

# Getting the Lead Out of Our Drinking Water

October 13th, 2022

Suburban Public Works  
Directors Association



# Getting the Lead Out of Our Drinking Water

October 13th, 2022



**Tom Nagle**



**Jonathan Flowers**



**Diane Moeller**



**Michael Giglio**

# Major Takeaways

- State and federal laws
- Service Line Inventory
- Lead Service Line Replacement Plan
- Construction
- Funding
- Public engagement

# Background



# Regulatory



EXPERT BLOG › JEREMY ORR

## Illinois Passes Landmark Legislation to Replace Lead Pipes

June 01, 2021 | Jeremy Orr



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### Ground Water and Drinking Water

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[Ground Water and Drinking Water Home](#)

[Basic Information](#)

[Private Wells](#)

[Consumer Confidence](#)

## Revised Lead and Copper Rule

### Lead and Copper Rule Revisions Virtual Engagements

# Regulatory

- **Illinois Lead Service Line Replacement and Notification Act (Act 102-631 formerly HB3739) – Effective 1/1/2022**
- **Major Elements**
  - **Mandatory LSLR**
  - **No Partial LSLR**
  - **Must develop Inventory**
  - **Must develop Replacement Plan**

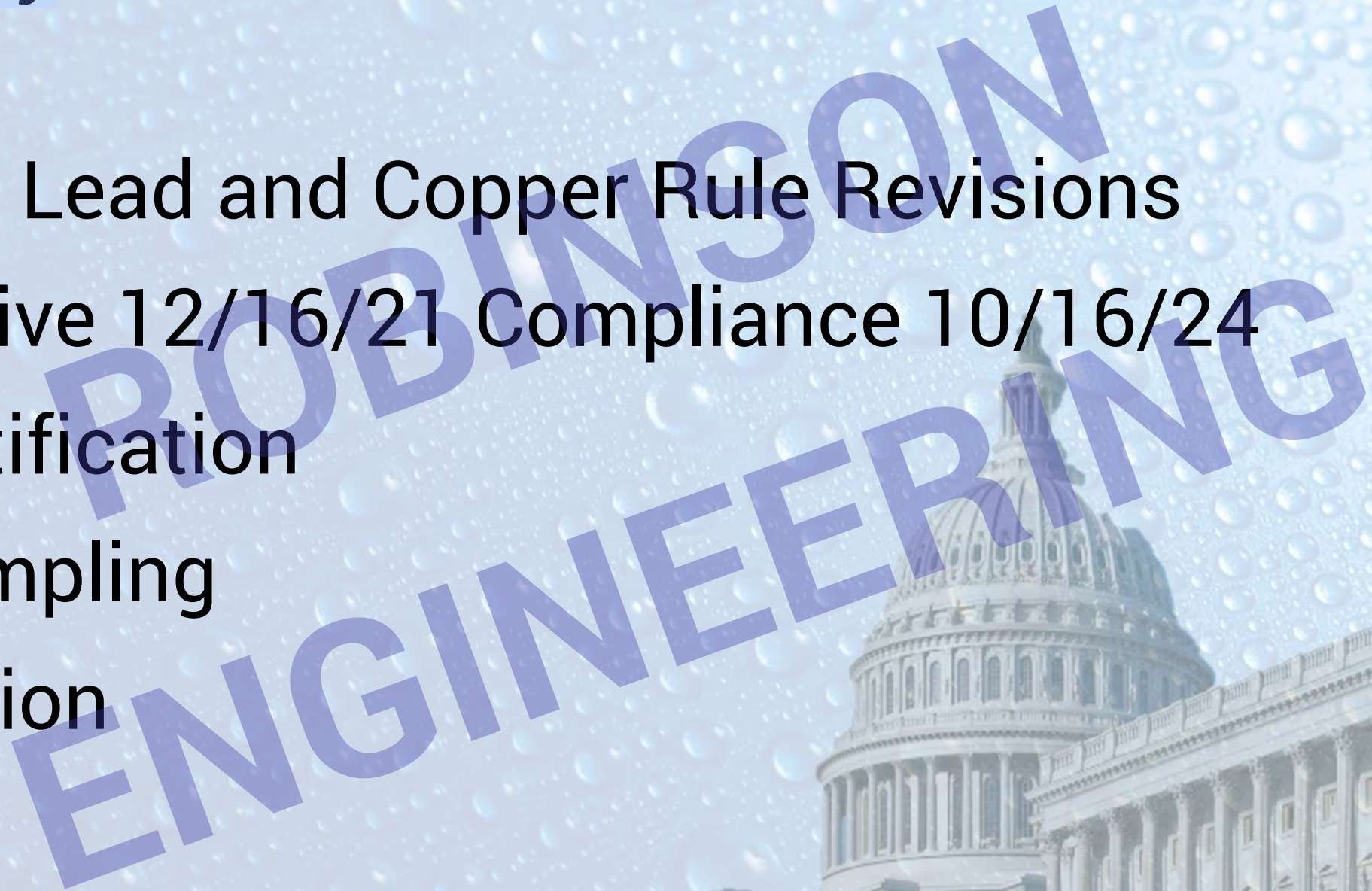
# Regulatory

- Federal Lead and Copper Rule Revisions

Effective 12/16/21 Compliance 10/16/24

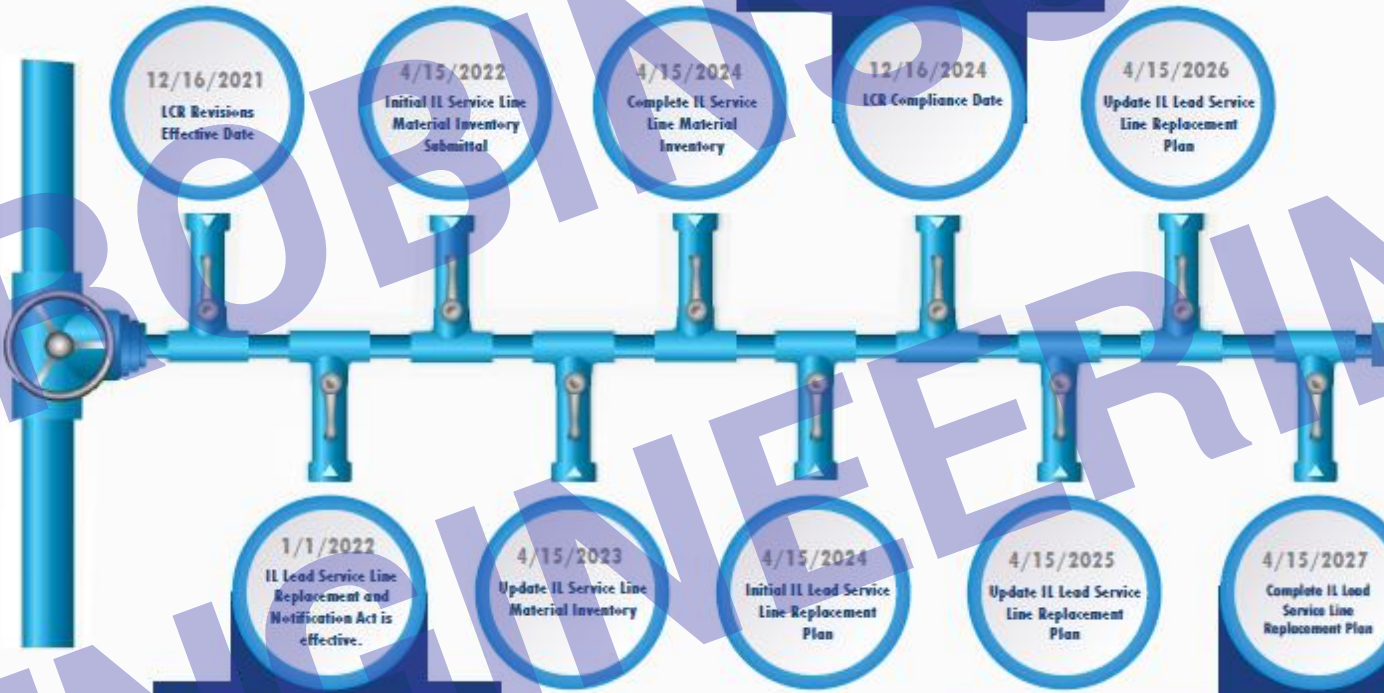
- Notification
- Sampling
- Action

ROBINSON  
ENGINEERING

The background of the slide features a light blue, semi-transparent image of the United States Capitol building. The building is shown from a low angle, highlighting its iconic dome and classical architectural details. Overlaid on this image are numerous small, realistic water droplets of varying sizes, creating a fresh and clean aesthetic. A large, semi-transparent watermark consisting of the words 'ROBINSON' and 'ENGINEERING' in a bold, sans-serif font is oriented diagonally across the center of the slide.

# Regulatory

## ILLINOIS LEAD SERVICE LINE REPLACEMENT AND NOTIFICATION ACT + LEAD AND COPPER RULE REVISIONS TIMELINE TO COMPLIANCE



New sampling requirements (5th L, sample from only LSLs, school sampling), trigger level enforcement (>10 ug/l), notification procedures, filter requirements, find and fix.

No partial lead service line replacements. CWS must replace public portion of LSL when private LSL is voluntarily replaced.

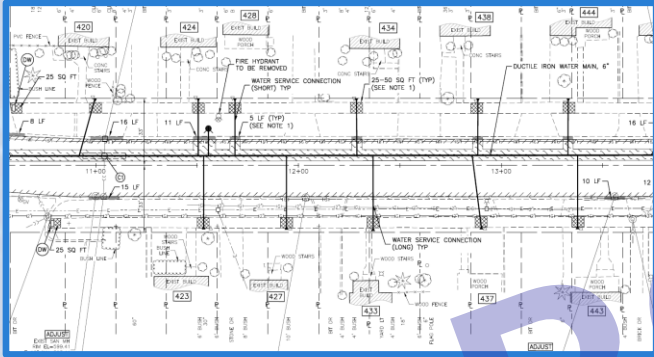
Start Mandatory LSLR

No. of LSLs	Annual Rate	Max Duration Years
1,200 or less	7%	15
1,200 - 5,000	6%	17
5,000 - 10,000	5%	20
10,000 +	3%	34



# Inventory – Preliminary Data Collection

• Record Drawings



• Plumbing Permits

• Plumbing Codes

**Joint Committee on Administrative Rules**  
**ADMINISTRATIVE CODE**

TITLE 77: PUBLIC HEALTH  
 CHAPTER I: DEPARTMENT OF PUBLIC HEALTH  
 SUBCHAPTER F: WATER AND SEWAGE  
 PART 890 ILLINOIS PLUMBING CODE

The General Assembly's Illinois Administrative Code database includes only those rulemakings that have been permanently adopted. This menu will point out the Sections on which an emergency rule (valid for a maximum of 150 days, usually until replaced by a permanent rulemaking) exists. The emergency rulemaking is linked through the notation that follows the Section heading in the menu.

