

Preliminary Engineering Report 2022

Water Utility Improvements Lead Service Line Replacements

For the

City of Fort Wayne, Indiana
Allen County, Indiana

March, 2022

Prepared by:

Hometown Engineering, LLC
For
Fort Wayne City Utilities

Preliminary Engineering Report 2022

Water Utility Improvements
Lead Service Line Replacements

City of Fort Wayne

March, 2022

TABLE OF CONTENTS

CHAPTER 1	PROJECT LOCATION	
	Introduction	1-1
	Project Area	1-1
	Project Need	1-2
	Project Scope	1-2
	Water Loss Audit	1-2
	Regional Planning Meetings	1-2
	Certified Operator	1-3
CHAPTER 2	CURRENT NEEDS	
	Existing Facilities	2-1
	Project Need And Description	2-2
CHAPTER 3	FUTURE NEEDS	
	Population and Flows	3-1
	Regionalization	3-2
CHAPTER 4	EVALUATION OF ALTERNATIVES	
	Introduction	4-1
	Evaluation of Feasible Alternatives	4-2
	Rationale for Alternative Selection	4-2
	Recommended Alternative	4-3
CHAPTER 5	EVALUATION OF ENVIRONMENTAL IMPACTS	
	Direct and Indirect Impacts	5-1
CHAPTER 6	PROPOSED PROJECT	
	Selected Plan Components and Processes	6-1
	Project Costs	6-1
	Project Schedule	6-2
	Land Acquisition	6-2
	Contract Operations	6-2
	Green Project Reserve/ Climate Resiliency Initiative	6-2

CHAPTER 7 LEGAL, FINANCIAL AND MANAGERIAL CAPABILITIES

Resolutions	17-1
Land Acquisition	17-1
Managerial and Financial Capabilities	17-1
Capital Asset Management Program	17-1
Project Costs and Financing	17-1

CHAPTER 18 PUBLIC PARTICIPATION

Summary	18-1
---------	------

LIST OF TABLES

2-1	Existing Treatment Plant Flows	2-1
3-1	Population Projections	3-1
3-2	Flow Projections	3-2
4-1	Lead Service Line Replacement Census Tracts	4-2
4-2	Lead Service Line Replacement Location	4-2
4-3	Lead Service Line Replacement Estimated Costs	4-3
6-1	Lead Service Line Replacement Project Cost Summary	6-1
7-1	Project Costs and Financing	17-2

LIST OF CHAPTER FIGURES AND EXHIBITS

1-1	Fort Wayne Map and Twenty-Year Service Area
1-2	Lead Service line Replacement Location Map
2-1	Existing Water Distribution System
2-2	Equipment Summary
2-3	Plant Flow Schematic
2-4	High Service Pumping Graph
2-5	Distribution System Facilities
2-6	List of Significant Users
2-7	2021 Water Quality Report
5-1a-c	Location Maps – Lead Service Line Replacements
5-2a-c	Wetlands/Floodplain Map – Lead Service Line Replacements
5-3a-c	SHAARD Mapping - Lead Service Line Replacements
6-1	LSLR Program Letter to Property Owners
6-2	LSLR Program Opt In and Right of Entry Form
6-3	LSLR Program Opt Out Form

City of Fort Wayne
Water Utility Improvements – Lead Service Line Replacements
March 2022

- 7-1 Signatory Resolution
- 7-2 PER Approval Resolution
- 7-3 Asset Management Program Certification Form
- 8 -1 Public Hearing Documentation

CHAPTER 1

PROJECT LOCATION AND SCOPE

INTRODUCTION

The City of Fort Wayne owns and operates a municipal water utility. The water treatment plant was originally constructed in the 1930s and major expansions have occurred in the 1950s and the 1980s. Currently, the plant is rated to provide 72 mgd to the customers of the utility.

All of the water is currently supplied by a low service pumping station on the St. Joe River that was constructed with the original facilities. The St. Joe Dam Pump Station has four pumps that supply raw water to the Three Rivers Filtration Plant. The total listed pumping capacity is 210 mgd, with a firm capacity of 140 mgd. Two reservoirs upstream of the St. Joe Dam provide emergency raw water storage.

The water is pumped from the St. Joe Dam through two parallel raw water mains to the Three Rivers Filtration Plant (TRFP). All of the potable water provided by the Fort Wayne Water Utility is treated at the Three Rivers Filtration Plant. General facilities at the plant include primary flocculation and settling, secondary flocculation and settling, and filtration. Chemical addition includes ferric sulfate, lime, powdered activated carbon on an intermittent basis, orthophosphate, fluoride, free chlorine, and chlorine dioxide and ammonia for disinfection.

Over the years, design professionals have conducted several studies to evaluate the capacity of the supply, treatment and distribution facilities to meet current and future flow requirements and regulations.

Fort Wayne is constructing groundwater wells at the Three Rivers Filtration Plant that will allow for the blending of up to 10 MGD of groundwater to the current water supply from the St. Joe Dam. This will allow for better operational control during runoff events and will allow for a reduction in chemical usage during these events. The runoff events occasionally result in taste and odor issues for customers. In addition, the completion of the project will provide some redundancy in raw water supply.

PROJECT AREA

Fort Wayne is located in central Allen County in northeast Indiana. Interstate 69 passes to the west of the City, and US Routes 33, 30, and 24, and State Roads 1, 3, and 14 pass through the City. Figure 1 attached to this chapter is a map of the City of Fort Wayne. The City is located on the Huntertown, Cedarville, Fort Wayne East, and Fort Wayne West Quadrangles, Townships 31N and 32N, Ranges 12E and 13E, all sections.

The twenty-year study and service area is the corporate limits of the City of Fort Wayne and the immediately surrounding area, as they are expected to exist in 20 years. Figure 1 -1 identifies the current service area and the proposed twenty-year service area. estimated to be directly served by Fort Wayne.

Fort Wayne is a regional utility and provider of water services and currently provides wholesale water treatment services to the City of New Haven's water system, just to the east of Fort Wayne's service area.

PROJECT NEED

The City of Fort Wayne continually evaluates the needs of the water utility. The master plans for both the distribution and the treatment facilities were last updated in 2019 for a ten- year planning criteria. The critical needs are based on the three performance criteria of adequacy, efficiency, dependability and reliability, as defined by the AWWA Research Foundation.

This project will address the replacement of lead service lines in underserved areas of the City.

PROJECT SCOPE

Several neighborhoods in the City have been identified for lead service line replacements (LSLR). The selected areas have been identified as priority area for LSLR based on factors including income levels, poverty levels, presence of children under the age of 17, and lead sampling results in the areas. The City is proposing to replace most of these service connections using horizontal directional drilling method.

WATER LOSS AUDIT

The City has completed a validated Water Loss Audit in accordance with SEA 4 and submitted the certifications to the IFA for both Honeysuckle and the City of Fort Wayne Water Utilities.

REGIONAL PLANNING MEETINGS

The City has participated in annual Regional Planning Meetings in accordance with SEA 4.

CERTIFIED OPERATOR

The City of Fort Wayne has several certified operators, and the certification needs will not change as a result of this project.

CHAPTER EXHIBITS

Figure 1-1 Fort Wayne Map and Twenty-Year Service Area

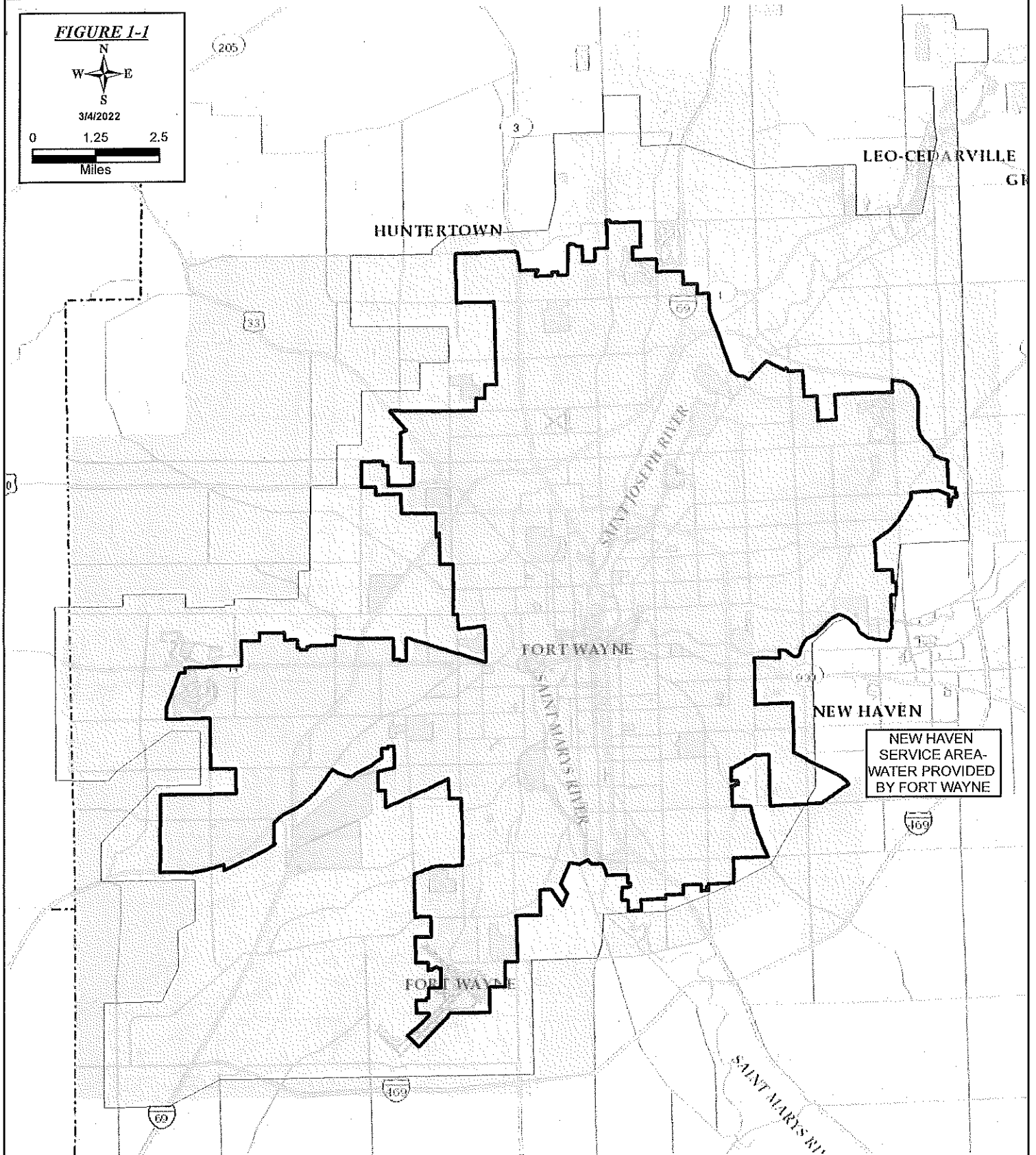
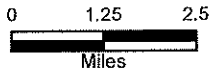
Figure 1-2 LSLR Replacement Location

EXISTING AND TWENTY YEAR SERVICE AREA

FIGURE 1-1



3/4/2022

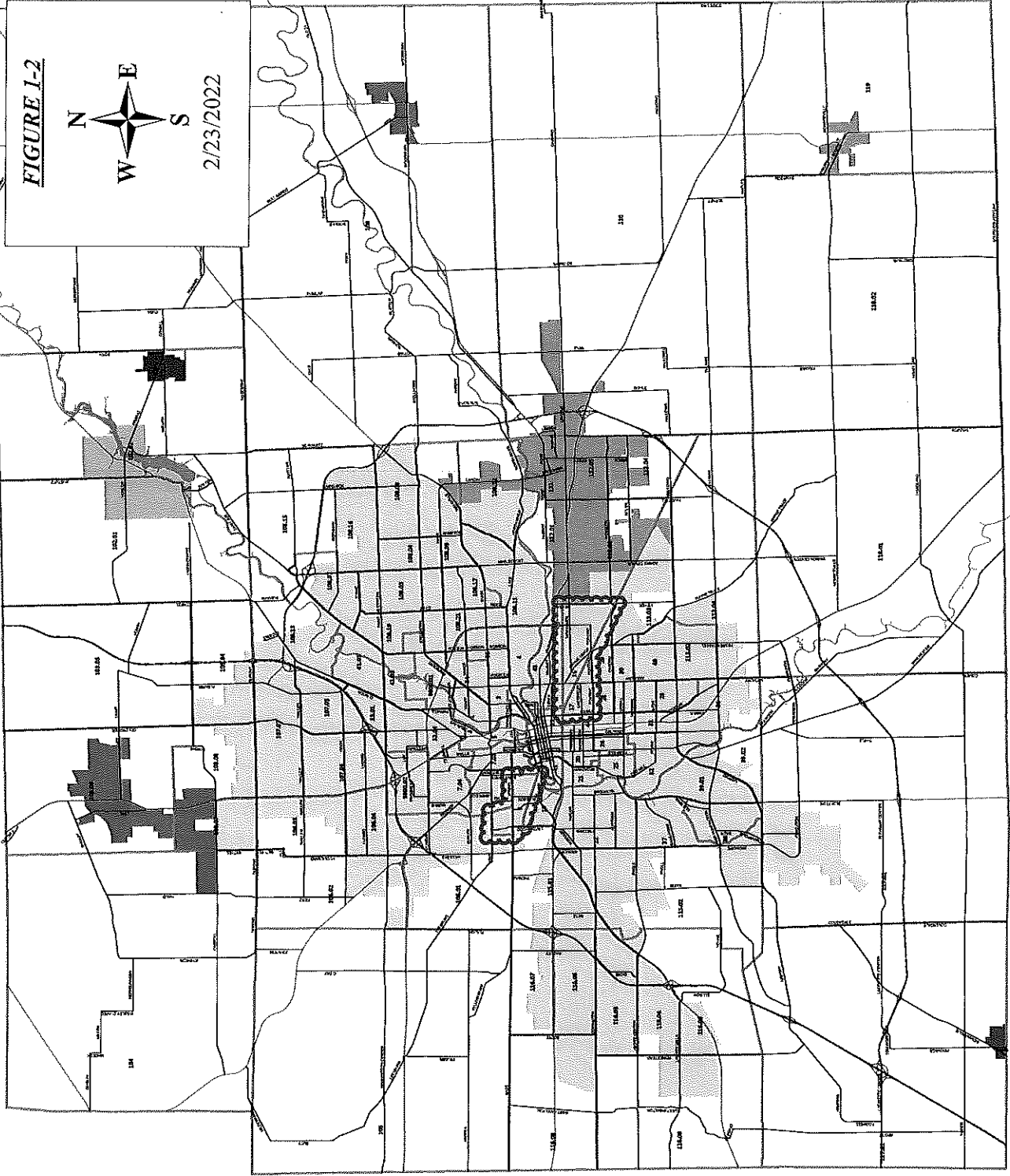


Legend

- City Limits
- Project_Polygon
- Existing Service Area



LSLR REPLACEMENT LOCATION



CHAPTER 2 CURRENT SITUATION

EXISTING FACILITIES

The City of Fort Wayne provides potable water to over 250,000 people in the water service area through 103,427 meters. As previously described, all of the potable water in the City of Fort Wayne is supplied by a low service pumping station on the St. Joe River that was constructed in the 1930's. The water is then treated at the Three Rivers Filtration Plant (TRFP). The original plant was constructed in the 1930's and major plant expansions occurred in the 1950's and the 1980's. The plant is rated to treat 72 mgd. Exhibit 2-2 to this chapter includes an equipment summary at the St. Joe Dam Pumping Station and the Three Rivers Filtration Plant; Exhibit 2-3 provides a schematic of the flow through the plant, and Exhibit 2-4 provides a history of high service pumping.

There are approximately 1,169 miles of water main in the City of Fort Wayne, and a total of 1,406 miles within the service area. There are nine elevated storage tanks and two above ground storage tanks with a total capacity of 18.5 million gallons. An additional 20 MG of storage capacity is available in reservoirs at the TRFP. Exhibit 2-5 to this chapter contains the summary of distribution system facilities and Figure 2-1 is a map of the existing distribution system.

Table 2-1 identifies the existing water consumption for the City of Fort Wayne Water Utility for 2021.

TABLE 2-1
EXISTING TRFP FLOWS

Domestic (D)	14.9 MGD
Commercial/Institutional (C)	5.7 MGD
Industrial (I)	1.7 MGD
Governmental	.5 MGD
Unmetered Authorized	<u>2.1 MGD</u>
Total DCI	24.3 MGD
Water Loss	<u>6.9 MGD</u>
Average Design Flow	31.2 MGD
Peak Day	45.7 MGD
Peak Hour	55.6 MGD
PLANT FLOW CAPACITY	72 MGD

The City performs an annual water loss audit. During 2020, the actual metered consumption in the service area was 23.4 MGD and unmetered authorized consumption was 2.2 MGD. The TRFP supplied a total of 11,881 MG, an average of 32.6 MGD. This calculates to a water loss of 21.1%. Of this percentage, 4.6% is apparent loss, and real water loss is 16.5%. The water loss in 2020 was less than the water loss in 2019.

PROJECT NEED AND DESCRIPTION

Several neighborhoods in the City have been identified for lead service line replacements (LSLR). The selected areas have been identified as priority area for LSLR based on various factors including poverty levels, income levels, and lead sampling results from the areas. The City is proposing to replace most of these service connections using horizontal directional drilling method.

Significant users do not provide an impact to the City of Fort Wayne as a result of its large size. Exhibit 2-6 provides a list of the significant users. Exhibit 2-7 to this chapter contains the 2021 Water Quality Report from the Three Rivers Filtration Plant. The Water Quality Report provides a summary of the treatment plant performance and costs for the previous year, including the results of lab testing of the raw and finished water.

