



CITY OF PFLUGERVILLE

DRAFT IMPACT FEE UPDATE
REPORT



2 0 2 2

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DRAFT IMPACT FEE REPORT

OCTOBER 2022

Prepared for:

City of Pflugerville

DRAFT
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FNI Project Number: PFL22589

The cost information in the report (or updated cost estimates for projects and escalations to date) is provided for the purposes of determining calculations and is subject to change.

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- Appendix D: Impact Fee Financial Calculations

EXECUTIVE SUMMARY

1.0 Background

In August 2022, the City of Pflugerville, Texas, authorized Freese and Nichols, Inc. (FNI) to perform an impact fee analysis on the City’s water and wastewater systems. The purpose of this report is to summarize the methodology used in the development and calculation of water and wastewater impact fees for the City of Pflugerville. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the establishment and update of water and wastewater impact fees.

2.0 Land Use Assumptions

Population and land use are important elements in the analysis of water and wastewater systems. Through collaboration between FNI and the City, FNI developed growth projections using land use assumptions from the City’s Aspire Pflugerville 2040 Comprehensive Plan to estimate service connections for the 2022 and 2032 planning years. **Table ES-1** presents the growth projections for the City of Pflugerville Water and Wastewater Service Areas.

Table ES-1: Growth Projections

Phase	Water Connections ⁽¹⁾	New Water Connections	Water Growth Rate	Wastewater Connections	New Wastewater Connections	Wastewater Growth Rate
2022	22,151	-	-	23,769	-	-
2032	39,669	17,518	6.00%	47,905	24,136	7.26%

⁽¹⁾ Water connections include customers served by Manville WSC.

3.0 Capital Improvement Plan

An impact fee capital improvement plan (CIP) was developed for the City of Pflugerville based on the land use assumptions and growth projections. The recommended improvements will provide the required capacity to meet projected water demands and wastewater flows through 2032. The Wastewater Service Area was split into Service Area 1 and Service Area 2 to account for different rates of development in the Central Basin and the Wilbarger and Cottonwood Basins. For each existing or proposed project, the impact fee eligible cost is calculated as a percentage of the project cost, based upon the portion of the project’s capacity required to serve growth projected to occur between 2022 and 2032, the 10-year period used for impact fee analysis. The cost associated with the portion of projects required to serve growth beyond this 10-year period will be eligible for impact fee cost recovery in the next impact fee update. The total

project cost includes the project capital improvement cost to serve 10-year growth, the projected finance cost for the capital improvements, and the consultant cost for preparing and updating the CIP. **Table ES-2** shows a summary of the total capital cost and impact fee-eligible cost for all impact fee CIP projects for the Water and Wastewater Service Areas.

Table ES-2: CIP Cost Summary

Service Area	Total Capital Cost of Impact Fee Eligible Projects	Total 10-Year (2022-2032) Cost of Impact Fee Eligible Projects
Water	\$626,486,509	\$440,527,996
Wastewater Service Area 1	\$126,970,457	\$29,234,001
Wastewater Service Area 2	\$629,036,556	\$302,918,072

4.0 Impact Fee Analysis

According to Chapter 395 of the Texas Local Government Code, the maximum impact fee may not exceed the amount determined by dividing the cost of required capital improvements by the total number of service units attributed to new development during the impact fee eligibility period. A water service unit is defined as the service equivalent to a water-only connection or a water/wastewater connection for a single-family residence. A wastewater service unit is defined as the service unit equivalent to a water/wastewater connection for a single-family residence. The current impact fee ordinance was effective in April of 2020. This ordinance set the water impact fee for a single-family meter at \$7,897 and the wastewater impact fee for a single-family meter at \$1,898 in the Central Basin and \$8,184 in the Cottonwood and Wilbarger Basins. This project is an update to the 2020 ordinance. **Table ES-3** displays the maximum allowable impact fee per service unit for the Water and Wastewater Service Areas.

Table ES-3: Maximum Allowable Impact Fees

Service Area	Maximum Allowable Impact Fee Per Service Unit
Water	\$14,404
Wastewater Service Area 1	\$1,382
Wastewater Service Area 2	\$13,454
Total in Wastewater Service Area 1	\$15,786
Total in Wastewater Service Area 2	\$27,858

1.0 BACKGROUND

Chapter 395 of the Texas Local Government Code requires an impact fee analysis before impact fees can be created and assessed. Chapter 395 defines an impact fee as “a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development.” In September 2001, Senate Bill 243 amended Chapter 395 thus creating the current procedure for implementing impact fees. Chapter 395 identifies the following items as impact fee eligible costs:

- Construction contract price
- Surveying and engineering fees
- Land acquisition costs
- Fees paid to the consultant preparing or updating the capital improvement plan (CIP)
- Projected interest charges and other finance costs for projects identified in the CIP

Chapter 395 also identifies items that impact fees **cannot** be used to pay for, such as:

- Construction, acquisition, or expansion of public facilities or assets other than those identified on the capital improvement plan
- Repair, operation, or maintenance of existing or new capital improvements
- Upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards
- Upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development
- Administrative and operating costs of the political subdivision
- Principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed above



In August 2022, the City of Pflugerville, Texas, authorized Freese and Nichols, Inc. (FNI) to perform an impact fee analysis on the City’s water and wastewater systems. The purpose of this report is to summarize the methodology used in the development and calculation of water and wastewater impact fees for the City of Pflugerville. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the establishment and update of water and wastewater impact fees.

Table 1-1 provides a list of abbreviations used in this report.

Table 1-1: List of Abbreviations

Abbreviation	Full Nomenclature
AWWA	American Water Works Association
CIP	Capital Improvement Plan
CCN	Certificate of Convenience and Necessity
EST	Elevated Storage Tank
FNI	Freese and Nichols, Inc.
gpm	gallons per minute
GST	Ground Storage Tank
HGL	Hydraulic Grade Line
LS	Lift Station
LUE	Living Unit Equivalent
PRV	Pressure Reducing Valve
PS	Pump Station
PZ	Pressure Zone
WSC	Water Supply Corporation
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

2.0 LAND USE ASSUMPTIONS

Land use and population are important elements in the analysis of water and wastewater systems. Through collaboration between FNI and the City, FNI developed growth projections using land use assumptions from the City's Aspire Pflugerville 2040 Comprehensive Plan to estimate service connections for the 2022 and 2032 planning years.

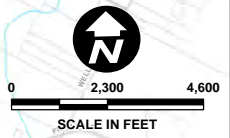
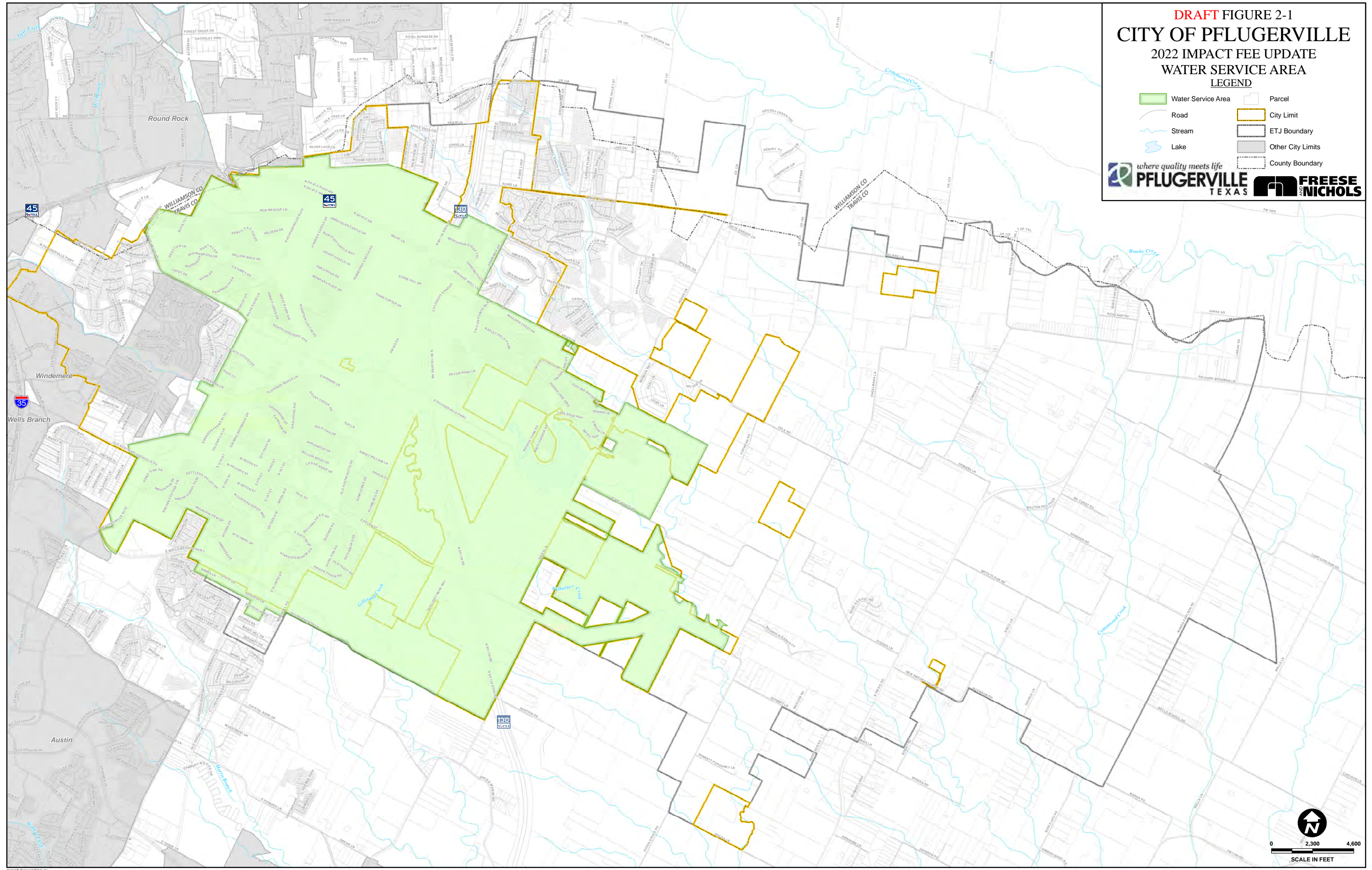
2.1 Service Areas

The service areas for City of Pflugerville's water and wastewater systems differ slightly in terms of extent. Both the Water and Wastewater Service Areas include the City's current Water and Wastewater Certificates of Convenience and Necessity (CCN), respectively, as well as areas that are proposed to be added to each CCN in the future. The Wastewater Service Area includes nearly the entire Water Service Area, and extends six miles farther east, covering an area more than 2.5 times the size of the Water Service Area. For the purpose of impact fee calculations, the Wastewater Service Area was split into two separate service areas to account for different rates of projected development. Service Area 1 includes the Central Basin, and Service Area 2 includes the Wilbarger and Cottonwood Basins. **Figure 2-1** illustrates the extent of the Water Service Area, and **Figure 2-2** illustrates the extent of the Wastewater Service Area, including both Service Area 1 and Service Area 2.

DRAFT FIGURE 2-1
CITY OF PFLUGERVILLE
 2022 IMPACT FEE UPDATE
 WATER SERVICE AREA

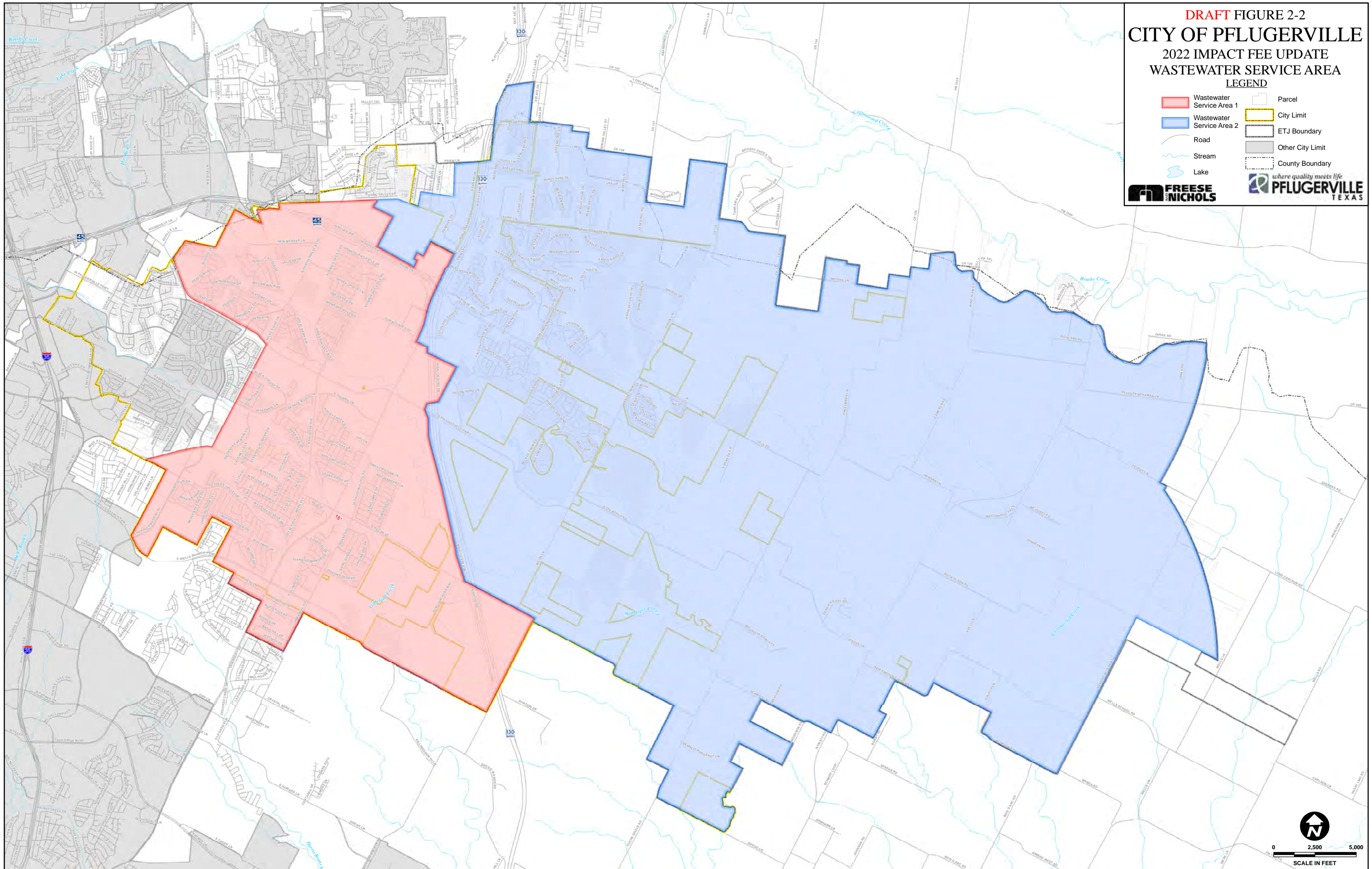
LEGEND

- Water Service Area
- Road
- Stream
- Lake
- Parcel
- City Limit
- ETJ Boundary
- Other City Limits
- County Boundary



DRAFT FIGURE 2-2
CITY OF PFLUGERVILLE
 2022 IMPACT FEE UPDATE
 WASTEWATER SERVICE AREA
 LEGEND

- Wastewater Service Area 1
- Wastewater Service Area 2
- Road
- Stream
- Lake
- Parcel
- City Limit
- ETJ Boundary
- Other City Limit
- County Boundary



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2.2 Land Use Assumptions














Land use assumptions were developed through collaboration between FNI and the City. To determine the density of future population growth throughout the City, land use from the City’s Comprehensive Plan was assigned to each parcel within the Water and Wastewater Service Areas. The land use types were assigned living unit equivalent (LUE) densities based on the Comprehensive Plan and input from City staff. The land use types and densities are shown in **Table 2-1**. **Figure 2-3** shows the land use assumptions and densities for the Water and Wastewater Service Areas.