SUBPART A: DEFINITIONS AND GENERAL PROVISIONS

- [Section 890.110 Applicability](#)
- [Section 890.120 Definitions](#)
- [Section 890.130 Incorporated and Referenced Materials](#)
- [Section 890.140 Compliance with this Part](#)
- [Section 890.150 Workmanship](#)
- [Section 890.160 Used Plumbing Material, Equipment, Fixtures](#)
- [Section 890.170 Sewer and/or Water Required](#)
- [Section 890.180 Sewer and Water Pipe Installation](#)
- [Section 890.190 Piping Measurements](#)
- [Section 890.200 Operation of Plumbing Equipment](#)

• Meter Records

**FLINT CITY WATER WORKS**

I hereby request you to run a 1" Lead 1/2" Service Line to premises described as follows: No. 3947-51 Main Street  
 Lot No. \_\_\_\_\_ Block \_\_\_\_\_

Date 12-2-24 Amount of Estimate \$63.00

JOHN WOREK  
 Head of Field Staff for Operations  
 Bid to 3947 Signed John Worek

---

DEPT. OF PUBLIC WORKS & UTILITIES  
 Division of Water Supply # 6029 57.33  
 CITY OF FLINT, MICHIGAN

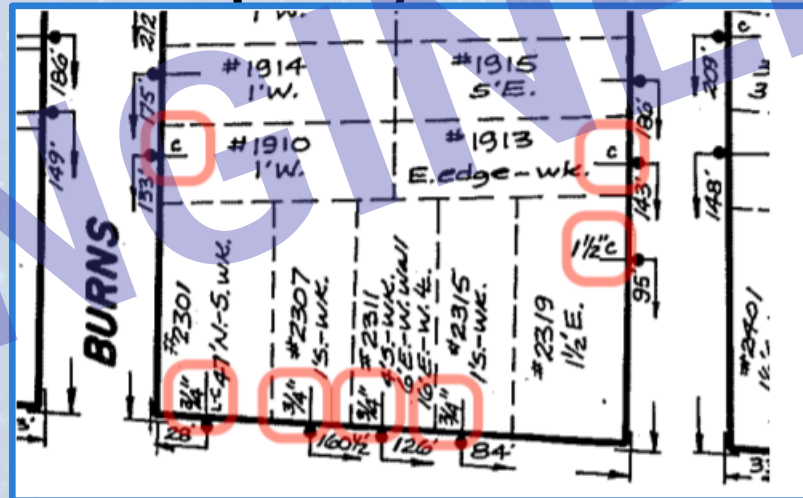
I hereby request you to run a 3/4 inch Service Line to premises described as follows: No. 5714 Baldwin Street  
 Lot No. 471 Block \_\_\_\_\_

3/4 Copper service  
M/S H

Date 4-7-53 Amount 51.33

Veterans Excavating  
 Name of Party Paying for Construction  
 For Druffel Homes signed E. L. Warner

• Property Records



• Service Repairs



# Inventory – Survey



**MICHAEL EINHORN**  
CRETE MAYOR

# Inventory – Survey

**Village of Crete**  
3.1K followers • 7 following

Follow Search

Posts About Mentions Followers Photos Videos More

**Intro**  
The page is not monitored 24/7. Email contact: media@villageofcrete.org

Page · City Hall  
VILLAGE OF CRETE IL is responsible for this Page  
524 West Exchange Street, Crete, IL, United States, Illinois  
(708) 672-5431  
media@villageofcrete.org  
villageofcrete  
VillageOfCrete

**Featured**

**Village of Crete**  
Yesterday at 1:58 PM · 🌐  
Crete residents should have received this water survey flyer in the mail. Please help improve your community by completing...

**Village of Crete**  
October 4 at 12:54 PM · 🌐  
Federal and state law requires the Village of Crete to inventory municipal water service lines, and we are asking resident...

**Public Service Announcement**  
Ways to Access the Survey  
Access the survey by scanning the QR code in the top right corner with the camera function on your phone. For the scanner, nothing must appear. This will open the survey instructions.  
You can also access the survey by typing this address into your phone web browser: www.creteksurvey.com  
This survey is also available at the Village of Crete's public website and Crete's Facebook.  
The Village's goal is to have all surveys completed within...



# Inventory – Survey

## Village of Hazel Crest

Dear Resident of Hazel Crest,

After applying for Federal and State government funds, the Village of Hazel Crest has been awarded money to replace the lead water pipes in town.

Please help the Village to remove these pipes by filling out an online survey.

The survey will help us to determine whether you have a lead pipe. Properties with known lead pipes will be first in line for replacement, so it is beneficial to fill out the survey.



Sincerely,

Vernard L. Alsberry Jr., Mayor



### Ways to Access the Survey

1. Access the survey by scanning the QR Code image above with the camera function of your phone. Tap the internet address that appears. This will open the survey instructions.
2. The survey will ask you to a) upload photos of your pipe b) scratch your pipe to reveal the bare metal c) see if a magnet sticks to your pipe. A magnet has been included with this mailing.
3. You can also access the survey by typing this address into your phone web browser: [hazelcrestsurvey.com](http://hazelcrestsurvey.com)
4. This survey is also available at the Village of Hazel Crest's official website and Hazel Crest's Facebook.

Completing the survey within two weeks will help the Village and the community begin the process of eliminating lead pipes in our community.

Please contact Mary from Robinson Engineering at 779-333-7893 if you cannot open the survey or if you have any questions.

# Inventory – Survey



**Lead Pipes**

**The Scratch Test**  
If the scraped area is shiny and silver, your service line is lead.

**The Magnet Test**  
A magnet will not stick to a lead pipe.

**The Tapping Test**  
Tapping a lead pipe with a coin will produce a dull noise.



**Copper Pipes**

**The Scratch Test**  
If the scraped area is copper in color, like a penny, your service line is copper.

**The Magnet Test**  
A magnet will not stick to a copper pipe.

**The Tapping Test**  
Tapping a copper pipe with a coin will produce a metallic ringing noise.

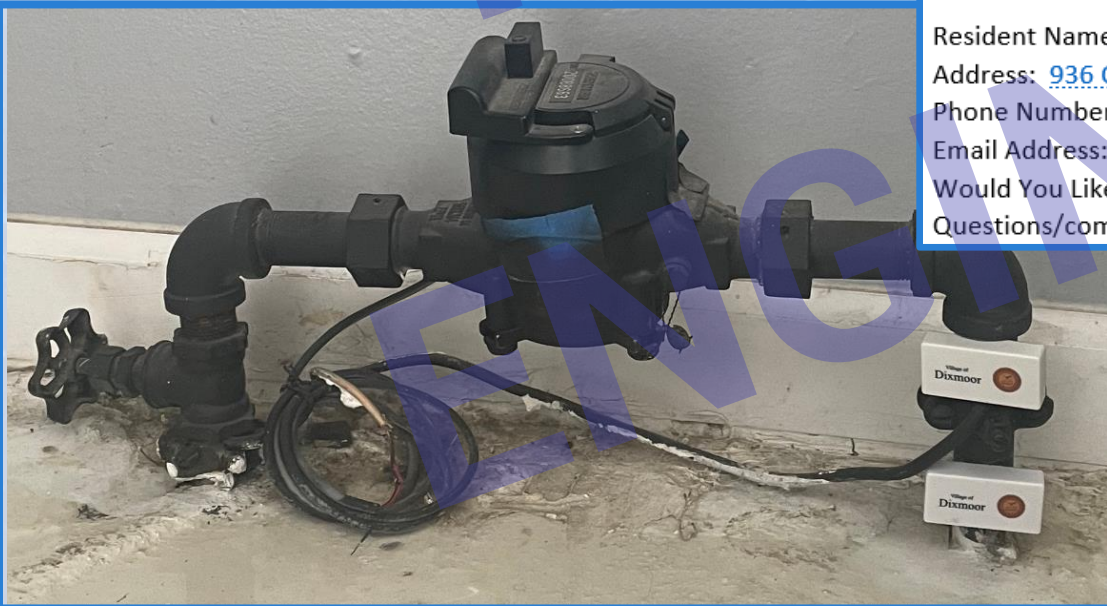


**Galvanized Pipes**

**The Scratch Test**  
If the scraped area remains a dull gray, your service line is galvanized steel.

**The Magnet Test**  
A magnet sticks to a galvanized pipe.

**The Tapping Test**  
Tapping a galvanized pipe with a coin will produce a metallic noise.



# WAUKEGAN

City of Progress Illinois

## Water Service Line Inventory Survey - City of Waukegan

Please follow the instructions below to help the City determine your water pipe material:

1. **Grab your a) cell phone and b) either a key or a screwdriver.**
2. **Find your water meter.** The meter should be on the lowest level of your house. It should look something like this:



### Crete LSLR Resident Survey Requires Assistance



Sean Tondre

To ● Andrea M. Brown

Cc ● Diane Moeller

📌 This message was sent with High importance.

Resident Name: Linda Edwards  
 Address: [936 Carol Ln, Crete, IL, 60417, USA](#)  
 Phone Number: (708) 367-0738  
 Email Address: [Linda3\\_2004@yahoo.com](mailto:Linda3_2004@yahoo.com)  
 Would You Like to Setup an Appointment: Yes  
 Questions/comments: Line goes under the crawl space

This pipe should be about 1" in diameter, and exit through the wall or floor close to the meter. Try to scratch as close to the wall or floor where the pipe leaves the building as possible. Be somewhat shiny copper or silver colored. Try to scratch every joint, part, or coating. Take at least three photos, from about 3 feet away that shows the meter, the floor or wall, and is clear, like the example photo above. Additional photos – a closeup of the scratch, and a photo of the pipe as part of the survey below. Please fill out as much information as you feel comfortable with. If you have any questions, please contact Diane Moeller at 224-908-3983 with any questions.

Representative of the City to assist you with this survey?

