water service line constructed, at the City’s expense, from the water main curb box in the public right-of-way to the water meter on the Owner’s property including the meter setting and any necessary connections to reset the water meter. The existing private lead service line will be disconnected and capped off inside the building;
- (c) Restore the Owner’s property disturbed by construction, including seeding of grass areas on the property and restore the interior portions of the building on the property disturbed by such work, to the same condition the property was in prior to the commencement of the work described in this Agreement;
- (d) Require the City’s contractor doing the work to provide adequate insurance to protect the Owner against any loss that may result from damage caused by negligent construction operations on the Owner’s property and require the contractor to provide the City with proof of such coverage.

- (e) Guarantee to the Owner that any work done shall be free from defects in material and workmanship for a period of one year from its completion (“Guarantee Period”).

**Section 5: Property Owner’s Responsibility.** The owner agrees to the following:

- (a) Permit temporary access and right of entry to and upon the above-referenced property to the City and City’s designated contractor(s) to perform a pre-inspection, access to permit the contractor entry to perform the work, testing of the new private water service line, and to permit any needed adjustments, maintenance, or repairs during the Guarantee Period;
- (b) Correction of subsidence in the excavated area. Settling of excavated soils is common. The Property Owner will be responsible for any future filling and reseeded.
- (c) Future maintenance of new water service from b-box to water meter as described in Maintenance, Repair and Replacement of Service Lines in Title 9 Chapter 3 of the Geneva Municipal Code and all other related equipment and improvements.

**Section 6: Property Tenant Responsibility.** The tenant also agrees to the following:

- (a) Permit temporary access and right of entry to and upon the above-referenced property to the City and City’s designated contractor(s) to perform a pre-inspection, testing of the new private water service line, and to permit any needed adjustments, maintenance, or repairs during the Guarantee Period;

**Section 7: Liability.** The City shall have no liability for any defective work or other damage, injury or loss on account of any act or omission of the City’s Contractor in the performance of the work. The Property Owner must make any claim for such matters directly against the Contractor or Contractor’s insurance carrier. Property Owner hereby agrees to indemnify and hold City harmless against any and all claims and further covenants not to sue the City for any and all claims.

**Section 8: Notices.** Unless otherwise notified in writing, all notices, requests and demands shall be made in writing and shall be personally delivered to, or mailed by United States Certified mail, postage prepaid and return receipt requested, or electronically (email) as follow:

For the City:                    Superintendent of Water & Wastewater  
   City of Geneva Public Works  
   1800 South Street  
   Geneva, Illinois 60134  
   (Email): [bvangyseghem@geneva.il.us](mailto:bvangyseghem@geneva.il.us)

For the Property Owner:

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

Or at such other addresses that any party hereto may designate in writing to the other parties pursuant to the provisions of this Section.

**Section 9: Breach.** If the Property Owner fails to comply with all requirements of the Agreement or to not participate in the program, the Property Owner must sign the “Waiver of Complete Lead Service Line Replacement” form.

**Section 10: Modification.** Any modification of this Agreement shall be in writing and executed by each Party.

**Section 11: Governing Law.** The Parties agree that the laws of the State of Illinois shall govern the construction and implementation of this Agreement. Each Party specifically stipulates to venue in the City of Geneva, and County of Kane.

**Section 12: Entire Agreement.** This Agreement shall be binding on the parties, their assigns and successors. This Agreement and the documents referenced in this Agreement constitute the entire agreement between the parties and supersede any previous negotiations. This Agreement shall not be modified except in writing signed by the parties.

**IN WITNESS WHEREOF**, THE PARTIES HAVE CAUSED THIS Agreement to be executed as of the dates written below.

CITY OF GENEVA, an Illinois Municipal Corporation

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

Written Name: \_\_\_\_\_

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

PROPERTY OWNER OR APPOINTED DESIGNEE

Property Address: \_\_\_\_\_

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

Written Name: \_\_\_\_\_

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

PROPERTY TENANT

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

Written Name: \_\_\_\_\_

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

WITNESS

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

Written Name: \_\_\_\_\_

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