Table 2-1: Land Use Types

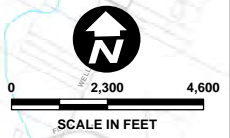
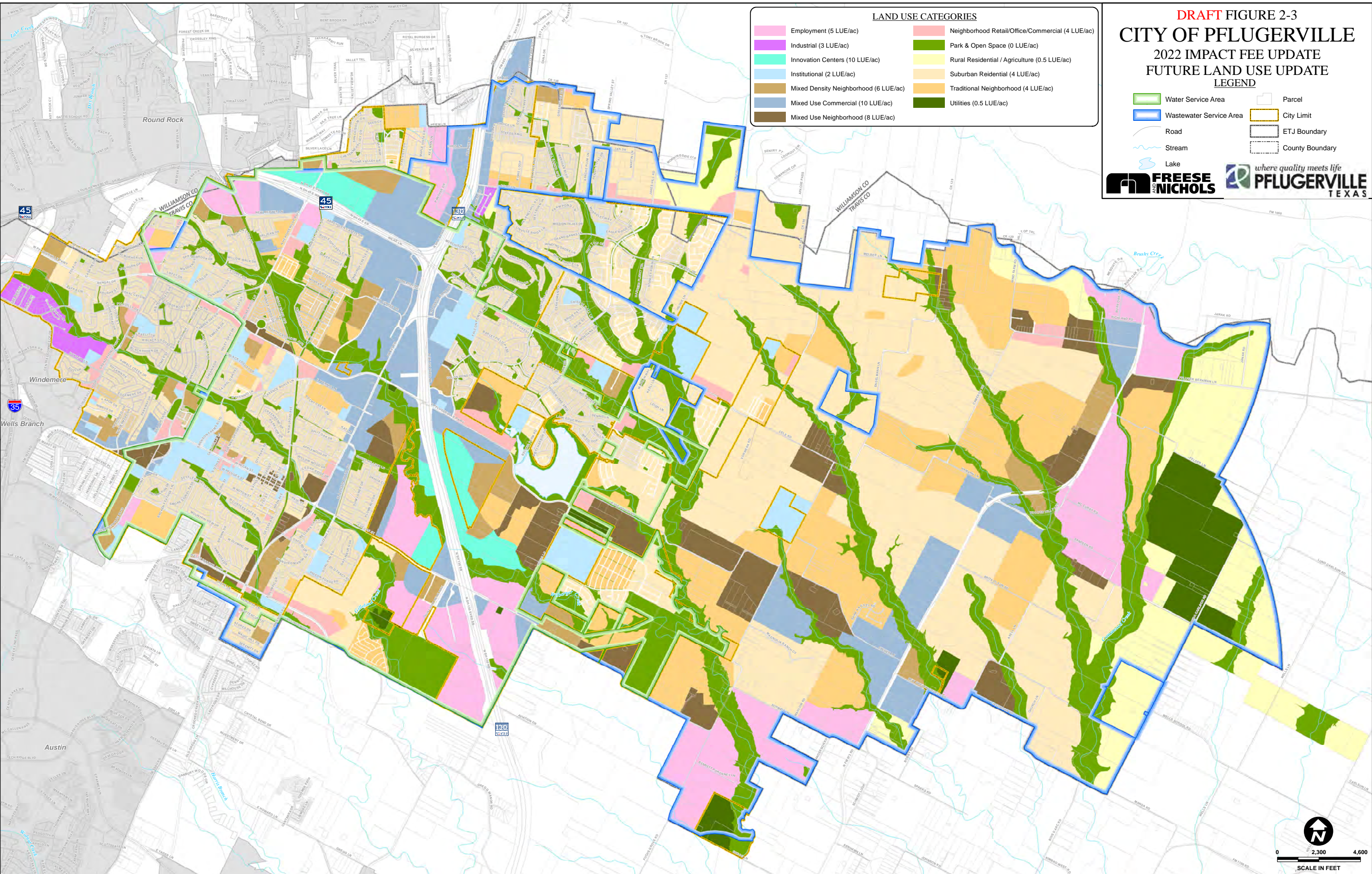
Land Use	Density (LUE/ac)
Employment	5
Industrial	3
Innovation Centers	10
Institutional	2
Mixed Density Neighborhood	6
Mixed Use Commercial	10
Mixed Use Neighborhood	8
Neighborhood Retail/Office/Commercial	4
Park & Open Space	0
Rural Residential / Agriculture	0.5
Suburban Residential	4
Traditional Neighborhood	4
Utilities	0.5

DRAFT FIGURE 2-3
CITY OF PFLUGERVILLE
 2022 IMPACT FEE UPDATE
 FUTURE LAND USE UPDATE
 LEGEND

LAND USE CATEGORIES

 Employment (5 LUE/ac)	 Neighborhood Retail/Office/Commercial (4 LUE/ac)
 Industrial (3 LUE/ac)	 Park & Open Space (0 LUE/ac)
 Innovation Centers (10 LUE/ac)	 Rural Residential / Agriculture (0.5 LUE/ac)
 Institutional (2 LUE/ac)	 Suburban Residential (4 LUE/ac)
 Mixed Density Neighborhood (6 LUE/ac)	 Traditional Neighborhood (4 LUE/ac)
 Mixed Use Commercial (10 LUE/ac)	 Utilities (0.5 LUE/ac)
 Mixed Use Neighborhood (8 LUE/ac)	

 Water Service Area	 Parcel
 Wastewater Service Area	 City Limit
 Road	 ETJ Boundary
 Stream	 County Boundary
 Lake	



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2.3 Growth Projections

Through collaboration between FNI and the City, FNI developed growth projections to estimate growth between the 2022 and 2032 planning years. The projected growth includes both residential and non-residential connections. The growth projections do not include redevelopment in any areas that have existing development. Growth projections were first developed for the Water Service Area, which is within the Wastewater Service Area. The process of developing growth projections included the following steps:

- 1. *Select an anticipated average annual growth rate*** – It was decided by City and FNI staff to use a 6% overall annual growth rate in the entire Water Service Area for 2022-2032 including areas served by Manville WSC.

- 2. *Classify undeveloped parcels*** – All growth was assumed to occur in undeveloped parcels. Undeveloped parcels within the Water and Wastewater Service Areas were identified using data received from the City. These parcels were compared with the water billing meter locations, and any parcels currently containing a billing meter were classified as existing development instead. Additionally, all areas within the Parks and Open Space land use category, which includes the floodplain, were classified as existing development because growth is not expected to occur within the floodplain.

- 3. *Develop growth projections within the Water Service Area*** – FNI developed growth projections within the Water Service Area first because the Water Service Area is contained within the Wastewater Service Area. City and FNI staff collaborated to identify projected growth timelines based on recent requests for service, development information provided to the City by developers, and proximity to existing infrastructure. City staff identified certain parcels that should be assumed to be developed in the 2022-2032 planning period. FNI coordinated with City staff to identify percent developed for each parcel through the planning period. FNI then adjusted development percentages for the identified parcels to match the 6% maximum desired annual growth rate in the Water Service Area selected in Step 1. These development percentages are summarized in **Table 2-2**.

Table 2-2: Calculated Development Percentages

Development Phase	Percent Developed 2022-2032
1	30%
2	50%
3	80%
4	100%

4. Develop growth projections for the remainder of the Wastewater Service Area – Growth projections outside of the Water Service Area were developed through collaboration between City and FNI staff based on the same information referenced in Step 3. The development percentages for the Water Service Area shown in were assumed for undeveloped parcels outside of the Water Service Area as well.

Table 2-3 presents the growth projections for the Water and Wastewater Service Areas. **Figure 2-4** shows the parcels identified to develop in the 10-year planning period in the Water and Wastewater Service Areas. Only development in the 10-year planning period is shown here because projects serving growth beyond the 10-year time period are not eligible for impact fee cost recovery.

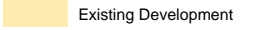

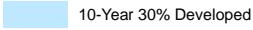

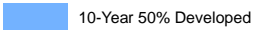
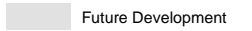
Table 2-3: Growth Projections


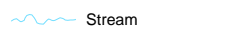
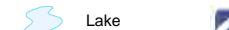
Phase	Water Connections ⁽¹⁾	New Water Connections	Water Growth Rate	Wastewater Connections	New Wastewater Connections	Wastewater Growth Rate
2022	22,151	-	-	23,769	-	-
2032	39,669	17,518	6.00%	47,905	24,136	7.26%

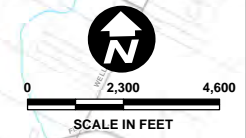
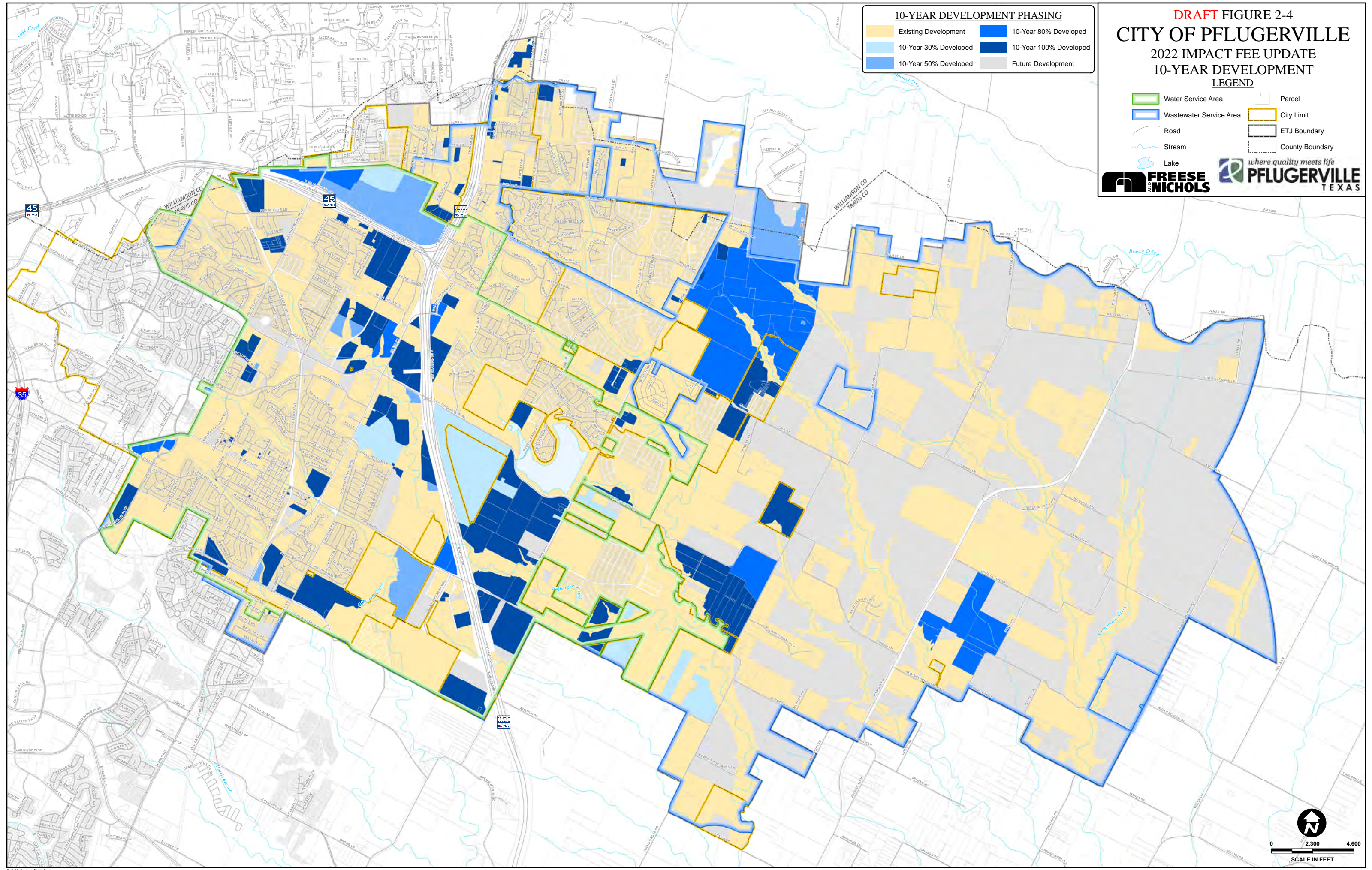
⁽¹⁾ Water connections include customers served by Manville WSC.

DRAFT FIGURE 2-4
CITY OF PFLUGERVILLE
 2022 IMPACT FEE UPDATE
 10-YEAR DEVELOPMENT
 LEGEND

10-YEAR DEVELOPMENT PHASING

 Existing Development	 10-Year 80% Developed
 10-Year 30% Developed	 10-Year 100% Developed
 10-Year 50% Developed	 Future Development

 Water Service Area	 Parcel
 Wastewater Service Area	 City Limit
 Road	 ETJ Boundary
 Stream	 County Boundary
 Lake	



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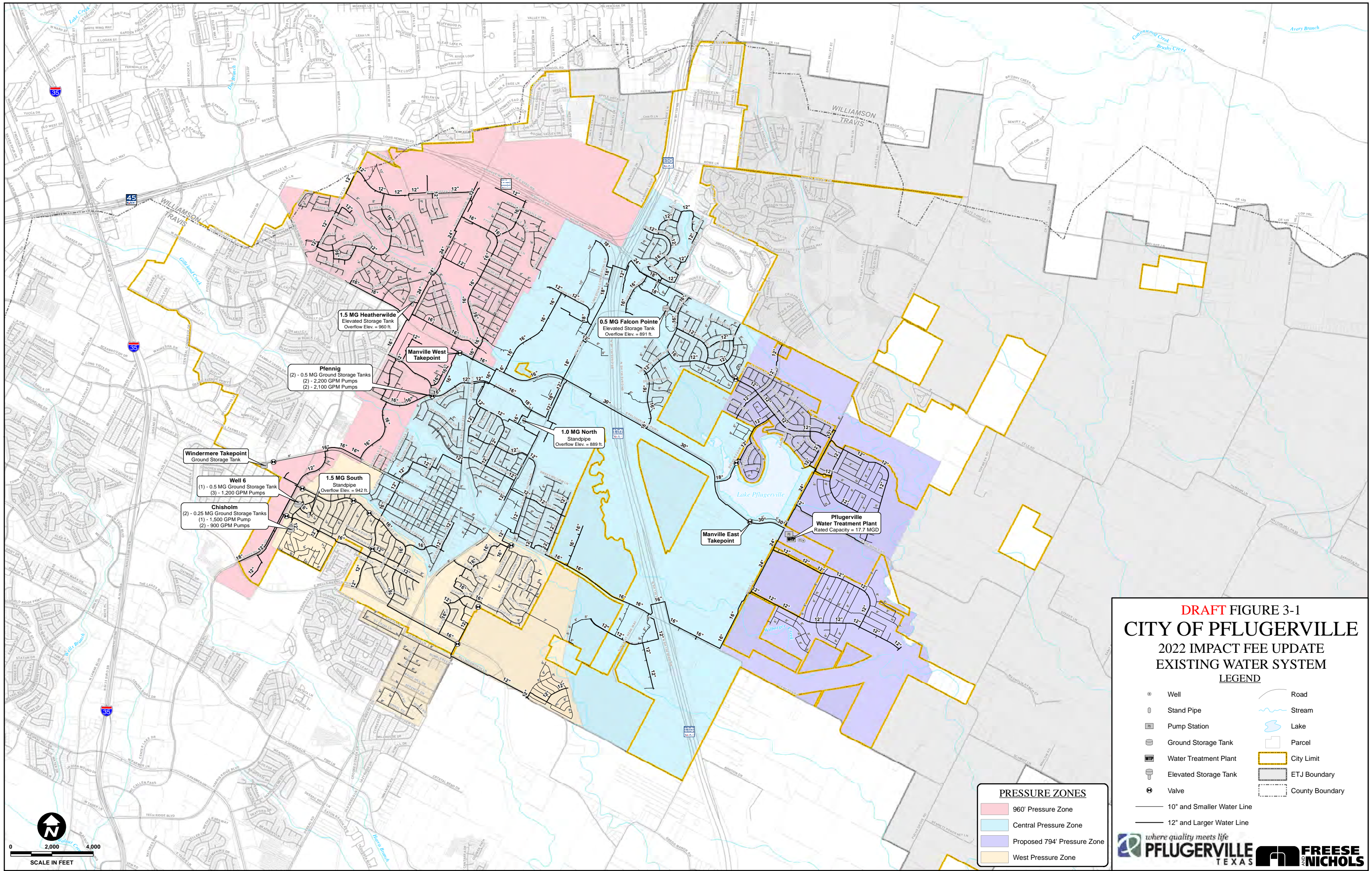
3.0 WATER AND WASTEWATER CAPITAL IMPROVEMENT PLAN

The water and wastewater impact fee CIP developed for the City of Pflugerville is based on the land use assumptions presented in the previous section. The CIPs were developed using hydraulic models of both the water and wastewater systems. The recommended improvements will provide the required capacity to meet projected water demands and wastewater flows through 2032.

3.1 Existing Water and Wastewater Systems

The City of Pflugerville’s water distribution system consists of four pressure zones (PZ), a network of water lines ranging in diameter from 2 inches to 36 inches, eight ground storage tanks (GST), four elevated storage tanks (EST), four pump stations (PS), two active groundwater wells, and a surface water treatment plant (WTP). Raw water is pumped from the Colorado River by the City’s River Intake PS to Lake Pflugerville. The Lake PS pumps water from Lake Pflugerville to the Surface WTP, where the raw water is treated to drinking water standards. The City operates four PZs: Central, East, West, and 960’. The hydraulic grade lines (HGL) in the Central, West, and 960’ PZs are controlled by ESTs and a standpipe, and the East PZ is supplied through pressure reducing valves (PRV) from the Central PZ, which set the HGL in the East PZ. The City also provides water to three wholesale customers: SouthWest Water Company, who is the parent company of Windermere Utilities (Windermere), Manville Water Supply Corporation (WSC), and the City of Manor. A map of the existing water distribution system and pressure zone boundaries is shown on **Figure 3-1**.

The existing wastewater system has 14 lift stations (LS), a network of lines ranging in size from 4 inches to 42 inches in diameter, and a 7.25 MGD wastewater treatment plant (WWTP). The wastewater collection system serves a larger area than the water distribution system and collects flow from users that are currently served water by other utilities. **Figure 3-2** displays a map of the existing wastewater collection system.



DRAFT FIGURE 3-1
CITY OF PFLUGERVILLE
 2022 IMPACT FEE UPDATE
 EXISTING WATER SYSTEM
 LEGEND

- ⊙ Well
- ⊖ Stand Pipe
- ⊠ Pump Station
- ⊞ Ground Storage Tank
- ⊞ WTP Water Treatment Plant
- ⊞ Elevated Storage Tank
- ⊞ Valve
- 10" and Smaller Water Line
- 12" and Larger Water Line
- Road
- Stream
- Lake
- Parcel
- City Limit
- ETJ Boundary
- County Boundary

PRESSURE ZONES

- 960' Pressure Zone
- Central Pressure Zone
- Proposed 794' Pressure Zone
- West Pressure Zone

0 2,000 4,000
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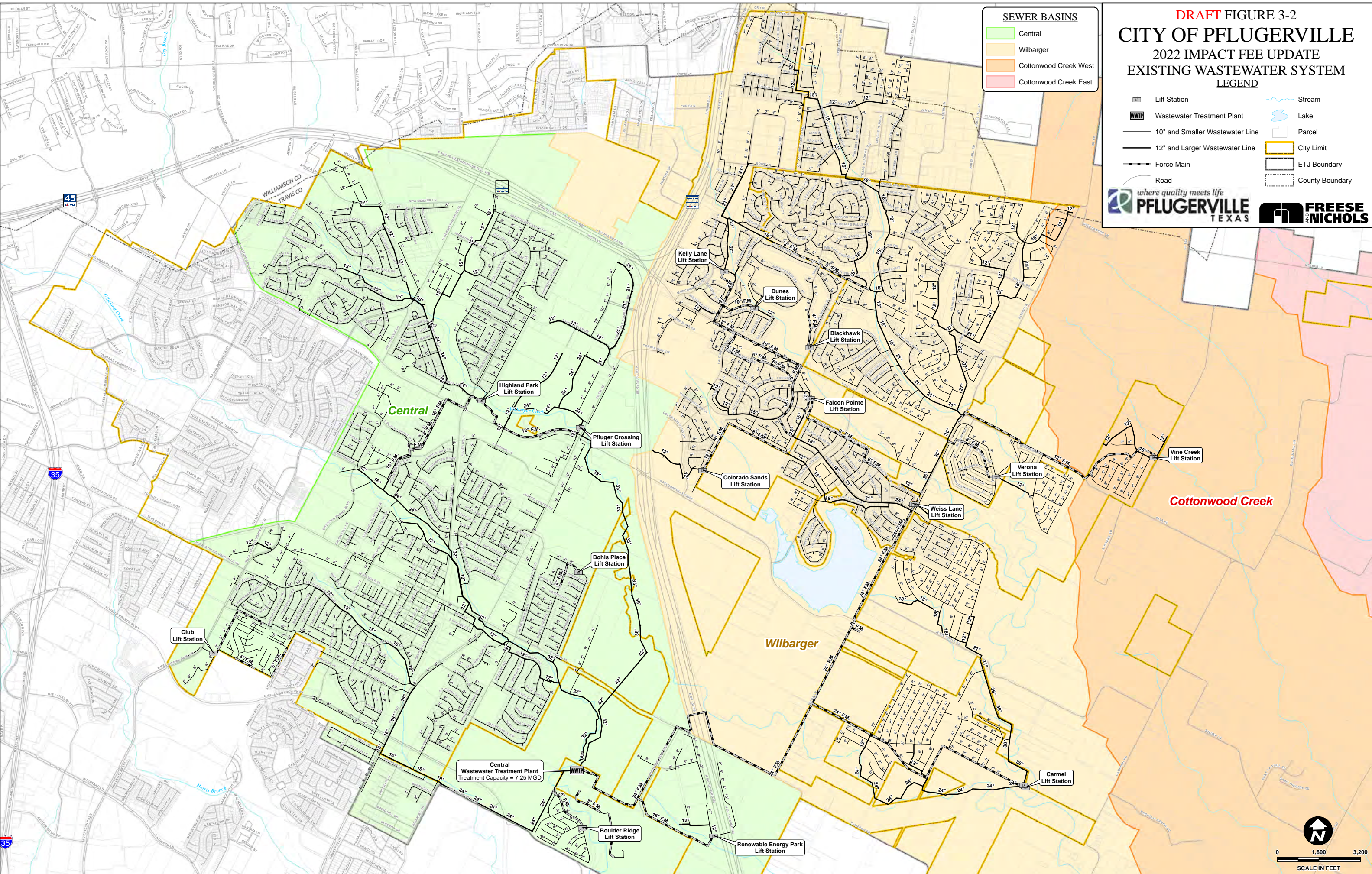