Email Contact

DS

Property Address

Questions/Comments

999 characters remaining

Upload Photos

Select File

Photos of water service line

# Inventory – Survey



## South Holland

### Water Service Line Resident Photos

Address 17000 South Park Ave  
Name John Hilsen  
Bldg Age 58  
Material Copper Pipes



Address 551 E 160th Place  
Name PATTY HAMBY  
Bldg Age 66  
Material Copper Pipes



Address 16422 Evans Ave, South  
Name Bernard Adams  
Bldg Age 64  
Material Galvanized



Address 738 E 157<sup>th</sup> St  
Name Ronald Magee  
Bldg Age 72 yrs  
Material Copper Pipes



4/15/2022

Page 1 of 80



## 1622 Henry Pl

1622 Henry Pl, Waukegan, Illinois, 60085

Survey Submittal Date  
7/21/2022, 3:47 PM

Would you like to set up an appointment?  
No

### Name

Diane Mueller

### Email Contact

diane.p.mueller@gmail.com

### Phone Number

2242778698

### Property Address

1622 Henry Pl

### Pipe Material

Copper Pipes

### Questions/Comments

No content available.

### QA/QC Completed

Yes

### QA/QC Completed Date

8/10/2022, 9:54 AM



# Inventory – Predictive Model

## ActiveRemediation: The Search for Lead Pipes in Flint, Michigan

Jacob Abernethy  
Georgia Institute of Technology &  
University of Michigan  
prof@gatech.edu

Alex Chojnacki  
University of Michigan  
thealex@umich.edu

Arya Farahi  
University of Michigan  
aryaf@umich.edu

Eric Schwartz  
University of Michigan  
ericmsch@umich.edu

Jared Webb  
Brigham Young University  
webb@mathematics.byu.edu



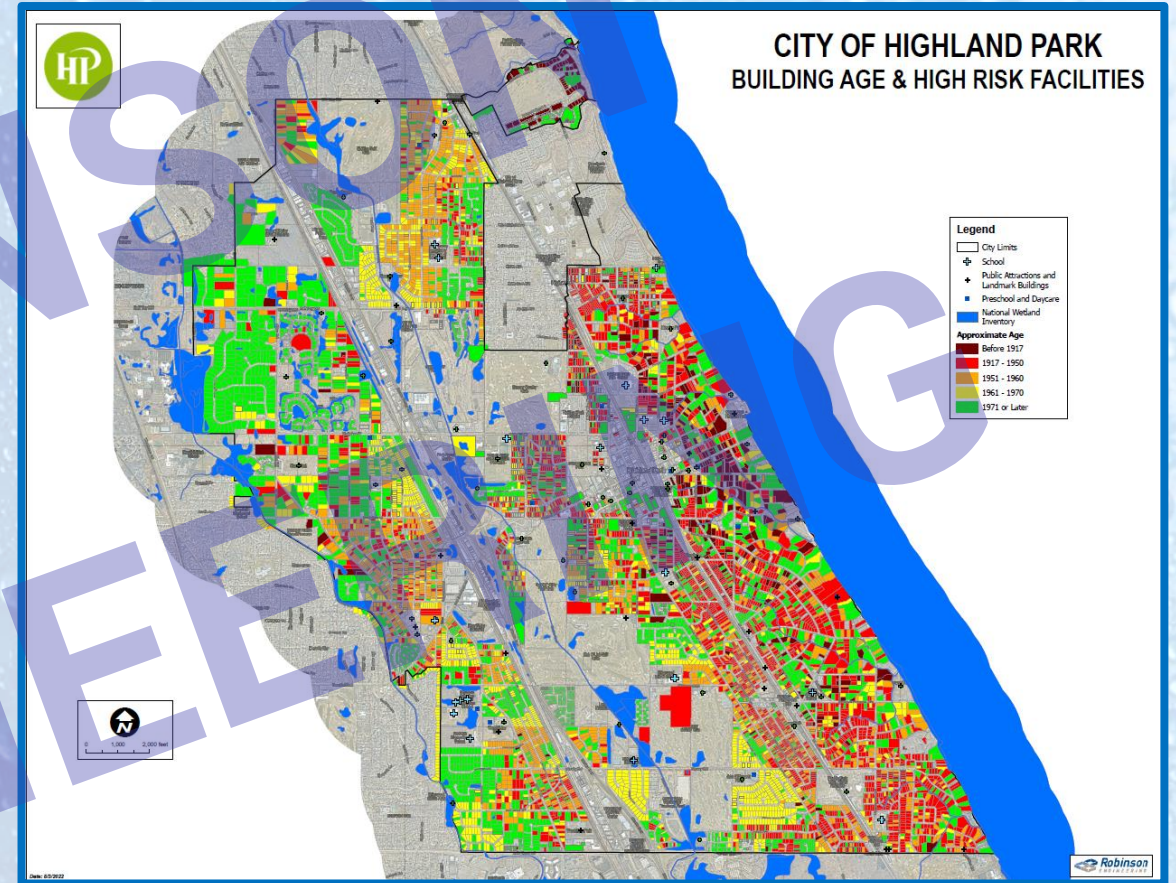
Address	Pin10	Probability of Lead
4256 KOLZE AVE	1215308028	36%
4262 KOLZE AVE	1215308029	8%
4266 KOLZE AVE	1215308030	8%
4232 KOLZE AVE	1215308031	8%
4229 GRACE ST	1215308033	35%
4234 KOLZE AVE	1215308035	42%
4238 KOLZE AVE	1215308036	64%
4255 KOLZE AVE	1215309005	72%
4249 KOLZE AVE	1215309007	8%
4245 KOLZE AVE	1215309008	72%
4241 KOLZE AVE	1215309009	8%
4239 KOLZE AVE	1215309010	39%
4237 KOLZE AVE	1215309011	72%
4235 KOLZE AVE	1215309012	8%
4231 KOLZE AVE	1215309013	8%
4225 KOLZE AVE	1215309014	36%
4254 OLD RIVER RD	1215309019	10%
4254 OLD RIVER RD	1215309020	10%
4254 OLD RIVER RD	1215309021	10%
4242 OLD RIVER RD	1215309022	8%
4230 OLD RIVER RD	1215309024	10%
4230 OLD RIVER RD	1215309025	10%
4230 OLD RIVER RD	1215309026	10%
4230 OLD RIVER RD	1215309027	10%
4219 KOLZE AVE	1215309030	8%
4257 KOLZE AVE	1215309034	73%
4260 OLD RIVER RD	1215309035	8%

Number of "Unknown" Service Lines*	Number to Physically Verify
Fewer than 1,500	20% of "unknown" lines
1,500	306
1,600	310
1,700	314
1,800	317
1,900	320
2,000	322
2,200	327
2,400	331
2,600	335
2,800	338
3,000	341
3,500	346
4,000	351
4,500	354
5,000	357
6,000	361



# Inventory – Predictive Model

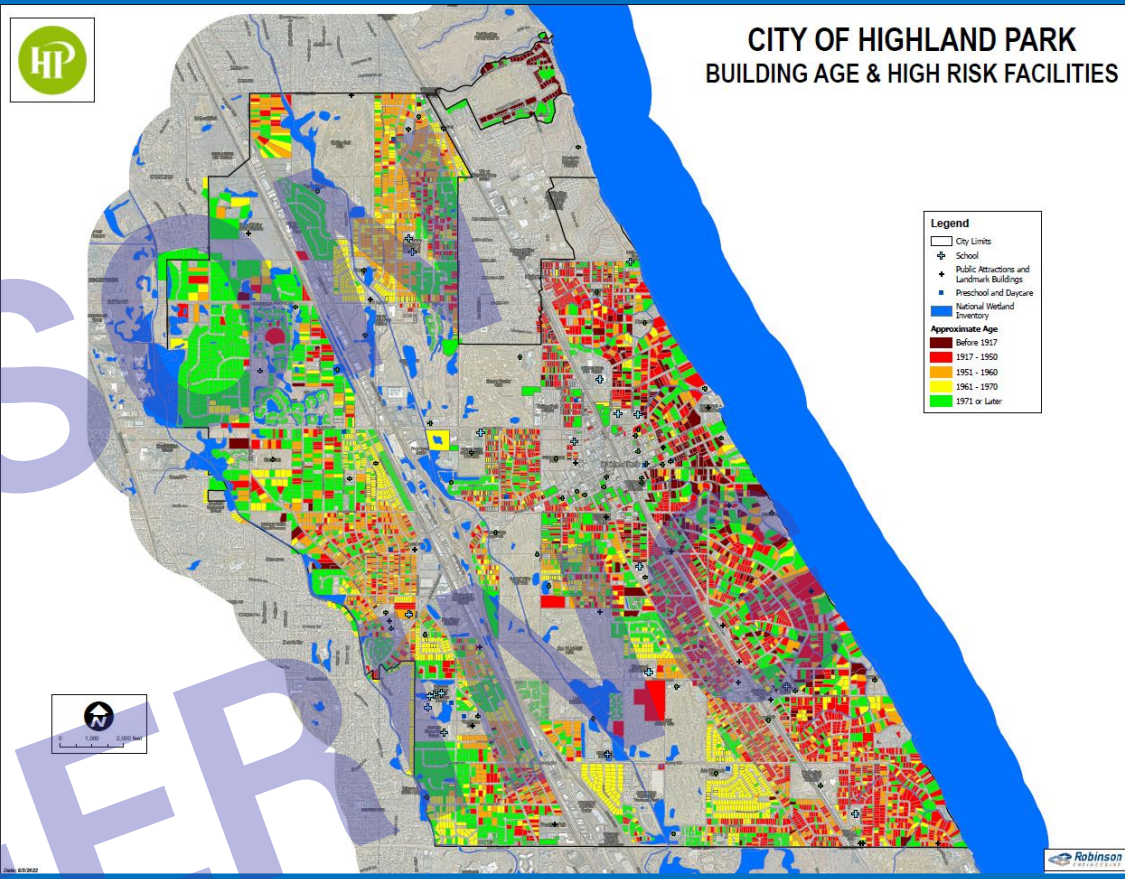
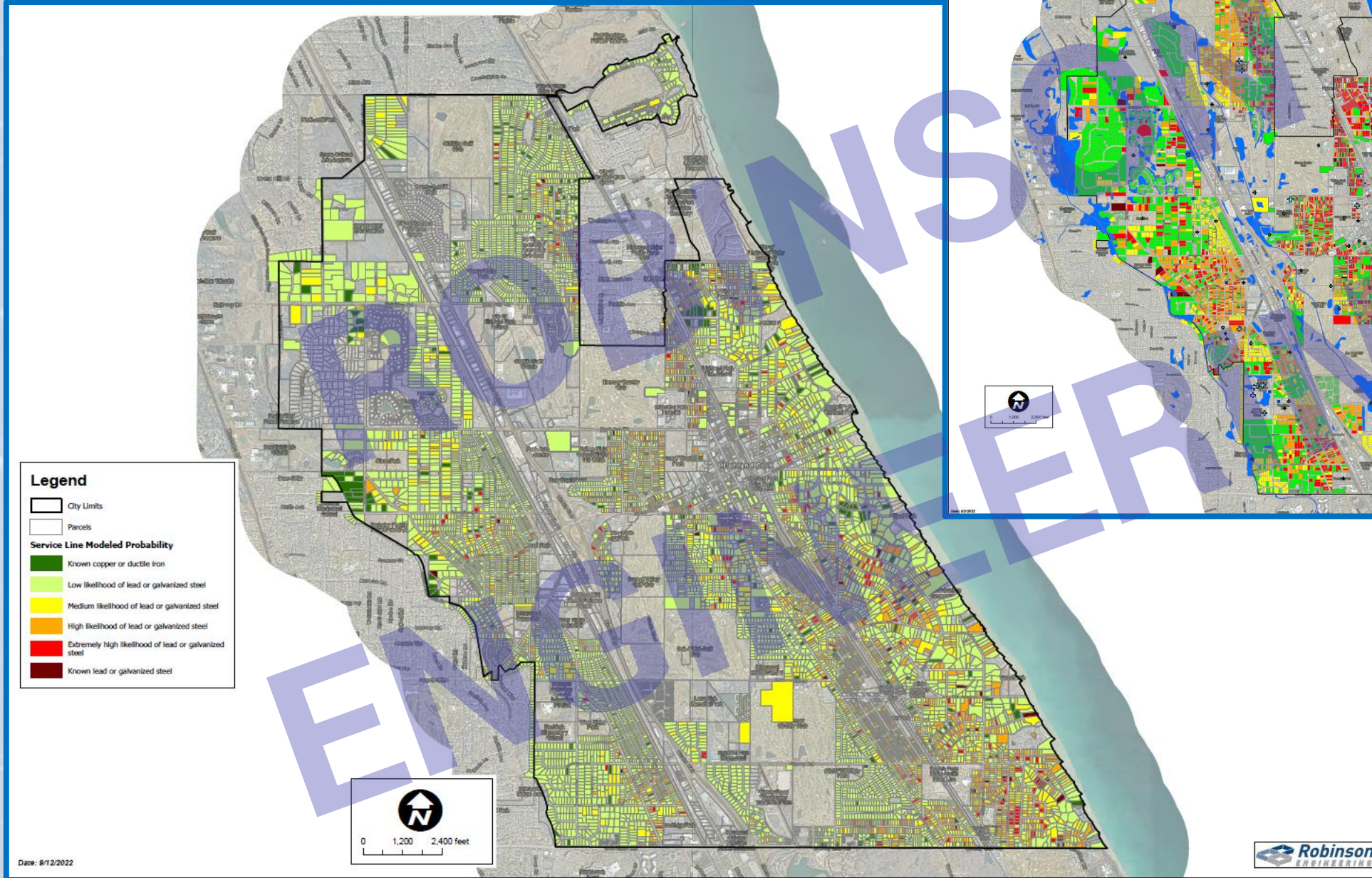
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4238 KOLZE AVE	1215308036	64%
4255 KOLZE AVE	1215309005	72%
4249 KOLZE AVE	1215309007	8%
4245 KOLZE AVE	1215309008	72%
4241 KOLZE AVE	1215309009	8%
4239 KOLZE AVE	1215309010	39%
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4230 OLD RIVER RD	1215309025	10%
4230 OLD RIVER RD	1215309026	10%
4230 OLD RIVER RD	1215309027	10%
4219 KOLZE AVE	1215309030	8%
4257 KOLZE AVE	1215309034	73%
4260 OLD RIVER RD	1215309035	8%