CHAPTER EXHIBITS

Figure 2-1 Existing Water Distribution System Map

Exhibit 2-2 Equipment Summary

Exhibit 2-3 Plant Flow Schematic

Exhibit 2-4 High Service Pumping Graph

Exhibit 2-5 Distribution System Facilities

Exhibit 2-6 List of Significant Users

Exhibit 2-7 2021 Water Quality Report

CITY OF FORT WAYNE WATER UTILITY DISTRIBUTION



LEGEND

WATER MAINS

- 4" MAINS & SMALLER
- 6" WATER MAINS
- 8" WATER MAINS
- 10" WATER MAINS
- 12" WATER MAINS
- 16" WATER MAINS
- 20" & 24" WATER MAINS
- 30" MAINS AND LARGER
- PRIVATE WATER MAINS

WATER FACILITIES

- STORAGE TANK
- PUMP STATION

WATER VALVES

- CHECK VALVE
- CLOSED VALVE

PRESSURE ZONES

- HONEYUCKLE
- WEST
- SOUTHWEST
- NORTHWEST
- SUMMIT

Scale: 1" = 1000'
0 300 600 900
Feet

Created on March 11, 2015
Last Modified on March 11, 2015
File Path: \\cityof-fortwayne\gis\water\utility_distribution.mxd
Prepared by: Fort Wayne GIS/Planning Division

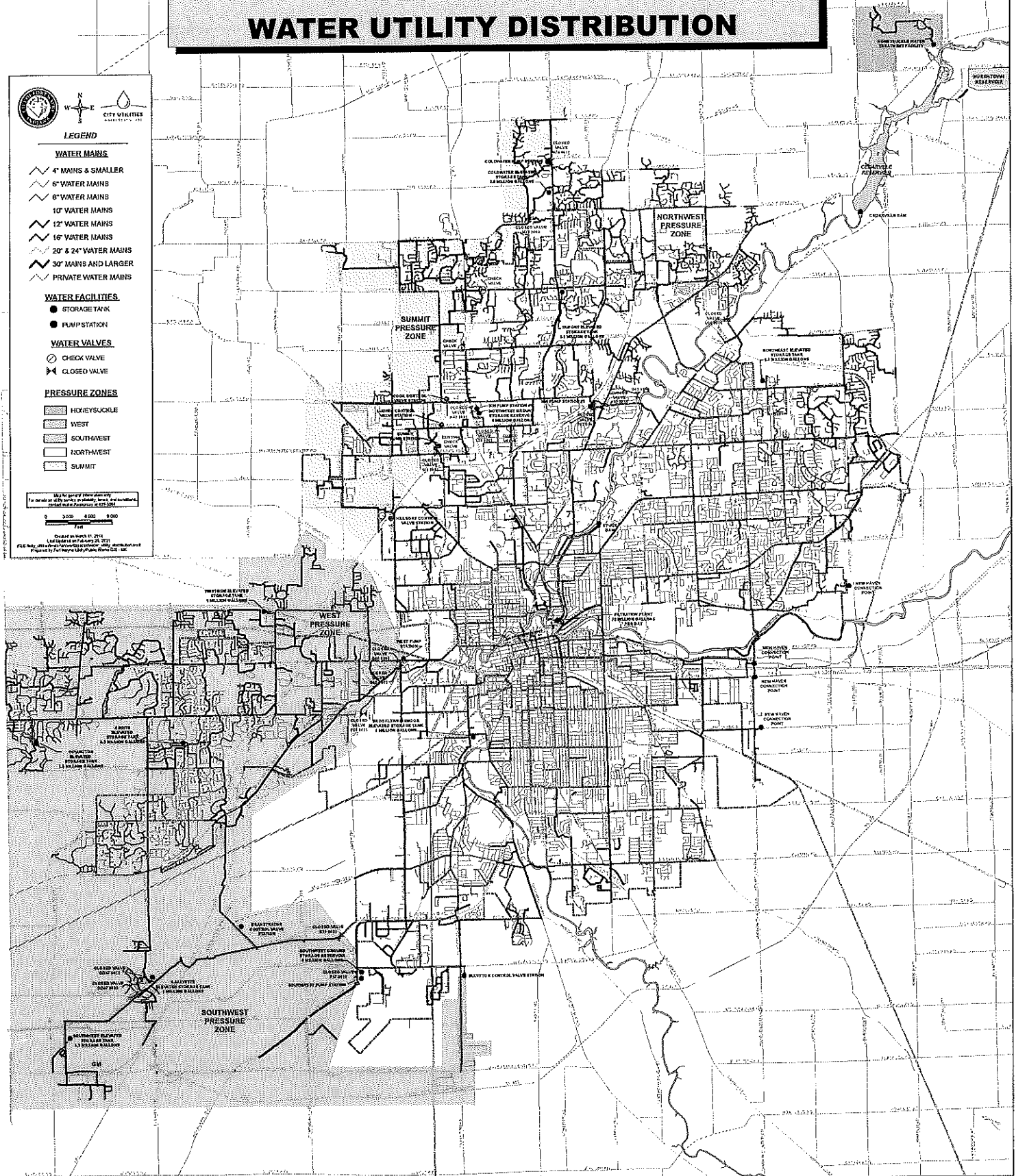


EXHIBIT 2-2

Three Rivers Filtration Plant Design Criteria Summary				
Item	Plant 1	Plant 2	Plant 3	
Primary Flocculation				
Number of Trains	2	3	2	
Number of Stages	3	3	3	
Top Elevation of Tanks	771.5	772.5	772.5	
Bottom Elevation of Tank	742.0	755.0	752.75	
W.S. Elevation at 24 mgd Plant Rate	768.27	769.05	770.2	
Volume, gal.				
Stage 1	67,900	42,000	115,800	
Stage 2	91,100	78,800	115,800	
Stage 3	152,700	99,400	115,800	
Theoretical Detention Time at 24 mgd Plant Rate, min.				
Stage 1	8.2	7.6	13.9	
Stage 2	10.9	14.2	13.9	
Stage 3	18.3	17.9	13.9	
Total	37.4	39.7	41.7	
Primary Settling				
Number of Trains	2	3	2	
Tank Area, sq. ft.	6,800	3,700	7,100	
Top Elevation of Tank	771.5	772.0	772.0	
Bottom Elevation of Tank (avg.)	754.83	754.5	752.83	
W.S. Elevation at 24 mgd Plant Rate	768.23/767.21 ¹	769.1	770.03	
Depth at 24 mgd Plant Rate, ft.	13.4/12.38 ¹	14.5	17.2	
Tank Volume, gal.	707,200/653,400 ¹	401,300	907,800	
Surface Loading Rate				
a) gpm/sq. ft.	2.46/1.23 ²	1.5	1.18	
b) cm/min.	10.1/5.1 ²	6.1	4.8	
Theoretical Detention Time, min.	42/39.2 ¹	72.2	109	
Flow-Through Velocity, fpm	1.98	1.02	0.77	
Weir Loading, gpd/ft.	—	12,000	12,600	
Recarbonation Following Primary Settling				
Number of Trains	2	2	2	
Tank Area, sq. ft.	1,422	438	1,001	
Top Elevation of Tank	771.5	772.0	772.0	
Bottom Elevation of Tank	754.3	760.5	752.83	
W.S. Elevation at 24 mgd Plant Rate	768.13	768.78	768.88	
Depth at 24 mgd Plant Rate, ft.	13.83	8.28	16.05	
Tank Volume, gal.	147,103	32,388	120,204	
Theoretical Detention Time, min.	8.8	2.9/5.8 ³	14.4	
Secondary Flocculation				
Number of Trains	—	3	2	
Number of Stages	—	3	3	
Top Elevation of Tank	—	770.5	772	
Bottom Elevation of Tank	—	753.5	751.3	
W.S. Elevation at 24 mgd Plant Rate	—	767.49	768.7	
Depth at 24 mgd Plant Rate, ft.	—	13.99	17.4	
Volume, gal.				
Stage 1	—	41,900	115,800	
Stage 2	—	78,500	115,800	
Stage 3	—	99,000	115,800	
Theoretical Detention Time at 24 mgd Plant Rate, min.				
Stage 1	—	7.5	13.9	
Stage 2	—	14.1	13.9	
Stage 3	—	17.8	13.9	
Total	—	39.4	41.7	

Three Rivers Filtration Plant Design Criteria Summary

Item	Plant 1	Plant 2	Plant 3
Secondary Settling			
Number of Trains	2	3	2
Tank Area, sq. ft.	7,056/15,607	3,800	7,056
Top Elevation of Tank	771.5	770.5	770.5
Bottom Elevation of Tank (avg.)	754.06	753.0	751.3
W.S. Elevation at 24 mgd Plant Rate	766.87	767.5	768.53
Depth at 24 mgd Plant Rate, ft.	12.81/11.25 ⁴	14.5	17.2
Tank Volume, gal.	676,100/656,700 ⁴	412,100	907,800
Surface Loading Rate			
a) gpm sq. ft.	1.18/1.07 ⁴	1.46	1.18
b) cm/min.	4.8/4.4 ⁴	6	4.8
Theoretical Detention Time, min.	81.2/78.8 ⁴	74.2	109
Flow-Through Velocity, fpm	4.36/4.96 ⁴	1.02	0.77
Weir Loading, gpd/ft.	—	11,976	12,578
Recarbonation Following Secondary Settling			
Number of Trains	—	1	1
Tank Area, sq. ft.	—	794	675
Top Elevation of Tank	—	770.5	770.5
Bottom Elevation of Tank	—	758.5	751.33
W.S. Elevation at 24 mgd Plant Rate	—	767.22	768.2
Depth at 24 mgd Plant Rate, ft.	—	8.72	16.87
Tank Volume, gal.	—	51,811	85,177
Theoretical Detention Time, min.	—	3.1	5.1
Filtration			
Number of Filters	10	10	8
Filter Box Dimension	25'x28'	25'x28'	25'x28'
Filter Box Area, sq. ft.	700	700	700
Loading Rate @ 24 mgd Plant Rate, gpm/sq. ft.			
a) All filters in service	2.38	2.38	2.97
b) One filter out of service	2.64	2.64	3.4
Top Elevation of Filter Box	769.0	769.0	769.0
Top Elevation of Filter Media	759.0	758.83	758.83
Top Elevation of Support Gravel	756.5	756.33	755.33
Top Elevation of Underdrain		755.33	755.33
Bottom Elevation of Washwater Troughs		759.25	759.25
Depth of Media, inches (as shown on dwgs.)			
a) Filter sand	30	30	30
Depth of Support Gravel, inches	12	12	12
W.S. Elevation at 24 mgd Plant Rate	766.28	766.92	766.43
Depth of Submergence Over Media, ft.	7.28	8.09	7.6
Total Filter Volume for Detention Time			
Calculation, gal.	58,590	51,522	48,957
Theoretical Detention Time at Peak Loading w/One Filter Out of Service, min.	25	27.9	20.6
Effective Detention Time, min (0.9 baffling factor)	23.4	25.1	18.5
Clearwall Beneath Filters			
Clearwall Dimensions, ft.			
	27.17'x144'	27.17'x144'	27.17'x115'
Number	2	2	2
Bottom Slab Top Elevation	741.0	741.09	741.0
Bottom Elevation of Top Slab	753.58	753.58	753.58
Depth, ft.			
a) Full clearwell	12.58	12.58	12.58
b) One foot below top slab	11.58	11.58	11.58

Three Rivers Filtration Plant Design Criteria Summary

Item	Plant 1	Plant 2	Plant 3
Volume, gal.			
a) Full clearwell	368,200	368,200	294,000
b) One foot below top slab	338,900	338,900	270,600
Theoretical Detention Time, min.	39.8 ⁵	39.8 ⁵	30.9 ⁶
Effective Detention Time, min (0.2 baffling factor)	8.0	8.0	6.2

¹East/West Clarification Tanks

²Surface loading rate of single tank/when two tanks operated in series.

³One recarbonation basin serves two of the trains and the other serves on train.

⁴Upper/Lower Secondary Settling Tanks

⁵Peak hourly rate of 554,500 gph (5 filters at 2.64 pgm/sq. ft. loading rate)

⁶Peak hourly rate of 571,200 gph (4 filters at 3.4 pgm/sq. ft. loading rate)