DRAFT FIGURE 3-2
CITY OF PFLUGERVILLE
 2022 IMPACT FEE UPDATE
 EXISTING WASTEWATER SYSTEM
 LEGEND

SEWER BASINS

- Central
- Wilbarger
- Cottonwood Creek West
- Cottonwood Creek East

-  Lift Station
-  Wastewater Treatment Plant
-  10" and Smaller Wastewater Line
-  12" and Larger Wastewater Line
-  Force Main
-  Road
-  Stream
-  Lake
-  Parcel
-  City Limit
-  ETJ Boundary
-  County Boundary



0 1,600 3,200
 SCALE IN FEET

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3.2 Water and Wastewater System Improvements

Proposed water and wastewater system improvement projects were developed using the Water and Wastewater Master Plans, input from City staff, and the City’s 5-year CIP. A summary of the costs for each of the projects required for the 10-year growth period used in the water system impact fee analysis is shown in **Table 3-1**. Summaries of the costs for each of the projects required for the 10-year growth period used in the wastewater system impact fee analysis are shown in **Table 3-2** and **Table 3-3** for Service Area 1 and Service Area 2, respectively. Costs listed for the existing projects are based on actual design and construction cost data provided by the City. Detailed cost estimates for the proposed water and wastewater system projects are included in **Appendix A**, **Appendix B**, and **Appendix C**. The costs are in 2022 dollars and include an allowance for engineering, surveying, and contingencies. Cost estimates do not include allowances for right-of-way acquisition. **Tables 3-1**, **3-2**, and **3-3** show a 2022 percent utilization, which is the portion of a project’s capacity that is required to serve existing development. This portion of the project cost is not impact-fee-eligible. The 2032 percent utilization is the portion of the project’s capacity that will be required to serve projected growth in the City in 2032. The 2022-2032 percent utilization is the portion of the project’s capacity required to serve development from 2022 to 2032. The impact fee eligible cost for each project is calculated as the total capital cost multiplied by the 2022-2032 percent utilization. Only this portion of the cost can be used to calculate maximum allowable impact fees. The proposed 10-year water system projects are shown on **Figure 3-3**. Proposed wastewater projects are shown on **Figure 3-4**.

Table 3-1: Water System Impact Fee Eligible Projects

Project Number	Project Name	2022 Utilization ⁽¹⁾	2032 Utilization	2022-2032 Utilization	Capital Cost	Impact Fee Eligible Cost
Existing Eligible						
A	1.5-MG Heatherwilde Elevated Storage Tank	55%	100%	45%	\$6,390,257	\$2,875,616
B	9.2-MGD Pfennig Pump Station	50%	64%	14%	\$3,200,000	\$448,000
C	16-inch Pecan Water Line	20%	80%	60%	\$974,073	\$584,444
D	Impact Fee Study	0%	100%	100%	\$38,000	\$38,000
Proposed Eligible						
1	2.5-MG North Elevated Storage Tank	40%	100%	60%	\$8,067,584	\$4,840,550
2	2.0-MG 800' PZ Elevated Storage Tank	36%	46%	10%	\$7,462,584	\$746,258
3	Water Treatment Plant Expansion and 6.0-MGD 800' PZ Pump Station	0%	100%	100%	\$165,949,936	\$165,949,936
4	42/36/24/20-inch Waterlines along Weiss Lane and crossing 130	25%	85%	60%	\$32,119,740	\$19,271,844
5	30-inch Kelly Lane Water Line	25%	75%	50%	\$4,855,200	\$2,427,600
6	16-inch Colorado Sand Drive Looping	10%	95%	85%	\$1,215,000	\$1,032,750
7	HCA 12-inch loop	70%	100%	30%	\$1,159,800	\$347,940
8	Colorado River Raw Water Line	0%	55%	55%	\$137,561,420	\$75,658,781
9	36/30-inch Weiss Lane/Kelly Lane Water Lines	20%	70%	50%	\$32,119,740	\$16,059,870
10	20-inch SH 130 Water Line	10%	90%	80%	\$4,857,975	\$3,886,380
11	30/24-inch SH 130 Water Lines	10%	90%	80%	\$7,906,300	\$6,325,040
12	12-inch Looping Improvements in Central PZ	20%	60%	40%	\$2,617,100	\$1,046,840
13	State Highway 45 Pump Station	0%	85%	85%	\$19,314,600	\$16,320,837
14	30/24-inch State Highway 45 Pump Station Discharge Line	0%	60%	60%	\$7,906,300	\$4,743,780
15	Lakeside Meadows 12/16/8-inch Water Lines	0%	100%	100%	\$3,442,300	\$3,442,300
16	12-inch Lifestyle Communities Water Line	0%	100%	100%	\$1,325,400	\$1,325,400
17	24-inch East State Highway 130 Water Line	10%	40%	30%	\$6,737,400	\$2,021,220
18	12/16-inch Water Lines Between Austin Hutto Road and Pflugerville Parkway	0%	70%	70%	\$3,856,500	\$2,699,550
19	Water Treatment Plant Expansion to 45 MGD	0%	63%	63%	\$135,000,000	\$85,050,000
20	Central PZ Pump Station Expansion to 39 MGD	0%	78%	78%	\$17,503,200	\$13,733,280
21	12-inch Water Line South of State Highway 45	10%	90%	80%	\$2,252,000	\$1,801,600
22	36/30/20-inch Immanuel Road EST Water Lines	15%	75%	60%	\$11,365,500	\$6,819,300
23	12-inch Looping in Southern Central PZ	10%	90%	80%	\$1,288,600	\$1,030,880
Total					\$626,486,509	\$440,527,996

⁽¹⁾Utilization in 2022 on proposed projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.

Table 3-2: Wastewater System Impact Fee Eligible Projects for Service Area 1

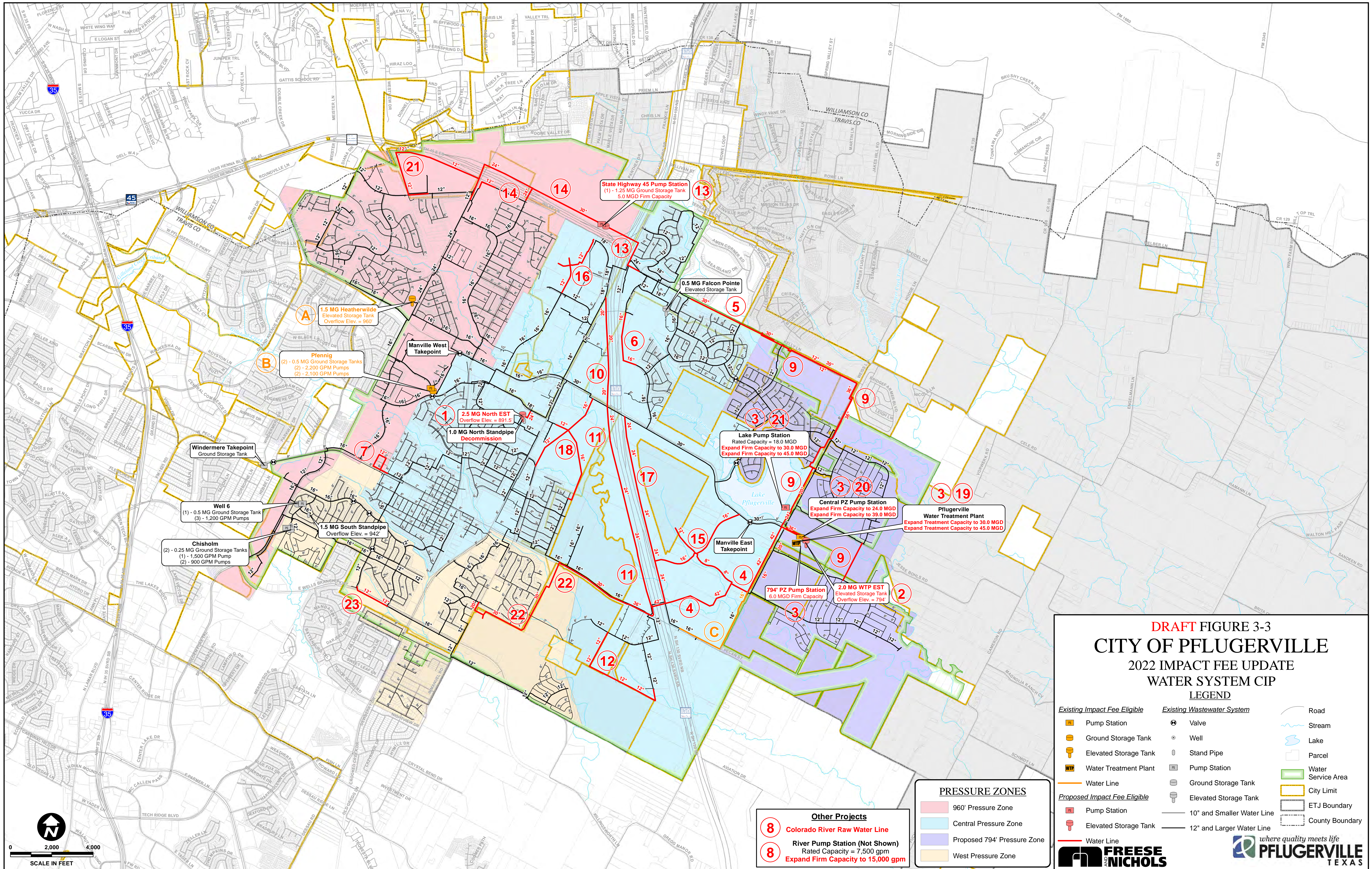
Project Number	Project Name	2022 Utilization ⁽¹⁾	2032 Utilization	2022-2032 Utilization	Capital Cost	Impact Fee Eligible Cost
Existing Eligible						
A	SH 130 Interceptor	35%	65%	30%	\$16,306,800	\$4,892,040
B	Central Wastewater Treatment Plant Phase 1 Expansion	85%	100%	15%	\$51,889,172	\$7,658,126
C	30/24-inch Highland Park Interceptor	50%	75%	25%	\$2,168,090	\$542,023
G	10-inch Quick Trip Interceptor	5%	90%	85%	\$628,238	\$534,002
H	Impact Fee Study	0%	100%	100%	\$19,000	\$19,000
Proposed Eligible						
1	Central Wastewater Treatment Plant Phase 2 Expansion	73%	100%	27%	\$25,847,457	\$7,085,244
8	15-inch Gilleland Creek Interceptor	76%	96%	20%	\$2,368,558	\$473,712
9	18-inch North Central Basin Interceptor	80%	90%	10%	\$1,366,550	\$136,655
11	8-inch Bohls Place Interceptor	70%	100%	30%	\$2,208,175	\$662,452
12	12-inch Club Interceptor	45%	55%	10%	\$5,017,818	\$501,782
13	Boulder Ridge Lift Station Expansion	90%	95%	5%	\$997,100	\$49,855
15	24-inch Central Interceptor	65%	85%	20%	\$11,192,100	\$2,238,420
17	24-inch SH 45 Interceptor	0%	65%	65%	\$5,277,000	\$3,430,050
18	15-inch SH 45 Interceptor	0%	60%	60%	\$1,684,400	\$1,010,640
Total					\$126,970,457	\$29,234,001

⁽¹⁾Utilization in 2022 on proposed projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.

Table 3-3: Wastewater System Impact Fee Eligible Projects for Service Area 2

Project Number	Project Name	2022 Utilization ⁽¹⁾	2032 Utilization	2022-2032 Utilization	Capital Cost	Impact Fee Eligible Cost
Existing Eligible						
D	Carmel Lift Station and Force Main	44%	80%	36%	\$3,853,330	\$1,391,094
E	36/24/21/18-inch Wilbarger Interceptors	11%	80%	69%	\$4,188,786	\$2,903,962
F	Vine Creek Lift Station and 12-inch Force Main	26%	100%	74%	\$1,810,411	\$1,338,130
H	Impact Fee Study	0%	100%	100%	\$19,000	\$19,000
Proposed Eligible						
2	Wilbarger Wastewater Treatment Plant	59%	100%	41%	\$247,000,000	\$100,858,333
3	54-inch Wilbarger Creek Interceptor	38%	81%	43%	\$29,196,328	\$12,516,048
4	Carmel Lift Station Pump Upgrades	10%	100%	90%	\$536,900	\$483,210
5	Sorento Interceptor Phase 2	80%	95%	15%	\$21,658,855	\$3,248,828
6	Kelly Lane Interceptor	40%	70%	30%	\$18,500,000	\$5,550,000
7	15-inch North Wilbarger Interceptor	0%	30%	30%	\$4,361,365	\$1,308,410
10	Cottonwood West Lift Station	0%	40%	40%	\$7,720,060	\$3,088,024
14	New Sweden Lift Station and Force Main	0%	100%	100%	\$6,281,100	\$6,281,100
16	24-inch Carmel Interceptor	0%	90%	90%	\$3,933,200	\$3,539,880
19	24-inch Colorado Sands Interceptor	0%	70%	70%	\$13,306,000	\$9,314,200
20	18-inch Colorado Sands Interceptor	5%	60%	55%	\$4,049,800	\$2,227,390
21	12-inch Wilbarger Inceptor	20%	80%	60%	\$1,573,900	\$944,340
22	Wilbarger Wastewater Treatment Plant Expansion	0%	63%	63%	\$202,488,000	\$127,736,180
23	New Sweden Lift Station Expansion and Force Main	0%	100%	100%	\$8,171,400	\$8,171,400
24	Cottonwood West Interceptor	0%	29%	29%	\$35,156,420	\$10,195,362
25	18-inch North Cottonwood Interceptor	0%	17%	17%	\$4,139,300	\$693,941
26	Cottonwood North Interceptor	0%	10%	10%	\$11,092,400	\$1,109,240
Total					\$629,036,556	\$302,918,072

⁽¹⁾Utilization in 2022 on proposed projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.



DRAFT FIGURE 3-3
CITY OF PFLUGERVILLE
 2022 IMPACT FEE UPDATE
 WATER SYSTEM CIP
LEGEND

- | | | |
|-------------------------------------|-----------------------------------|--------------------|
| Existing Impact Fee Eligible | Existing Wastewater System | Road |
| Pump Station | Valve | Stream |
| Ground Storage Tank | Well | Lake |
| Elevated Storage Tank | Stand Pipe | Parcel |
| Water Treatment Plant | Pump Station | Water Service Area |
| Water Line | Ground Storage Tank | City Limit |
| Proposed Impact Fee Eligible | Elevated Storage Tank | ETJ Boundary |
| Pump Station | 10" and Smaller Water Line | County Boundary |
| Elevated Storage Tank | 12" and Larger Water Line | |
| Water Line | | |

PRESSURE ZONES

- 960' Pressure Zone
- Central Pressure Zone
- Proposed 794' Pressure Zone
- West Pressure Zone

Other Projects

- Colorado River Raw Water Line**
- River Pump Station (Not Shown)**
Rated Capacity = 7,500 gpm
- Expand Firm Capacity to 15,000 gpm**

SCALE IN FEET
 0 2,000 4,000

Created by Freese and Nichols, Inc. File No. 1911073
 Location: 1111 W. WY. PLANNING/01: DELIVERABLE/04/04 Draft 2022 Impact Fee Report/Figure 3-3/Water CIP Impact Fee Update.mxd
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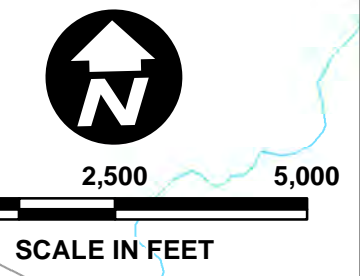
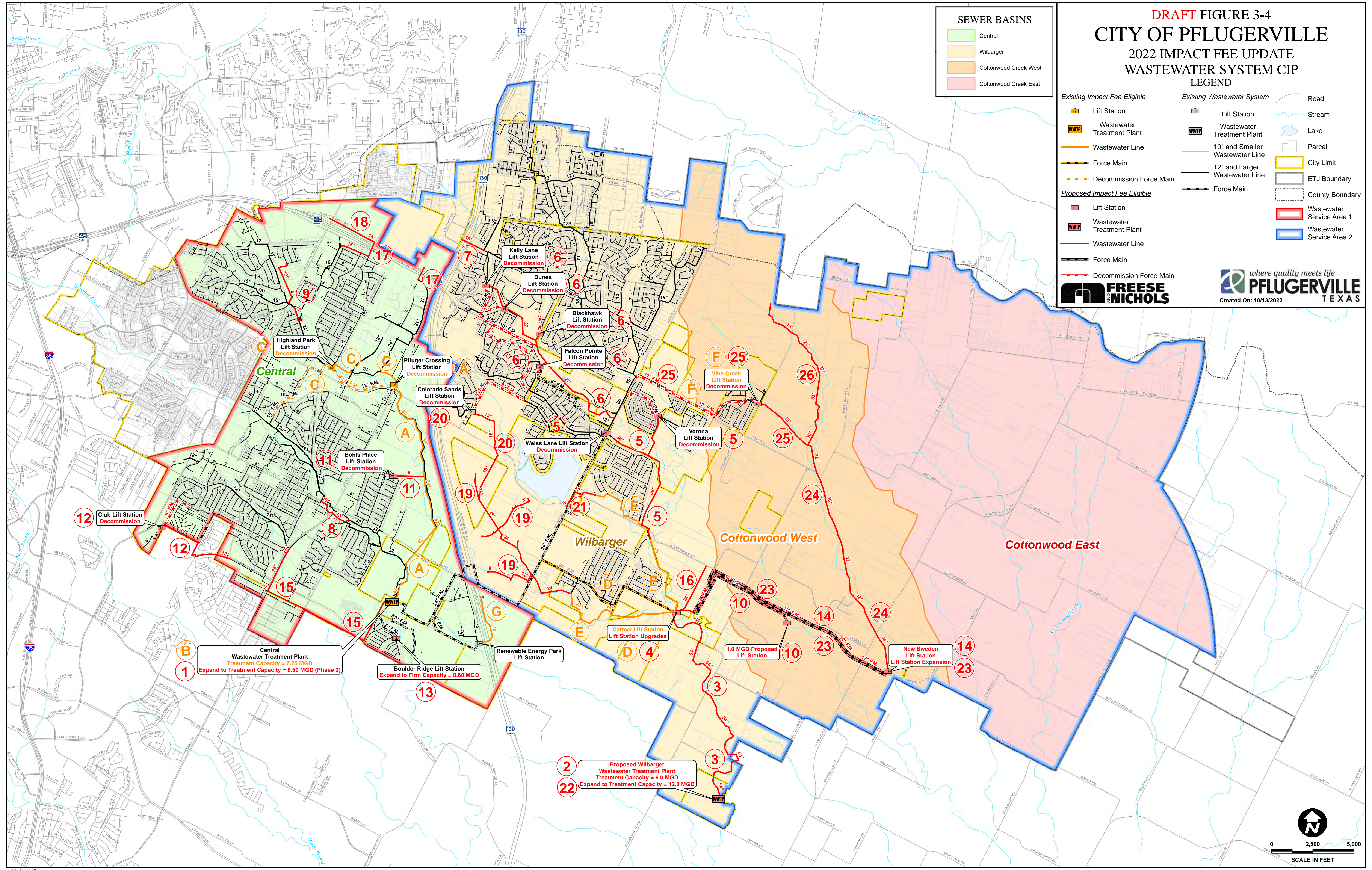