# Inventory – Predictive Model



CITY OF HIGHLAND PARK  
BUILDING AGE & HIGH RISK FACILITIES

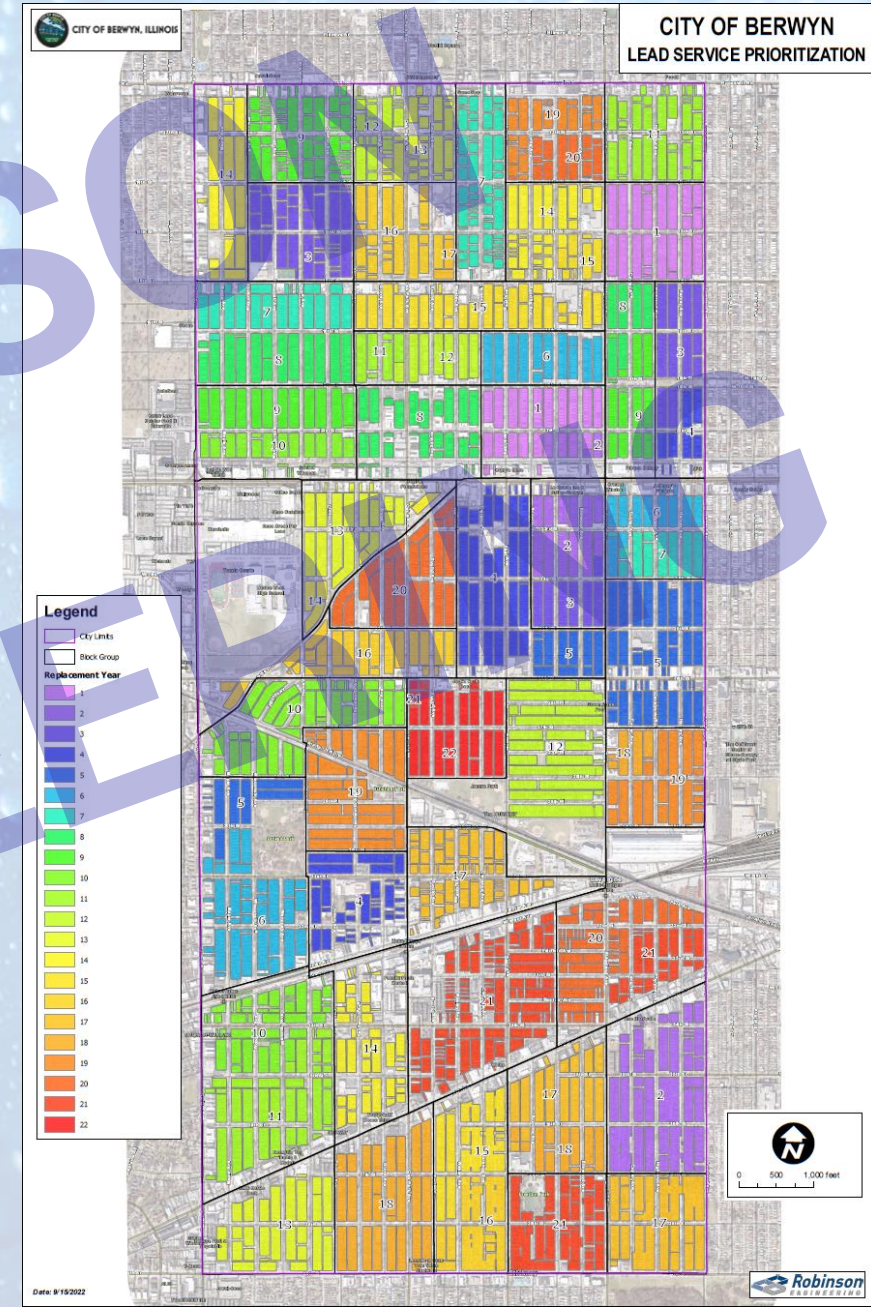


# Replacement Plan – Inventory of LSLs



# Replacement Plan – Prioritization & Schedule

- Metropolitan Planning Council collaboration
  - Block group level
  - Demographic data:
    - Education
    - Income level
    - Age
    - Employment
    - Building Age
    - Insured status
    - Disability



# Public Involvement



# Replacement Plan – Funding

**Local Agency** Village of Harwood Heights

**Location** See Map

**Description** Lead Service Replacements Preliminary Estimate of Cost

The undersigned submits herewith his schedule of prices covering the work to be performed under this contract; he understands that he must show in the schedule the unit prices for which he proposes to perform each item of work; that the extensions must be made by him, and if not so done, his proposal may be rejected as irregular.

## Schedule for Single Bid

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

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
1	FULL LEAD WATER SERVICE REPLACEMENT	EACH	210	\$8,500.00	\$ 1,785,500.00
2	PARTIAL LEAD WATER SERVICE REPLACEMENT	EACH	75	\$5,500.00	\$ 412,500.00
3	EXPLORATORY EXCAVATION	EACH	200	\$500.00	\$ 100,000.00
4	INLET FILTERS	EACH	10	\$250.00	\$ 2,500.00
5	NON-SPECIAL WASTE DISPOSAL	CUYD	40	\$78.00	\$ 3,120.00
6	SANITARY SEWER SERVICE ADJUSTMENT	EACH	10	\$1,500.00	\$ 15,000.00