Three Rivers Filtration Plant (TRFP) Process Diagram

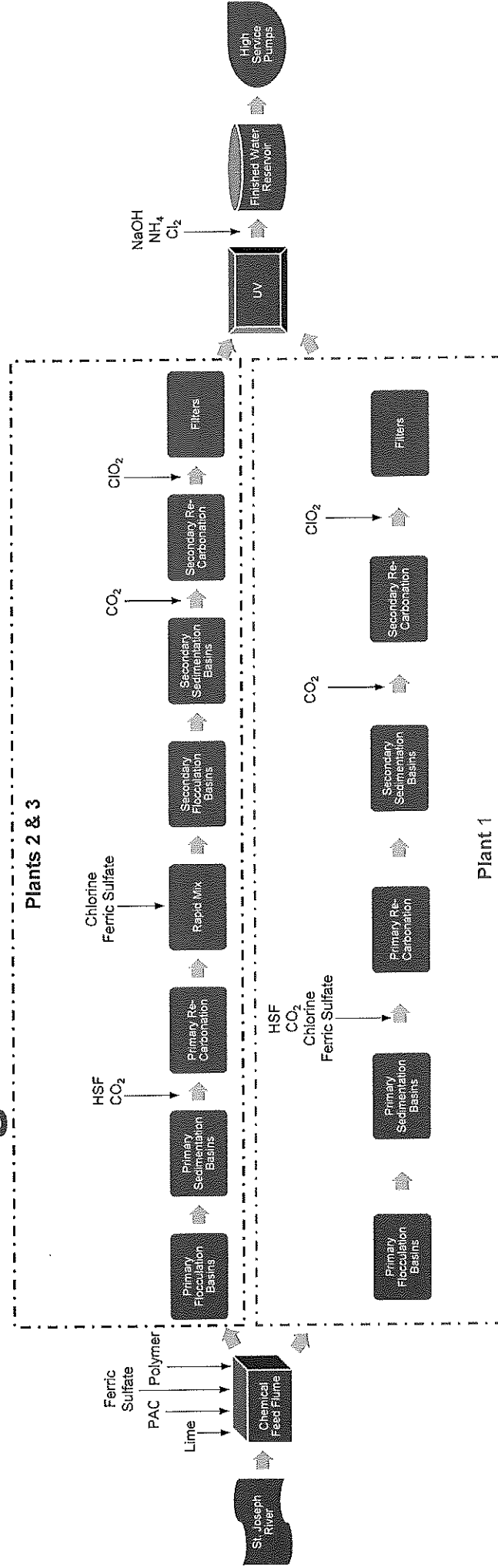


EXHIBIT 2-4

Three Rivers Filtration Plant High Service Pumping City of Fort Wayne, Indiana

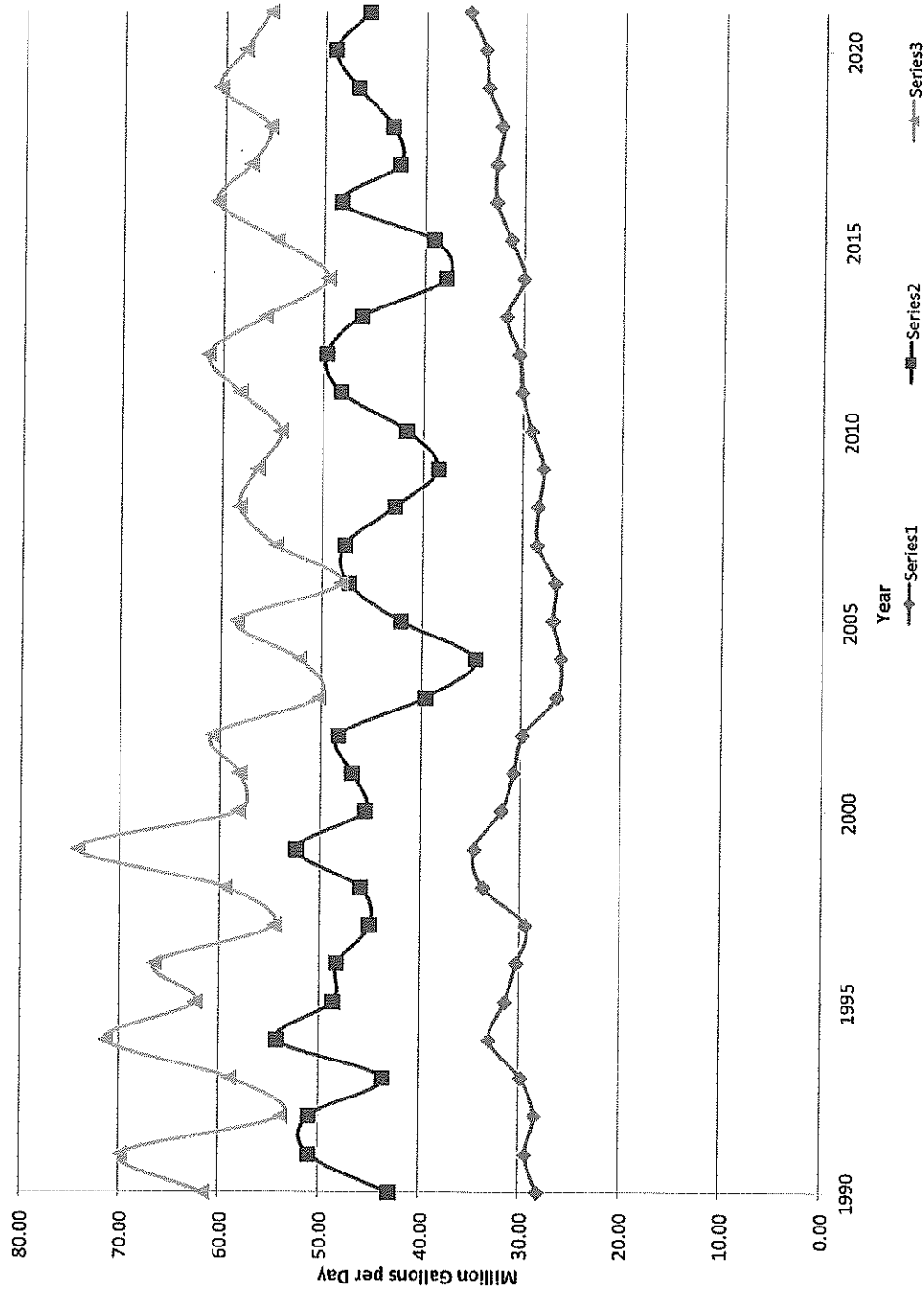


EXHIBIT 2-5
WATER DISTRIBUTION SYSTEM

Data Gathered	Water Service Area (sq miles)	Water Mains (miles)	Asbestos Cement (miles)	Cast Iron (miles)	Copper (miles)	Ductile Iron (miles)	High Density Polyethylene (miles)	Prestressed Concrete (miles)	Plastic (miles)	Polyvinyl Chloride (PVC) (miles)	Steel (miles)	Unknown Material (miles)	Hydrants in City Limits	Hydrants Outside City Limits	Valves
1/3/19	150.56	1,408.37	46.88	519.46	0.83	424.33	87.43	12.66	1.52	311.76	2.69	0.81	9,066	2,401	15,142
11/30/18	150.47	1,407.70	46.88	519.46	0.83	424.31	87.43	12.66	1.52	311.11	2.69	0.81	9,067	2,390	15,127
10/31/18	150.36	1,406.25	46.88	519.46	0.83	424.46	87.43	12.66	1.52	309.5	2.69	0.81	9,067	2,373	15,106
9/28/18	150.27	1,404.89	47.16	518.19	0.83	424.27	87.5	12.66	1.61	306.59	2.69	2.39	9,067	2,367	15,099
8/30/18	150.26	1,404.75	47.16	519.19	0.83	424.28	87.5	12.66	1.61	306.44	2.69	2.39	9,068	2,365	15,100
8/1/18	150.27	1,402.67	47.16	520.85	0.83	423.93	86.24	12.66	1.61	305.32	2.69	2.39	9,042	2,365	15,066
7/2/18	150.37	1,402.95	47.16	525.6	0.83	423.93	80.12	12.66	1.61	305.3	2.69	3.04	9,037	2,365	15,061
6/1/18	150.37	1,402.92	47.16	525.6	0.83	423.92	80.12	12.66	1.61	305.29	2.69	3.03	9,037	2,365	15,062
5/1/18	150.37	1,402.92	47.16	525.6	0.83	423.92	80.12	12.66	1.61	305.29	2.69	3.03	9,037	2,365	15,062
4/2/18	150.37	1,402.80	47.17	525.75	0.83	423.92	80.12	12.66	1.61	305.02	2.69	3.03	9,037	2,362	15,056
3/1/18	150.15	1,400.94	47.17	525.57	0.83	424.03	80	12.66	1.61	304.04	2.69	9.3	9,037	2,352	15,037
2/1/18	150.14	1,401.10	47.29	525.57	0.83	424.03	80	12.66	1.61	304.08	2.69	9.3	9,037	2,349	15,034
1/4/18	149.66	1,396.47	47.26	525.57	0.83	423.44	79.22	12.77	1.61	300.73	2.69	9.3	9,017	2,317	14,987
12/1/17	149.66	1,396.36	47.26	525.57	0.83	423.44	79.22	12.77	1.61	300.63	2.69	9.3	9,017	2,315	14,987
11/2/17	149.55	1,395.66	47.26	525.67	0.83	423.44	75.11	12.77	1.61	299.93	2.69	13.4	9,017	2,307	14,975
10/1/17	149.55	1,395.66	47.26	525.67	0.83	423.44	75.1	12.77	1.61	299.94	2.69	13.4	9,016	2,304	14,975
9/1/17	149.54	1,394.52	47.26	525.82	0.83	423.44	74.29	12.77	1.61	299.44	2.69	13.31	9,007	2,301	14,969
8/1/17	149.38	1,393.59	47.26	525.87	0.83	423.39	74.29	12.77	1.61	298.52	2.69	13.31	9,008	2,291	14,960
7/1/17	149.35	1,393.34	47.26	526.06	0.83	423.43	74.19	12.77	1.61	298.2	2.69	13.27	9,011	2,288	14,951
6/1/17	149.1	1,393.24	47.26	526.77	0.83	423.34	73.57	12.77	1.61	298.09	2.69	13.27	9,011	2,288	14,955
5/1/17	149.1	1,393.11	47.26	526.87	0.83	423.36	73.43	12.77	1.61	297.95	2.69	13.29	9,009	2,288	14,953
4/3/17	149.1	1,392.43	47.26	527.09	0.83	423.38	73.96	12.77	1.61	296.52	2.69	13.29	9,009	2,282	14,939
2/28/17	149.1	1,392.55	47.26	527.12	0.83	423.41	73.99	12.77	1.61	296.57	2.69	13.32	9,010	2,281	14,936
1/31/17	149.1	1,392.20	47.26	527.12	0.83	423.4	74	12.8	1.61	296.22	2.69	13.32	9,010	2,271	14,927

Treated Water Storage

ELEVATED TANKS

Tank Name	Year Installed	Capacity (MG)	Tank Dia. (ft)	Pressure Zone	Connection Pipe Size (in)	Tank Headrange (ft)
Brooklyn / Kinsmoor	1952	1.00	77.0	Main	16	30.0
Northeast	1999	1.50	86.0	Main	16	40.0
GM Tank	1985	1.50	86.0	SW	16	42.5
West side	1988	1.00	74.0	W	16	40.0
Coldwater (AquaN)	2000	2.00	94.0	NW	16	45.0
Dupont (AquaN)	1979	0.50	50.0	NW	12	33.7
Abolte (ASW)	1973	0.50	56.0	W	16	30.0
Covington (ASW)	1990	1.50	96.0	W	16	35.0
Lafayette (ASW)	2005	1.00	74.0	W	16	35.0

Total Elevated Storage 10.50

GROUND STORAGE TANK

Tank Name	Year Installed	Capacity (MG)	Tank Dia. (ft)	Pressure Zone (for)	Connection Pipe Size (in)	Depth of Res. (ft)
Northwest Reservoir	1985	4.00	134.0	NW	16/24	38.0
Southwest Reservoir	1985	4.00	134.0	SW	16/30	38.0
Honeysuckle	2007	0.04		HS	8/6	

Total Ground Storage 8.04

FILTRATION PLANT STORAGE

Tank Name	Year Installed	Capacity (MG)	Reservoir Size (ft)	Connection Pipe Size (in)	Avg. Depth of Res. (ft)
North Reservoir	1931	14.00	348*310	1-36", 4-66"x66"	17.8
South Reservoir	1931	6.00	144*372	3-48", 2-66"x66"	16.3

Total Plant Storage 20.00

TOTAL 38.54

NORTHWEST PUMP STATION #1						7200 Lima Road			
"Normal Operation" Suction Side Pressure Range -						32 - 42 psi		STATION ELEVATIONS	
Minimum Suction Pressure (PSV Setting)-						28 psi		Floor FF elev = 835	
"Normal Operation" Discharge Pressure Range -						64-75 psi		Pump CL elev = 836.9	
Max Pressure or Pressure Relief Setting -						80 psi			
Pump Types: Vertical Can									
		PUMP CAPACITY				PUMPS CONTROLLED BY:			
	TYPE	RATED		ACTUAL		DISCHARGE PSI		TANK ELEVATION	
		GPM	TDH	GPM	TDH	ON	OFF	ON	OFF
Pump 1 (A1)	VFD	1,200	175	1,200	178			976.6	977.1
Pump 2 (A2)	VFD	1,200	175	1,200	175			971.1	974.1
Pump 3 (A3)	VFD	1,200	175	1,200	175			967.1	970.1
Pump 4 (B1)	CS	2,500	155	2,500	160			971.8	976.4
Pump 5 (B2)	CS	2,500	155	2,500	165			963.1	965.1
Total Capacity (If not possible to run all pumps at once)								GPM	6000
Pump Sequencing (order pumps come on and off for all operation situations):									
	A1	1200 gpm	NW1						
	C1	700 gpm	NW2						
	B1	2500 gpm	NW1						
	A2	1200 gpm	NW1						
	C2	700 gpm	NW2						
	A3	1200 gpm	NW1						
	C3	700 gpm	NW2						
	B2	2500 gpm	NW1						
Misc / Notes (anything that would affect pump or station performance):									
6000 gpm is meter upper limit - flow rate is higher when running all pumps If lose telemetry, plc enters pressure control mode to maintain 63 psi Pumps are rotated in each group for exercising reasons Works with NWPS2 as demonstrated in the sequence above NWPS2 is a telemetry hub; backup links are available									
Alarms sent back to Filtration Plant from NWPS:									
Discharge Pressure Low/High Suction Pressure Low/High Reservoir Level Low/High Intrusion, Power Failure, Low Temperature, Building Flooded Pump Failure									
Created By: MW			Revised: 8/16/16			Printed: 9/23/2016			

NORTHWEST PUMP STATION #2

7020 Red Haw Drive

"Normal Operation" Suction Side Pressure Range -	40-55 psi	STATION ELEVATIONS
Minimum Suction Pressure (Pump Cut Out Setting)-	30 psi	Floor FF elev = 807.84
"Normal Operation" Discharge Pressure Range -	70-92 psi	Pump CL elev = 809.5
Max Pressure or Pressure Relief Setting -	97 psi	

Pump Types: Horizontal Split Case

	TYPE	PUMP CAPACITY				PUMPS CONTROLLED BY:			
		RATED		ACTUAL		DISCHARGE PSI		TANK ELEVATION	
		GPM	TDH	GPM	TDH	ON	OFF	ON	OFF
Pump 6	CS	700	120					971.9	976.5
Pump 7	CS	700	120					969.1	972.1
Pump 8	CS	700	120					966.1	968.1

Total Capacity (If not possible to run all pumps at once) GPM 2200

Pump Sequencing (order pumps come on and off for all operation situations):

A1	1200 gpm	NW1
C1	700 gpm	NW2
B1	2500 gpm	NW1
A2	1200 gpm	NW1
C2	700 gpm	NW2
A3	1200 gpm	NW1
C3	700 gpm	NW2
B2	2500 gpm	NW1

Misc / Notes (anything that would affect pump or station performance):

Pumps are rotated in each group for exercising reasons
Works with NWPS1 as demonstrated in the sequence above
NWPS2 is a telemetry hub; backup links are available

Alarms sent back to Filtration Plant from NWPS:

Discharge Pressure Low/High
Suction Pressure Low/High
Reservoir Level Low/High
Intrusion, Power Failure, Low Temperature, Building Flooded
Pump Failure

Created By: MW AS

Revised: 8/16/16

Printed: 9/23/2016

WEST PUMP STATION

"Normal Operation" Suction Side Pressure Range -	45 - 65 psi	STATION ELEVATIONS
Minimum Suction Pressure needed for Station-	35 psi	Floor FF elev = 787.5
"Normal Operation" Discharge Pressure Range -	75 - 92 psi	Pump CL elev = 789.5
Max Pressure or Pressure Relief Setting -	93 psi	

Pump Types: Horizontal Split Case

	PUMP CAPACITY				PUMPS CONTROLLED BY:			
	RATED		ACTUAL		DISCHARGE PSI		TANK ELEVATION	
	GPM	TDH	GPM	TDH	ON	OFF	ON	OFF
Pump 1	1700	100	2300	60			965	969.5
Pump 2	1700	100	2300	60			964	969
Pump 3	1700	100	2300	60			962	967
Pump 4	1700	100	2300	60			961	966.5

Total Capacity (If not possible to run all pumps at once)	GPM	4500
---	-----	------

Pump Sequencing (order pumps come on and off for all operation situations):

Lafayette and Branstrator also contribute to the flows into WPZ
sequence of pumps works in conjunction with BPCS and LTPS
pumps rotate every time called to run
pumps look at covington tank as primary and west side tank as secondary
when lose all telemetry, jump into pressure control mode to maintain 80 psi
Generator automatically comes on during power fail

Misc / Notes (anything that would affect pump or station performance):

Alarms sent back to Filtration Plant from WPS:

Discharge Pressure Low/High
Suction Pressure Low/High
Intrusion, Power Failure, Low Temperature, Building Flooded
Pump Failure

Alarms sent back to Filtration Plant from WEST TANK:

Overflow
Power Failure, Low Temperature, Intrusion

Created By: MW

Revised: 8/25/2016

Printed: 9/23/2016

Lafayette Tank Pump Station

"Normal Operation" Suction Side Pressure Range -	66-73 psi	STATION ELEVATIONS
Minimum Suction Pressure needed for Station-	66 psi	Floor FF elev = 823
"Normal Operation" Discharge Pressure Range -	72-94 psi	Pump CL elev = 826
Max Pressure or Pressure Relief Setting -	psi	

Pump Types: Horizontal Split Case

	PUMP CAPACITY				PUMPS CONTROLLED BY:			
	RATED		ACTUAL		DISCHARGE PSI		TANK ELEVATION	
	GPM	TDH	GPM	TDH	ON	OFF	ON	OFF
Pump 1	800	81					x	x
Pump 2	1600	82					x	x
valve flow							x	x

Total Capacity (If not possible to run all pumps at once)	GPM	2300
---	-----	------

Pump Sequencing (order pumps come on and off for all operation situations):

sequence of pumps works in conjunction with BPCS and WSPS
pumps rotate every time called to run
pumps look at covington tank as primary and west side tank as secondary
SWPZ boost - pumps and valves pump water back to SWPZ from the 1MG elevated tank

Misc / Notes (anything that would affect pump or station performance):

Alarms sent back to Filtration Plant from WPS:

Discharge Pressure Low/High
Suction Pressure Low/High
Intrusion, Power Failure, Low Temperature, Building Flooded
Pump Failure

Alarms sent back to Filtration Plant from Lafayette tank PS:

Overflow, pump fail, flood, high and low tank level
Power Failure, Low Temperature, Intrusion

Created By: MW

Revised: 8/16/2016

Printed: 9/23/2016

Branstrator Pressure Control Station

"Normal Operation" Suction Side Pressure Range -	88-98 psi	STATION ELEVATIONS
Minimum Suction Pressure needed for Station-	88 psi	Floor FF elev = 763
"Normal Operation" Discharge Pressure Range -	83 - 98 psi	
Max Pressure or Pressure Relief Setting -	100 psi	

Pump Types: Horizontal Split Case

	PUMP CAPACITY				PUMPS CONTROLLED BY:			
	RATED		ACTUAL		DISCHARGE PSI		TANK ELEVATION	
	GPM	TDH	GPM	TDH	ON	OFF	ON	OFF
valve flow	1200	0					x	x

Total Capacity (If not possible to run all pumps at once)	GPM	1400
---	-----	------

Pump Sequencing (order pumps come on and off for all operation situations):

Valve looks at covington tank as primary and west side tank as secondary
 SWPZ boost - valve closes
 Pressure control mode - valve modulates to maintain preset suction side pressure.

Misc / Notes (anything that would affect pump or station performance):

Alarms sent back to Filtration Plant from WPS:

Discharge Pressure Low/High
 Suction Pressure Low/High
 Intrusion, Power Failure, Low Temperature, Building Flooded
 Pump Failure

Alarms sent back to Filtration Plant from BPCS:

High and low pressure, high and low flow
 Power Failure, Low Temperature, Instrusion

Created By: MW

Revised: 8/16/2016

Printed: 9/23/2016

SOUTHWEST PUMP STATION

"Normal Operation" Suction Side Pressure Range -	51 - 65 psi	STATION ELEVATIONS
Minimum Suction Pressure (PSV Setting)-	51 psi	Floor FF elev = 786
"Normal Operation" Discharge Pressure Range -	86 - 110 psi	Pump CL elev = 787.8
Max Pressure or Pressure Relief Setting -	110 psi	

Pump Types: Vertical Can

	PUMP CAPACITY				PUMPS CONTROLLED BY:			
	RATED		ACTUAL		DISCHARGE PSI		TANK ELEVATION	
	GPM	TDH	GPM	TDH	ON	OFF	ON	OFF
Pump 1	2,000	220	2100	200			see below	see below
Pump 2	2,000	220	2100	200			see below	see below
Pump 3	2,500	210	2600	200			see below	see below
Pump 4	2500	210	3000	200			see below	see below
Pump 5	2500	210	3000	200			see below	see below

Total Capacity (If not possible to run all pumps at once)		GPM(SW)	7300
---	--	---------	------

Pump Sequencing (order pumps come on and off for all operation situations):

		tank elevation		All available pumps rotate every start
		on	off	
SWPS	lead	994.2	999.0	
SWPS	lag1	992.0	998.0	
SWPS	lag2	989.0	995.0	
LTPS	lead	986.0	995.0	
LTPS	lag	985.0	994.0	
SWPS	lag3	985.0	990.0	
SWPS	lag4	981.0	989.0	

Misc / Notes (anything that would affect pump or station performance):

When loses telemetry, pressure control mode is activated

Alarms sent back to Filtration Plant from SWPS:

- Discharge Pressure Low/High
- Suction Pressure Low/High
- Reservoir Level Low/High
- Intrusion, Power Failure, Low Temperature, Building Flooded
- Pump Failure, Bypass Valve Open

Alarms sent back to Filtration Plant from GM TANK:

- Overflow
- Power Failure, Low Temperature, Intrusion

Created By: MW

Revised: 8/16/2016

Printed: 9/23/2016

Filtration Plant

"Normal Operation" Suction Side Pressure Range -	reservoir level 752	ELEVATIONS
Minimum Suction Pressure needed for Station-	West PS - elev 746 in rsvr	Floor FF elev =
"Normal Operation" Discharge Pressure Range -	82 - 87 psi	Pump CL elev =
Max Pressure or Pressure Relief Setting -	90 psi - PRV	HSD CL pipe =738

Pump Types: Vertical - all

	PUMP CAPACITY				PUMPS CONTROLLED BY:			
	RATED		ACTUAL		DISCHARGE PSI		TANK LEVEL	
	MGD	TDH	MGD	TDH	ON	OFF	ON	OFF
West Pump Room								
Pump 9	15	200			PLC controlled			
Pump 10	15	200						
Pump 11	15	200						
Pump 12	15	200						
North Pump Room								
Pump 14	16	200						
Pump 15	16	200						
Pump 16	16	200						
Pump 17	16	200						
pump 18	16	200						

Total Capacity (If not possible to run all pumps at once)	GPM
---	-----

Pump Sequencing (order pumps come on and off for all operation situations):

Pumps 9, 15, 16, and 18 are VFD pumps used to maintain HSD press.
sequence is a single vfd pump, 2 vfd pumps, then additional constants speed pumps

Misc / Notes (anything that would affect pump or station performance):

HSD pressure is measured from elev 738, which is CL of basement discharge loop.