DRAFT FIGURE 3-4
CITY OF PFLUGERVILLE
 2022 IMPACT FEE UPDATE
 WASTEWATER SYSTEM CIP
 LEGEND

SEWER BASINS

■	Central
■	Wilbarger
■	Cottonwood Creek West
■	Cottonwood Creek East

Existing Impact Fee Eligible	Existing Wastewater System	Road
Lift Station	Lift Station	Stream
Wastewater Treatment Plant	Wastewater Treatment Plant	Lake
Wastewater Line	10" and Smaller Wastewater Line	Parcel
Force Main	12" and Larger Wastewater Line	City Limit
Decommission Force Main	Force Main	ETJ Boundary
Proposed Impact Fee Eligible	County Boundary	Wastewater Service Area 1
Lift Station	Wastewater Treatment Plant	Wastewater Service Area 2
Wastewater Line	Force Main	
Decommission Force Main		



Created By: Freese and Nichols, Inc.
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4.0 IMPACT FEE ANALYSIS

The current impact fee ordinance was effective in April of 2020. This ordinance set the water impact fee for a single-family meter at \$7,897 and the wastewater impact fee for a single-family meter at \$1,898 in the Central Basin and \$8,184 in the Cottonwood and Wilbarger Basins. The impact fee analysis involves determining the utilization of existing and proposed projects required as defined by the capital improvement plan to serve new development over the next 10-year period. For existing or proposed projects, the impact fee eligible cost is calculated as a percentage of the total project cost, based upon the percentage of the project's capacity required to serve development projected to occur between 2022 and 2032. Capacity serving existing development and development projected to occur more than 10 years in the future cannot be included in the maximum allowable impact fee calculations.

4.1 Service Units

According to Chapter 395 of the Texas Local Government Code, the maximum allowable impact fee may not exceed the amount determined by dividing the cost of required capital improvements by the total number of service units attributed to new development during the impact fee eligibility period. A water service unit is defined as the service equivalent to a water-only connection or a water/wastewater connection for a single-family residence. A wastewater service unit is defined as the service unit equivalent to a wastewater-only connection or a water/wastewater connection for a single-family residence.

Public, commercial, and industrial connections are converted into service units based upon the capacity of each meter used to provide service. The number of service units required to represent each meter size is based on the safe maximum operating capacity of the appropriate meter type. American Water Works Association (AWWA) standards C700 and C710 (Displacement Meters), C702 (Compound Meters), and C703 (Fire Service Type, Type III, also referred to as Combination Meters) were used to determine the safe maximum operating capacity, as these meter types represent those in place and stocked by the City. The service unit equivalent for each meter size used by the City is listed in **Table 4-1**.

Table 4-1: Service Unit Equivalencies

Meter Size	Safe Maximum Operating Capacity ⁽¹⁾ (gpm)	Service Unit Equivalent
5/8" Displacement	15	1.0
3/4" Displacement	25	1.7
1" Displacement	40	2.7
1 1/2" Displacement	50	3.3
2" Displacement	100	6.7
3" Compound	320	21.3
4" Compound	500	33.3
4" Combination	700	46.7
6" Compound	1,000	66.7
6" Combination	1,600	106.7
8" Combination	2,800	186.7
10" Combination	4,400	293.3

(1) Safe maximum operating capacity is based on AWWA standards C700 and C710, C702, and C703.

Typically, in Pflugerville, single-family residences are served with 5/8-inch water meters. Larger meters represent public, commercial, and industrial water use. The City provided data that included the quantity and size of each active water meter in their system as of July 2022. This data included meters served by Manville WSC. To determine the number of meters in the Water Service Area in 2022, FNI subtracted the number of meters of each meter size served by Manville WSC from the total meter count for each meter size. To estimate the number of meters in the Water Service Area in 2032, FNI assumed a 6% growth rate over the 10-year period including Manville WSC customers. This is consistent with the land use assumptions discussed in **Section 2.0**. **Table 4-2** shows the water service units for 2022 and the projected service units for 2032. The service units for 2022 and 2032 were calculated by multiplying the number of meters of each meter size by the corresponding service unit equivalent. The growth in service units is the difference between the service units in 2032 and 2022.

Table 4-2: Water Service Units

Meter Size	2022			2032			Growth in Service Units
	Number of Meters ⁽¹⁾	Service Unit Equivalent ⁽²⁾	Service Units	Number of Meters ⁽³⁾	Service Unit Equivalent ⁽²⁾	Service Units	
5/8" Displacement	14,634	1.0	14,634	30,702	1.0	30,702	16,068
3/4" Displacement	86	1.7	143	181	1.7	302	158
1" Displacement	163	2.7	435	342	2.7	912	477
1 1/2" Displacement	364	3.3	1,213	764	3.3	2,547	1,333
2" Displacement	167	6.7	1,113	350	6.7	2,333	1,220
3" Compound	14	21.3	299	29	21.3	619	320
4" Compound	15	33.3	500	32	33.3	1,067	567
4" Combination	2	46.7	93	4	46.7	187	93
6" Compound	6	66.7	400	13	66.7	867	467
6" Combination	4	106.7	427	8	106.7	853	427
8" Combination	11	186.7	2,053	23	186.7	4,293	2,240
10" Combination	6	293.3	1,760	12	293.3	3,520	1,760
Total	15,472	-	23,070	32,460	-	48,201	25,130

(1) Meter count provided by City (minus meters in Manville WSC service area).

(2) Based on AWWA C700, C702, and C703 Maximum Safe Operating Flow.

(3) Based on 6% growth rate in the Water Service Area (including Manville WSC)

The total number of wastewater meters in both Wastewater Service Areas was provided by the City. To estimate the number of meters by size in Service Area 1 and Service Area 2 in 2022, FNI used geocoded meter data provided by the City. Based on the selected developed parcels, the 10-year growth rates calculated for Service Area 1 and Service Area 2 were 7.26%. **Table 4-3** and **Table 4-4** show the wastewater service units for 2022 and the projected service units for 2032 for Service Area 1 and Service Area 2, respectively. The service units for 2022 and 2032 were calculated by multiplying the number of meters of each meter size by the service unit equivalent. The growth in service units is the difference between the service units in 2032 and 2022.

Table 4-3: Wastewater Service Area 1 SUE Projections

Meter Size	2022			2032			Growth in Service Units
	Number of Meters ⁽¹⁾	Service Unit Equivalent ⁽²⁾	Service Units	Number of Meters ⁽³⁾	Service Unit Equivalent ⁽²⁾	Service Units	
5/8" Displacement	9,366	1.0	9,366	18,883	1.0	18,883	9,517
3/4" Displacement	71	1.7	118	143	1.7	238	120
1" Displacement	150	2.7	400	302	2.7	805	405
1 1/2" Displacement	341	3.3	1,137	687	3.3	2,290	1,153
2" Displacement	111	6.7	740	224	6.7	1,493	753
3" Compound	13	21.3	277	26	21.3	555	277
4" Compound	10	33.3	333	20	33.3	667	333
4" Combination	1	46.7	47	2	46.7	93	47
6" Compound	7	66.7	467	14	66.7	933	467
6" Combination	2	106.7	213	4	106.7	427	213
8" Combination	9	186.7	1,680	18	186.7	3,360	1,680
10" Combination	5	293.3	1,467	10	293.3	2,933	1,467
Total	10,086	-	16,245	20,333	-	32,678	16,433

(1) Meter count provided by City and allocated for each wastewater service area based on billing data.

(2) Based on AWWA C700, C702, and C703 Maximum Safe Operating Flow.

(3) Based on Service Area 1 growth rate of 7.26%.

Table 4-4: Wastewater Service Area 2 SUE Projections

Meter Size	2022			2032			Growth in Service Units
	Number of Meters ⁽¹⁾	Service Unit Equivalent ⁽²⁾	Service Units	Number of Meters ⁽³⁾	Service Unit Equivalent ⁽²⁾	Service Units	
5/8" Displacement	13,489	1.0	13,489	27,180	1.0	27,180	13,691
3/4" Displacement	24	1.7	40	49	1.7	82	42
1" Displacement	28	2.7	75	56	2.7	149	75
1 1/2" Displacement	33	3.3	110	67	3.3	223	113
2" Displacement	78	6.7	520	157	6.7	1,047	527
3" Compound	3	21.3	64	6	21.3	128	64
4" Compound	7	33.3	233	14	33.3	467	233
4" Combination	1	46.7	47	2	46.7	93	47
6" Compound	13	66.7	867	26	66.7	1,733	867
6" Combination	2	106.7	213	4	106.7	427	213
8" Combination	2	186.7	373	4	186.7	747	373
10" Combination	3	293.3	880	6	293.3	1,760	880
Total	13,683	-	16,911	27,571	-	34,035	17,125

(1) Meter count provided by City and allocated for each wastewater service area based on billing data.

(2) Based on AWWA C700, C702, and C703 Maximum Safe Operating Flow.

(3) Based on Service Area 2 growth rate of 7.26%.

4.2 Maximum Impact Fee Calculations

The impact fee determination method employed by NewGen Strategies and Solutions, LLC is developed through a financial based model, which fully recognizes the requirements of Chapter 395, including the recognition of cash and/or debt financing, interest earnings, fund balances, and applicable credits. In developing the components of the financial model, several assumptions must be made, including the following:

- Financing
 - Method of financing
 - The level of financing
 - Cost of financing
 - Debt repayment structure
- Timing and Level of Expenditures and Revenues
- Interest Earnings
- Annual Service Unit Growth

The assumptions employed in the maximum assessable impact fee determination provide a reasonable basis for forecasting; however, it must be emphasized that these assumptions may not necessarily reflect actual future conditions. To address this, Chapter 395 requires the monitoring of impact fees through the Impact Fee Advisory Committee and allows for the option to update or revise impact fees to reflect the actual implementation of the impact fee program.

Once the cost of capacity added that is attributable to growth is determined, it must then be decided how the cost will be financed: cash and/or debt. For any previously funded projects, whether partially funded or in full, actual costs of capital have been included. Unless specific funding has already been determined, it is assumed that the City will cash fund 25% and debt finance 75% of the future impact fee eligible project costs. For debt financing, the cost of financing is based on the S&P Municipal Bond General Obligation Index as of October 2022 of future debt costs for bonds and assumed to be issued with 30-year terms. Debt service payments for each future debt issue are assumed to remain constant over the issue's term.

Currently, the exact timing and annual level of cash capital expenditures over the forecast period is indeterminate; therefore, it is assumed that capital expenditures will occur in equal amounts over the 10-year program period. It is also assumed that for debt-financed capital projects, the City will expend debt proceeds over a 3-year timeframe. For the calculation of the maximum assessable impact fee, debt is assumed to be issued in equal amounts for each year. In order to recognize the full amount of debt to be

issued for the cost of capacity added that is attributable to growth during the 10-year period, a portion of years 8, 9, and 10 are assumed to be spent in the final 3 years.

Because debt is issued over 30-year terms and impact fees developed herein are to be charged over a 10-year period, sufficient fund balance must be generated to meet the future debt service obligations. There is no existing fund balance at the time because this is a new impact fee. Once collection begins, the generation of fund balances will be available for interest earnings.

Chapter 395 states that interest earnings are funds of the impact fee account and are to be held to the same restrictions as impact fee revenues. Therefore, in order to recognize that interest earnings are used to fund only these specific Water Impact Fee CIP projects, interest earnings are credited against the costs recoverable through impact fees. It should be noted that Chapter 395 does not require the upfront recognition of interest earnings in the impact fee determination; however, in an effort to acknowledge the time value of the impact fee payers' monies, interest earnings have been credited. Interest is assumed to be earned at an annual rate of 2.67% per the Lone Star Corporate Overnight Investment Pool Average Interest Rate as of September 2022.

As with the timing and level of the capital expenditures over the 10-year forecast, the timing and annual level of service unit growth over the 10-year program period is indeterminate at the present time. As such, it is assumed that service unit growth will be consistent over the 10-year forecast.

Chapter 395 requires a plan for awarding either a credit for the portion of ad valorem tax and/or utility service revenues generated by new service units during the program period that are used for payment of improvements that are included in the Water Impact Fee CIP. As an alternative, a credit equal to 50% of the total cost of implementing the Water Impact Fee CIP may be used. The City has elected to use the revenue credit method instead of the 50% method.

Table 4-5 shows a summary of the maximum allowable impact fee calculations for the City of Pflugerville's water system. **Table 4-6** and **Table 4-7** show a summary of the maximum allowable impact fee calculations for Service Area 1 and Service Area 2, respectively, of the City of Pflugerville's wastewater system. The detailed financial calculations are provided in **Appendix D**. A comparison graph showing impact fees in other nearby cities is presented on **Figure 4-1**.

Table 4-5: Maximum Water Impact Fee Calculation

Water Impact Fee	
Total Eligible Capital Improvement Costs	\$626,486,509
Recoverable Costs for Impact Fee Planning Period	\$440,527,996
Financing Costs	\$353,865,705
Interest Earnings	\$159,694,138
Credit for Utility Revenue	\$272,710,449
Total Eligible Impact Fee Costs	\$361,989,114
Growth in Service Units	25,130
Maximum Impact Fee per Service Unit	\$14,404

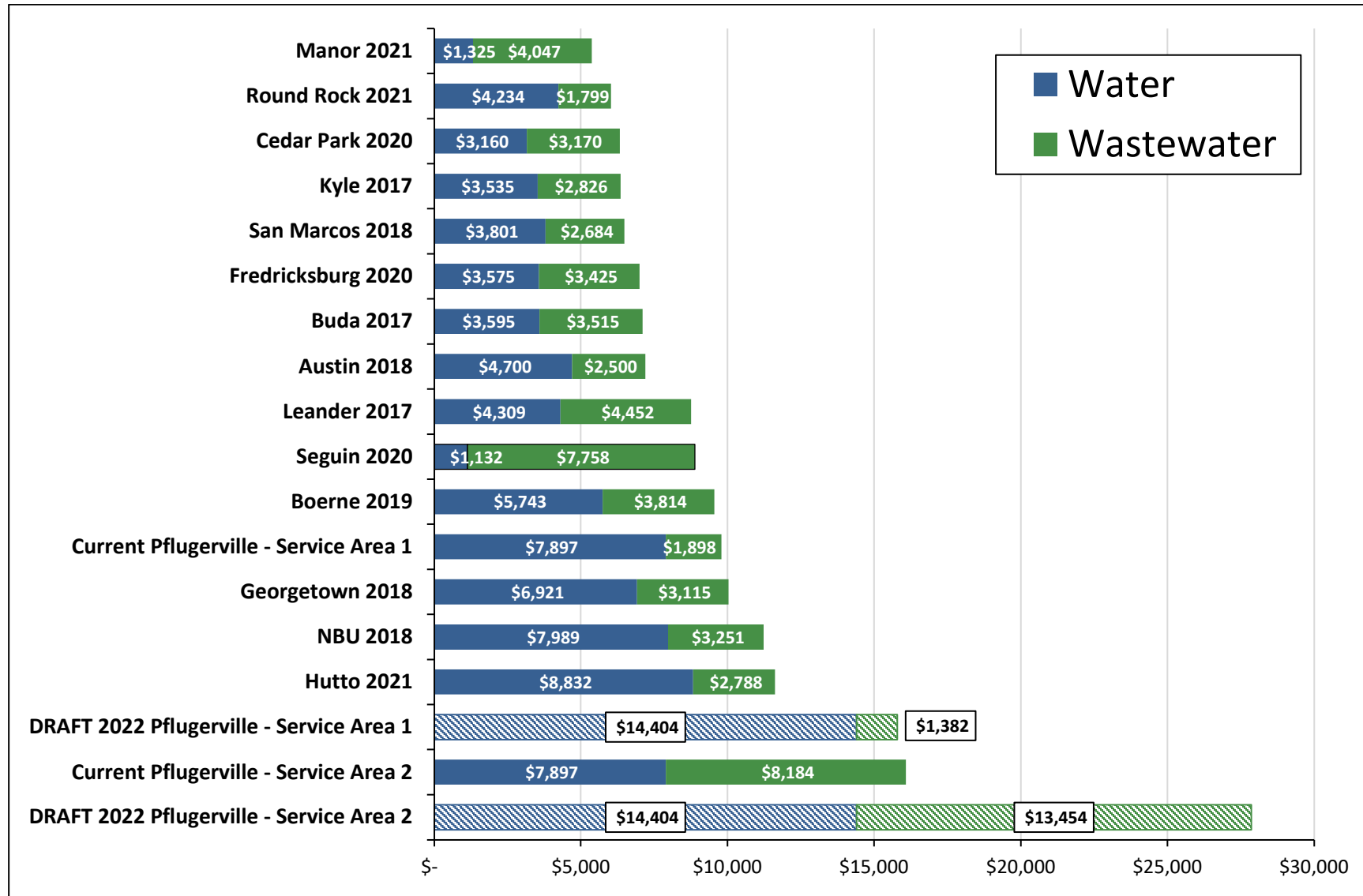
Table 4-6: Maximum Wastewater Impact Fee Calculation