Subtotal \$ 2,318,120.00

Subtotal Rounded-Up \$ 2,350,000.00

Contingency (10%) \$ 235,000.00

Design Engineering \$ 121,000.00

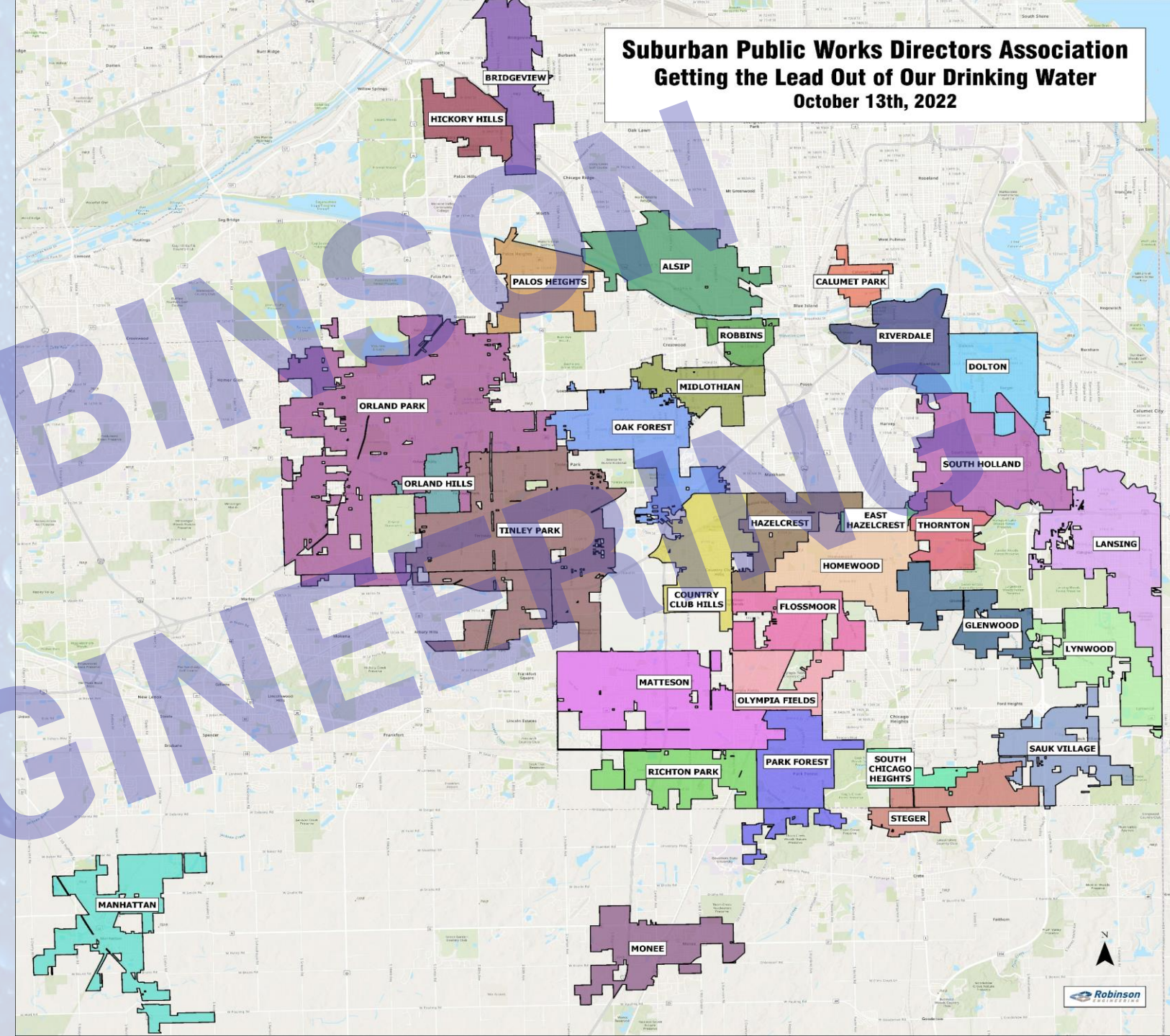
Construction Engineering \$ 235,000.00

**Total Cost \$ 2,941,000.00**

# Replacement Plan – Funding

Year	Revenue from Water Rates	Water Rate Percent Increase	Sewer Use Revenue Per 1000 Gallons	Percent Sewer Use Revenue Increase	Sewer Rehab Fee Per Residential Account	Sewer Rehab Fee per Commercial Account	Revenue from Village Sewer Fee Per Account	Village Sewer Fee Percent Increase	Additional Revenue	Loan Cost 50% Forgiveness	Net Cost
0	\$4.80	-	\$2.33	-	\$80.00	\$200.00	\$79.60	-	-	-	-
1	\$1,347,636.74	5%	\$490,155.70	5%	\$69,606.00	\$54,000.00	\$251,138.00	5%	\$6,021.43	-	-
2	\$1,415,018.58	6%	\$514,663.48	6%	\$71,694.18	\$55,620.00	\$263,694.90	6%	\$114,176.14	\$122,364.76	(\$8,188.63)
3	\$1,499,919.69	5%	\$545,543.29	5%	\$73,845.01	\$57,288.60	\$279,516.59	5%	\$249,598.18	\$244,729.53	\$4,868.65
4	\$1,574,915.67	5%	\$572,820.45	4%	\$76,060.36	\$59,007.26	\$293,492.42	4%	\$369,781.17	\$367,094.29	\$2,686.87
5	\$1,653,661.46	5%	\$595,733.27	4%	\$78,342.17	\$60,777.48	\$305,232.12	4%	\$487,231.49	\$489,459.06	(\$2,227.56)
6	\$1,736,344.53	0%	\$619,562.60	0%	\$80,692.43	\$62,600.80	\$317,441.41	0%	\$610,126.77	\$611,823.82	(\$1,697.05)
7	\$1,736,344.53	0%	\$619,562.60	0%	\$83,113.20	\$64,478.82	\$317,441.41	0%	\$614,425.57	\$611,823.82	\$2,601.75
8	\$1,736,344.53	0%	\$619,562.60	0%	\$85,606.60	\$66,413.19	\$317,441.41	0%	\$618,853.33	\$611,823.82	\$7,029.51
9	\$1,736,344.53	0%	\$619,562.60	0%	\$88,174.80	\$68,405.58	\$317,441.41	0%	\$623,413.92	\$611,823.82	\$11,590.10
10	\$1,736,344.53	0%	\$619,562.60	0%	\$90,820.04	\$70,457.75	\$317,441.41	0%	\$628,111.33	\$611,823.82	\$16,287.51
11	\$1,736,344.53	0%	\$619,562.60	0%	\$93,544.64	\$72,571.48	\$317,441.41	0%	\$632,949.67	\$611,823.82	\$21,125.85
12	\$1,736,344.53	0%	\$619,562.60	0%	\$96,350.98	\$74,748.63	\$317,441.41	0%	\$637,933.15	\$611,823.82	\$26,109.33
13	\$1,736,344.53	0%	\$619,562.60	0%	\$99,241.51	\$76,991.09	\$317,441.41	0%	\$643,066.14	\$611,823.82	\$31,242.32
14	\$1,736,344.53	0%	\$619,562.60	0%	\$102,218.76	\$79,300.82	\$317,441.41	0%	\$648,353.12	\$611,823.82	\$36,529.30
15	\$1,736,344.53	0%	\$619,562.60	0%	\$105,285.32	\$81,679.85	\$317,441.41	0%	\$653,798.71	\$611,823.82	\$41,974.89
16	\$1,736,344.53	0%	\$619,562.60	0%	\$108,443.88	\$84,130.24	\$317,441.41	0%	\$659,407.66	\$611,823.82	\$47,583.84
17	\$1,736,344.53	0%	\$619,562.60	0%	\$111,697.20	\$86,654.15	\$317,441.41	0%	\$665,184.88	\$611,823.82	\$53,361.06
18	\$1,736,344.53	0%	\$619,562.60	0%	\$115,048.11	\$89,253.77	\$317,441.41	0%	\$671,135.42	\$611,823.82	\$59,311.60
19	\$1,736,344.53	0%	\$619,562.60	0%	\$118,499.56	\$91,931.39	\$317,441.41	0%	\$677,264.48	\$611,823.82	\$65,440.66
20	\$1,736,344.53	0%	\$619,562.60	0%	\$122,054.54	\$94,689.33	\$317,441.41	0%	\$683,577.41	\$611,823.82	\$71,753.59
21	\$1,736,344.53	0%	\$619,562.60	0%	\$125,716.18	\$97,530.01	\$317,441.41	0%	\$690,079.73	\$611,823.82	\$78,255.91

Name	Cost (Assuming all Unknowns are Lead)
Park Forest	\$66,429,000
Homewood	\$35,928,000
Lansing	\$31,986,000
Flossmoor	\$28,818,000
Alsip	\$27,747,000
Riverdale	\$23,004,000
Dolton	\$22,734,000
Robbins	\$19,674,000
Midlothian	\$11,394,000
South Chicago Heights	\$10,899,000
Richton Park	\$8,523,000
Thornton	\$8,064,000
Steger	\$7,290,000
Matteson	\$5,679,000
Orland Park	\$5,427,000
Olympia Fields	\$4,995,000
Tinley Park	\$2,871,000
Hazel Crest	\$2,484,000
Calumet Park	\$2,169,000
East Hazel Crest	\$1,170,000
Sauk Village	\$639,000
South Holland	\$252,000
Oak Forest	\$108,000
Glenwood	\$81,000
Monee	\$45,000
<b>Towns Without Lead</b>	
Bridgeview	\$0
Country Club Hills	\$0
Hickory Hills	\$0
Lynwood	\$0
Manhattan	\$0
Orland Hills	\$0
Palos Heights	\$0





## FY2022 PWSLP - Lead Service Line Replacement Projects

Loan Applicant	Project Description	Estimated Construction Start	Estimated Loan Amount	Loan Priority Score
Rockford	Lead service line replacement (Phase 4)	3/1/2022	\$4,000,000	450
Springfield	Replace 500-750 lead service service lines (Phase	1/5/2021	\$4,000,000	395
Beecher	Replace lead service lines	7/15/2021	\$3,000,000	370
Assumption	Locate and replace 140 lead service lines	7/15/2021	\$1,350,000	355
Marshall	locate and replace lead service lines	9/1/2021	\$1,583,960	355
Chicago	Replace lead service lines (Phase 1)	1/1/2022	\$4,000,000	325
Sycamore	Replace lead service lines	9/1/2021	\$1,000,000	315
Itasca	Replace lead service lines	10/30/2021	\$4,000,000	295
Frankfort	Replace lead service lines	7/15/2021	\$2,000,000	285
Frankfort	Replace lead service lines	7/15/2021	\$2,000,000	285
Robbins	Replace lead service lines (Phase 1)	10/15/2021	\$2,000,000	270
East Hazel Crest	Replace lead service lines	7/15/2021	\$800,000	245
Elgin	Replace lead service lines	6/1/2021	\$4,000,000	245
Freeport	Replace lead service lines (Phase 2)	5/1/2021	\$4,000,000	235
Dixmoor	Replace lead service lines and meters	10/15/2021	\$4,000,000	230
Canton	Replace 230 lead service lines	6/1/2021	\$1,500,000	200
Calumet City	Replace 400 lead service lines (Phase 1)	9/1/2021	\$4,000,000	190
Joliet	Replace lead service lines (Phase 3)	10/2/2021	\$4,000,000	180
Total 2022 Intended Funding List			\$51,233,960	