Created By: MW

Revised: 7/2/1905

Printed: 9/23/2016

St Joe Dam - Low Service Pumps

"Normal Operation" Suction Side Pressure Range - Suction Lift psi

Minimum Suction Pressure needed for Station- Elev of 750 at intake psi

"Normal Operation" Discharge Pressure Range - 5 - 30 psi

Max Pressure or Pressure Relief Setting - N/A psi

Pump Types:

	PUMP CAPACITY				PUMPS CONTROLLED BY:			
	RATED		ACTUAL		DISCHARGE PSI		TANK LEVEL	
	MGD	TDH	MGD	TDH	ON	OFF	ON	OFF
Pump 1	37.30	41.7						
Pump 2	66.50	83.5						
Pump 3	37.30	41.7						
Pump 4 low	57.00	68.0						
Pump 4 high	68.50	87.6						

Total Capacity (If not possible to run all pumps at once) GPM

Pump Sequencing (order pumps come on and off for all operation situations):

Sequences vary to meet Plants needs - throttling done with cone valves as needed

Pump 1 --- Plant needs 14 - 37 MGD

Pump 2 ---- Plant needs 46 -70 MGD...or use Pump 4

Pump 3 --- Plant needs 14-37 MGD, or run in parallel with Pump 1 provides 30 - 47 MGD

Pump 4 low ---- Plant needs 40 - 60 MGD

Pump 4 high --- Plant needs 60 - 70 MGD

Misc / Notes (anything that would affect pump or station performance):

Three Intake Structures - all in use at one time (Minimum Intake Elev. is 750)

Three Traveling Screens - all in use at one time

Floor Elevation of Pump Room is 755

Pumps 1 & 3 were installed in 2008 and have VFD drives

Pumps 2 & 4 have cone valves for throttling

Pump 4 has a two speed motor

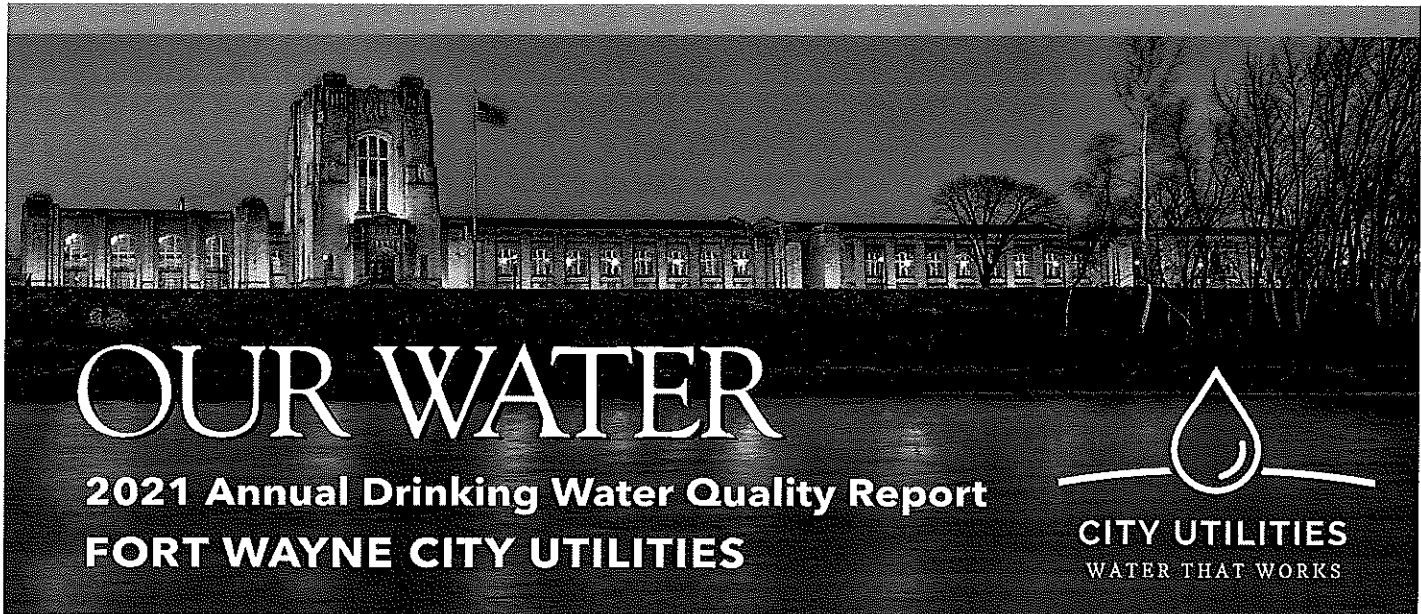
Created By: MW

Revised: 7/2/1905

Printed: 9/23/2016

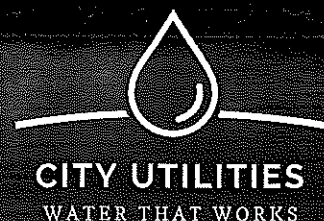
EXHIBIT 2-6
CITY OF FORT WAYNE
WATER UTILITY
SIGNIFICANT USERS

New Haven Municipality
General Motors Llc
Canterbury Green Apartments
Nestle Dreyers Ice
Parkview Hospital
Fort Wayne Community Schools
Mikes Car Wash Inc
Indiana Purdue
Allen County Government,
City Of Fort Wayne - Parks
Prairie Farms Dairy
Valbruna Slater Stainless
Cintas Corporation
Saratoga Potato Chips LLC
Antler Park/National
Southbridge Apartment
FW Anodizing
Maysville RSD
Rbvh Llc
IDC Holdings LLC
Don Halls
Rre Vip Coliseum Park
West Wind Apartments
Three Fountains
Her-Mutt Ltd Partner
Blue Kingfisher, LLC



OUR WATER

2021 Annual Drinking Water Quality Report FORT WAYNE CITY UTILITIES



Letter from Kumar Menon, Director of City Utilities

Hindsight and perfect vision are both 20/20. Looking back, 2020 was a challenging year for all of us. As we navigated our way through the last several months, words like pandemic, social distancing and personal protective equipment became so much more common. Hand washing emerged as the first line of defense against the virus. Along with essential workers, the vital importance of water to our collective fight was reinforced again and again.

All of us made daily adjustments in our personal lives. This was also the case at City Utilities. I can tell you that I have never been prouder of the level of dedication of our essential workers — the women and men of City Utilities — that was demonstrated throughout this difficult period.

Thank you for the notes and social media posts that many of you sent to our City Utilities' team. Your encouragement meant a great deal to our staff as we focused on our work while juggling the countless demands we all faced at home to keep our lives functioning and our own families safe.



Three Rivers Water Filtration staff

No matter if the times are ordinary or extraordinary, our focus was, is and always will be on delivering high-quality water to support public health and safety. As you will see in this report, test results for the 2020 year clearly show our drinking water met or was better than all the water quality standards established by the U.S. Environmental Protection Agency. We run more than 50,000 tests each day through

our lab and our automation processes that perform continuous testing every minute of every day.



Once again, in 2020, City Utilities received national and statewide recognition, receiving awards for water treatment, our water distribution system and a geographic app created to aid us and our public safety partners in fire hydrant maintenance.

Recently we were chosen as the fourth best tasting municipal water at the Berkeley International Water Tasting competition. In addition, this year, in renewing

the lab certification at our Three Rivers Water Filtration Plant, our chemists received a perfect (20/20) score on certification testing.

Recognition for our efforts is rewarding, but the awards mean nothing unless we remain laser focused on making improvements that support your family, your neighborhood and our community.

I can promise you we will continue to produce high-quality, safe water and invest in infrastructure improvements to support the entire system.

In 2020, City Utilities invested more than \$100 million in water, sewer and stormwater improvements. In hindsight, our community's investments in underground infrastructure may have been less than enough in past decades. However, looking back over the last dozen years, our investments in infrastructure have significantly benefited our neighborhoods and local businesses. Looking forward, our vision is to strengthen all our infrastructure to meet future demands of our community.

In 2020, we treated and delivered more than 13 billion gallons of water through our 1,428 miles of water main pipes. That's a billion gallons more than in 2019.

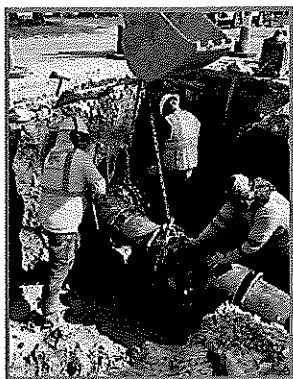
Treating and delivering high-quality water to you and your family is a responsibility we take very seriously. Clean water is our core mission.

The dedication, resilience and expertise of every City Utilities' employee are there to see in every drop of water we produce and supply. It is the pledge of excellence we renew every day.

Looking forward, you will clearly see our vision and mission's impact across 2021 as we continue our efforts to sustain our system, enhance our neighborhoods and promote the growth and development of Fort Wayne, Allen County and Northeast Indiana. Thank you for trusting us through 2020. Here's to the future.

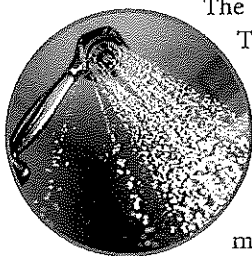
Supporting Neighborhoods

Nationwide, underground infrastructure has been ignored for decades. City Utilities is committed to replacing aging infrastructure. We are two and a half years into an aggressive commitment to replace 70 miles of aging water mains by 2024. In 2020, new water mains were built in the neighborhoods of Southwood Park, Fairmont, Crestwood Colony, Hamilton, and Frances Slocum. These new pipes will support the neighborhood for 75-100 years. In 2021, work will continue throughout the community with main replacements and extensions.



Water Qualities that Matter to You

City Utilities is committed to providing great water and to adjusting the water treatment process as necessary to ensure consistency in water quality. Occasionally, substances are found in drinking water that may cause taste, color and odor. Employees at the Three Rivers Water Filtration Plant work diligently to anticipate these changes in river water quality and adjust the treatment process to remove as much of the taste and odor as possible from the water. This is done by adding powdered activated carbon to the treatment process and adjusting the balance between various types of disinfecting chemicals being used. For more information on taste, odor or color of drinking water please contact City Utilities by calling 311. City Utilities posts an indicator of current taste and odor of our water at drinkingwater.cityoffortwayne.org.



The feel of water is determined by the softness.

The plant softens the water sent to customers using powdered calcium hydroxide (lime).

The lime causes a chemical reaction that helps to remove calcium and magnesium – the naturally occurring minerals that cause hardness in water. Water hardness is measured in milligrams of calcium and magnesium per liter.

Very soft water may be from 0-75 mg/L of hardness. Hard water has between 150 and 300 mg/L of hardness. Fort Wayne's water had an average hardness of 116 mg/L in 2020 and is considered moderately soft.

With moderately softer water, soaps and detergents create more suds, so you use less. Softer water has been found to extend the life of water-using appliances such as ice makers and dishwashers by as much as 30%.

The Board of Public Works reviews and approves contracts for utility construction projects that impact how your drinking water is treated. The Board meets every Tuesday at noon at Citizens Square, 200 E. Berry Street, Fort Wayne, Indiana. The meetings are open to the public and are on Public Access TV.

Information about Lead

Lead in City Utilities drinking water primarily comes from materials and components used in water service lines and interior plumbing; therefore, lead levels in a customer's water vary depending on the kinds of pipes and plumbing fixtures present in homes and businesses. City Utilities does not control the variety of materials used in plumbing components inside homes and businesses. However, we are taking steps to reduce lead levels in private plumbing through service line replacements and a new treatment process.

In 2019, City Utilities began using orthophosphate in our treatment process to reduce levels of lead found primarily in water service lines, the pipe from the curb to the home, and pipes and hardware inside homes and businesses. Orthophosphate forms a protective layer inside lead service lines and plumbing, creating a barrier between the lead pipes and the water flowing through them. This process is proving effective at reducing lead levels.

In testing water samples from around the community we found results for 2020 well within the regulatory limit. Our result was 3.1 ug/L, compared to an allowable EPA level of 15 ug/L.

City Utilities is taking additional steps to reduce lead levels by offering customers prequalified contractors and financing to help residents with lead service line replacements at an agreed to, lower price. More than 430 property owners have signed up to date.



Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Until you can eliminate the lead in your private plumbing, you can minimize your potential for lead exposure by letting the water run before using it. Turn on the cold water and let it run for 30 seconds to two minutes before you use the water for drinking or cooking. If you are concerned about the level of lead in your water, you may wish to have your water tested by a private laboratory. Information on lead in drinking water, testing methods and other steps you can take to minimize exposure to lead is available from the Safe Drinking Water Hotline 1-800-426-4791 or at www.epa.gov/safewater/lead.

Drinking Water and Your Health

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals such as people with cancer who are undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants, can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers.

Cryptosporidium is a microbial pathogen that may be found in surface water such as rivers, lakes and streams throughout the United States. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of the infection include nausea, diarrhea and abdominal cramps. Cryptosporidium oocysts must be ingested to cause disease, and the illness may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people, infants, small children and the elderly are at greater risk for having cryptosporidiosis advance into a life-threatening illness.

Guidelines from the US EPA and Centers for Disease Control and Prevention on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

In 2020, the highest level of Cryptosporidium found in the river water coming into the water filtration plant before it was treated was 0.645 oocysts per liter of water. Cryptosporidium was NEVER found in the drinking water that City Utilities sent out to its customers, as is required by federal standards. That means that 100% of the time, City Utilities' water treatment process was able to remove or deactivate these "germs."

Improving Water Delivery

The fifth phase of the 24-inch water main is under construction in 2021 between Fernhill Avenue and Washington Center Road. Approximately 7,300 feet of pipe is being installed by directional drilling pushing the pipe under Lima Road and Coliseum Boulevard. The new main will improve reliability and fire protection for the neighborhoods and businesses in the area.



Sources of Drinking Water

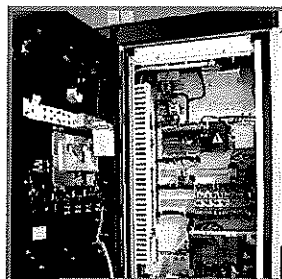
The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential land uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

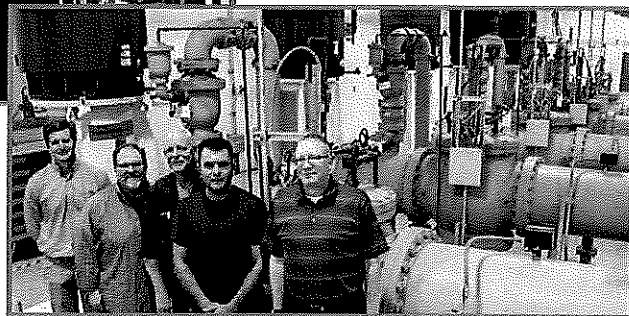
High Service Pump

Engineers and staff at our Three Rivers Water Filtration Plant upgraded a high service pump with a new variable frequency drive in 2020. The new drive will reduce energy consumption, save money and improve the reliability and consistency of our pumping system.



We also replaced the aging under-drains on some of our filter systems. These investments are essential to continue operation at a high level and meet the demands of the future.

◀ Technology allows operators to adjust water flow from the pump



▲ High Service Pump Team:

L-R Andrew Schipper, Jason Anspach, Dan Troxell,
Jon Melton, Stephen Williams

Testing Our Water

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (US EPA) sets regulations that limit the amount of certain contaminants in water that comes from public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The US EPA also requires that public water systems make an annual report, such as this one, to all of their customers. Bottled water producers don't face the same requirement to share information regularly.

The US EPA and the State of Indiana require City Utilities to regularly test the drinking water we produce and send out to make sure that it remains safe. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants in drinking water, at a level below the limits set by regulatory agencies, does not indicate that the water poses a health risk.

The table to the right shows substances that are regulated by the US EPA that were detected in Fort Wayne's finished drinking water between January 1 and December 31, 2020. Results of all tests performed in 2020 met or were better than federal and state standards require. City Utilities tests for many other substances, but because they were not detected, they are not reported here. Some tests are required only once per year because the US EPA and State of Indiana have determined that the concentration of these substances does not change frequently. For tests required only once a year, there is no range of results in the table.

City Utilities also tests for many substances that are not regulated. Monitoring unregulated contaminants helps the US EPA determine where certain contaminants occur and whether the agency should consider regulating those in the future.

Check the City Utilities' website at www.cityoffortwayne.org/utilities for more information.

Award Winning City Utilities

We are honored to receive national and state recognition in 2020. Partnership for Safe Water - 20 Year Director's Award for Water Treatment - The award recognizes high-quality water production and optimization of plant treatment operations. Of the more than 11,400 community-owned surface water utilities in the U.S., City Utilities was one of only 37 to receive the award. Presented by American Water Works Association (AWWA) and EPA.

Partnership for Safe Water - Director's Award for Water Distribution System Operations - presented for a thorough and high level of performance and performance improvement in the water distribution system. Presented by AWWA and EPA.

Excellence in GIS Award. The City Utilities Geographic Information Systems (GIS) team was recognized for "One Dot at a Time. The new App/Dashboard to aid fire hydrant maintenance.



How to Read the Water Quality Table

Maximum Contaminant Level Goal (MCLG):

The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL):

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Treatment Technique (TT):

A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL):

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Detected Level:

The highest level of a contaminant detected for comparison against the accepted level. The detected level could be the highest single measurement or it may be an average, depending on the peak level of a contaminant.

Range:

The lowest to highest values for all samples tested for each contaminant. If only one sample is tested, no range is listed.

HA: Health Advisory level.

NA: Not applicable.

MNR: Monitoring not required but recommended.

ppm: Parts per million or milligrams per liter (mg/L).

ppb: Parts per billion or micrograms per liter (ug/L).

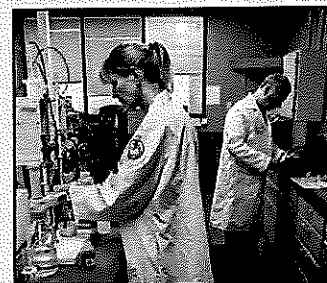
NTU:

Nephelometric Turbidity Units. A measure of water's cloudiness and an indicator of the effectiveness of the water filtration process.

%: Percent of monthly samples that were positive.

Oocyst:

A fertilized gamete of a parasitic organism's sporozoans that is enclosed in a thick wall.