Wastewater Impact Fee - Service Area 1	
Total Eligible Capital Improvement Costs	\$126,970,457
Recoverable Costs for Impact Fee Planning Period	\$29,234,001
Financing Costs	\$21,115,225
Interest Earnings	\$7,344,887
Credit for Utility Revenue	\$20,285,654
Total Eligible Impact Fee Costs	\$22,718,685
Growth in Service Units	16,433
Maximum Impact Fee per Service Unit	\$1,382

Table 4-7: Maximum Wastewater Impact Fee Calculation

Wastewater Impact Fee - Service Area 2	
Total Eligible Capital Improvement Costs	\$629,036,556
Recoverable Costs for Impact Fee Planning Period	\$302,918,072
Financing Costs	\$234,706,983
Interest Earnings	\$81,604,605
Credit for Utility Revenue	\$225,608,340
Total Eligible Impact Fee Costs	\$230,412,110
Growth in Service Units	17,125
Maximum Impact Fee per Service Unit	\$13,454

Figure 4-1: Water and Wastewater Impact Fee per Service Unit Comparison



Appendix A

Water System Project Cost Estimates

Water Impact Fee CIP Cost Summary

Proj. No.	Project Name	Cost
Existing Eligible		
A	1.5-MG Heatherwilde Elevated Storage Tank	\$6,390,257
B	9.2 MGD Pfenning Pump Station	\$3,200,000
C	16-inch Pecan Water Line	\$974,073
D	Impact Fee Study	\$38,000
Existing Eligible Sub-Total		\$10,602,330
Proposed Eligible		
1	2.5-MG North Elevated Storage Tank	\$8,067,584
2	2.0-MG 800' PZ Elevated Storage Tank	\$7,462,584
3	Water Treatment Plant Expansion & 6.0-MGD 800' PZ Pump Station	\$165,949,936
4	Lakeside Meadows Waterlines	\$32,119,740
5	30-inch Kelly Lane Water Line	\$4,855,200
6	16-inch Colorado Sand Drive Looping	\$1,215,000
7	HCA 12-inch loop	\$1,159,800
8	Colorado River Raw Water Line	\$137,561,420
9	36/30-inch Weiss Lane/Kelly Lane Water Lines	\$32,119,740
10	20-inch State Highway 130 Water Line	\$4,857,975
11	30/24-inch SH 130 Water Lines	\$7,906,300
12	12-inch Looping Improvements in Central PZ	\$2,617,100
13	State Highway 45 Pump Station	\$19,314,600
14	30/24-inch State Highway 45 Pump Station Discharge Line	\$7,906,300
15	Lakeside Meadows 12/16/8-inch Water Lines	\$3,442,300
16	12-inch Lifestyle Communities Water Line	\$1,325,400
17	24-inch East State Highway 130 Water Line	\$6,737,400
18	12/16-inch Water Lines Between Austin Hutto Road and Pflugerville Parkway	\$3,856,500
19	Water Treatment Plant Expansion to 45 MGD	\$135,000,000
20	Central PZ Pump Station Expansion to 39.0 MGD	\$17,503,200
21	12-inch Water Line South of State Highway 45	\$2,252,000
22	36/30/20-inch Immanuel Road EST Water Lines	\$11,365,500
23	12-inch Looping in Southern 960' PZ	\$1,288,600
Proposed Eligible Sub-Total		\$615,884,179
Total Water Impact Fee Eligible Cost		\$626,486,509

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 1

Phase: Impact Fee

Project Name: 2.5-MG North Elevated Storage Tank

Project Description:

A 2.5-MG elevated storage tank to replace the existing 1.0-MG North Standpipe. This project also includes a 24-inch water line to replace the existing 12/16-inch water line northeast of the tank site off of Pfennig Lane.

Project Driver:

This project will address existing regulatory compliance issues in the Central Pressure Zone and serve growth.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.5-MG North Elevated Storage Tank	1	LS	\$ 8,067,584	\$ 8,067,584
				SUBTOTAL:	\$ 8,067,584
				CONTINGENCY	0% \$ -
				SUBTOTAL:	\$ 8,067,584
				ENG/SURVEY	0% \$ -
				SUBTOTAL:	\$ 8,067,584
Estimated Project Total (2022 Dollars):					\$ 8,067,584

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 2

Phase: Impact Fee

Project Name: 2.0-MG 800' PZ Elevated Storage Tank

Project Description:

A 2.0-MG elevated storage tank at the Pflugerville WTP to serve a new 794' Pressure Zone. A 24-inch water line is required to connect the elevated storage tank to the water distribution system.

Project Driver:

This project will serve growth in the southeast portion of service area.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.0-MG 800' PZ Elevated Storage Tank	1	LS	\$ 7,462,584	\$ 7,462,584
				SUBTOTAL:	\$ 7,462,584
				CONTINGENCY	0% \$ -
				SUBTOTAL:	\$ 7,462,584
				ENG/SURVEY	0% \$ -
				SUBTOTAL:	\$ 7,462,584
Estimated Project Total (2022 Dollars):					\$ 7,462,584

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 3

Phase: Impact Fee

Project Name: Water Treatment Plant Expansion & 6.0-MGD 800' PZ Pump Station

Project Description:

Capacity and reliability improvements to all existing systems to provide firm capacity and redundancy in facilities to maximize the membranes installed at the WTP. This project will increase the firm capacity of the Water Treatment Plant from 17.3 MGD to 30.0 MGD. This project also includes a 6.0-MGD pump station at the Pflugerville WTP to serve a new 794' Pressure Zone.

Project Driver:

This project will provide additional production and distribution capacity to serve growth.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	WTP Expansion & 6.0-MGD 800' PZ Pump Station	1	LS	\$ 165,949,936	\$ 165,949,936
				SUBTOTAL:	\$ 165,949,936
				CONTINGENCY	0% \$ -
				SUBTOTAL:	\$ 165,949,936
				ENG/SURVEY	0% \$ -
				SUBTOTAL:	\$ 165,949,936
Estimated Project Total (2022 Dollars):					\$ 165,949,936

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 4

Phase: Impact Fee

Project Name: Lakeside Meadows Waterlines

Project Description:

A 42-inch water line to replace the existing 30-inch water line on Pflugerville Parkway from Weiss Lane to the western side of State Highway 130.

Project Driver:

This project will provide additional transmission capacity to serve growth.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Lakeside Meadows Waterlines	1	LS	\$ 32,119,740	\$ 32,119,740
				SUBTOTAL:	\$ 32,119,740
CONTINGENCY				0%	\$ -
				SUBTOTAL:	\$ 32,119,740
ENG/SURVEY				0%	\$ -
				SUBTOTAL:	\$ 32,119,740
Estimated Project Total (2022 Dollars):					\$ 32,119,740

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 5

Phase: Impact Fee

Project Name: 30-inch Kelly Lane Water Line

Project Description:

30-inch water line along Kelly Lane to connect the existing 24-inch water line along Weiss Lane to the existing 24-inch water line along Kelly Lane.

Project Driver:

This project will provide additional transmission capacity and serve growth.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	30" WL & Appurtenances	4,900	LF	\$ 450	\$ 2,205,000
2	48" Boring and Casing	500	LF	\$ 1,920	\$ 960,000
					SUBTOTAL: \$ 3,165,000
CONTINGENCY				30%	\$ 949,500
					SUBTOTAL: \$ 4,114,500
ENG/SURVEY				18%	\$ 740,700
					SUBTOTAL: \$ 4,855,200
Estimated Project Total (2022 Dollars):					\$ 4,855,200

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 6

Phase: Impact Fee

Project Name: 16-inch Colorado Sand Drive Looping

Project Description:

16-inch water line in the Central Pressure Zone that will connect the existing 16-inch water lines along Colorado Sand Drive.

Project Driver:

This project will serve growth and provide increased redundancy.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" WL & Appurtenances	3,300	LF	\$ 240	\$ 792,000
					SUBTOTAL: \$ 792,000
CONTINGENCY				30%	\$ 237,600
					SUBTOTAL: \$ 1,029,600
ENG/SURVEY				18%	\$ 185,400
					SUBTOTAL: \$ 1,215,000
Estimated Project Total (2022 Dollars):					\$ 1,215,000

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 7

Phase: Impact Fee

Project Name: HCA 12-inch loop

Project Description:

0

Project Driver:

0

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" WL & Appurtenances	2,700	LF	\$ 180	\$ 486,000
2	Pavement Repair	2,700	LF	\$ 100	\$ 270,000
				SUBTOTAL:	\$ 756,000
				CONTINGENCY	30%
				SUBTOTAL:	\$ 982,800
				ENG/SURVEY	18%
				SUBTOTAL:	\$ 1,159,800
Estimated Project Total (2022 Dollars):					\$ 1,159,800

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 8

Phase: Impact Fee

Project Name: Colorado River Raw Water Line

Project Description:

A second raw water line from the Colorado River, constructed within the City's existing easement, and capacity improvements to the existing Colorado River Pump Station.

Project Drivers:

This project will provide additional production capacity to serve growth.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Colorado River Raw Water Line	1	LS	\$ 137,561,420	\$ 137,561,420
		1			
				SUBTOTAL:	\$ 137,561,420
				CONTINGENCY	0%
					\$ -
				SUBTOTAL:	\$ 137,561,420
				ENG/SURVEY	0%
					\$ -
				SUBTOTAL:	\$ 137,561,420
Estimated Project Total (2022 Dollars):					\$ 137,561,420

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 9

Phase: Impact Fee

Project Name: 36/30-inch Weiss Lane/Kelly Lane Water Lines

Project Description:

36- and 30-inch water lines along Weiss Lane and Kelly Lane to connect the 36-inch water line under design along Weiss Lane to the existing 30-inch water line under design along Kelly Lane.

Project Drivers:

This project will provide additional transmission capacity and serve growth.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	36/30-inch Weiss Lane/Kelly Lane Water Lines	1	LS	\$ 32,119,740	\$ 32,119,740
				SUBTOTAL:	\$ 32,119,740
				CONTINGENCY	0%
				SUBTOTAL:	\$ 32,119,740
				ENG/SURVEY	0%
				SUBTOTAL:	\$ 32,119,740
Estimated Project Total (2022 Dollars):					\$ 32,119,740

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: 10 Phase: Impact Fee

Project Name: 20-inch State Highway 130 Water Line

Project Description:

20-inch water line along the west side of State Highway 130 from Pflugerville Parkway to Farm to Market 685.

Project Drivers:

This project will serve growth along the State Highway 130 corridor and provide looping improvements for the Central Pressure Zone.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20-inch State Highway 130 Water Line	1	LS	\$ 4,857,975	\$ 4,857,975
				SUBTOTAL:	\$ 4,857,975
				CONTINGENCY	0%
				SUBTOTAL:	\$ 4,857,975
				ENG/SURVEY	0%
				SUBTOTAL:	\$ 4,857,975
Estimated Project Total (2022 Dollars):					\$ 4,857,975

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 11

Phase: Impact Fee

Project Name: 30/24-inch SH 130 Water Lines

Project Description:

A 30- and 24-inch along the west side of SH 130 from Pecan Street to Pflugerville Parkway.

Project Drivers:

This project will serve growth in the Central Pressure Zone west of State Highway 130.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	30" WL & Appurtenances	3,000	LF	\$ 450	\$ 1,350,000
2	24" WL & Appurtenances	7,900	LF	\$ 360	\$ 2,844,000
3	48" Boring and Casing	500	LF	\$ 1,920	\$ 960,000
				SUBTOTAL:	\$ 5,154,000
CONTINGENCY				30%	\$ 1,546,200
				SUBTOTAL:	\$ 6,700,200
ENG/SURVEY				18%	\$ 1,206,100
				SUBTOTAL:	\$ 7,906,300
Estimated Project Total (2022 Dollars):					\$ 7,906,300

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 12

Phase: Impact Fee

Project Name: 12-inch Looping Improvements in Central PZ

Project Description:

12-inch water lines in the Central Pressure Zone that will serve new development and improve system operations.

Project Drivers:

This project will serve growth and provide increased redundancy.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" WL & Appurtenances	6,700	LF	\$ 180	\$ 1,206,000
2	24" Boring and Casing	500	LF	\$ 960	\$ 480,000
3	Pavement Repair	200	LF	\$ 100	\$ 20,000
				SUBTOTAL:	\$ 1,706,000
CONTINGENCY				30%	\$ 511,800
				SUBTOTAL:	\$ 2,217,800
ENG/SURVEY				18%	\$ 399,300
				SUBTOTAL:	\$ 2,617,100
Estimated Project Total (2022 Dollars):					\$ 2,617,100

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 13

Phase: Impact Fee

Project Name: State Highway 45 Pump Station

Project Description:

A 5.0-MGD pump station and 1.25-MG ground storage tank in the northwest corner of the intersection of State Highway 130 and State Highway 45 serving the 960' Pressure Zone. 30-inch water lines along Kelly Lane, the eastern frontage road of State Highway 130, and the northern frontage road of State Highway 45 crossing under State Highway 130, providing a means to fill the ground storage tank from the Central Pressure Zone.

Project Drivers:

This project will provide additional pumping capacity to serve growth in the 960' Pressure Zone.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL	
1	Pump Station - New 5.0 MGD	1	LS	\$ 5,376,000	\$ 5,376,000	
2	1.25 MG Ground Storage Tank	1	LS	\$ 2,200,000	\$ 2,200,000	
3	Flow Control Valve with Vault	1	LS	\$ 200,000	\$ 200,000	
4	30" WL & Appurtenances	4,300	LF	\$ 450	\$ 1,935,000	
5	48" Boring and Casing	1,500	LF	\$ 1,920	\$ 2,880,000	
				SUBTOTAL:	\$ 12,591,000	
				CONTINGENCY	30%	\$ 3,777,300
				SUBTOTAL:	\$ 16,368,300	
				ENG/SURVEY	18%	\$ 2,946,300
				SUBTOTAL:	\$ 19,314,600	
Estimated Project Total (2022 Dollars):					\$ 19,314,600	

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 14

Phase: Impact Fee

Project Name: 30/24-inch State Highway 45 Pump Station Discharge Line

Project Description:

30- and 24-inch water lines along the northern frontage road of State Highway 45 and Heatherwilde Boulevard. This project will connect the State Highway 45 Pump Station to the 960' Pressure Zone.

Project Drivers:

This project will provide additional pumping capacity to serve growth in the 960' Pressure Zone.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	30" WL & Appurtenances	4,200	LF	\$ 450	\$ 1,890,000
2	24" WL & Appurtenances	4,900	LF	\$ 360	\$ 1,764,000
3	36" Boring and Casing	1,000	LF	\$ 1,440	\$ 1,440,000
4	Pavement Repair	600	LF	\$ 100	\$ 60,000
SUBTOTAL:					\$ 5,154,000
CONTINGENCY				30%	\$ 1,546,200
SUBTOTAL:					\$ 6,700,200
ENG/SURVEY				18%	\$ 1,206,100
SUBTOTAL:					\$ 7,906,300
Estimated Project Total (2022 Dollars):					\$ 7,906,300

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 15

Phase: Impact Fee

Project Name: Lakeside Meadows 12/16/8-inch Water Lines

Project Description:

This project includes new 16-, 12-, and 8-inch water lines to serve the proposed Lakeside Meadows development.

Project Drivers:

This project will serve growth in the Central Pressure Zone east of State Highway 130.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" WL & Appurtenances	5,700	LF	\$ 240	\$ 1,368,000
2	12" WL & Appurtenances	1,800	LF	\$ 180	\$ 324,000
3	8" WL & Appurtenances	2,600	LF	\$ 120	\$ 312,000
4	30" Boring and Casing	200	LF	\$ 1,200	\$ 240,000
				SUBTOTAL:	\$ 2,244,000
				CONTINGENCY	30%
				SUBTOTAL:	\$ 2,917,200
				ENG/SURVEY	18%
				SUBTOTAL:	\$ 3,442,300
Estimated Project Total (2022 Dollars):					\$ 3,442,300

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 16

Phase: Impact Fee

Project Name: 12-inch Lifestyle Communities Water Line

Project Description:

This project includes new 12-inch water lines to serve the proposed Lifestyle Communities development.

Project Drivers:

This project will serve growth in the Central Pressure Zone west of State Highway 130.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" WL & Appurtenances	4,800	LF	\$ 180	\$ 864,000
				SUBTOTAL:	\$ 864,000
CONTINGENCY				30%	\$ 259,200
				SUBTOTAL:	\$ 1,123,200
ENG/SURVEY				18%	\$ 202,200
				SUBTOTAL:	\$ 1,325,400
Estimated Project Total (2022 Dollars):					\$ 1,325,400

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 17

Phase: Impact Fee

Project Name: 24-inch East State Highway 130 Water Line

Project Description:

A 24-inch water line along the eastern frontage road of State Highway 130 from the under design 42-inch water line in Project G to the existing 30-inch water line along Pflugerville Parkway.

Project Drivers:

This project will serve growth in the Central Pressure Zone east of State Highway 130.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" WL & Appurtenances	10,200	LF	\$ 360	\$ 3,672,000
2	36" Boring and Casing	500	LF	\$ 1,440	\$ 720,000
				SUBTOTAL:	\$ 4,392,000
				CONTINGENCY	30%
				SUBTOTAL:	\$ 5,709,600
				ENG/SURVEY	18%
				SUBTOTAL:	\$ 6,737,400
Estimated Project Total (2022 Dollars):					\$ 6,737,400

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 18

Phase: Impact Fee

Project Name: 12/16-inch Water Lines Between Austin Hutto Road and Pflugerville Parkway

Project Description:

16- and 12-inch water lines west of State Highway 130 following the proposed alignments of Old Austin Hutto Road and Pfennig Lane.

Project Drivers:

This project will serve growth in the Central Pressure Zone west of State Highway 130.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL	
1	16" WL & Appurtenances	6,400	LF	\$ 240	\$ 1,536,000	
2	12" WL & Appurtenances	4,100	LF	\$ 180	\$ 738,000	
3	30" Boring and Casing	200	LF	\$ 1,200	\$ 240,000	
				SUBTOTAL:	\$ 2,514,000	
				CONTINGENCY	30%	\$ 754,200
				SUBTOTAL:	\$ 3,268,200	
				ENG/SURVEY	18%	\$ 588,300
				SUBTOTAL:	\$ 3,856,500	
Estimated Project Total (2022 Dollars):					\$ 3,856,500	

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 19

Phase: Impact Fee

Project Name: Water Treatment Plant Expansion to 45 MGD

Project Description:

A treatment capacity expansion at the Pflugerville WTP from 30.0 MGD to 45.0 MGD, and addition of two 5.0-MG clearwells. This project also includes an expansion of the Lake Pump Station (raw water) from 30.0 MGD to 45.0 MGD, replaces the existing 36-inch transmission main with a 54-inch pipeline, and expands the firm capacity of the River Pump Station (raw water) from 10.0 MGD to 20.0 MGD.