## FY2022 PWSLP - Lead Service Line Replacement Projects

Loan Applicant	Project Description	Estimated Construction Start	Estimated Loan Amount	Loan Priority Score
<b>Beecher</b>	<b>Replace lead service lines</b>	<b>7/15/2021</b>	<b>\$3,000,000</b>	<b>370</b>
<b>Calumet City</b>	<b>Replace 400 lead service lines (Phase 1)</b>	<b>9/1/2021</b>	<b>\$4,000,000</b>	<b>190</b>
<b>Dixmoor</b>	<b>Replace lead service lines and meters</b>	<b>10/15/2021</b>	<b>\$4,000,000</b>	<b>230</b>
<b>East Hazel Crest</b>	<b>Replace lead service lines</b>	<b>7/15/2021</b>	<b>\$800,000</b>	<b>245</b>
<b>Frankfort</b>	<b>Replace lead service lines</b>	<b>7/15/2021</b>	<b>\$2,000,000</b>	<b>285</b>
<b>Frankfort</b>	<b>Replace service lines</b>	<b>7/15/2021</b>	<b>\$2,000,000</b>	<b>285</b>
<b>Itasca</b>	<b>Replace lead service lines</b>	<b>10/30/2021</b>	<b>\$4,000,000</b>	<b>295</b>
<b>Robbins</b>	<b>Replace lead service lines (Phase 1)</b>	<b>10/15/2021</b>	<b>\$2,000,000</b>	<b>270</b>
Assumption	Locate and replace 140 lead service lines	7/15/2021	\$1,350,000	355
Canton	Replace 230 lead service lines	6/1/2021	\$1,500,000	200
Chicago	Replace lead service lines (Phase 1)	1/1/2022	\$4,000,000	325
Elgin	Replace lead service lines	6/1/2021	\$4,000,000	245
Freeport	Replace lead service lines (Phase 2)	5/1/2021	\$4,000,000	235
Joliet	Replace lead service lines (Phase 3)	10/2/2021	\$4,000,000	180
Marshall	locate and replace lead service lines	9/1/2021	\$1,583,960	355
Rockford	Lead service line replacement (Phase 4)	3/1/2022	\$4,000,000	450
Springfield	Replace 500-750 lead service service lines (Phase	1/5/2021	\$4,000,000	395
Sycamore	Replace lead service lines	9/1/2021	\$1,000,000	315
Total 2022 Intended Funding List			\$51,233,960	
<b>Total REL Projects</b>			<b>\$21,800,000</b>	<b>43%</b>

# Data

FY 2023 PWSLP - Lead Service Line Replacement Projects				
Loan Applicant	Project Description	Amount	Population	Score
GALESBURG	LEAD SERVICE LINE REPLACEMENT PROJECT	\$2,000,000	40,000	455
MARSHALL	LEAD SERVICE LINE REPLACEMENT PROJECT	\$800,000	7,786	365
ASSUMPTION	LEAD SERVICE LINE REPLACEMENT PROJECT (140 LINES)	\$1,380,273	1,368	355
ROCKFORD	PHASE 5 - REMOVE / REPLACE LEAD SERVICE LINES	\$4,000,000	149,597	325
SYCAMORE	REPLACE 120 LEAD SERVICE LINES	\$4,000,000	17,897	300
NOKOMIS	LEAD SERVICE LINE REPLACEMENT PROJECT	\$300,000	2,055	280
BARRINGTON	LEAD SERVICE LINE REPLACEMENT PROJECT (250 LINES)	\$4,000,000	12,131	255
ROBBINS	LEAD SERVICE LINE REPLACEMENT PROJECT	\$4,000,000	5,460	255
ITASCA	REPLACE LEAD SERVICE LINES	\$2,700,000	8,694	250
CALUMET CITY	LEAD SERVICE LINE REPLACEMENT PROJECT (400 LINES)	\$3,998,000	36,033	240
DIXMOOR	LEAD SERVICE LINE REPLACEMENT PROJECT PHASE 1	\$4,000,000	3,158	240
ELGIN	LEAD SERVICE LINE REPLACEMENT PROJECT (350 LINES)	\$4,000,000	120,000	235
FREEPORT	PHASE 3 - LEAD SERVICE LINE REPLACEMENT PROJECT	\$4,000,000	23,973	210
PLAINFIELD	LEAD SERVICE LINE REPLACEMENT PROJECT	\$297,570	39,581	175
SEATON	LEAD SERVICE LINE REPLACEMENT PROJECT	\$753,000	222	175
DUET	REPLACE LEAD SERVICE LINES ALONG 21 MI OF WATER MAIN	\$4,000,000	148,693	165
HAZEL CREST	LEAD SERVICE LINE REPLACEMENT PROJECT	\$4,000,000	14,000	160
PLAINFIELD	LEAD SERVICE LINE REPLACEMENT PROJECT	\$409,933	39,581	115
CARPENTERSVILLE	REPLACE 350 LEAD SERVICE LINES	\$4,000,000	37,983	105
<b>Total 2023 Intended Funding List</b>		<b>\$52,638,776</b>		

# Data

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Loan Applicant	Project Description	Amount	Population	Score
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<b>Total 2023 Intended Funding List</b>		<b>\$52,638,776</b>		
<b>Total REL Jobs</b>		<b>\$14,700,000</b>	<b>28%</b>	

# Typical Service Line Construction

- Resident Interaction
- FAQ Letter
- Facebook
- Newsletter
- Agreements
- Construction Initiation



Village of Frankfort  
July 29 · 🌐

Come out tonight or Saturday AM at the Village of Frankfort to learn more about the grant to replace any lead service lines.  
For a map of the program area, please click:  
<https://www.frankfortil.org/2021-02-11%20Lead%20Services...>

### Lead Service Line Replacement Program


Public Open Houses  
Village Hall - 432 W. Nebraska Street

Thursday, July 29 5 PM to 7 PM • Saturday, July 31 9 AM to 11 AM

Utility customers within the program area have been contacted directly.

For information regarding the Lead Service Line Replacement Program, please visit [www.frankfortil.org](http://www.frankfortil.org) or contact Zachary Brown, Utilities Director at 815-412-2432.


VILLAGE OF FRANKFORT  
EST. 1888



### Lead Water Service Project Questions & Answers

Who do I call if I have questions or concerns?  
Of course, you can always contact the Itasca Public Works at 630-773-2455 with any questions.

What will this project look like?



Drilling of Water Service

# Typical Service Line Construction

- Initial Inspections
  - Signed Access Agreements



# Typical Service Line Construction

- Initial Inspections
- Signed Access Agreements

ROBINS ON  
ENGINEERING

PROPERTY ACCESS AGREEMENT FORM  
LEAD WATER SERVICE REPLACEMENTS

The Village of Frankfort Lead Water Service Replacement Project will require access to private property to install a new underground water service. The Village and its Contractor (listed below) will require access to the front yard and inside of the building to connect the new water service to the existing water meter location.

The undersigned, \_\_\_\_\_ ("Customer") grants to the Village of Frankfort ("Village") and to its approved Contractor/Agents an agreement to enter upon the Customer's property at \_\_\_\_\_ (address) Frankfort, IL ("Property") for the purpose of replacing any detected lead piping, at no cost to the Customer. The term of the agreement shall be 12 months following the date set forth below or final Village acceptance of the construction project.

For full water service replacement, the Village-approved Contractor will use trenchless methods to install a water service pipe from the water main to a new Village curb stop installation, then from the curb stop installation to the water meter located inside the Customer's Property. The Village will determine the location of the installation. The pipe and any valves or boxes on the street side of the curb stop will be owned and maintained by the Village. The pipe and valves on the building side of the curb stop will be owned and maintained by the Customer.

The methods utilized for Customer water service line installation replacement will leave the majority of the property undisturbed. The Village will provide a warranty of the material and workmanship of the Customer water service line for 12 months following completion of the construction project.

Upon completion of the work necessary to establish the new connection, including disconnection from the old water main, installing the Village water service connection, the Village curb stop installation, and the Customer water service, the Village will restore the Customer's outdoor property as nearly as practicable to its former condition. The Contractor will minimize disturbance indoors at the Customer's Property, and will also restore the indoor area as nearly as practicable to its original condition.

The Contractor will also require access to the building for a preconstruction inspection with photographs and an excavation at the curb box to determine the presence of lead piping.

I understand that this is a voluntary agreement that I may opt out of at any point prior to the day of construction, and that I am not responsible for any damages that are caused by the construction project. I will prepare a proper working environment for the Contractor inside my building, clear of clutter and other impediments. The Village and the Contractor listed below are responsible for notifying me at least 24 hours prior to accessing the property. Upon notice, the Village and approved contractor have access to the property between the hours of 7:00 am and 7:00 pm for one pre-inspection and one water service installation.

I fully understand what is being offered by the Village of Frankfort as it pertains to the water service replacement and hereby opt IN to participate.

I fully understand what is being offered by the Village of Frankfort as it pertains to the water service replacement and hereby opt to NOT participate.

CONTRACTOR \_\_\_\_\_

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

VILLAGE \_\_\_\_\_

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

CUSTOMER \_\_\_\_\_

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

Phone Number: \_\_\_\_\_

# Typical Service Line Construction

- Construction of LSL can be installed in about **4 hours**. We tell the resident they should expect **+/- 8 hours** (full day)
- Restoration to follow