Chemists - Michele Gerke,
Steve Hinkleman

Water Quality Table

Contaminants	Units	MCLG	MCL	Compliance Achieved	Highest Level Detected in Your Water	Range	Typical Sources
Disinfectants & Disinfection By-Products							
Chlorine	ppm	4	4	Yes	1.81	1.39 - 1.81	Additive used in drinking water treatment process to control bacteria
Chlorine Dioxide	ppb	800	800	Yes	190	38 - 190	Additive used in drinking water treatment process to control bacteria
Chlorite	ppm	0.8	1	Yes	0.957	0.387 - 0.957	By-product of drinking water disinfection
Haloacetic Acids (HAA5)	ppb	NA	60	Yes	26 Highest LRAA at site #10	9.2 - 24.7	By-product of drinking water disinfection NOTE: compliance is based on each location's running annual average (LRAA). The location running annual average for the site with the highest individual result of 24.7 was 26
Total Organic Carbon (TOC)	mg/L	NA	TT	Yes	The percentage of TOC was measured each month and the system met the TOC removal requirements	NA	Naturally present in the environment
TTHMs (Total Trihalomethanes)	ppb	NA	80	Yes	37 Highest LRAA at site #1	15.6 - 53.6	By-product of drinking water disinfection NOTE: compliance is based on each location's running annual average (LRAA). The location running annual average for the site with the highest individual result of 53.6 was 37
Inorganic Compounds							
Fluoride	ppm	4	4	Yes	0.8	0.5 - 0.8	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	10	Yes	2.83	0.206 - 2.83	Runoff from fertilizer use; leaching from septic systems; sewage discharge; erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	1	Yes	0.043	0 - 0.043	Runoff from fertilizer use; leaching from septic systems; sewage discharge; erosion of natural deposits
Sodium	ppm	0	NONE	NA	30	9.6 - 30	Naturally present in the environment
Barium	ppm	2	2	Yes	0.018	0.0076 - 0.018	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Thallium	ppb	0.5	2	Yes	0.0	0.0 - 0.0	Discharge from electronics, glass, leaching from ore-processing sites, drug factories
Sulfate	ppm	NA	NA	NA	32	Only one test is required per year	Naturally occurring compound
Microbiological Contaminants							
Total Coliform	% of positive samples monthly	0	5	Yes	2.3	0 - 2.3	Naturally present in the environment
Turbidity	% of samples below TT of 0.3 NTU	100	95	Yes	100	100 - 100	Soil runoff
Turbidity	Highest single measurement in NTU	NA	TT	Yes	0.12	NA	Soil runoff
Cryptosporidium	oocysts/100 L	0	TT	Yes	0	NA	Human and animal fecal waste
Source (Raw) water Cryptosporidium	oocysts/ L	NA	NA	NA	NA	<0.089 - 0.645	Human and animal fecal waste
Volatile Organic Compounds							
NA							
Synthetic Organic Compounds Regulated							
Atrazine	ppb	3	3	Yes	0.3	0.0 - 0.30	Runoff of herbicide used on row crops
Simazine	ppb	4	4	Yes	0.11	0.0 - 0.11	Runoff of herbicide used on row crops
2,4-D	ppb	70	70	Yes	0.3	0.0 - 0.30	Runoff of herbicide used on row crops
Unregulated Compounds							
Metolachlor	ppb	NA	NA	NA	0.0	0.0 - 0.0	Runoff of herbicide used on row crops
Dicamba	ppb	NA	NA	NA	0.1	0.0 - 0.1	Runoff of herbicide used on row crops
Total Hardness	ppm	NA	NA	NA	151	86 - 151	Runoff of limestone and dolomite; Ave. = 116
Inorganic Contaminants							
90th percentile							
Copper (June - Sept 2020)	ppm	1.3	90% of samples taken below AL = 1.3	Yes	0.076	Samples taken = 50 samples Exceeding AL = 0	Corrosion of household plumbing systems
Lead (June - Sept 2020)	ppb	0	90% of samples taken below AL = 15	Yes	3.1	Samples taken = 50 samples Exceeding AL = 1	Corrosion of household plumbing systems; erosion of natural deposits
Radioactive Contaminants							
Combined Radium 226/228	pCi/L	0	5	Yes	1	1 - 1	Erosion of natural deposits
Gross alpha excluding radon and Uranium	pCi/L	0	15	Yes	0.2	0.2 - 0.2	Erosion of natural deposits



FORT WAYNE CITY UTILITIES

Citizens Square, 200 E. Berry, Suite 270
Fort Wayne, IN 46802

PRESORT STANDARD
U.S. POSTAGE
PAID
FORT WAYNE, IN
PERMIT #90

Important Information Sources:

Three Rivers Water Filtration Plant
Jason Anspach - Water Quality Manager
260-427-8311 or 260-427-1303
www.cityoffortwayne.org/utilities

Indiana Department of Environmental
Management (IDEM)
1-888-233-7745
in.gov/idem/cleanwater/2450.htm

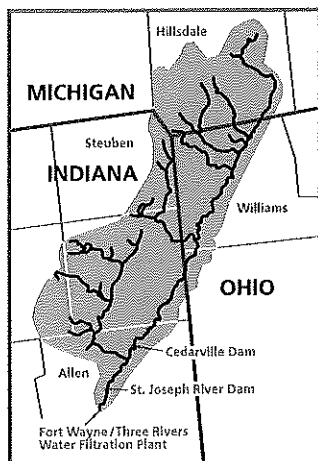
EPA's Safe Drinking Water Hotline
1-800-426-4791
www.epa.gov/drink/

Where Does Fort Wayne's Water Come From?

Water provided to customers of City Utilities comes from the St. Joseph River. Water flows into the river from more than 694,000 acres in northeast Indiana, northwest Ohio and a small part of south central Michigan. The primary land use in the watershed is agricultural.

Fort Wayne draws an average of about 36 million gallons of water each day from the river. This "raw" water is treated, filtered and tested at the Three Rivers Water Filtration Plant before it is distributed to customers.

The Indiana Department of Environmental Management (IDEM) has conducted a Source Water Assessment for City Utilities' water supply. The Source Water Assessment has identified potential sources of contamination. The report also analyzes the hydrological conditions that may affect the susceptibility of the water supply to potential contaminants. More information concerning this Source Water Assessment may be obtained by contacting the Water Quality Manager of the Three Rivers Filtration Plant, Jason Anspach, 260-427-1303.



Protecting Our Water Source

Fort Wayne City Utilities works with partners upstream to protect the quality of water in the St. Joseph River before it gets to Fort Wayne. The St. Joseph River Watershed Initiative is a non-profit watershed planning and protection organization that involves many watershed stakeholders in testing river water quality, developing management plans, implementing best management practices to reduce pollution going into the river and educating property owners.

Do you want to help protect Fort Wayne's drinking water at its source? Check out the St. Joe Initiative's website at www.sjrwi.org for information on ways you can volunteer.

Fire Protection

Some of the investments we make in the water system are specifically intended to increase water capacity and reliability for firefighting. These investments coupled with the professionalism of the Fort Wayne Fire Department, make Fort Wayne's ISO fire protection rating a Class 2. A community's ISO rating helps determine what property owners pay for insurance. As a result of the improved rating, Fort Wayne residents have the potential to see lower property insurance costs.



Hydrant flushing is part of City Utilities' maintaining 11,739 hydrants in the system.

AVISO IMPORTANTE

Este reporte contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda. En español: 311.

City Utilities' Mission

To support public safety and public health and enhance regional economic development by delivering high quality, affordable water, wastewater and stormwater services in ways that protect the environment.

CHAPTER 3
FUTURE SITUATION

POPULATION AND FLOWS

Table 3-1 identifies the historical populations for the City of Fort Wayne and Allen County and projects populations through the year 2040 by using the current information. The data from 1970 to 2010 in Table 3-1 has been obtained from the United States Census Bureau. The projections for Allen County were obtained from STATS Indiana. The projections for Fort Wayne were calculated using linear regression.

TABLE 3-1
POPULATION PROJECTIONS

Year	Fort Wayne	% Increase	Allen County	% Increase	City as % of County
1970	143,260		280,455		51%
1980	272,747	90%	382,961	37%	71%
1990	173,072	-37%	300,836	-21%	58%
2000	205,727	19%	331,849	10%	62%
2010	253,691	23%	355,329	7%	71%
2020	263,886	4%	385,410	8%	68%
2030 (proj.)	271,236	3%	402,948	5%	67%
2035 (proj.)	284,858	5%	411,566	2%	69%
2040 (proj.)	291,192	2%	419,283	2%	69%
2045 (proj.)	299,281	3%	426,351	.02%	70%

The population in the City of Fort Wayne has experienced an increase in population over the years, and that trend is projected to continue with a total projected population of 299,281 by the year 2045. The population is projected to increase approximately 13% over the next 20 years. Because the City currently provides water service to many areas outside of the corporate limits, it is anticipated that the water service area will grow at the same rate as the population. The City currently provides water service to approximately 265,000 people. Increasing this service population by 13% results in a projected service population of approximately 300,000 people in 2014. Because of unforeseen events that may occur in the future, it is impossible to arrive at the exact population that Fort Wayne may serve in 2040; however, a projected design population of 300,000 appears reasonable for estimating future water needs of the City.

Table 3-2 identifies the future projected water needs for the service area in the year 2045. The projections are based on historical water pumping records and estimated growth.

**TABLE 3-2
FLOW PROJECTIONS**

Domestic (D)	21.2 MGD
Commercial (C)	7.5 MGD
Industrial (I)	3.3 MGD
Total DCI	32.0 MGD
Unmetered Authorized Consumption	4.0 MGD
TOTAL DESIGN FLOW	36.0 MGD
 Peak DCI (Peaking Factor = 1.5)	 54.0 MGD
Peak Hourly Flow (Peaking Factor = 2)	72 MGD

REGIONALIZATION

The City of Fort Wayne is the regional provider for potable water for the majority of Allen County. There is no other provider in the area that has the capacity to meet the water demands from Fort Wayne. Therefore, regionalization will not be discussed further.

CHAPTER 4 EVALUATION OF ALTERNATIVES

INTRODUCTION

The City of Fort Wayne has been more actively replacing lead service lines since 2019. Between 2019 and end of year 2021, the City has averaged replacing 475 public and 150 private lead service lines per year. Between 2022 and end of year 2023, the City plans to average 500 public side and 250 private side replacements. Because replacement of private lines(which are owned by the property owner and on private property) is not mandatory, the City has tried to incentivize private replacement, especially in low-income areas.

The City has set a goal to replace all of its remaining lead service lines (LSLR) by the end of year 2044. In order to accomplish this goal, at least 700 lines per year will need to be replaced. With this project, the City can be more aggressive with the replacement program and get a head start on its goals. This project will replace approximately 2,100 lead service lines.

To identify the priority areas for LSLR, the City has utilized Census tract data, GIS data, and lead sampling results. City Utilities established a scoring matrix to prioritize the census tracts in its lead service areas that provided for the following:

- 30 points for lowest MHI in area – MHI in Fort Wayne is \$49,855
- 10 points for highest % poverty in area
- 10 points for highest % of children in homes
- 35 points for highest % of water samples above 10ppb in area
- 5 points for highest % of homes sampled in area
- 5 points for highest % residential customers in area
- 5 points for highest % of lead services in area

The selected areas have been identified as priority areas for LSLR based on the above criteria. While ethnicity was not considered as a part of the scoring, Census Tract 17 has an 85.9% non-white population, Census Tract 16 is 43.2% non-white, and Census Tract 9 is 11.6% non-white.

The Council on Environmental Quality has established a Climate and Economic Justice Screening Tool to assess census tracts along eight different environmental metrics: climate change, clean energy and energy efficiency, clean transportation, affordable and sustainable housing, remediation and reduction of legacy pollution, critical clean water and waste infrastructure, health burdens, and training and workforce development. Based on this tool, the 3 identified census tracts qualify as disadvantaged areas.

Table 4-1 provides the census tracts, in order of scoring, for the proposed LSLR areas. Table 4-2 provides the locations for the proposed LSLR.

TABLE 4-1
LEAD SERVICE LINE REPLACEMENT CENSUS TRACTS

Census Track Areas	Total Water Service Taps in Area	Est. Lead Services in Area (max)	MHI of Area	Area % Poverty	% of Pop. Age 0-17	Lead Sample Results in Area - % above 10ppb	% Samples of Homes	% Residential	% of Taps in Area Est. to be Lead (max)
Tract 16	939	739	\$24,146	34.6%	35.4%	29.4%	16.5%	88.0%	78.7%
Tract 17	520	468	\$22,722	40.9%	43.2%	19.8%	1.9%	99.1%	90.0%
Tract 9	1238	880	\$34,239	44.8%	20.8%	34.7%	1.8%	98.3%	71.1%

TABLE 4-2
LEAD SERVICE LINE REPLACEMENT LOCATION

	Quad	Civil	Township	Range	Section
Census Tract 16	FW East	Adams	30N	13E	7, 8, 17,18
	FW West	Wayne	30N	12E	12
Census Tract 17	FW East	Adams	30N	13E	7
	FW West	Wayne	30N	12E	12
Census Tract 9	FW West	Wayne	30N	12E	3,4
	FW West	Washington	31N	12E	33, 34

The City has developed a 5-year replacement plan for water mains. Most of the mains in these census tracts are beyond the City's 5-year replacement plan; however, a few of the water mains may be considered for replacement concurrently with the lead service line work. If these mains are replaced, they will be replaced utilizing local funds.

EVALUATION OF FEASIBLE ALTERNATIVES

The following alternatives will be evaluated:

- No Action
- Lead Service Line Replacement

No Action

The "no action" alternative is not a feasible alternative. If no action is taken, the customers will continue to utilize lead service lines.

Lead Service Replacement

With this option, the City will improve the service to the affected customers by increasing the safety of their water.

RATIONALE FOR ALTERNATIVE SELECTION

As previously identified, replacement of lead service lines City will improve the service to the affected customers by increasing the safety of their water.

RECOMMENDED ALTERNATIVE

The recommended alternative is the replacement of lead service lines in the identified areas.

Table 4-3 identifies the project cost estimate for the LSLR. The City utilizes a work allowance for these projects instead of contingencies. Because the City does a significant quantity of water main replacements every year, the potential for change orders is minimized, and a 10% contingency is not necessary.

Design of these projects is done in-house; therefore, no planning and design costs are included in the total cost estimate.

**TABLE 4-3
LEAD SERVICE LINE REPLACEMENT
ESTIMATED PROJECT COSTS**

Description	QTY	UNIT	Unit Price	Extension
Mobilization and Demobilization	1	LS	\$300,000	\$300,000
Maintenance and Protection of Traffic	1	LS	\$200,000	\$200,000
Video Documentation of Conditions	1	LS	\$100,000	\$100,000
Restoration	1	LS	\$300,000	\$300,000
LSLR - Public Side	2087	EA	\$2,000	\$4,174,000
LSLR Private Side	2087	EA	\$2,400	\$5,008,800
Subtotal Construction				\$10,082,800
Work Allowance				\$100,000
Total Construction				\$10,182,800
CM&I				\$706,000
Legal Financial				\$302,500
Subtotal Non-Construction				\$1,008,500
Total Project Cost				\$11,191,300

CHAPTER 5 ENVIRONMENTAL IMPACTS

DIRECT AND INDIRECT IMPACTS

Disturbed And Undisturbed Land

The lead service lines will be replaced by horizontal directional drilling when feasible. Refer to Figure 1-2 for the overall location of the lead service line replacement areas. Figures 5-1a through 5-1c provide aerial views of each of the locations. All work will take place in areas previously disturbed by the installation of the original water service facilities.

Historic And Architectural Resources

A copy of the SHAARD map for each area is provided in Figures 5-3a through 5-3c. Many of the areas contain historic structures. Two of areas are located in or adjacent to historic districts. There will be no impact to the structures and the impact to the surrounding area will be temporary and minimal. Within the yards of lead service line replacements, only a small (2' by 2') hole will need to be excavated so that the new service line can be connected to the water main. The yards will be returned to their original condition as a part of the construction, and any impacts on the yards will be temporary and minimal.

There are no known archeological sites or National Natural Landmarks within the project area. The construction and operation of the proposed project will not impact National Natural Landmarks.

Wetlands

Figures 5-2a through 5-2c provide the wetlands and floodplain mapping for the areas of the proposed lead service line replacements. The lead service line replacement are not located in the wetlands.

Hydrology

Groundwater supplies, sole source aquifers, and drinking water supplies will not be negatively impacted by the proposed projects.

None of the lead service line replacements are located within the 100-year floodplain.

The project will not adversely affect waters of high quality listed in 327 IAC 2-1-2(3), exceptional use streams listed in 312 IAC 2-1-11 (b), Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-2, Salmonid Streams listed in 327 IAC 2-1.5-5(a)(3), or waters on the Outstanding Rivers list (Natural Resources Commission Non-rule Policy Document).

Plants and Animals

There are not any wooded areas, scrub or shrub areas in the locations of the proposed project. The construction and operation of the proposed project will not negatively impact State or Federally listed endangered species or their habitat. Trees and shrubs will not be removed as a part of this construction. The project will be implemented to minimize the impact to non-endangered species and their habitat. Mitigation measures will be implemented as requested by the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service.

Prime Farmland And Geology

The proposed project does not impact prime farmland, and in accordance with the guidance, NRCS was not notified of the project.

Air Quality

The area is in compliance with ozone and other airborne pollutants. This project will not introduce any additional pollutants into the atmosphere. Malodorous fumes and gases will not be discharged into the air as a result of the construction activities or the operation of the proposed work. The construction and operation of this work will not adversely affect ozone levels and will not increase or decrease airborne pollutants. Short-term negative impacts to air quality will include noise and dust during the construction period. There will be no long-term negative impacts to air quality. The contractor will be required to maintain all equipment in good working order to mitigate noise and air pollution caused by faulty operating equipment. If dust becomes an issue, the contractor will be required to water the construction zones to keep airborne particulate to a minimum.

Open Space and Recreational Opportunities

Open space and recreational opportunities will not be negatively affected by the construction or the operation of the proposed project.

Lake Michigan Coastal Program

The proposed project will not affect the Lake Michigan Coastal Zone.

National Natural Landmarks

The construction and operation of the proposed project will not affect National Natural Landmarks.

Secondary Impacts

The City of Fort Wayne through the authority of its Council planning commission, or other means, will ensure that future development, as well as future collection system or treatment works projects connecting to SRF funded facilities will not adversely affect

wetlands, wooded areas, steep slopes, archaeological/historical/structural resources, or other sensitive environmental resources. The City will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental authorities.

Mitigation Measures

To mitigate resident complaints, construction will only be allowed from 7:00 am to 5:00 pm Monday through Friday.