Project Drivers:

This project will provide additional production capacity to serve growth.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	WTP Expansion to 45 MGD	1	LS	\$ 135,000,000	\$ 135,000,000
				SUBTOTAL:	\$ 135,000,000
CONTINGENCY				0%	\$ -
				SUBTOTAL:	\$ 135,000,000
ENG/SURVEY				0%	\$ -
				SUBTOTAL:	\$ 135,000,000
Estimated Project Total (2022 Dollars):					\$ 135,000,000

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 20

Phase: Impact Fee

Project Name: Central PZ Pump Station Expansion to 39.0 MGD

Project Description:

An expansion of the Central PZ Pump Station from 24.0 MGD to 39.0 MGD.

Project Drivers:

This project will provide additional pumping capacity to serve growth.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Central PZ Pump Station Expansion to 39.0 MGD	1	LS	\$ 17,503,200	\$ 17,503,200
				SUBTOTAL:	\$ 17,503,200
CONTINGENCY				0%	\$ -
				SUBTOTAL:	\$ 17,503,200
ENG/SURVEY				0%	\$ -
				SUBTOTAL:	\$ 17,503,200
Estimated Project Total (2022 Dollars):					\$ 17,503,200

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 21

Phase: Impact Fee

Project Name: 12-inch Water Line South of State Highway 45

Project Description:

12-inch water lines along the southern frontage road of State Highway 45 from Heatherwilde Boulevard to Meister Lane, along Meister Lane to New Meister Lane, and along New Meister Lane to Heatherwilde Boulevard.

Project Drivers:

This project will serve growth in the 960' Pressure Zone.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" WL & Appurtenances	8,100	LF	\$ 180	\$ 1,458,000
2	Pavement Repair	100	LF	\$ 100	\$ 10,000
SUBTOTAL:					\$ 1,468,000
CONTINGENCY				30%	\$ 440,400
SUBTOTAL:					\$ 1,908,400
ENG/SURVEY				18%	\$ 343,600
SUBTOTAL:					\$ 2,252,000
Estimated Project Total (2022 Dollars):					\$ 2,252,000

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 22

Phase: Impact Fee

Project Name: 36/30/20-inch Immanuel Road EST Water Lines

Project Description:

36-, 30-, and 20-inch water lines replacing the existing water lines on East Pecan Street and connecting the proposed Immanuel Road EST in Project 18 to the distribution system.

Project Drivers:

This project will provide additional transmission and elevated storage capacity to serve growth in the Central Pressure Zone.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	36" WL & Appurtenances	2,100	LF	\$ 540	\$ 1,134,000
2	30" WL & Appurtenances	11,100	LF	\$ 450	\$ 4,995,000
3	20" WL & Appurtenances	1,000	LF	\$ 300	\$ 300,000
4	48" Boring and Casing	500	LF	\$ 1,920	\$ 960,000
5	Pavement Repair	200	LF	\$ 100	\$ 20,000
				SUBTOTAL:	\$ 7,409,000
				CONTINGENCY	30%
				SUBTOTAL:	\$ 9,631,700
				ENG/SURVEY	18%
				SUBTOTAL:	\$ 11,365,500
Estimated Project Total (2022 Dollars):					\$ 11,365,500

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City of Pflugerville



Water Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 23

Phase: Impact Fee

Project Name: 12-inch Looping in Southern 960' PZ

Project Description:

A 12-inch water line along East Wells Branch Parkway connecting the existing 12-inch water line on South 10th Street to the existing 16-inch on East Wells Branch Parkway.

Project Drivers:

This project will improve connectivity in the Central Pressure Zone.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" WL & Appurtenances	2,000	LF	\$ 180	\$ 360,000
2	24" Boring and Casing	500	LF	\$ 960	\$ 480,000
				SUBTOTAL:	\$ 840,000
CONTINGENCY				30%	\$ 252,000
				SUBTOTAL:	\$ 1,092,000
ENG/SURVEY				18%	\$ 196,600
				SUBTOTAL:	\$ 1,288,600
Estimated Project Total (2022 Dollars):					\$ 1,288,600

Appendix B

Wastewater System Service Area 1

Project Cost Estimates

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City of Pflugerville
Wastewater Impact Fee CIP Cost Summary

Wastewater Impact Fee Service Area 1		
Project No.	Project Name	Cost
Existing Eligible		
A	SH 130 Interceptor	\$16,306,800
B	Central Wastewater Treatment Plant Phase 1 Expansion	\$51,889,172
C	30/24-inch Highland Park Interceptor	\$2,168,090
G	10-inch Quick Trip Interceptor	\$628,238
H	Impact Fee Study	\$19,000
Existing Eligible Sub-Total		\$71,011,300
Proposed Eligible		
1	Central Wastewater Treatment Plant Phase 2 Expansion	\$25,847,457
8	15-inch Gilleland Creek Interceptor	\$2,368,558
9	18-inch North Central Basin Interceptor	\$1,366,550
11	8-inch Bohls Place Interceptor	\$2,208,175
12	12-inch Club Interceptor	\$5,017,818
13	Boulder Ridge Lift Station Expansion	\$997,100
15	24-inch Central Interceptor	\$11,192,100
17	24-inch SH 45 Interceptor	\$5,277,000
18	15-inch SH 45 Interceptor	\$1,684,400
Proposed Eligible Sub-Total		\$55,959,158
Total Wastewater Service Area 1 Impact Fee Eligible Cost		\$126,970,457

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **1** Service Area: **1**

Project Name: **Central Wastewater Treatment Plant Phase 2 Expansion**

Project Description:

Expansion of Central WWTP to 8.50 MGD

Project Driver:

Increased flows due to growth in the Central and Wilbarger Basins.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8.5 MGD WWTP Expansion (Phase 2)	1	LS	\$ 25,847,457	\$ 25,847,457
				SUBTOTAL:	\$ 25,847,457
CONTINGENCY				0%	\$ -
				SUBTOTAL:	\$ 25,847,457
ENG/SURVEY				0%	\$ -
				SUBTOTAL:	\$ 25,847,457
Estimated Project Total (2022 Dollars):					\$ 25,847,457

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: 8 Service Area: 1

Project Name: **15-inch Gilleland Creek Interceptor**

Project Description:

15-inch interceptor along Gilleland Creek replacing an existing 12-inch interceptor.

Project Driver:

Insufficient interceptor capacity to meet projected peak flows.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15-inch Gilleland Creek Interceptor	1	LS	\$ 2,368,558	\$ 2,368,558
SUBTOTAL:					\$ 2,368,558
CONTINGENCY				0%	\$ -
SUBTOTAL:					\$ 2,368,558
ENG/SURVEY				0%	\$ -
SUBTOTAL:					\$ 2,368,558
Estimated Project Total (2022 Dollars):					\$ 2,368,558

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: 9 Service Area: 1

Project Name: 18-inch North Central Basin Interceptor

Project Description:

18-inch interceptor replacing an existing 15-inch interceptor along Great Basin Avenue.

Project Driver:

Increased flows due to growth in the northern portion of the Central Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18-inch North Central Basin Interceptor	1	LS	\$ 1,366,550	\$ 1,366,550
SUBTOTAL:					\$ 1,366,550
CONTINGENCY				0%	\$ -
SUBTOTAL:					\$ 1,366,550
ENG/SURVEY				0%	\$ -
SUBTOTAL:					\$ 1,366,550
Estimated Project Total (2022 Dollars):					\$ 1,366,550

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **11** Service Area: **1**

Project Name: **8-inch Bohls Place Interceptor**

Project Description:
8-inch interceptor connecting the Bohls Place development to the State Highway 130 interceptor. Decommissioning of Bohls Place Lift Station after completion of the interceptor.

Project Driver:
System reliability and insufficient firm pumping capacity to meet existing peak flows.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8-inch Bohls Place Interceptor	1	LS	\$ 2,208,175	\$ 2,208,175
SUBTOTAL:					\$ 2,208,175
CONTINGENCY				0%	\$ -
SUBTOTAL:					\$ 2,208,175
ENG/SURVEY				0%	\$ -
SUBTOTAL:					\$ 2,208,175
Estimated Project Total (2022 Dollars):					\$ 2,208,175

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Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **12** Service Area: **1**

Project Name: **12-inch Club Interceptor**

Project Description:
12-inch interceptor connecting the area served by the Club Lift Station to the existing 8-inch interceptor along Wells Branch Parkway. Decommissioning of Club Lift Station after completion of the interceptor.

Project Driver:
System reliability and insufficient firm pumping capacity to meet existing peak flows.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12-inch Club Interceptor	1	LS	\$ 5,017,818	\$ 5,017,818
SUBTOTAL:					\$ 5,017,818
CONTINGENCY				0%	\$ -
SUBTOTAL:					\$ 5,017,818
ENG/SURVEY				0%	\$ -
SUBTOTAL:					\$ 5,017,818
Estimated Project Total (2022 Dollars):					\$ 5,017,818

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Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **13** Service Area: **1**

Project Name: **Boulder Ridge Lift Station Expansion**

Project Description:

Expansion of Boulder Ridge Lift Station from a firm capacity of 0.33 MGD to 0.60 MGD.

Project Driver:

Insufficient firm pumping capacity to meet existing peak flows.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	0.3 MGD Lift Station Expansion	1	LS	\$ 550,000	\$ 550,000
2	Generator	1	LS	\$ 100,000	\$ 100,000
SUBTOTAL:					\$ 650,000
CONTINGENCY				30%	\$ 195,000
SUBTOTAL:					\$ 845,000
ENG/SURVEY				18%	\$ 152,100
SUBTOTAL:					\$ 997,100

Estimated Project Total (2022 Dollars): \$ 997,100

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Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: 15 Service Area: 1

Project Name: 24-inch Central Interceptor

Project Description:

30/24-inch interceptors replacing an existing 24/18-inch wastewater line along Dessau Road and Wells Branch Parkway.

Project Driver:

Increased flows due to growth in the Central Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe 8- 16 feet deep	13,500	LF	\$ 480	\$ 6,480,000
2	60" Diameter Manhole	28	EA	\$ 20,000	\$ 560,000
3	32" Boring and Casing	200	LF	\$ 1,280	\$ 256,000
SUBTOTAL:					\$ 7,296,000
CONTINGENCY				30%	\$ 2,188,800
SUBTOTAL:					\$ 9,484,800
ENG/SURVEY				18%	\$ 1,707,300
SUBTOTAL:					\$ 11,192,100
Estimated Project Total (2022 Dollars):					\$ 11,192,100

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Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: 17 Service Area: 1

Project Name: 24-inch SH 45 Interceptor

Project Description:
15-inch and 24-inch interceptors crossing under State Highway 45 between Heatherwilde Boulevard and State Highway 130 currently being designed by CP&Y. This project will serve development northwest of the intersection of State Highway 45 and State Highway 130.

Project Drivers:
Increased flows due to growth along the State Highway 45 corridor.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe 8- 16 feet deep	5,100	LF	\$ 480	\$ 2,448,000
2	60" Diameter Manhole	11	EA	\$ 20,000	\$ 224,000
3	32" Boring and Casing	600	LF	\$ 1,280	\$ 768,000
SUBTOTAL:					\$ 3,440,000
CONTINGENCY				30%	\$ 1,032,000
SUBTOTAL:					\$ 4,472,000
ENG/SURVEY				18%	\$ 805,000
SUBTOTAL:					\$ 5,277,000
Estimated Project Total (2022 Dollars):					\$ 5,277,000

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Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **18** Service Area: **1**

Project Name: **15-inch SH 45 Interceptor**

Project Description:
15-inch wastewater main north of State Highway 45 between Heatherwilde Boulevard and State Highway 130. This project will serve development northwest of the intersection of State Highway 45 and State Highway 130.

Project Drivers:
Increased flows due to growth along the State Highway 45 corridor.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe 8- 16 feet deep	3,400	LF	\$ 300	\$ 1,020,000
2	48" Diameter Manhole	8	EA	\$ 10,000	\$ 78,000
SUBTOTAL:					\$ 1,098,000
CONTINGENCY				30%	\$ 329,400
SUBTOTAL:					\$ 1,427,400
ENG/SURVEY				18%	\$ 257,000
SUBTOTAL:					\$ 1,684,400
Estimated Project Total (2022 Dollars):					\$ 1,684,400

Appendix C

Wastewater System Service Area 2

Project Cost Estimates

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**City of Pflugerville
Wastewater Impact Fee CIP Cost Summary**

Wastewater Impact Fee Service Area 2		
Project No.	Project Name	Cost
Existing Eligible		
D	Carmel Lift Station and Force Main	\$3,853,330
E	36/24/21/18-inch Wilbarger Interceptors	\$4,188,786
F	Vine Creek Lift Station and 12-inch Force Main	\$1,810,411
H	Impact Fee Study	\$19,000
Existing Eligible Sub-Total		\$9,871,527
Proposed Eligible		
2	Wilbarger Wastewater Treatment Plant	\$247,000,000
3	54-inch Wilbarger Creek Interceptor	\$29,196,328
4	Carmel Lift Station Pump Upgrades	\$536,900
5	Sorento Interceptor Phase 2	\$21,658,855
6	Kelly Lane Interceptor	\$18,500,000
7	15-inch North Wilbarger Interceptor	\$4,361,365
10	Cottonwood West Lift Station	\$7,720,060
14	New Sweden Lift Station and Force Main	\$6,281,100
16	24-inch Carmel Interceptor	\$3,933,200
19	24-inch Colorado Sands Interceptor	\$13,306,000
20	18-inch Colorado Sands Interceptor	\$4,049,800
21	12-inch Wilbarger Interceptor	\$1,573,900
22	Wilbarger Wastewater Treatment Plant Expansion	\$202,488,000
23	New Sweden Lift Station Expansion and Force Main	\$8,171,400
24	Cottonwood West Interceptor	\$35,156,420
25	18-inch North Cottonwood Interceptor	\$4,139,150
26	Cottonwood North Interceptor	\$11,092,400
Proposed Eligible Sub-Total		\$619,164,879
Total Wastewater Service Area 2 Impact Fee Eligible Cost		\$629,036,406

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 2

Service Area: 2

Project Name: **Wilbarger Wastewater Treatment Plant**

Project Description:

Proposed Wilbarger WWTP with treatment capacity of 6.0 MGD

Project Driver:

Increased flows due to growth in the Wilbarger and Cottonwood Basins.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	6.0 MGD Wastewater Treatment Plant	1	LS	\$ 247,000,000	\$ 247,000,000
				SUBTOTAL:	\$ 247,000,000
CONTINGENCY				0%	\$ -
				SUBTOTAL:	\$ 247,000,000
ENG/SURVEY				0%	\$ -
				SUBTOTAL:	\$ 247,000,000
Estimated Project Total (2022 Dollars):					\$ 247,000,000

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **3** Service Area: **2**

Project Name: **54-inch Wilbarger Creek Interceptor**

Project Description:

54-inch interceptor in the southern portion of the Wilbarger Basin.

Project Driver:

Increased flows due to growth in the Wilbarger and Cottonwood Basins.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	54-inch Interceptor	1	LS	\$ 29,196,328	\$ 29,196,328
SUBTOTAL:					\$ 29,196,328
CONTINGENCY				0%	\$ -
SUBTOTAL:					\$ 29,196,328
ENG/SURVEY				0%	\$ -
SUBTOTAL:					\$ 29,196,328
Estimated Project Total (2022 Dollars):					\$ 29,196,328

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **4** Service Area: **2**

Project Name: **Carmel Lift Station Pump Upgrades**

Project Description:

Purchase and install three new 200 Hp pumps and upsize impellers in two existing pumps to expand pumping capacity and extend service life of lift station to 2028.

Project Driver:

Insufficient pumping capacity to meet peak flows.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Carmel LS Pump Upgrades	1	LS	\$ 350,000	\$ 350,000
SUBTOTAL:					\$ 350,000
CONTINGENCY				30%	\$ 105,000
SUBTOTAL:					\$ 455,000
ENG/SURVEY				18%	\$ 81,900
SUBTOTAL:					\$ 536,900
Estimated Project Total (2022 Dollars):					\$ 536,900

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: 5 Service Area: 2

Project Name: Sorrento Interceptor Phase 2

Project Description:

36-inch interceptor from Weiss Lane lift station and Verona lift station. Decommissioning Weiss Lane and Verona lift stations

Project Driver:

Insufficient pumping capacity at Weiss Lane Lift Station to meet peak flows.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Sorrento Phase 2	1	LS	\$ 21,658,855	\$ 21,658,855
SUBTOTAL:					\$ 21,658,855
CONTINGENCY				0%	\$ -
SUBTOTAL:					\$ 21,658,855
ENG/SURVEY				0%	\$ -
SUBTOTAL:					\$ 21,658,855
Estimated Project Total (2022 Dollars):					\$ 21,658,855

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 6

Service Area: 2

Project Name: Kelly Lane Interceptor

Project Description:

27-inch interceptor from the Kelly Lane Lift Station to upstream of the Weiss Lane Lift Station. 15-inch interceptor crossing under SH130 from the northwest portion of the City. Decommissioning the Kelly Lane, Dunes, Blackhawk, and Falcon Pointe lift stations. 15/12-inch interceptors connecting the wastewater lines upstream of the decommissioned lift stations to the 27-inch interceptor.

Project Driver:

Insufficient firm pumping capacity to meet projected peak flows at the Kelly Lane Lift Station, and increased system reliability and ease of operations.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Kelly Lane Interceptor	1	LS	\$ 18,500,000	\$ 18,500,000
				SUBTOTAL:	\$ 18,500,000
				CONTINGENCY	0%
					\$ -
				SUBTOTAL:	\$ 18,500,000
				ENG/SURVEY	0%
					\$ -
				SUBTOTAL:	\$ 18,500,000
Estimated Project Total (2022 Dollars):					\$ 18,500,000

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **7** Service Area: **2**

Project Name: **15-inch North Wilbarger Interceptor**

Project Description:

15-inch interceptor connecting North Wilbarger to N SH 130 interceptor

Project Driver:

New development west of State Highway 130 to be served by the Wilbarger Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15-inch Wilbarger Interceptor	1	LS	\$ 4,361,365	\$ 4,361,365
SUBTOTAL:					\$ 4,361,365
CONTINGENCY				0%	\$ -
SUBTOTAL:					\$ 4,361,365
ENG/SURVEY				0%	\$ -
SUBTOTAL:					\$ 4,361,365
Estimated Project Total (2022 Dollars):					\$ 4,361,365

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: 10 Service Area: 2

Project Name: Cottonwood West Lift Station

Project Description:

1.0 MGD lift station and 12-inch force main serving the southern portion of the Cottonwood West Basin.

Project Driver:

New development in currently undeveloped areas of the Cottonwood West Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Cottonwood West Lift Station	1	LS	\$ 7,720,060	\$ 7,720,060
SUBTOTAL:					\$ 7,720,060
CONTINGENCY				0%	\$ -
SUBTOTAL:					\$ 7,720,060
ENG/SURVEY				0%	\$ -
SUBTOTAL:					\$ 7,720,060
Estimated Project Total (2022 Dollars):					\$ 7,720,060

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **14** Service Area: **2**

Project Name: **New Sweden Lift Station and Force Main**

Project Description:

Lift station and 12-inch force main serving the southern portion of the Cottonwood West Basin.