# Project - Investigation



# Project – Investigation



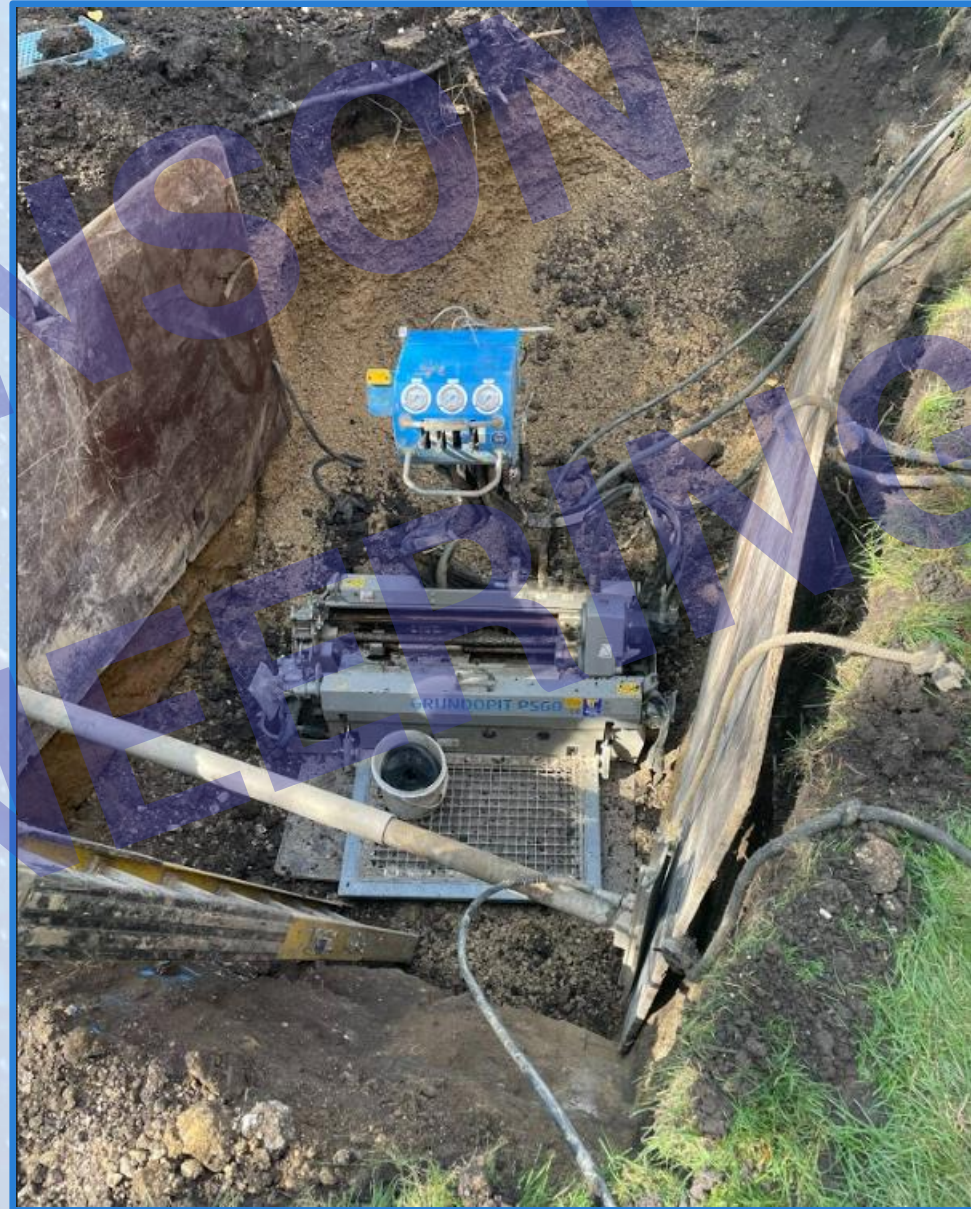
# Project – Investigation – Homeowner Concurrence



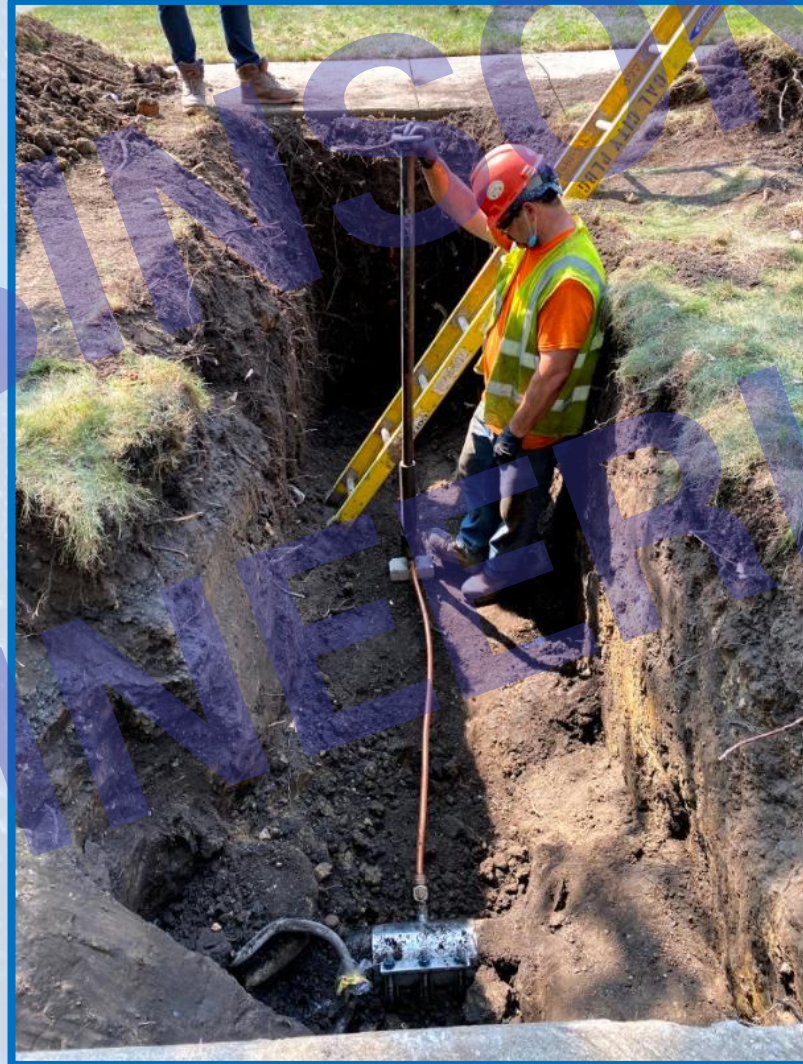
# Project - Exterior Installation



# Project – Exterior Installation



# Project – Exterior Installation



# Project – Trenches



# Project – Interior Installation



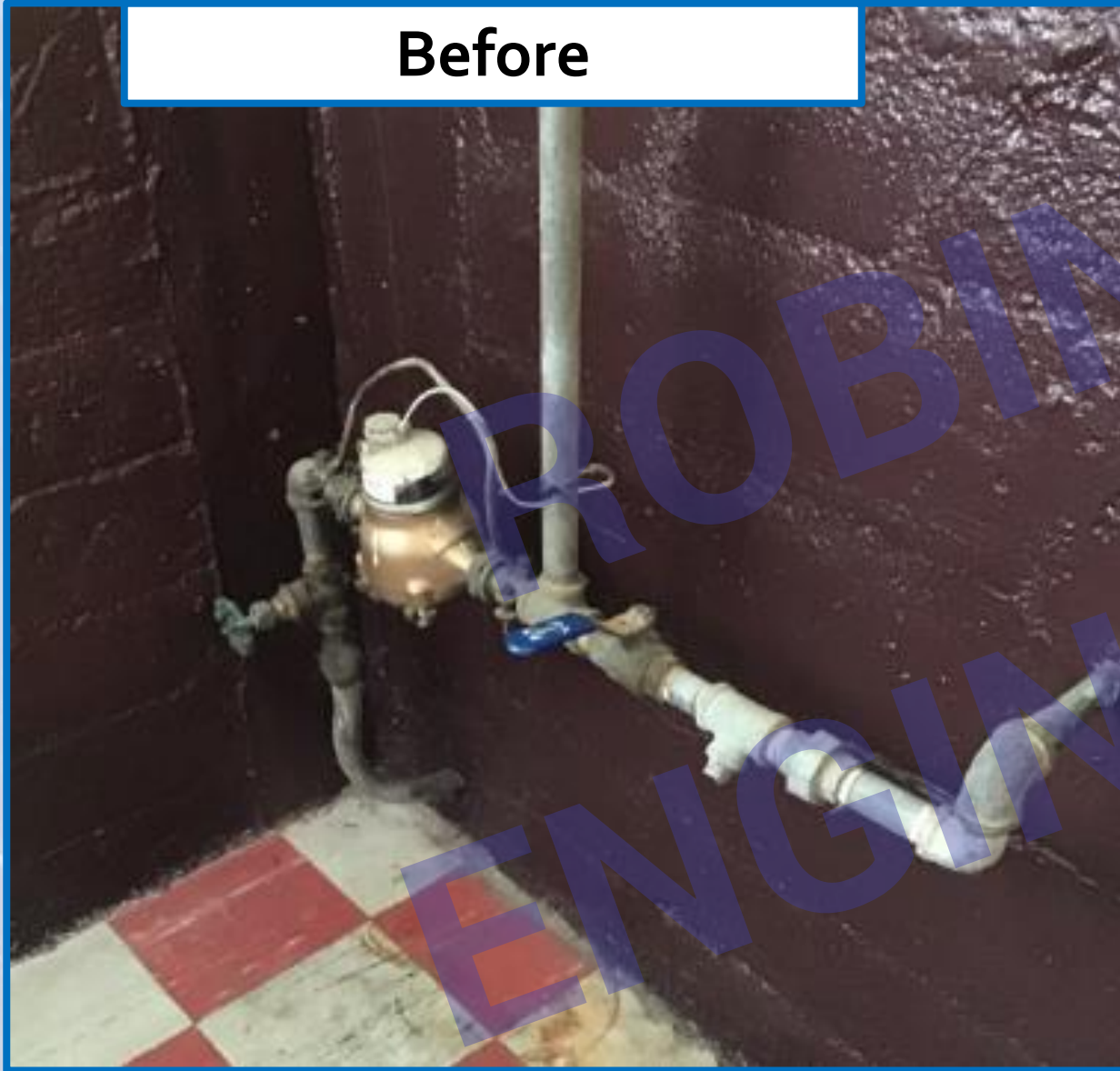


# Project – Interior Protection



# Project – Interior Protection

Before



After – Different Penetration Location



# Project – Completion



# Project – Completion



# Project – Problems



# Project – Problems

Address	Existing Material	Pic Acquired
532 Birch Dr	¾" copper	yes
533 Birch Dr	¾" copper	yes
544 Birch Dr	¾" copper	yes
*616 Birch Dr	unknown	no *c2c
*619 Birch Dr	¾" copper	yes *c2c
*625 Birch Dr	¾" copper	yes *c2c
*631 Birch Dr	¾" copper	yes *c2c
*634 Birch Dr	¾" copper	yes *c2c
635 Birch Dr	¾" copper	yes
*639 Birch Dr	copper	no-per CB text *c2c
*641 Birch Dr	¾" copper	yes *c2c
704 Block St	copper	no- verified through HO (goes w/ 380 Maxwell)
710 Block St	¾" copper	yes
*721 Block St	¾" copper	yes *c2c
*724 Block St	1" copper	no-per CB text on 10/16 *c2c
1038 Catalpa Ct	¾" copper	yes
1040 Catalpa Ct	copper	no-h.o. A Wojciechowski verified-built home
1042 Catalpa Ct	copper	yes
1044 Catalpa Ct	¾" copper	yes
1046 Catalpa Ct	¾" copper	yes
*515 Catalpa St	¾" copper	yes *c2c
*528 Catalpa St	copper	no-verified Matt @ BPW 1/25/22 *c2c
*535 Catalpa St	¾" copper	yes *c2c
*541 Catalpa St	¾" copper	yes *c2c
*616 Catalpa St	¾" copper	yes *c2c
*618 Catalpa St	copper	no-verified Matt @ BPW 1/19/22 *c2c
*619 Catalpa St	UNKNOWN	no-EXPLORE DIG *c2c
*622 Catalpa St	copper	no-verified CB text 12/10 *c2c
*626 Catalpa St	¾" copper	yes *c2c
*630 Catalpa St	¾" copper	yes *c2c
*634 Catalpa St	¾" copper	yes *c2c
*635 Catalpa St	copper	yes *see note in EXPLORE (HS) not digging per BPW
*638 Catalpa St	copper	no-verified Matt @ BPW 1/25/22 *c2c
*639 Catalpa St	¾" copper	yes *c2c
*642 Catalpa St	copper	yes *c2c
*643 Catalpa St	¾" copper	yes *c2c