CHAPTER EXHIBITS

Figure 5-1a-c	Location Maps
Figures 5-2a-c	Wetlands/Floodplains Maps
Figures 5-3a-c	SHAARD Maps



Legend



LSLR - CENSUS TRACTS 16 & 17 (WEST)



FIGURE 5-1b



2/23/2022

0 500 1,000 Feet

Legend

- Previous Project - Schele & Raymond
- Public Mains
- Private Mains
- Tract 17
- Tract 16



LSLR - CENSUS TRACTS 16 & 17 (EAST)

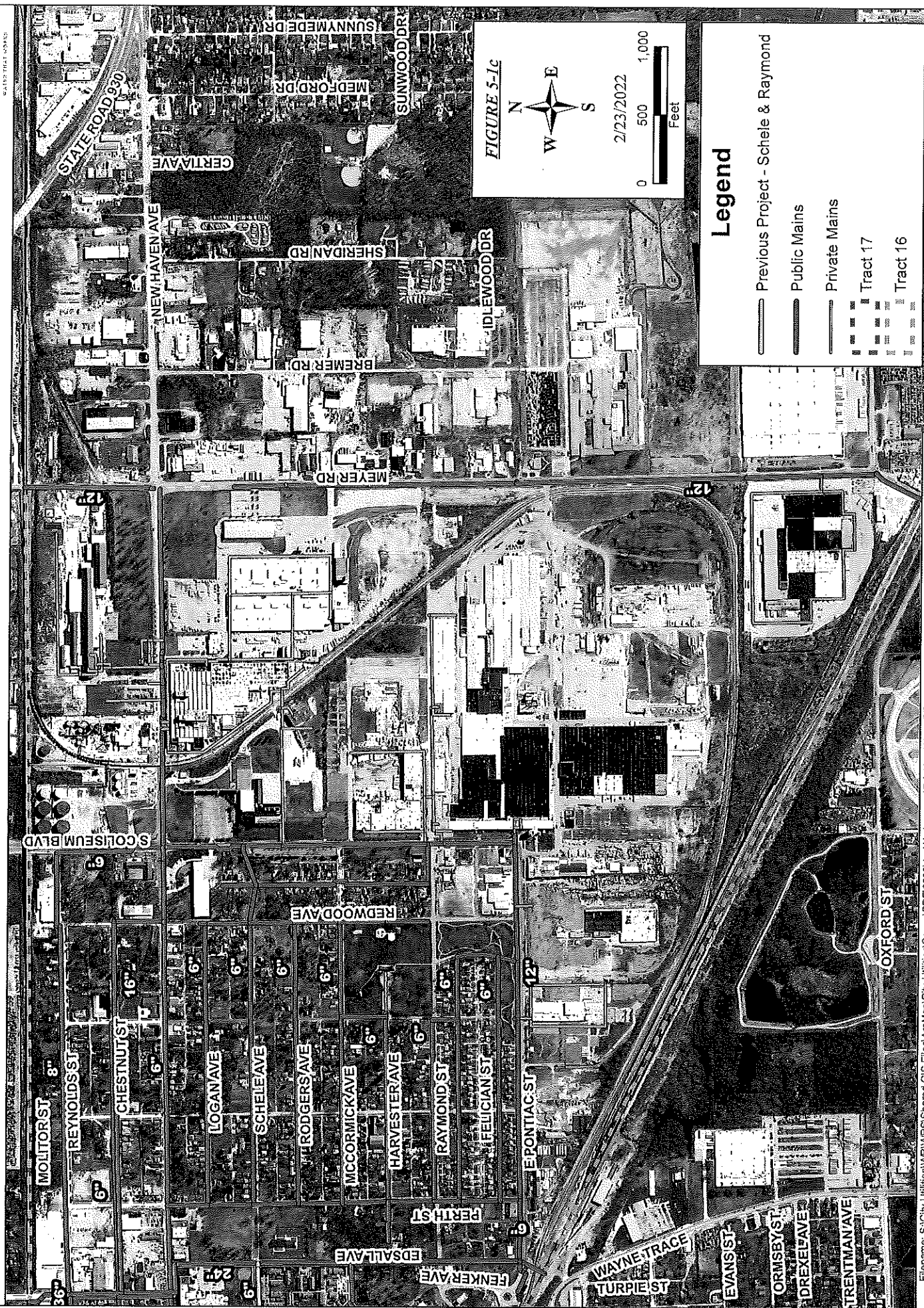


FIGURE 5-1c



2/23/2022



Legend

- Previous Project - Schele & Raymond
- Public Mains
- Private Mains
- Tract 17
- Tract 16



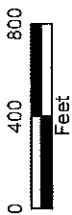
LSLR - CENSUS TRACT 9



FIGURE 5-2a



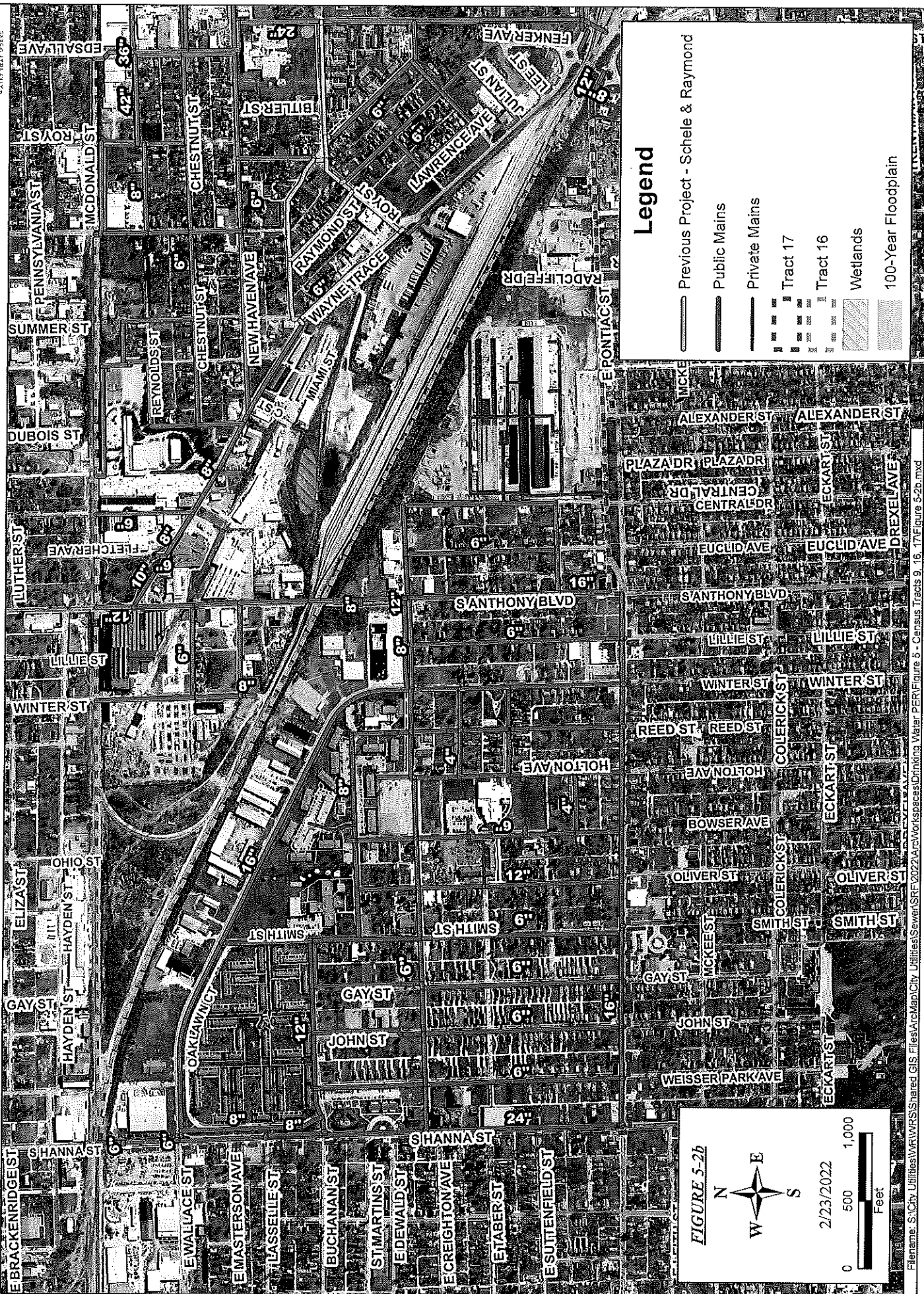
2/23/2022



Legend

- Previously Replaced - Steep Cherokee Area
- Water Mains
- Census Tract 9
- Wetlands
- 100-Year Floodplain

LSLR - CENSUS TRACTS 16 & 17 (WEST)





LSLR - CENSUS TRACTS 16 & 17 (EAST)

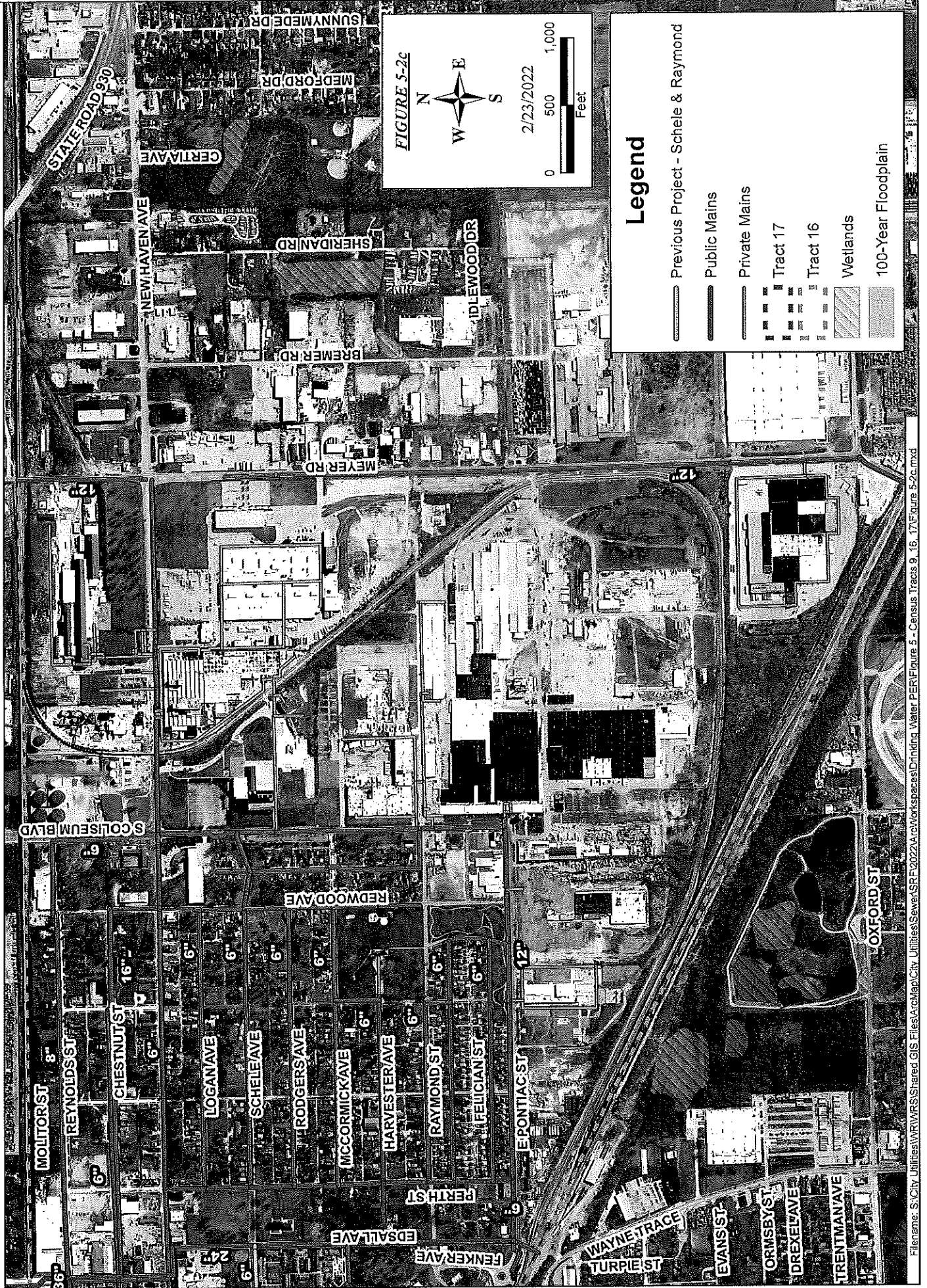


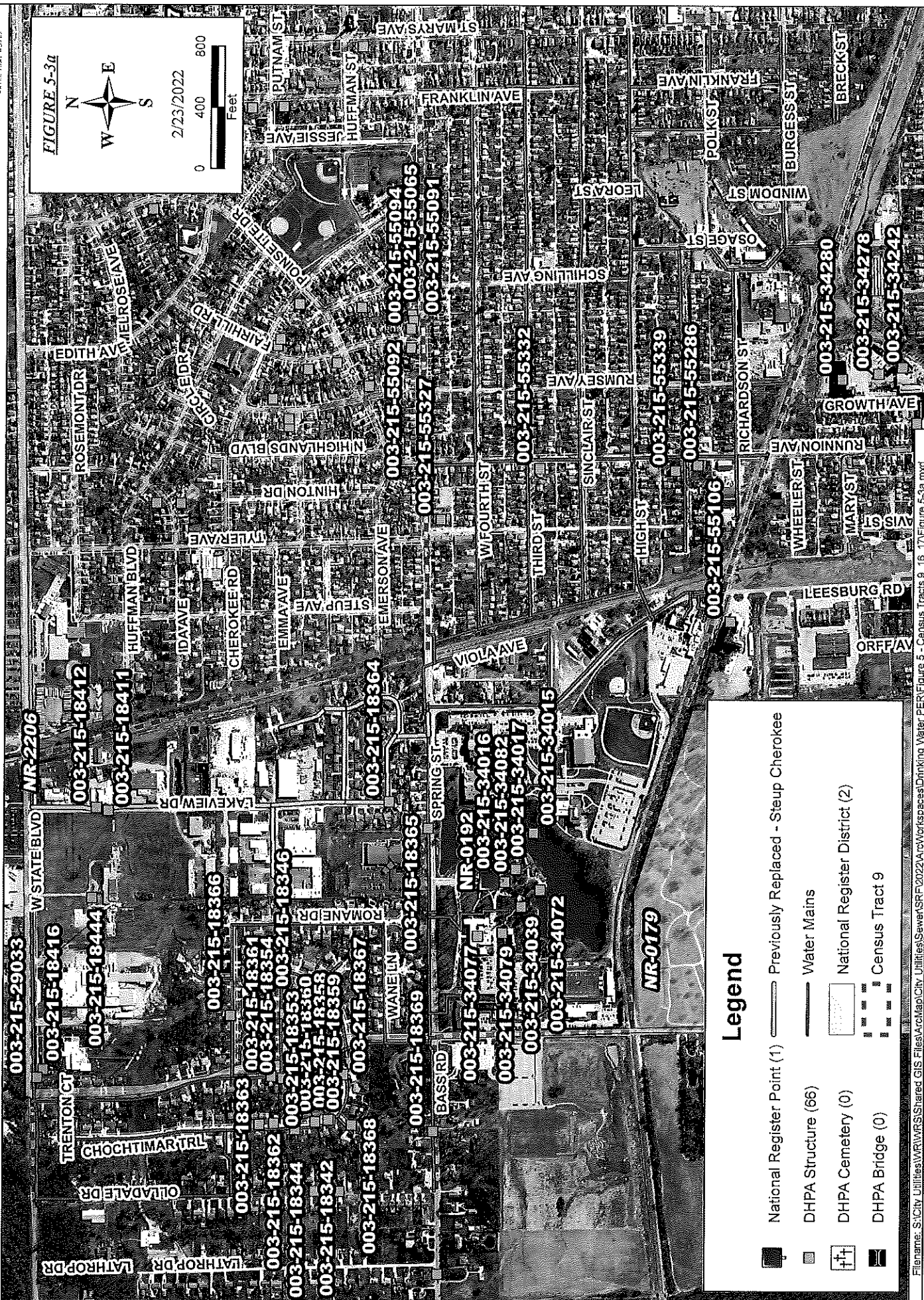
FIGURE 5-2c

2/23/2022

0 500 1,000
Feet

Legend

- Previous Project - Schele & Raymond
- Public Mains
- Private Mains
- Tract 17
- Tract 16
- Wetlands
- 100-Year Floodplain



Filename: S:\City Utilities\WRI\WRS\Shared GIS Files\ArcMap\City Utilities\Sewer\SRF\2020\ArcWorkspaces\Drinking Water PER\Figure 5 - Census Tracts 9, 16, 17\Figure 5 2a.mxd

LSLR - CENSUS TRACTS 16 & 17 (WEST)

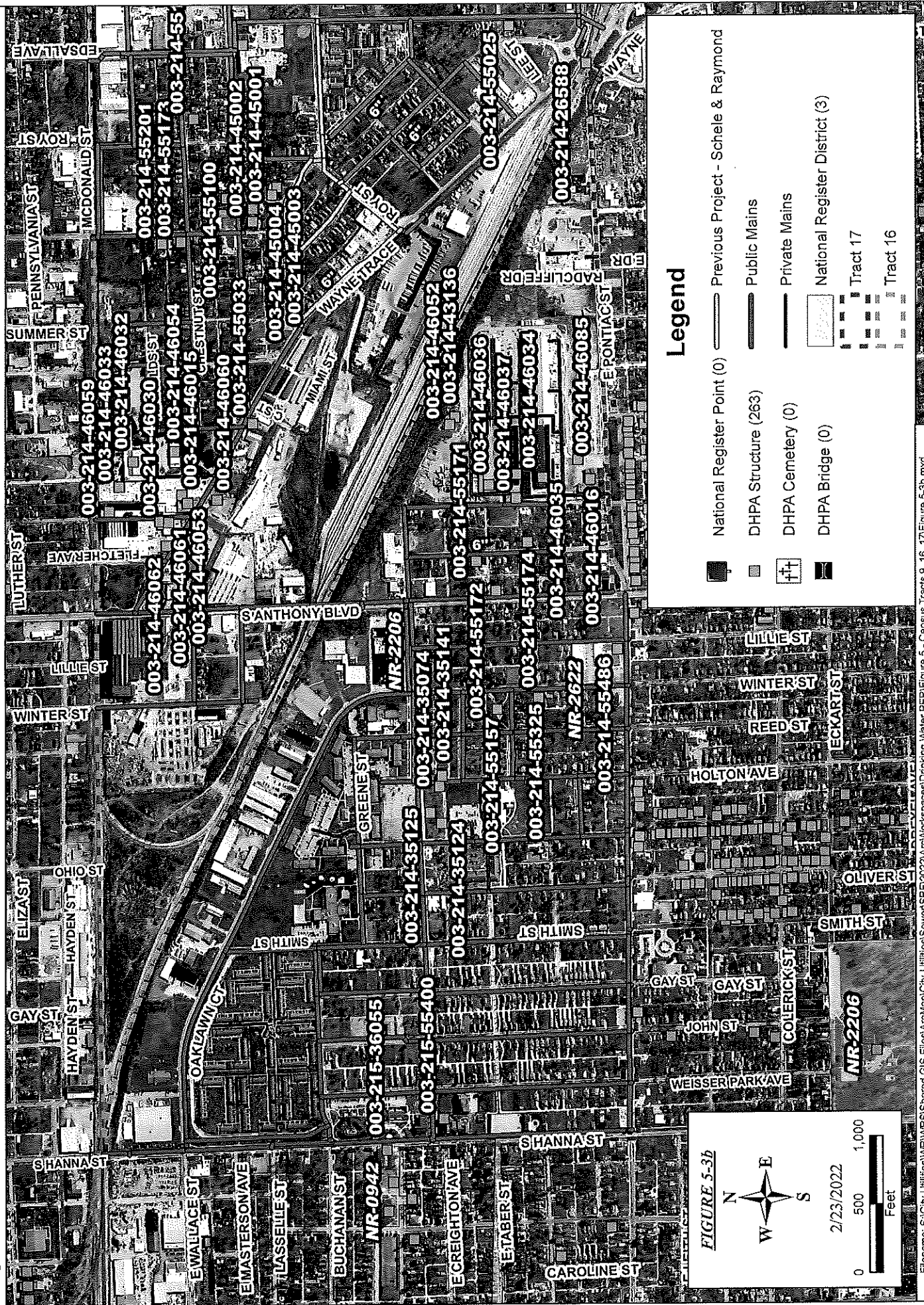




FIGURE 5-3c
2/23/2022

0 500 1,000
Feet

Legend

- National Register Point (0)
- DHPA Structure (58)
- DHPA Cemetery (0)
- DHPA Bridge (0)
- Previous Project
- Public Mains
- Private Mains
- National Register District (1)
- Tract 17
- Tract 16

Parcel Numbers:
003-214-26010, 003-214-55508, 003-214-24233, 003-214-27314, 003-214-24242, 003-214-24234, 003-214-24225, 003-214-24227, 003-214-24226, 003-214-29004, 003-214-24236, 003-214-24237, 003-214-24239, 003-214-24238, 003-214-24224, 003-214-24241, 003-214-24235, 003-214-24240, 003-214-55024, 003-214-55169, 003-214-55022, 003-214-55025, 003-214-55049, NR-2206

Street Names:
Molitor St, Reynolds St, Chestnut St, Logan Ave, Scheele Ave, Rodgers Ave, McCormick Ave, Harvester Ave, Raymond St, Felician St, Wayne Trace, Turpie St, Evans St, Ormsby St, Drexel Ave, Trentman Ave, Oxford St

Filename: S:\City Utilities\WRI\WRS\Shared GIS Files\ArcMap\City Utilities\Sewer\SRF\2022\ArcWorkspaces\Drinking Water PER\Figure 5 - Census Tracts 9, 16, 17\Figure 5-3c.mxd

CHAPTER 6
PROPOSED PROJECT

SELECTED PLAN COMPONENTS AND PROCESSES

The proposed project will replace approximately 2,100 lead service lines in the identified census tracts. The service lines will be replaced by directional drilling and, as a result, there will be minimal disruption to the pavement and lawns.