Project Drivers:

Growth in the Cottonwood Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL	
1	New Sweden Lift Station & Force Main	1	LS	\$ 4,094,500	\$ 4,094,500	
SUBTOTAL:					\$ 4,094,500	
				CONTINGENCY	30%	\$ 1,228,400
SUBTOTAL:					\$ 5,322,900	
				ENG/SURVEY	18%	\$ 958,200
SUBTOTAL:					\$ 6,281,100	
Estimated Project Total (2022 Dollars):					\$ 6,281,100	

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **16** Service Area: **2**

Project Name: **24-inch Carmel Interceptor**

Project Description:

24-inch interceptor in the eastern portion of the Wilbarger Basin that will serve new development.

Project Drivers:

New development in currently undeveloped areas of the Wilbarger Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe 8- 16 feet deep	4,400	LF	\$ 480	\$ 2,112,000
2	60" Diameter Manhole	10	EA	\$ 20,000	\$ 196,000
3	32" Boring and Casing	200	LF	\$ 1,280	\$ 256,000
SUBTOTAL:					\$ 2,564,000
CONTINGENCY				30%	\$ 769,200
SUBTOTAL:					\$ 3,333,200
ENG/SURVEY				18%	\$ 600,000
SUBTOTAL:					\$ 3,933,200
Estimated Project Total (2022 Dollars):					\$ 3,933,200

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate

October 2022

Construction Project Number: 19

Service Area: 2

Project Name: 24-inch Colorado Sands Interceptor

Project Description:

24-inch interceptor in the western portion of the Wilbarger Basin that will serve the Colorado Sands development.

Project Drivers:

New development in currently undeveloped areas of the Wilbarger Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe 8- 16 feet deep	12,900	LF	\$ 480	\$ 6,192,000
2	12" Pipe 8- 16 feet deep	2,100	LF	\$ 240	\$ 504,000
3	8" Pipe 8- 16 feet deep	6,300	LF	\$ 160	\$ 1,008,000
4	60" Diameter Manhole	27	EA	\$ 20,000	\$ 536,000
5	48" Diameter Manhole	18	EA	\$ 10,000	\$ 178,000
6	32" Boring and Casing	200	LF	\$ 1,280	\$ 256,000
SUBTOTAL:					\$ 8,674,000
CONTINGENCY				30%	\$ 2,602,200
SUBTOTAL:					\$ 11,276,200
ENG/SURVEY				18%	\$ 2,029,800
SUBTOTAL:					\$ 13,306,000
Estimated Project Total (2022 Dollars):					\$ 13,306,000

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **20** Service Area: **2**

Project Name: **18-inch Colorado Sands Interceptor**

Project Description:

18-inch interceptor in the western portion of the Wilbarger Basin that will serve the Colorado Sands development.

Project Drivers:

New development in currently undeveloped areas of the Wilbarger Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe 8- 16 feet deep	4,700	LF	\$ 360	\$ 1,692,000
2	15" Pipe 8- 16 feet deep	1,500	LF	\$ 300	\$ 450,000
3	60" Diameter Manhole	10	EA	\$ 20,000	\$ 208,000
4	48" Diameter Manhole	4	EA	\$ 10,000	\$ 40,000
5	Lift Station - Decommission	1	LS	\$ 250,000	\$ 250,000
SUBTOTAL:					\$ 2,640,000
CONTINGENCY				30%	\$ 792,000
SUBTOTAL:					\$ 3,432,000
ENG/SURVEY				18%	\$ 617,800
SUBTOTAL:					\$ 4,049,800
Estimated Project Total (2022 Dollars):					\$ 4,049,800

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **21** Service Area: **2**

Project Name: **12-inch Wilbarger Interceptor**

Project Description:
12-inch and 8-inch wastewater main on Weiss Lane at Jesse Bohls Road to connect to the 18" line downstream.

Project Drivers:
New development along Weiss Lane as well as the discharge flow from the Water Treatment Plant.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe 8- 16 feet deep	1,600	LF	\$ 240	\$ 384,000
2	8" Pipe 8- 16 feet deep	1,200	LF	\$ 160	\$ 192,000
3	48" Diameter Manhole	7	EA	\$ 10,000	\$ 66,000
4	24" Boring and Casing	400	LF	\$ 960	\$ 384,000
SUBTOTAL:					\$ 1,026,000
CONTINGENCY				30%	\$ 307,800
SUBTOTAL:					\$ 1,333,800
ENG/SURVEY				18%	\$ 240,100
SUBTOTAL:					\$ 1,573,900

Estimated Project Total (2022 Dollars): \$ 1,573,900

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **22** Service Area: **2**

Project Name: **Wilbarger Wastewater Treatment Plant Expansion**

Project Description:

Expansion of Wilbarger WWTP treatment capacity from 6.0 MGD to 12.0 MGD

Project Drivers:

Increased flows due to growth in the Wilbarger and Cottonwood Basins.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL	
1	12.0 MGD WWTP Expansion	1	LS	\$ 132,000,000	\$ 132,000,000	
				SUBTOTAL:	\$ 132,000,000	
				CONTINGENCY	30%	\$ 39,600,000
				SUBTOTAL:	\$ 171,600,000	
				ENG/SURVEY	18%	\$ 30,888,000
				SUBTOTAL:	\$ 202,488,000	
Estimated Project Total (2022 Dollars):					\$ 202,488,000	

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **23** Service Area: **2**

Project Name: **New Sweden Lift Station Expansion and Force Main**

Project Description:
Lift station and parallel 12-inch force main that will serve the western portion of the Cottonwood Basin and convey flows to the Wilbarger WWTP.

Project Drivers:
Increased flows due to growth in the Cottonwood Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Force Main	16,700	LF	\$ 204	\$ 3,406,800
2	24" Boring and Casing	500	LF	\$ 960	\$ 480,000
3	1.0 MGD Lift Station	1	EA	\$ 1,440,000	\$ 1,440,000
SUBTOTAL:					\$ 5,326,800
CONTINGENCY				30%	\$ 1,598,100
SUBTOTAL:					\$ 6,924,900
ENG/SURVEY				18%	\$ 1,246,500
SUBTOTAL:					\$ 8,171,400
Estimated Project Total (2022 Dollars):					\$ 8,171,400

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **24** Service Area: **2**

Project Name: **Cottonwood West Interceptor**

Project Description:

48/42/36-inch interceptor in the Cottonwood West Basin that will serve new development.

Project Drivers:

New development in currently undeveloped areas of the Cottonwood West Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Cottonwood West Interceptor	1	LS	\$ 35,156,420	\$ 35,156,420
				SUBTOTAL:	\$ 35,156,420
				CONTINGENCY	0%
				SUBTOTAL:	\$ 35,156,420
				ENG/SURVEY	0%
				SUBTOTAL:	\$ 35,156,420
Estimated Project Total (2022 Dollars):					\$ 35,156,420

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: 25 Service Area: 2

Project Name: 18-inch North Cottonwood Interceptor

Project Description:

18-inch interceptor connecting the area served by the Vine Creek Lift Station to the Cottonwood West Interceptor. Decommissioning of Vine Creek Lift Station after completion of the interceptor.

Project Drivers:

System reliability and new development in currently undeveloped areas of the Cottonwood West Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe > 16 feet deep	4,500	LF	\$ 396	\$ 1,782,000
2	48" Diameter Manhole	7	EA	\$ 10,000	\$ 66,250
3	30" Boring and Casing	500	LF	\$ 1,200	\$ 600,000
4	Lift Station - Decommission	1	LS	\$ 250,000	\$ 250,000
				SUBTOTAL:	\$ 2,698,250
				CONTINGENCY	30%
				SUBTOTAL:	\$ 3,507,750
				ENG/SURVEY	18%
				SUBTOTAL:	\$ 4,139,150
Estimated Project Total (2022 Dollars):					\$ 4,139,150

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City of Pflugerville



Wastewater Impact Fee Capital Improvement Cost Estimate October 2022

Construction Project Number: **26** Service Area: **2**

Project Name: **Cottonwood North Interceptor**

Project Description:

36/33/27/21/18-inch interceptor in the Cottonwood West basin that will serve new development

Project Drivers:

New development in the north of the Cottonwood West Basin.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	36" Pipe 8- 16 feet deep	1,200	LF	\$ 720	\$ 864,000
2	33" Pipe 8- 16 feet deep	3,000	LF	\$ 660	\$ 1,980,000
3	27" Pipe 8- 16 feet deep	2,800	LF	\$ 540	\$ 1,512,000
4	21" Pipe 8- 16 feet deep	1,800	LF	\$ 420	\$ 756,000
5	18" Pipe 8- 16 feet deep	2,800	LF	\$ 360	\$ 1,008,000
6	72" Diameter Manhole	9	EA	\$ 25,000	\$ 235,000
7	60" Diameter Manhole	16	EA	\$ 20,000	\$ 316,000
8	30" Boring and Casing	200	LF	\$ 1,200	\$ 240,000
9	40" Boring and Casing	200	LF	\$ 1,600	\$ 320,000
				SUBTOTAL:	\$ 7,231,000
				CONTINGENCY	30%
				SUBTOTAL:	\$ 9,400,300
				ENG/SURVEY	18%
				SUBTOTAL:	\$ 11,092,400

Estimated Project Total (2022 Dollars): \$ 11,092,400

Appendix D

Impact Fee Financial Calculations

City of Pflugerville - 2022 Water Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Impact Fee Summary Table
 Water Service Area

0	Existing Fund Balance	\$ -
1	Existing Number of Service Units	23,070
2	Total Number of Services Units for Planning Period	48,200
3	Additional Service Units Added During Planning Period (Line 2 - Line 1)	25,130
4	Total Cost of the Water Impact Fee CIP	\$ 626,486,509
5	Recoverable Cost for Impact Fee Planning Period	\$ 440,527,996
6	Percent Recoverable for Water Impact Fee Planning Period (Line 5 / Line 4)	70.32%
7	Financing Costs (From Financial Analysis)	\$ 353,865,705
8	Interest Earnings (From Financial Analysis)	\$ (159,694,138)
9	Recoverable Cost of Water Impact Fee and Financing Costs (Line 5 + Line 7 + Line 8 - Line 0)	\$ 634,699,563
10	Pre-Credit Maximum Fee (Line 9 / Line 3)	\$ 25,257
11	Credit for Utility Revenues (From Financial Analysis)	\$ (272,710,449)
12	Recoverable Cost of Water Impact Fee and Financing (Line 9 + Line 11)	\$ 361,989,114
13	Maximum Assessable Fee (Line 12 / Line 3)	\$ 14,405

SUMMARY OF WATER IMPACT FEE DETERMINATION

Water Service Area

Recoverable Impact Fee CIP Costs	\$ 440,527,996	Per Freese & Nichols Study
Financing Cost	353,865,705	See Detail Below
Existing Fund Balance	-	Water Appendices - page 1
Interest Earnings	(159,694,138)	Water Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 634,699,563	Sum of Above
Credit for Utility Revenues	(272,710,449)	Water Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 361,989,114	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is the Freese and Nichols Impact Fee Study.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 699,014,013	Water Appendices - page 2
Existing Annual Debt Service	1,656,556	Water Appendices - page 2
Principal Component (New and Existing Debt)	(346,804,864)	Water Appendices - page 1
Financing Costs	<u>\$ 353,865,705</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Assuming all existing fund balance is already encumbered for projects from prior impact fee studies. Reference is page 1 of Water Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 2.67% annual interest rate. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Water Appendices.

Pre Credit Recoverable Cost for Impact Fee:

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Existing Fund Balance and Interest Earnings.

Credit for Utility Revenues:

In 2001, the Local Government Code Chapter 395 was amended to include a credit for ad valorem and/or utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes utility revenues used to fund impact fee eligible projects. Reference is page 7 of Water Appendices.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Utility Revenues. This is the maximum cost that can be recovered through impact fees.

City of Pflugerville - 2022 Water Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Calculation Assumptions
Water Service Area

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	2.67%
Annual Service Unit Growth ⁽²⁾	2,513
Existing Fund Balance ⁽³⁾	-
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 913,790
Non-debt Funded Project Cost ⁽⁵⁾	93,723,132
New Project Cost Funded Through New Debt ⁽⁶⁾	345,891,074
Total Recoverable Project Cost ⁽⁷⁾	\$ 440,527,996

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁸⁾</u>	<u>Interest ⁽⁹⁾</u>	<u>Term</u>
1	\$ 34,589,107	4.25%	30
2	34,589,107	4.50%	30
3	34,589,107	4.75%	30
4	34,589,107	5.00%	30
5	34,589,107	5.25%	30
6	34,589,107	5.50%	30
7	34,589,107	5.75%	30
8	34,589,107	6.00%	30
9	34,589,107	6.00%	30
10	34,589,107	6.00%	30
Total	\$ 345,891,074		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽¹⁰⁾</u>
1	\$ 9,372,313
2	20,902,016
3	32,431,718
4	43,961,421
5	43,961,421
6	43,961,421
7	43,961,421
8	43,961,421
9	43,961,421
10	43,961,421
11	34,589,107
12	23,059,405
13	11,529,702
Total	\$ 439,614,206

(1) Lone Star Corporate Overnight Investment Pool Average Interest Rate as of September 2022
(2) Per Freese and Nichols Impact Fee Study
(3) Assumes all existing fund balances are already encumbered
(4) Per discussions with City Staff
(5) This assumes 25% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 75% of new project costs funded through new debt issues, unless specified otherwise
(7) Per Freese and Nichols Impact Fee Study
(8) Assumes new debt issued in equal annual amounts
(9) Estimated interest on future debt from October 2022 S&P Municipal Bond General Obligation Index
(10) Assumes new debt proceeds expended over a 3-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Pflugerville - 2022 Water Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Debt Service and Expense Summary
 Water Service Area

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 2,061,450	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,061,450
2	2,061,450	2,123,479	-	-	-	-	-	-	-	-	4,184,929
3	2,061,450	2,123,479	2,186,359	-	-	-	-	-	-	-	6,371,287
4	2,061,450	2,123,479	2,186,359	2,250,071	-	-	-	-	-	-	8,621,358
5	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	-	-	-	-	-	10,935,955
6	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	-	-	-	-	13,315,873
7	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	-	-	-	15,761,884
8	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	-	-	18,274,745
9	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	-	20,787,606
10	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
11	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
12	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
13	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
14	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
15	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
16	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
17	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
18	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
19	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
20	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
21	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
22	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
23	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
24	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
25	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
26	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
27	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
28	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
29	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
30	2,061,450	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	23,300,467
31	-	2,123,479	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	21,239,017
32	-	-	2,186,359	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	19,115,538
33	-	-	-	2,250,071	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	16,929,180
34	-	-	-	-	2,314,597	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	14,679,109
35	-	-	-	-	-	2,379,917	2,446,012	2,512,861	2,512,861	2,512,861	12,364,512
36	-	-	-	-	-	-	2,446,012	2,512,861	2,512,861	2,512,861	9,984,595
37	-	-	-	-	-	-	-	2,512,861	2,512,861	2,512,861	7,538,583
38	-	-	-	-	-	-	-	-	2,512,861	2,512,861	5,025,722
39	-	-	-	-	-	-	-	-	-	2,512,861	2,512,861
	\$ 61,843,504	\$ 63,704,360	\$ 65,590,758	\$ 67,502,132	\$ 69,437,910	\$ 71,397,510	\$ 73,380,347	\$ 75,385,830	\$ 75,385,830	\$ 75,385,830	\$ 699,014,013

City of Pflugerville - 2022 Water Impact Fee Study
Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary

II. Summary of Annual Expenses

<u>Year</u>	<u>New Annual Debt Service⁽¹⁾</u>	<u>Annual Capital Expenditures⁽²⁾</u>	<u>Annual Bond Proceeds⁽²⁾</u>	<u>Existing Annual Debt Service⁽³⁾</u>	<u>Annual Credit⁽⁴⁾</u>	<u>Total Expense</u>
1	\$ 2,061,450	\$ 9,372,313	\$ (34,589,107)	\$ 57,529	\$ (208,146)	\$ (23,305,961)
2	4,184,929	20,902,016	(34,589,107)	55,019	(758,470)	(10,205,614)
3	6,371,287	32,431,718	(34,589,107)	55,226	(1,582,851)	2,686,273
4	8,621,358	43,961,421	(34,589,107)	55,140	(2,633,179)	15,415,633
5	10,935,955	43,961,421	(34,589,107)	55,262	(3,875,534)	16,487,997
6	13,315,873	43,961,421	(34,589,107)	55,209	(5,284,921)	17,458,473
7	15,761,884	43,961,421	(34,589,107)	55,257	(6,842,904)	18,346,550
8	18,274,745	43,961,421	(34,589,107)	55,014	(8,535,264)	19,166,808
9	20,787,606	43,961,421	(34,589,107)	55,221	(10,318,082)	19,897,058
10	23,300,467	43,961,421	(34,589,107)	55,123	(12,176,888)	20,551,016
11	23,300,467	34,589,107	-	55,221	(12,176,938)	45,767,857
12	23,300,467	23,059,405	-	55,014	(12,176,831)	34,238,055
13	23,300,467	11,529,702	-	55,245	(12,176,951)	22,708,463
14	23,300,467	-	-	55,160	(12,176,907)	11,178,720
15	23,300,467	-	-	55,014	(12,176,831)	11,178,650
16	23,300,467	-	-	55,050	(12,176,850)	11,178,668
17	23,300,467	-	-	55,014	(12,176,831)	11,178,650
18	23,300,467	-	-	55,218	(12,176,937)	11,178,748
19	23,300,467	-	-	55,121	(12,176,886)	11,178,702
20	23,300,467	-	-	55,121	(12,176,886)	11,178,702
21	23,300,467	-	-	55,036	(12,176,842)	11,178,661
22	23,300,467	-	-	55,240	(12,176,949)	11,178,759
23	23,300,467	-	-	55,133	(12,176,893)	11,178,707
24	23,300,467	-	-	55,211	(12,176,933)	11,178,745
25	23,300,467	-	-	55,221	(12,176,938)	11,178,749
26	23,300,467	-	-	55,162	(12,176,908)	11,178,721
27	23,300,467	-	-	55,036	(12,176,842)	11,178,661
28	23,300,467	-	-	55,203	(12,176,929)	11,178,741
29	23,300,467	-	-	55,054	-	23,355,521
30	23,300,467	-	-	55,084	-	23,355,551
31	21,239,017	-	-	-	-	21,239,017
32	19,115,538	-	-	-	-	19,115,538
33	16,929,180	-	-	-	-	16,929,180
34	14,679,109	-	-	-	-	14,679,109
35	12,364,512	-	-	-	-	12,364,512
36	9,984,595	-	-	-	-	9,984,595
37	7,538,583	-	-	-	-	7,538,583
38	5,025,722	-	-	-	-	5,025,722
39	2,512,861	-	-	-	(1,310,129)	1,202,732
	<u>\$ 699,014,013</u>	<u>\$ 439,614,206</u>	<u>\$(345,891,074)</u>	<u>\$ 1,656,556</u>	<u>\$(272,710,449)</u>	<u>\$ 521,683,251</u>