# Project – Solutions



# Project – Solutions



(1 of 2)

Name of Licensed Plumber	Andrew Bedard
Overseeing the Job	Bedard
Licensed Plumber Number	058-180217
LSLR Starting Flushing Time	1:25pm
LSLR Ending Flushing Time	1:40pm
LSLR Flushing Duration	15 min per homeowner
LSLR Flushing Faucet or Hose Bib Location in Relationship to the Front of the House	Kitchen sink
Address Number	404 N RUSH ST
Attachments:	
<a href="#">Photo 3.jpg</a>	
<a href="#">Photo 1.jpg</a>	
<a href="#">Photo 2.jpg</a>	



# Public Works Involvement – Resources Needed

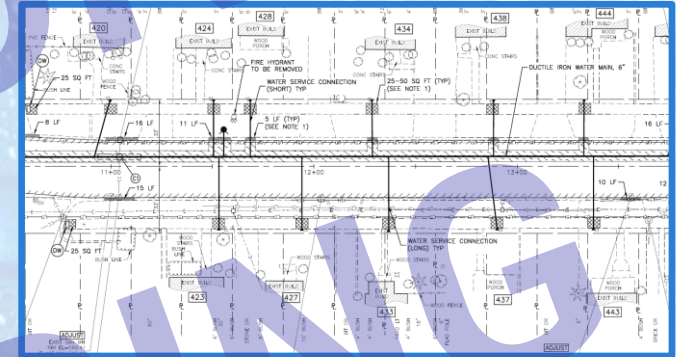
- Staff Involvement



- Locating



- Record Drawings



- Meter Records

**FLINT CITY WATER WORKS**

I hereby request you to run a 1" Lead inch Service Line to premises described as follows: No. 3947-51 Main Street  
Lot No. \_\_\_\_\_ Block \_\_\_\_\_

Date 12-2-21 Amount of Estimate \$6322

JOHN WOREK  
Bid to 3947 Signed John Worek

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**DEPT. OF PUBLIC WORKS & UTILITIES**  
Division of Water Supply # 6029 57.33

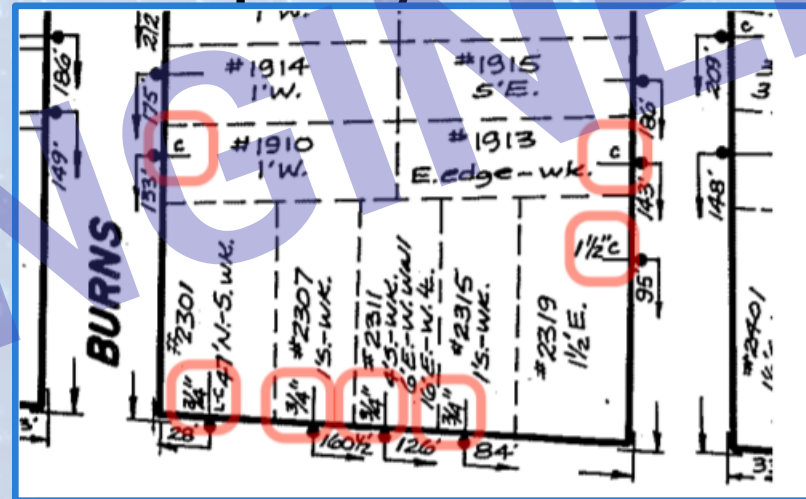
I hereby request you to run a 3/4 inch Service Line to premises described as follows: No. 5714 Baldwin Street  
Lot No. 471 Block \_\_\_\_\_

3/4 Copper service  
M5 H

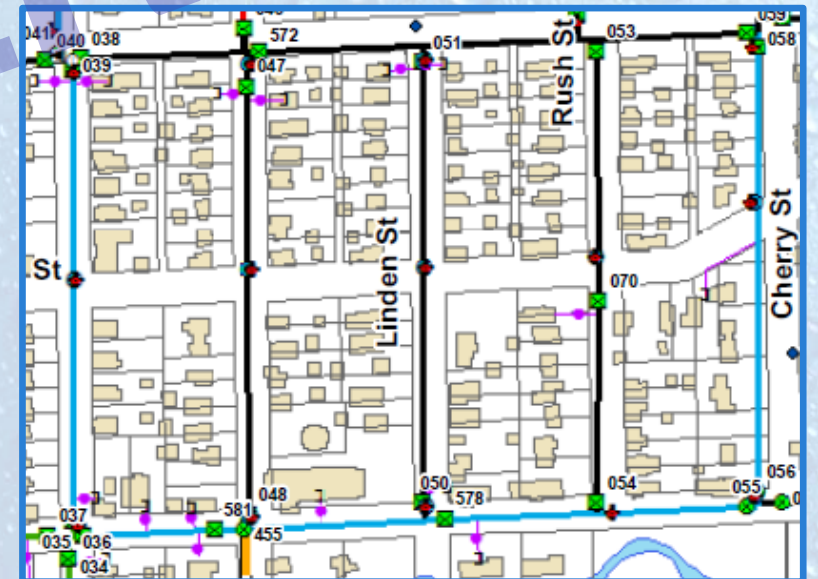
Date 4-7-53 Amount 51.33

Veterans Excavating  
For Druffel Homes Signed E. L. Warner

- Property Records



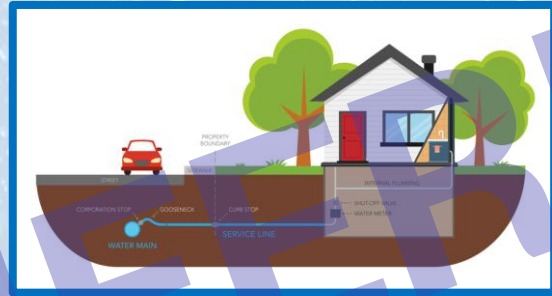
- Water System Atlas





# Main/Service Replacement

Emergency  
Repair



ROBINSON  
ENGINEERING

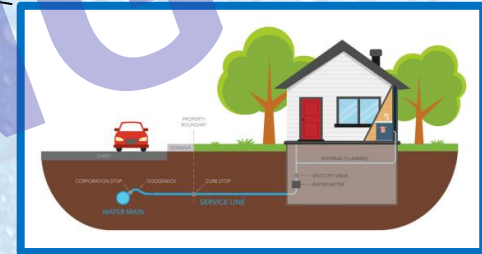


# Main/Service Replacement

Emergency Repair

30 Days

120 Days (Winter)

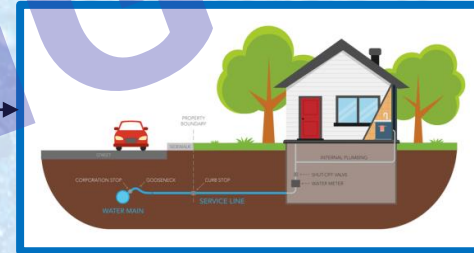


ROBINSON ENGINEERING



# Main/Service Replacement

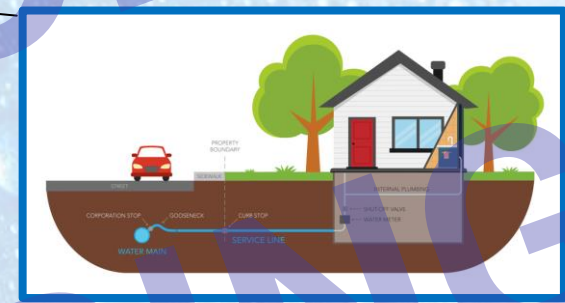
Emergency  
Repair



BINSON ENGINEERING

45 days

Day of Construction

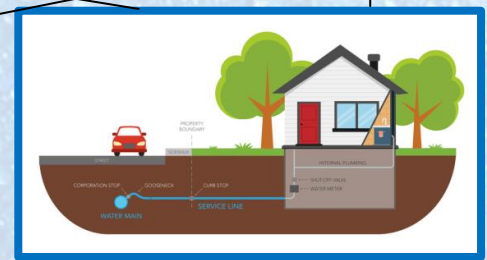


Emergency Repair

Emergency Repair

30 Days

120 Days (Winter)



# Inventory – IDPH Forms

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

## SECTION 4: Property Owner Information

Full Name (First Name Last Name)

Phone

Email

## SECTION 5: DENIAL OF COMPLETE LEAD SERVICE LINE REPLACEMENT

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.

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>.

## FAILURE BY PROPERTY OWNER TO RESPOND OR SIGN WAIVER FOR PLANNED REPLACEMENT

If the owner of a potentially affected building refuses to sign the waiver or fails to respond to the community water system after the community water supply has complied with subsection (ii), then the community water supply shall notify the Department [IDPH] in writing within 15 working days.

This form should be completed by a representative of the community water supply. This form shall serve as notification to the Department [IDPH] as required by the Lead Service Line Replacement and Notification Act (Public Act 102-0613) and subsection (ii) of the Environmental Protection Act (415 ILCS 17.12).

\* Required

### COMMUNITY WATER SUPPLY INFORMATION

1. Water System Name \*

Enter your answer

2. Water System Number, IL \*

Enter your answer

Next

Never give out your password. [Report abuse](#)

Robinson Engineering, Ltd.  
<https://www.reltd.com/lead>



***Robinson***  
**ENGINEERING**



ROBINSON  
ENGINEERING

**Thank You!!**



**Suburban Public Works  
Directors Association**





**Tom Nagle**  
708-210-5690



**Jonathan Flowers**  
815-412-2015



**Diane Moeller**  
224- 908-3983



**Michael Giglio**  
708-868-0074

**Thank You!!**



**Suburban Public Works  
Directors Association**