Project Costs

Table 6-1 identifies the cost estimates for the lead service line replacement. The City utilizes a work allowance for these projects instead of contingencies. Because the City does a significant quantity of water main replacements every year, the potential for change orders is minimized, and a 10% contingency is not necessary. There may be more than one contractor selected to complete this work.

Design of these projects is done in-house; therefore, no planning and design costs are included in the total cost estimate.

TABLE 6-1
LEAD SERVICE LINE REPLACEMENT
ESTIMATED PROJECT COSTS

Description	QTY	UNIT	Unit Price	Extension
Mobilization and Demobilization	1	LS	\$300,000	\$300,000
Maintenance and Protection of Traffic	1	LS	\$200,000	\$200,000
Video Documentation of Conditions	1	LS	\$100,000	\$100,000
Restoration	1	LS	\$300,000	\$300,000
LSLR - Public Side	2087	EA	\$2,000	\$4,174,000
LSLR Private Side	2087	EA	\$2,400	\$5,008,800
Subtotal Construction				\$10,082,800
Work Allowance				\$100,000
Total Construction				\$10,182,800
CM&I				\$706,000
Legal Financial				\$302,500
Subtotal Non-Construction				\$1,008,500
Total Project Cost				\$11,191,300

Project Schedule

PER Submittal	March 2022
Anticipated PER Approval	November 2022
Complete Design	November 2022
Bid Opening	February 2023
IURC Approval	March 2023
Loan Closing	April 2023
Begin Construction	May 2023
Construction Completion and Startup	December 2024

Land Acquisition

Land acquisition will not be required for these projects; however, the city will need right of entry from each homeowner to replace the complete lead service line. Exhibits to this Chapter include the initial notification letter, right of entry form, and opt out form.

Contract Operations

The operation of the facilities will be accomplished with City personnel. There is no intention on the part of the City to move towards Contract Operations.

GREEN PROJECT RESERVE/CLIMATE RESILIANCY INITIATIVE

There are no green components associated with this project.

CHAPTER EXHIBITS

- 6-1 LSLR Program Letter to Property Owners
- 6-2 LSLR Program Opt In and Right of Entry Form
- 6-3 LSLR Program Opt Out Form



CITY OF FORT WAYNE

THOMAS C. HENRY, MAYOR

Example mailing date

[REDACTED]
or Current Property Owner

[REDACTED]
WO#Example

Re: Replacement of Privately-Owned Lead Water Service Line

[REDACTED]
City Utilities Project no. WO#Example, Example Project

Dear Property Owner:

Fort Wayne City Utilities has the privilege of providing healthy and safe water service for the residents of Allen County. The Three Rivers Water Filtration Plant produces high-quality water that meets or exceeds Federal and EPA standards. We are proud of the water we provide, but some older homes in our community may have a lead or galvanized service line, which can cause an elevated level of lead in drinking water at those homes. To help remedy this issue, City Utilities is undertaking a project to replace these service lines to residences with new service lines made of safer materials. This mailing is going to residents who have older homes and who may be able to take advantage of financial assistance to replace the service line on their property with safer materials.

Since you own and are responsible for the portion of the water service line from the curb stop valve to your house, we need your permission to replace the service line on your private property. If you agree to allow us into your property to perform this work, and the contractor finds that your water service line is made of lead or galvanized steel, then your water service line will be replaced from the street to your meter. You will be responsible to pay for replacement of your portion of the line however, the replacement is not mandatory. If no lead or galvanized steel is found, or you choose not to replace the service line, no private replacement will occur and you will not be responsible to pay anything.

We understand that replacing a service line is an expense many of us do not plan for. To help, City Utilities has negotiated a price cap and developed a loan plan that will allow you to pay for the replacement over a period of up to ten years. If you wish to have this work performed as part of the City's project, please execute and return the enclosed Special Contract for Lead Service Line Replacement. **The Special Contract must be signed and returned no later than Example deadline date.** Your share of the cost will be \$ **XXXXX.XX** and you will not be billed for the work until the work is

ENGAGE • INNOVATE • PERFORM

CITIZENS SQUARE

200 E. Berry St. • Fort Wayne, Indiana • 46802-1804 • www.cityoffortwayne.org

An Equal Opportunity Employer

complete. You may pay the entire billed amount with no penalty; or you may take advantage of a loan from City Utilities under which you would make monthly minimum payments of \$XX.XX (including annual interest at a rate of X.X%) for a maximum of 10 years.

To replace your water service line, contractors will need to work both inside and outside of your home; however no internal plumbing located after the water meter will be replaced. The replacement will use trenchless methods such as pipe pulling, directional drilling, or pipe bursting wherever possible. Open cut installation will only be allowed with prior Owner approval. When the work is complete the contractor will plant grass, patch asphalt and concrete, and seal the entrance into your foundation or foundation wall if disturbed by the work. All other restoration will not be performed by the contractor and shall be the responsibility of the property owner.

A grounding rod is a device that protects your home from power surges, such as a lightning strike. Most homes have electrical grounding rods installed. However, in some older homes the grounding rods may not be in working condition, may not have been installed at all, or the connections between metal (bonding) inside the home may not be up to code. In these rare cases, the water service line may act as the only path to ground for electricity. In order to perform a full service line replacement, the electrical connection across the meter will be removed. The metal service line will be replaced with HDPE (plastic). This means the water service line will no longer function as a path to ground for your electrical system. For this reason, it is recommended that homes without ground rods and bonding in working condition have electrical grounding and bonding installed prior to the water service line replacement.

For information on the risks associated with lead, please visit EPA's website at: www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

We encourage you to participate in this program to reduce health risks. If you choose not to replace your privately-owned portion of the water service line, the public portion will still be replaced from the water main to the curb stop valve. This partial water service line replacement might temporarily elevate levels of lead in your drinking water. Therefore, if you choose not to replace the service line, City Utilities will provide you with a free filtering pitcher designed to remove lead from the water, as well as recommendations for flushing your interior plumbing. To help avoid your family being exposed to a higher level of lead in your drinking water as the result of a partial lead service line replacement, you would need to use the filtering pitcher for 180 days for any water used in drinking and cooking, and also follow the flushing instructions every day for 90 days following the work.

Thank you for your cooperation with this important public utility project. If you have any questions or concerns, please contact us at (260) 427-1234. If you do not wish to participate, please return the enclosed Acknowledgement and Waiver form. Documents should be returned to the following address:

City of Fort Wayne – City Utilities - Engineering
ATTN: Lead Service Line Replacement
200 E. Berry St., Suite 250
Fort Wayne, IN 46802

Este es un programa de la Ciudad para ayudar a eliminar las tuberías de agua de plomo potencialmente peligrosas a su hogar. Para obtener ayuda, llame a nuestros representantes de servicio al cliente al (260) 427-1234.

ဒီဗြို့တော်ရဲ့ ပရိုဂရမ်က သင်တို့အိမ်က ဘေးအန္တရာယ် ဒီဗြို့တော်ရဲ့ ပရိုဂရမ်က သင်တို့အိမ်က ဘေးအန္တရာယ် ဖြစ်စေနိုင်သည့် ခဲအဆိပ် တက်စေနိုင်သော ရေပိုက်လုံး များ ကိုဖယ်ရှား ပေးဖို့အတွက် ကူညီပေးပါသည်။ အကူအညီယူရင် အောက်ပါ ဖုန်းနံပါတ် ကိုခေါ်ဆိုနိုင်ပါသည်။ ၂၆၀-၄၂၇-၁၂၃၄ဖြစ်စေနိုင်သည့် ခဲအဆိပ် တက်စေနိုင်သော ရေပိုက်လုံး များ ကိုဖယ်ရှား ပေးဖို့အတွက် ကူညီပေးပါသည်။ အကူအညီယူရင် အောက်ပါ ဖုန်းနံပါတ် ကိုခေါ်ဆိုနိုင်ပါသည်။ ၂၆၀-၄၂၇-၁၂၃၄

Special Contract for Lead Service Line Replacement

COMPLETE AND RETURN THIS FORM IF YOU DO WISH TO PARTICIPATE IN THE CITY'S LEAD SERVICE LINE REPLACEMENT PROGRAM.

Cross-Reference Allen County Recorder's Office Document no.: [REDACTED]

LEAD SERVICE LINE REPLACEMENT PROGRAM	Project:	Example Project, WO#Example
	Auditor Parcel ID:	[REDACTED]
	FWCU Account no.:	[REDACTED]
	Notice Date:	Example mailing date

Owner: Return this signed Special Contract for Lead Service Line Replacement ("Special Contract") by **Example deadline date ("Return Deadline")** to confirm your participation in the Lead Service Line Replacement Program ("LSLRP"). If you do not wish to participate in the LSLRP, please sign the Fort Wayne City Utilities Lead Service Line Replacement Program Acknowledgement and Waiver form enclosed herewith.

Return Address: Fort Wayne City Utilities ("FWCU"), 200 E. Berry St., Ste. 250, Fort Wayne, IN 46802 (return envelope enclosed).

"Property"

[REDACTED]

"Owner" (collectively, if more than one)

[REDACTED]

Owner Mailing Address (if different from Property address)

Owner Contact Information

(Required to Schedule Interior Work)

Preferred Contact

_____ cell phone

☐

_____ other phone

☐

Additional Notes (If Any):

(Notes that conflict with the terms of the Special Contract will not be accepted.)

[Signature Pages and Exhibits on Following Pages.]

I/We, the undersigned Owner, have received and read the *Options to Replace Lead Service Line* and hereby elect to participate in the LSLRP. Owner agrees to comply with the terms and conditions of the LSLRP set forth in Exhibit A (Work Cost) and Exhibit B (Terms and Conditions) attached hereto and incorporated into and made a part of this Special Contract.

Signed by Owner on the date indicated below, effective on the signature date or if not dated, on the date of receipt by the FWCU ("**Effective Date**"). Signature must be notarized.
(MUST BE SIGNED IN FRONT OF A NOTARY BY EACH PROPERTY OWNER NAMED ON DEED)

Signature

Printed name (and title, if Owner is a business entity)

Date

Signature

Printed name

Date

Signature

Printed name

Date

Signature

Printed name

Date

CERTIFICATE OF ACKNOWLEDGEMENT

STATE OF INDIANA)
) SS:
COUNTY OF ALLEN)

Before me, a Notary Public in and for said County and State, personally appeared _____, and
acknowledged the execution of the foregoing *Special Contract for Lead Service Line Replacement* as a voluntary
act and deed for the uses and purposes therein contained.

WITNESS my hand and seal this ____ day of _____, 20__.

Notary Public Signature Notary Public Printed Name

My Commission Expires: _____

My County of Residence: _____

This instrument prepared by Brandon Almas, Associate City Attorney, City of Fort Wayne. I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security Number in this document, unless required by law (Brandon Almas).

EXHIBIT A
Work Cost

Work Cost: The “**Work Cost**” shall be defined as the total cost of the private side lead service line replacement project, as illustrated below. If nine or more replacements occur within a ½ mile of your property, the price of replacement is cheaper due to economy of scale. If this bulk pricing cannot be achieved, the low volume pricing will be used as illustrated by the Work cost breakdown. The Work Cost excludes additional costs that may need to be incurred by Owner, e.g. in providing access or restoring items that Owner is responsible for as defined in the *Terms and Conditions* in Exhibit B herein below. To avoid unexpected delays in Work or termination of the contract, Owner must remove obstacles prior to the Work per the Owner Obligations (defined in the *Terms and Conditions*).

Owner’s Share: The Work breakdown based on the currently selected contractor is shown below. If the selected contractor is changed, the property owner will be notified of any price changes before Work starts and may refuse the Work at that time. Owner will not be billed for the Work until Work is completed. After Work is completed, City Utilities will send a statement and provide 60 days to pay in full before interest starts to accrue. Payments may be made over 10 years.

WORK COST BREAKDOWN		
Can be paid in full or financed for up to 10 years		
Description of Work	Total Cost (Without Interest)	Monthly cost over 10 years with 7.5% interest*
Water Service Line Replacement Low Volume Pricing (8 or Less Replacements in ½ Mile)	Contractor’s low volume pricing	Contractor’s price split into monthly payments over 10 years with 7.5% interest
Water Service Line Replacement Bulk Pricing (9 or More Replacements in ½ Mile)	Contractor’s bulk price	Contractor’s price split into monthly payments over 10 years with 7.5% interest

* Interest rate is Wall Street Journal Prime Rate plus 2.000 percentage points, determined as of April 23, 2019

EXHIBIT B
Terms and Conditions

1. **Program Benefits.** To qualify for the different types of benefits available under the LSLRP, the Owner must meet the eligibility criteria for the applicable program benefits.
 - a. **Financing.** Financing is available to all residential property owners with a 5/8" or 3/4" meter who are customers of FWCU. Financing is offered over a term of ten (10) years with fixed interest at the WSJ prime index plus two percentage points, determined as of April 23, 2019.
 - b. **Program subject to funds.** Owner agrees that any benefits available under the LSLRP are subject to availability of funds. FWCU shall have no obligation to provide benefits under the LSLRP if funds are not available.
2. The **"Work"**. The work shall be defined as any and all necessary activities to replace the existing lead or galvanized steel service line with a new HDPE service line from the curb stop valve to approximately 6-inches beyond the outlet valve of the meter setting in the building (or if exterior meter, to the first interior valve), including the following:
 - a. **"Exterior Work"**. The Exterior Work shall include:
 - i. Measurement, surveying, and marking in preparation for installation.
 - ii. Excavation to install the HDPE service line. Trenchless methods will require excavation of a minimum of one 4-foot x 6-foot pit at the curb stop valve. Additional pits may be necessary if boring of a new route through the soil is necessary. If FWCU determines that trenchless methods are not possible due to soil and other conditions on the Property, a 2-foot wide trench will be excavated from the curb stop valve to the point of entry of the service line into the building with prior Owner approval.
 - b. **"Interior Work"**. The Interior Work shall include all activities inside the building on the Property necessary to complete the Work. This may include:
 - i. Enlarging the existing entry point or creating a new entry point through the building wall or basement floor to accept the new HDPE service line, if necessary.
 - ii. Cut and remove existing lead or galvanized steel service line at the water meter setting, install a new shutoff valve, connect the new HDPE service line to the existing premise plumbing, and install new meter setting supports as needed.
 - iii. If an electrical grounding system is found to be attached to the lead service line, it will need to be removed to perform the Work. Reinstallation of the electrical grounding shall be the responsibility of the Owner. Owner expressly agrees that FWCU shall not have any liability related to the manner of installation or failure to complete such installation of the electrical grounding and bonding, and Owner hereby waives and releases any and all such claims against FWCU.
 - c. **Restoration.** Following installation of the new HDPE service line, the Property will be restored by FWCU as follows:
 - i. Backfilling of excavated lawn areas with existing soils and include no less than 4-inches of topsoil.
 - ii. All impacted lawn areas will receive seed and straw during the growing season. Watering grass seed will be the responsibility of Owner.
 - iii. All impacted concrete and asphalt paved surfaces will be repaired or replaced with appropriate materials similar to those that were removed to allow the work to be completed.
 - iv. Entry point into the foundation wall or slab will be sealed to prevent water infiltration.
 - v. Any other restoration required will not be performed by FWCU (including its agents, employees, and contractors). FWCU shall not be responsible for damage to nor required to restore any personal property, landscaping or improvements including without limitation, plantings, pavers, drywall, flooring, ceilings, paneling, or furniture disturbed in order to perform the Work due to Owner's failure to remove such items as required in Section 3: Owner's Obligations.

- d. Inspection. FWCU reserves the right to inspect the Work to verify compliance with applicable laws and regulations, including FWCU design standards.
- e. System Flushing. FWCU will flush the system using an outside spigot or utility sink in the building to fully flush the new HDPE service line for at least ten (10) minutes. Further flushing recommendations may be provided to Owner following completion of the Work.

3. **Owner's Obligations.**

- a. Prerequisites to Work. Owner shall be provided advance notice of the date(s) of the Work ("**Work Date**"). Prior to the Work Date, Owner shall remove any personal property, landscaping and improvements that may interfere with or inhibit access to the Work areas, including but not limited to those described below.
 - i. Exterior access. Owner shall remove and provide protection for any exterior items required to perform the Work, including without limitation any walls, sculptures, ornaments, or furniture. Owner is responsible for digging up living plant material prior to the start of construction and providing necessary protection for the plants during construction. Any replanting or reinstallation of those items to the original locations will be the responsibility of Owner upon completion of the Work.
 - ii. Interior Work area. Owner shall remove and provide protection for any and all personal property, improvements or other obstructions (including stored items, furniture, drywall, paneling, etc.) necessary to provide access to the Interior Work area, which includes the area around the interior water meter and the service line between the meter (or first interior shutoff valve, if an exterior meter) and the point at which the water service line enters the building. The reinstallation of those items to the original locations will be the responsibility of Owner upon completion of the Work.

On the Work Date, any landscaping, improvements, personal property or other items obstructing access to or impeding performance of the Work may be grounds for termination of this Special Contract or delay the Work until obstructions are removed by Owner. If agreed upon by Owner and Contractor, the obstructions material may be removed by the Contractor in order to perform the Work, and Owner hereby waives all claims against FWCU for damage due to removal of items necessary to perform the Work, as it is Owner's responsibility to remove such items prior to the Work Date. Additional contractor costs for removal of obstructions cannot be added to the Work Costs in accordance with Exhibit A (Work Cost) to this Special Contract unless approved by FWCU. If FWCU determines such additional costs cannot be added to the Work Costs, the Owner will be responsible for paying such costs to the Contractor directly.

- b. Ownership and Maintenance of Service Line. Notwithstanding Owner's participation in the LSLRP, Owner acknowledges that Owner retains ownership of and repair responsibility for the water service line at all times following completion of the lead or galvanized steel service line replacement project.
- c. Payment of Owner's Share. Owner shall be responsible for the full amount of fees that may be due for the applicable LSLRP benefits. Owner may prepay all or a portion of the outstanding balance without penalty.
- d. Remedies for Failure to Pay. In addition to any other available statutory remedies, if Owner and/or Owner's individual successors and assigns, fails to pay any amount due under this Special Contract by the applicable due date, FWCU may terminate water service to Owner and/or Owner's individual successors and assigns. In addition, FWCU may place a lien against the Property in an amount equal to the outstanding repayment amount and/or fees, including any attorney fees, court costs, or other expenses associated with collecting the outstanding balance.
- e. Transfer or Sale of the Property. During the Term of this Special Contract, unless amounts due from Owner have been fully paid, Owner shall disclose and provide a copy of this Special Contract to a purchaser under contract to purchase the Property or other potential transferee of the Property. At closing, Owner shall either:
 - 1) assign and shall cause transferee to assume this Special Contract by completing an *Assignment and Assumption Agreement* and provide to FWCU a written copy of the completed *Assignment and*

Assumption Agreement to the LSLRP Program Director 200 E. Berry St., Ste. 250, Fort Wayne, IN 46802; or

2) pay the full amount that is due and owing to FWCU.

Notwithstanding any assignment to the transferee, Owner shall not be released from its obligations to FWCU under this Special Contract; rather, following the date of the assignment, Owner shall be secondarily liable to FWCU for any unpaid costs due to FWCU hereunder.

4. **Covenant to Run with Land; Recording.** Owner's obligations hereunder, including but not limited to the obligation to pay the amounts due to FWCU under this Special Contract, shall be deemed covenants running with the land, binding upon all subsequent owners of the Property until satisfied in full. FWCU may record this Special Contract with the Recorder's Office in Allen County, Indiana. FWCU shall be responsible to pay all recording fees.

5. **Term.** The term of this Special Contract shall commence on the Effective Date and, if not sooner terminated as provided herein, shall automatically expire at such time as the Work has been completed and all payments due from Owner have been paid (the "Term").

6. **Right of Entry.** Owner hereby acknowledges that FWCU (including its agents, employees and contractors), will require access to the Property to complete the Work. Owner hereby grants the following rights to enter upon the Property:

- a. Exterior access. From the Effective Date until the date of completion of the Work, FWCU shall be permitted to enter upon the Property outside of the building from time to time for the purpose of performing the Work.
- b. Interior access. On the Work Date, Owner shall provide access to FWCU for the purpose of performing the Interior Work. Owner or Owner's adult representative shall remain present during the Interior Work. While performing the Interior Work, FWCU may perform needed maintenance and repair or replacement of the City-owned meter setting.

The right of entry granted hereby is executed for the benefit of FWCU (including its agents, employees, and contractors).

7. **Warranty.** Owner acknowledges and agrees that the Contractor selected to perform the Work may offer a warranty on the Work. **OWNER ACKNOWLEDGES AND AGREES THAT FWCU MAKES NO WARRANTY RELATED TO THE WORK AND SPECIFICALLY DISCLAIMS ALL WARRANTIES THAT MAY BE DISCLAIMED UNDER INDIANA LAW INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

8. **Damage; Release.** With the exception of the liabilities expressly stated herein, each party hereby releases and waives claims against each other for damages or injuries resulting from the negligent acts or omissions of the other party, pursuant to the activities under this Special Contract. FWCU shall not be responsible for any damage caused as a result of the Work.

9. **Delays.** FWCU shall make best efforts to perform the Work Monday through Friday, between 7am and 5pm, non-holidays. The following occurrences may require delay or rescheduling of the relevant Work:

- i. Owner's failure to clear obstructions to accommodate the Work.
- ii. Inclement weather.
- iii. Owner's failure to provide access to the Work area.
- iv. Owner's failure to comply with the prerequisites to Work in Section 3 hereof.

10. **Termination.** This Special Contract may be terminated as provided in this Section 10. Following

termination, the Owner shall be responsible for causing completion of the private lead or galvanized steel service line replacement in accordance with applicable laws and regulations.

- a. By Owner. At any time prior to commencement of the Work, Owner may terminate this Special Contract by providing written notice to FWCU, along with a signed copy of Fort Wayne City Utilities Lead Service Line Replacement Project Acknowledgement and Waiver form, at the return address on Page 1.
- b. By FWCU. FWCU shall have the right to terminate this Special Contract with seven (7) days advance notice to Owner at the Owner Mailing Address on page 1 under any of the following circumstances:
 - i. FWCU determines that the service line on the Property is lead-free, as determined in accordance with Indiana law.
 - ii. Title to the Property has changed, unless this Special Contract has been assigned to and assumed by the transferee.
 - iii. Owner fails to provide timely access necessary to perform the Work, or is not present at the time scheduled for replacement, and an alternative date and time cannot be coordinated.
 - iv. Owner's breach of any terms, conditions, representations, or warranties under this Special Contract.
 - v. Without cause at any time prior to commencement of the Work.

11. **Representations and Warranties.** The undersigned represents warrants and covenants to FWCU that the undersigned are all of the owners of the fee simple interest in the Property and have the power and authority to enter into this Special Contract and to carry out all obligations hereunder.

12. **Notice.** All notices given under this Special Contract shall be in writing and delivered personally, by first class United States mail, or by a recognized overnight courier service. Notice shall be sent to Owner at Owner's Mailing Address, and to the FWCU at the Return Address on page 1. If Owner sends a notice to FWCU alleging that FWCU is in breach of this Special Contract, Owner shall simultaneously send a copy of such notice by U.S. certified mail to: City Law Department, 200 E. Berry St., Ste. 430, Fort Wayne, IN 46802.

13. **Waiver.** Any failure by FWCU to enforce its rights under this Special Contract shall not constitute or operate as a waiver of any other breach of such provision or of any other provisions.

14. **Forum selection; Governing Law.** This Special Contract shall be governed by and construed in accordance with the laws of the City of Fort Wayne and the State of Indiana. All actions regarding this Special Contract shall be brought in the circuit or superior courts in Allen County, Indiana, and Owner agrees that venue in such court is proper. Owner hereby waives trial by jury with respect to any and all matters arising under this Agreement.

15. **Severability.** If any part of this Special Contract is held by a court of law to be void, illegal or unenforceable, such part shall be deemed severed from this Agreement, and the balance of this Agreement shall remain in full force and effect.

16. **Privacy Notice.** Owner acknowledges and agrees that information provided to or obtained by FWCU, including, without limitation, telephone numbers, email addresses, mailing addresses, specific work requests or other comments relevant to the Work, and information about existing piping materials on Owner's property, may be shared with third parties solely for purposes related to the Work. Such information will not be shared for any other purpose. By signing up to participate in the Lead Service Line Replacement Program, Owner consents to the sharing of such information solely for purposes related to the Work.

[END OF EXHIBIT B"]

Fort Wayne City Utilities Lead Service Line Replacement Program
Acknowledgment and Waiver
CUE WO#Example

**COMPLETE AND RETURN THIS FORM ONLY IF YOU DO NOT WISH TO PARTICIPATE
IN THE CITY'S LEAD SERVICE LINE REPLACEMENT PROGRAM.**

ADDRESS: [REDACTED]

Your property has been identified by Fort Wayne City Utilities ("FWCU") as possibly containing leaded alloy or galvanized plumbing (valves, piping, solder, faucets, etc.). In certain circumstances, lead plumbing can corrode and leach lead into the user's drinking supply. The United States Environmental Protection Agency ("EPA") and the Indiana Department of Environmental Management ("IDEM") have determined that lead in drinking water can increase a person's exposure to lead, which can have adverse effects on health. More information about the adverse effects of lead can be found on the EPA's website at www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water.

To help minimize the risks of exposure to lead from water service lines, FWCU has implemented a Lead Service Line Replacement Program ("LSLRP"). Through the LSLRP, FWCU intends to replace water service lines containing lead and/or galvanized steel. FWCU will also offer homeowners an opportunity to finance the cost of the lead service line replacement over a period of up to ten (10) years.

Because your property has been identified by FWCU as possibly containing lead or galvanized plumbing, it is recommended that you participate in the LSLRP. You may do so by signing and returning the Special Contract for Lead Service Line Replacement that has been provided to you. Please note that the benefits available under the LSLRP are offered for a limited time. FWCU will excavate a hole for the public replacement regardless of Owner involvement. Using the excavation to also replace the private portion reduces the labor costs and inconvenience of replacing the service line later. Once FWCU replaces the water mains and public service lines in your area there will be no need for this excavation and this cost saving opportunity is lost.

If you do not elect to participate in the LSLRP, FWCU will proceed with a partial lead service line replacement—e.g., FWCU will replace the water public service line, but will not replace the private service line on your property from the curb stop valve to your house. This means that the risk of lead exposure will still exist. A partial replacement can agitate the existing lead pipe, leading to elevated lead levels for a period of time. Following the partial lead service line replacement, the American Water Works Association ("AWWA") recommends the following steps to minimize the risks of lead exposure:

- Do not consume water, ice, or use hot water until you have finished flushing
- Remove aerators or screens including shower heads from all faucets used for flushing
- Beginning with the lowest level of your home, fully open the cold water taps (showers, bathtubs, sinks, laundry tubs, hose-bibs, etc.)
- Keep lower level faucets on and move to each higher floor fully opening faucets
- Let the water run for at least thirty (30) minutes after all faucets are open
- After thirty (30) minutes turn off the first faucet opened and continue to turn off other faucets in the same manner you turned them on
- Clean or replace aerators/screens on shower heads, faucets, etc.

Additionally, FWCU will provide you with a free filtered water pitcher that should be used for a period of 90 days after the partial replacement.

If you have any questions, please contact our Customer Support staff at (260) 427-1234.

By signing below, you acknowledge and agree that you have read this Waiver, understand the risks associated with lead and/or galvanized plumbing, and decline to participate in Fort Wayne City Utilities' Lead Service Line Replacement Program.

Homeowner printed name: _____

Phone (optional): _____

Homeowner signature: _____

Date: _____

Please see optional survey below, your feedback is valuable for our continued efforts to improve this program.

Reason for declining work:

- ☐ Too costly
- ☐ Do not want the disruption
- ☐ Service line is not lead or galvanized steel
- ☐ Other (please specify below)

CHAPTER 7

LEGAL, FINANCIAL & MANAGERIAL CAPABILITIES

RESOLUTIONS

Specific resolutions must be passed by the Board of Works to comply with the requirements of the State Revolving Loan Fund. These two resolutions are the Signatory Authorization and the PER Acceptance. The Signatory Resolution is attached as an Exhibit to this Chapter. The PER Approval Resolution will be submitted to the Board for approval after the public hearing.

LAND ACQUISITION

Land acquisition is not required for the proposed lead service line replacement; however, the City will need to acquire Right of Entry from each property owner to replace the private side lead service lines. A copy of the Right of Entry form is attached.

MANAGERIAL AND FINANCIAL CAPABILITIES

The City of Fort Wayne has the managerial and financial capabilities to finance and manage this project. The City has provided water service since the 1930's and continues to meet Federal and State water quality requirements.

CAPITAL ASSET MANAGEMENT PROGRAM

The City of Fort Wayne has a Capital Asset Management Plan that meets or exceeds the requirements in SEA 362 and the guidelines required by the Indiana Finance Authority. The certification form is attached at the end of this chapter.

PROJECT COSTS AND FINANCING

Table 1-1 identifies the project costs and financing information using an SRF loan.

TABLE 7-1
SRF PROJECT COSTS AND FINANCING

Proposed Project Costs	
Supply/Wells Costs	\$0
Transmission/Distribution Costs	\$9,982,800
Treatment Cost	\$0
Storage Costs	\$0
Sub Total Construction Cost	\$9,982,800
Contingencies and Work Allowance	\$100,000
Non-construction Costs	\$1,008,500
Total Project Cost	\$11,091,300
Ineligible Costs	\$0
Other Funding Sources (Local)	\$0
Requested SRF Loan Amount	\$11,091,300

Financial Adviser

- a. Firm Contact: Baker Tilly
- b. Name: Eric Walsh

Bond Counsel

- a. Firm Contact: Ice Miller
- b. Name: Michael Allen

CHAPTER EXHIBITS

- 7-1 Signatory Resolution
- 7-2 PER Approval Resolution
- 7-3 Capital Asset Management Program Certification Form

RESOLUTION NO. 108-3-16-21-1

RESOLUTION: SIGNATORY AUTHORIZATION RESOLUTION

WHEREAS, the Board of Public Works of the City of Fort Wayne, Allen County, Indiana, herein called the Participant has plans for wastewater and/or drinking water infrastructure improvement projects to meet State and Federal regulations and the Participant intends to proceed with the construction of such works:

WHEREAS, the Board of Public Works has adopted this Resolution dated March 16, 2021.

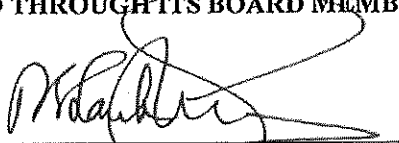
NOW, THEREFORE BE IT RESOLVED by the Board of Public Works of the City of Fort Wayne, the governing body of said community, that:

1. Kumar Menon, Director, Matthew Wirtz, Deputy Director, Justin Brugger, and/or Bogdan Vlasea as employees of the City of Fort Wayne be authorized to make application for a State Revolving Fund Loan ("SRF Loan") and provide the SRF Loan Program such information, data and documents pertaining to the loan process as may be required, and otherwise act as the authorized representatives of the Participant; and
2. The Participant agrees to comply with State and Federal requirements as they pertain to the SRF Loan Program; and
3. Two certified copies of this Resolution be prepared and submitted as part of the Participant's Preliminary Engineering Report.

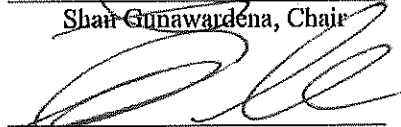
PASSED AND ADOPTED by the City of Fort Wayne's Board of Public Works this 16th day of March 2021, at its regularly scheduled meeting.

**FORT WAYNE BOARD OF PUBLIC WORKS
BY AND THROUGH ITS BOARD MEMBERS**

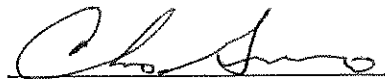
BY:


Shan Gunawardena, Chair

BY:


Kumar Menon, Member

BY:


Chris Guerrero, Member

ATTEST:

 3/16/21
Michelle Fulk-Vondran, Clerk

MISCELLANEOUS RESOLUTION NO. _____

RESOLUTION: ACCEPTANCE OF PRELIMINARY ENGINEERING REPORT

WHEREAS, the Board of Public Works of the City of Fort Wayne, Allen County, Indiana, has caused a Preliminary Engineering Reports, PER, dated **March 2022**, to be prepared by the consulting firm of HomeTown Engineering, LLC for the Water Utility; and

WHEREAS, said PER has been presented to the public at a public hearing held on **April 12, 2022**, in the Council Chambers, Room 035, Citizens Square, 200 East Main Street, Fort Wayne, Indiana, for public comment; and

WHEREAS, the Board of Public Works finds that there was not sufficient evidence presented in objection to the recommended project in the PER.

NOW, THEREFORE BE IT RESOLVED THAT:

1. The City of Fort Wayne PER for the Water Utility dated **March 2022** be approved and adopted by the Board of Public Works; and
2. Said PER be submitted to the State Revolving Fund Loan Program for review and approval.

PASSED AND ADOPTED by the City of Fort Wayne's Board of Public Works this **12th day of April, 2022** after the Public Hearing.

**FORT WAYNE BOARD OF PUBLIC WORKS
BY AND THROUGH ITS BOARD MEMBERS**

BY: _____
Shan Gunawardena, Chair

BY: _____
Kumar Menon, Member

BY: _____
Chris Guerrero, Member

ATTEST: _____
Michelle Fulk-Vondran, Clerk

To be completed at the Public Hearing

**State Revolving Fund Loan Program
Asset Management Program Certification Form
Inclusive of
Fiscal Sustainability Plan Certification**

(To be submitted either at the time of loan closing or no later than the final disbursement of a Participant's loan proceeds)

Participant Name <u>Fort Wayne City Utilities</u>		
Street Address <u>200 E Berry St, Suite 250</u>		P. O. Box Number
City <u>Fort Wayne</u>	State <u>IN</u>	Zip Code <u>46802</u>

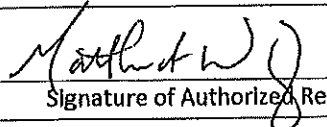
Indiana Code 5-1.2-10-16 requires a Participant that receives a loan or other financial assistance from the State Revolving Fund Loan Program (SRF) to certify that the Participant has documentation demonstrating it has the financial, managerial, technical and legal capability to operate and maintain its water or wastewater collection and treatment system. A Participant must demonstrate that it has developed an asset management program as defined in the Indiana Finance Authority's (Authority) Asset Management Program Guidelines.

Section 603(d)(1)(E) of the Federal Water Pollution Control Act (FWPCA) requires a recipient of a loan for a project that involves the repair, replacement, or expansion of a publicly owned treatment works to develop and implement a Fiscal Sustainability Plan (FSP). The requirement pertains to those portions of the treatment works paid for with Clean Water SRF Loan Funds.

The Asset Management Program (AMP) shall be inclusive of the requirements of the FSP for Wastewater and Drinking Water projects and shall include at a minimum the following: (1) A system map (2) An inventory and assessment of system assets (3) development of an Infrastructure Inspection, repair, and maintenance plan, including a plan for funding such activities (4) an evaluation and implementation of water and energy conservation efforts (5) An analysis of the customer rates necessary to support the AMP (6) Audit performed at least every two years (7) Demonstration of the technical, managerial, legal and financial capability to operate and maintain the system, per the guidelines established by the Authority.

I hereby certify that I am an authorized representative for the above listed Participant and pursuant to IC 5-1.2-10-16 and Section 603(d)(1)(E), the Participant has developed and is implementing an AMP (inclusive of the requirements of an FSP) that meets the requirements established by the Authority. Upon the request of the Environmental Protection Agency (EPA) or the Indiana SRF, the Participant agrees to make the AMP (which includes the FSP requirements) available for inspection and/or review.

Participant's estimated capital asset needs in the next 5 years: \$ 175,000,000

 Signature of Authorized Representative	<u>3/2/22</u> Date
<u>Matthew A. Wirlz</u> Printed Name	<u>(260) 427-2690</u> <u>matthew.wirlz@cityoffortwayne.org</u> Phone Number/Email Address

Effective November 1, 2021

CHAPTER 8
PUBLIC PARTICIPATION

SUMMARY

A Public Hearing will be held in the Fort Wayne Council Chambers, Room 035, 200 East Berry, Fort Wayne, IN. Information from the public hearing will be attached as exhibits to this Chapter, including a copy of the public notice, Publisher's Affidavit, the sign in sheet and minutes of the Public Hearing.