(1) Water Appendices - page 2 Section I
(2) Water Appendices - page 1
(3) Eligible outstanding debt funded projects as a percent of total principal times original annual debt service
(4) Water Appendices - page 7

City of Pflugerville - 2022 Water Impact Fee Study
Capital Improvement Plan for Impact Fees
Revenue Test
Water Service Area

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 14,405	2,513	\$ 36,198,911	\$ (23,305,961)	\$ 59,504,872	\$ 794,390	60,299,262
2	14,405	2,513	36,198,911	(10,205,614)	46,404,526	2,229,491	108,933,279
3	14,405	2,513	36,198,911	2,686,273	33,512,639	3,355,912	145,801,830
4	14,405	2,513	36,198,911	15,415,633	20,783,279	4,170,366	170,755,474
5	14,405	2,513	36,198,911	16,487,997	19,710,914	4,822,312	195,288,700
6	14,405	2,513	36,198,911	17,458,473	18,740,438	5,464,393	219,493,532
7	14,405	2,513	36,198,911	18,346,550	17,852,361	6,098,806	243,444,699
8	14,405	2,513	36,198,911	19,166,808	17,032,103	6,727,352	267,204,154
9	14,405	2,513	36,198,911	19,897,058	16,301,853	7,351,981	290,857,988
10	14,405	2,513	36,198,911	20,551,016	15,647,895	7,974,808	314,480,691
11	-	-	-	45,767,857	(45,767,857)	7,785,634	276,498,468
12	-	-	-	34,238,055	(34,238,055)	6,925,431	249,185,844
13	-	-	-	22,708,463	(22,708,463)	6,350,104	232,827,485
14	-	-	-	11,178,720	(11,178,720)	6,067,258	227,716,022
15	-	-	-	11,178,650	(11,178,650)	5,930,783	222,468,155
16	-	-	-	11,178,668	(11,178,668)	5,790,665	217,080,152
17	-	-	-	11,178,650	(11,178,650)	5,646,805	211,548,307
18	-	-	-	11,178,748	(11,178,748)	5,499,103	205,868,662
19	-	-	-	11,178,702	(11,178,702)	5,347,458	200,037,418
20	-	-	-	11,178,702	(11,178,702)	5,191,763	194,050,480
21	-	-	-	11,178,661	(11,178,661)	5,031,913	187,903,732
22	-	-	-	11,178,759	(11,178,759)	4,867,793	181,592,766
23	-	-	-	11,178,707	(11,178,707)	4,699,291	175,113,350
24	-	-	-	11,178,745	(11,178,745)	4,526,290	168,460,896
25	-	-	-	11,178,749	(11,178,749)	4,348,670	161,630,816
26	-	-	-	11,178,721	(11,178,721)	4,166,307	154,618,401
27	-	-	-	11,178,661	(11,178,661)	3,979,076	147,418,817
28	-	-	-	11,178,741	(11,178,741)	3,786,846	140,026,922
29	-	-	-	23,355,521	(23,355,521)	3,426,923	120,098,324
30	-	-	-	23,355,551	(23,355,551)	2,894,829	99,637,601
31	-	-	-	21,239,017	(21,239,017)	2,376,783	80,775,367
32	-	-	-	19,115,538	(19,115,538)	1,901,510	63,561,339
33	-	-	-	16,929,180	(16,929,180)	1,471,083	48,103,242
34	-	-	-	14,679,109	(14,679,109)	1,088,390	34,512,524
35	-	-	-	12,364,512	(12,364,512)	756,418	22,904,431
36	-	-	-	9,984,595	(9,984,595)	478,254	13,398,090
37	-	-	-	7,538,583	(7,538,583)	257,089	6,116,596
38	-	-	-	5,025,722	(5,025,722)	96,220	1,187,094
39	-	-	-	1,202,732	(1,202,732)	15,639	0
			\$ 361,989,114	\$ 521,683,251		\$ 159,694,138	

City of Pflugerville - 2022 Water Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Calculation
Water Service Area

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	39	2.7581	1.0000	2,513	6,931	\$ (23,305,961)	\$ (64,280,885)
2	38	2.6864	1.0000	2,513	6,751	(10,205,614)	(27,416,400)
3	37	2.6165	1.0000	2,513	6,575	2,686,273	7,028,746
4	36	2.5485	1.0000	2,513	6,404	15,415,633	39,286,695
5	35	2.4822	1.0000	2,513	6,238	16,487,997	40,926,865
6	34	2.4177	1.0000	2,513	6,076	17,458,473	42,208,827
7	33	2.3548	1.0000	2,513	5,918	18,346,550	43,202,400
8	32	2.2936	1.0000	2,513	5,764	19,166,808	43,960,204
9	31	2.2339	1.0000	2,513	5,614	19,897,058	44,448,304
10	30	2.1758	1.0000	2,513	5,468	20,551,016	44,715,291
11	29	2.1192	1.0000	-	-	45,767,857	96,992,864
12	28	2.0641	1.0000	-	-	34,238,055	70,671,569
13	27	2.0104	1.0000	-	-	22,708,463	45,654,105
14	26	1.9582	1.0000	-	-	11,178,720	21,889,740
15	25	1.9072	1.0000	-	-	11,178,650	21,320,350
16	24	1.8576	1.0000	-	-	11,178,668	20,765,933
17	23	1.8093	1.0000	-	-	11,178,650	20,225,870
18	22	1.7623	1.0000	-	-	11,178,748	19,700,055
19	21	1.7164	1.0000	-	-	11,178,702	19,187,663
20	20	1.6718	1.0000	-	-	11,178,702	18,688,675
21	19	1.6283	1.0000	-	-	11,178,661	18,202,597
22	18	1.5860	1.0000	-	-	11,178,759	17,729,382
23	17	1.5447	1.0000	-	-	11,178,707	17,268,239
24	16	1.5046	1.0000	-	-	11,178,745	16,819,223
25	15	1.4654	1.0000	-	-	11,178,749	16,381,835
26	14	1.4273	1.0000	-	-	11,178,721	15,955,775
27	13	1.3902	1.0000	-	-	11,178,661	15,540,751
28	12	1.3541	1.0000	-	-	11,178,741	15,136,712
29	11	1.3188	1.0000	-	-	23,355,521	30,802,407
30	10	1.2846	1.0000	-	-	23,355,551	30,001,409
31	9	1.2511	1.0000	-	-	21,239,017	26,573,110
32	8	1.2186	1.0000	-	-	19,115,538	23,294,368
33	7	1.1869	1.0000	-	-	16,929,180	20,093,554
34	6	1.1561	1.0000	-	-	14,679,109	16,969,809
35	5	1.1260	1.0000	-	-	12,364,512	13,922,290
36	4	1.0967	1.0000	-	-	9,984,595	10,950,163
37	3	1.0682	1.0000	-	-	7,538,583	8,052,604
38	2	1.0404	1.0000	-	-	5,025,722	5,228,794
39	1	1.0134	1.0000	-	-	1,202,732	1,218,789
					<u>61,738</u>		<u>\$ 889,318,684</u>

Annual Interest Rate:	2.67%
Present Value of Initial Impact Fee Fund Balance	\$ -
Total Escalated Expense for Entire Period	\$ 889,318,684
Less Future Value of Initial Impact Fee Fund Balance	-
Sub-Total	<u>\$ 889,318,684</u>
Total Escalated Service Units	<u>61,738</u>
Maximum Assessable Impact Fee for Water Service Area	\$ 14,405

City of Pflugerville - 2022 Water Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Project Funding
Water Service Area

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Cost In</u>		<u>Impact Fee</u>		<u>Debt Funded⁽²⁾</u>		<u>Non-Debt</u>	
	<u>Service Area</u>	<u>⁽¹⁾</u>	<u>Recoverable Cost⁽¹⁾</u>	<u>⁽¹⁾</u>	<u>Existing</u>	<u>Proposed</u>	<u>Funded⁽²⁾</u>	
1.5-MG Heatherwilde Elevated Storage Tank	\$	6,390,257	\$	2,875,616	\$	-	\$ 2,156,712	\$ 718,904
9.2-MGD Pfennig Pump Station		3,200,000		448,000		-	336,000	112,000
16-inch Pecan Water Line		974,073		584,444		-	438,333	146,111
2.5-MG North Elevated Storage Tank		8,067,584		4,840,550	600,000	-	4,240,550	-
2.0-MG 800' PZ Elevated Storage Tank		7,462,584		746,258		-	559,694	186,565
Water Treatment Plant Expansion and 6.0-MGD 800' PZ Pump Station		165,949,936		165,949,936		-	124,462,452	41,487,484
42/36/24/20-inch Waterlines along Weiss Lane and crossing 130		32,119,740		19,271,844		-	14,453,883	4,817,961
30-inch Kelly Lane Water Line		4,855,200		2,427,600	30,525	-	2,397,075	-
16-inch Colorado Sand Drive Looping		1,215,000		1,032,750		-	1,032,750	-
HCA 12-inch loop		1,159,800		347,940		-	260,955	86,985
Colorado River Raw Water Line		137,561,420		75,658,781		-	75,658,781	-
36/30-inch Weiss Lane/Kelly Lane Water Lines		32,119,740		16,059,870	203,265	-	10,567,869	5,288,736
20-inch SH 130 Water Line		4,857,975		3,886,380	80,000	-	-	3,806,380
30/24-inch SH 130 Water Lines		7,906,300		6,325,040		-	4,743,780	1,581,260
12-inch Looping Improvements in Central PZ		2,617,100		1,046,840		-	785,130	261,710
State Highway 45 Pump Station		19,314,600		16,320,837		-	12,240,628	4,080,209
30/24-inch State Highway 45 Pump Station Discharge Line		7,906,300		4,743,780		-	3,557,835	1,185,945
Lakeside Meadows 12/16/8-inch Water Lines		3,442,300		3,442,300		-	2,581,725	860,575
12-inch Lifestyle Communities Water Line		1,325,400		1,325,400		-	994,050	331,350
24-inch East State Highway 130 Water Line		6,737,400		2,021,220		-	1,515,915	505,305
12/16-inch Water Lines Between Austin Hutto Road and Pflugerville Parkway		3,856,500		2,699,550		-	2,024,663	674,888
Water Treatment Plant Expansion to 45 MGD		135,000,000		85,050,000		-	63,787,500	21,262,500
Central PZ Pump Station Expansion to 39 MGD		17,503,200		13,733,280		-	10,299,960	3,433,320
12-inch Water Line South of State Highway 45		2,252,000		1,801,600		-	1,351,200	450,400
36/30/20-inch Immanuel Road EST Water Lines		11,365,500		6,819,300		-	5,114,475	1,704,825
12-inch Looping in Southern Central PZ		1,288,600		1,030,880		-	329,161	701,719
Water Impact Fee Update		38,000		38,000		-	-	38,000
Total		\$ 626,486,509		\$ 440,527,996		\$ 913,790	\$ 345,891,074	\$ 93,723,132

(1) Per Freese and Nichols Impact Fee Study
(2) Per discussions with City staff and City files

City of Pflugerville - 2022 Water Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Credit Determination
 Water Service Area

<u>Year</u>	<u>Eligible Revenue Funded Cost ⁽¹⁾</u>	<u>Annual Service Units</u>	<u>Eligible Debt Service per Service Unit</u>	<u>Annual Growth in Service Units (Cumulative)</u>	<u>Credit for Annual Utility Rate Revenues</u>
1	\$ 2,118,979	25,583	\$ 82.83	2,513	\$ 208,146
2	4,239,947	28,096	150.91	5,026	758,470
3	6,426,513	30,609	209.96	7,539	1,582,851
4	8,676,499	33,122	261.96	10,052	2,633,179
5	10,991,218	35,635	308.44	12,565	3,875,534
6	13,371,081	38,148	350.51	15,078	5,284,921
7	15,817,141	40,661	389.00	17,591	6,842,904
8	18,329,759	43,174	424.56	20,104	8,535,264
9	20,842,827	45,687	456.21	22,617	10,318,082
10	23,355,590	48,200	484.56	25,130	12,176,888
11	23,355,688	48,200	484.56	25,130	12,176,938
12	23,355,481	48,200	484.55	25,130	12,176,831
13	23,355,712	48,200	484.56	25,130	12,176,951
14	23,355,627	48,200	484.56	25,130	12,176,907
15	23,355,481	48,200	484.55	25,130	12,176,831
16	23,355,517	48,200	484.55	25,130	12,176,850
17	23,355,481	48,200	484.55	25,130	12,176,831
18	23,355,685	48,200	484.56	25,130	12,176,937
19	23,355,588	48,200	484.56	25,130	12,176,886
20	23,355,588	48,200	484.56	25,130	12,176,886
21	23,355,503	48,200	484.55	25,130	12,176,842
22	23,355,707	48,200	484.56	25,130	12,176,949
23	23,355,600	48,200	484.56	25,130	12,176,893
24	23,355,678	48,200	484.56	25,130	12,176,933
25	23,355,688	48,200	484.56	25,130	12,176,938
26	23,355,629	48,200	484.56	25,130	12,176,908
27	23,355,503	48,200	484.55	25,130	12,176,842
28	23,355,670	48,200	484.56	25,130	12,176,929
29	23,355,521	48,200	-	25,130	-
30	23,355,551	48,200	-	25,130	-
31	21,239,017	48,200	-	25,130	-
32	19,115,538	48,200	-	25,130	-
33	16,929,180	48,200	-	25,130	-
34	14,679,109	48,200	-	25,130	-
35	12,364,512	48,200	-	25,130	-
36	9,984,595	48,200	-	25,130	-
37	7,538,583	48,200	-	25,130	-
38	5,025,722	48,200	-	25,130	-
39	2,512,861	48,200	52.13	25,130	1,310,129
Total	\$ 700,670,569				\$ 272,710,449

2022 Service Units ⁽²⁾	23,070
Ten Year Growth in Service Units ⁽²⁾	25,130
	10 years
Annual Growth in Service Units	2,513
Credit Amount	\$ 272,710,449

(1) Water Appendices - page 3 Section II
 (2) Per Freese and Nichols Impact Fee Study

City of Pflugerville - 2022 Wastewater Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Impact Fee Summary Table
 Wastewater Service Area 1

0	Existing Fund Balance	\$ -
1	Existing Number of Service Units	16,245
2	Total Number of Services Units for Planning Period	32,678
3	Additional Service Units Added During Planning Period (Line 2 - Line 1)	16,433
4	Total Cost of the Wastewater Impact Fee CIP	\$ 126,970,457
5	Recoverable Cost for Impact Fee Planning Period	\$ 29,234,001
6	Percent Recoverable for Wastewater Impact Fee Planning Period (Line 5 / Line 4)	23.02%
7	Financing Costs (From Financial Analysis)	\$ 21,115,225
8	Interest Earnings (From Financial Analysis)	\$ (7,344,887)
9	Recoverable Cost of Wastewater Impact Fee and Financing Costs (Line 5 + Line 7 + Line 8 - Line 0)	\$ 43,004,339
10	Pre-Credit Maximum Fee (Line 9 / Line 3)	\$ 2,617
11	Credit for Utility Revenues (From Financial Analysis)	\$ (20,285,654)
12	Recoverable Cost of Wastewater Impact Fee and Financing (Line 9 + Line 11)	\$ 22,718,685
13	Maximum Assessable Fee (Line 12 / Line 3)	\$ 1,383

SUMMARY OF WASTEWATER IMPACT FEE DETERMINATION

Wastewater Service Area 1

Recoverable Impact Fee CIP Costs	\$ 29,234,001	Per Freese & Nichols Study
Financing Cost	21,115,225	See Detail Below
Existing Fund Balance	-	Wastewater Appendices - page 1
Interest Earnings	(7,344,887)	Wastewater Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 43,004,339	Sum of Above
Credit for Utility Revenues	(20,285,654)	Wastewater Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 22,718,685	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is the Freese and Nichols Impact Fee Study.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 41,798,017	Wastewater Appendices - page 2
Existing Annual Debt Service	-	Wastewater Appendices - page 2
Principal Component (New and Existing Debt)	(20,682,791)	Wastewater Appendices - page 1
Financing Costs	<u>\$ 21,115,225</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Assuming all existing fund balance is already encumbered for projects from prior impact fee studies. Reference is page 1 of Wastewater Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 2.67% annual interest rate. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Wastewater Appendices.

Pre Credit Recoverable Cost for Impact Fee:

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Existing Fund Balance and Interest Earnings.

Credit for Utility Revenues:

In 2001, the Local Government Code Chapter 395 was amended to include a credit for ad valorem and/or utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes utility revenues used to fund impact fee eligible projects. Reference is page 7 of Wastewater Appendices.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Utility Revenues. This is the maximum cost that can be recovered through impact fees.

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Calculation Assumptions
Wastewater Service Area 1

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	2.67%
Annual Service Unit Growth ⁽²⁾	1,643
Existing Fund Balance ⁽³⁾	-
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ -
Non-debt Funded Project Cost ⁽⁵⁾	8,551,210
New Project Cost Funded Through New Debt ⁽⁶⁾	20,682,791
Total Recoverable Project Cost ⁽⁷⁾	\$ 29,234,001

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁸⁾</u>	<u>Interest ⁽⁹⁾</u>	<u>Term</u>
1	\$ 2,068,279	4.25%	30
2	2,068,279	4.50%	30
3	2,068,279	4.75%	30
4	2,068,279	5.00%	30
5	2,068,279	5.25%	30
6	2,068,279	5.50%	30
7	2,068,279	5.75%	30
8	2,068,279	6.00%	30
9	2,068,279	6.00%	30
10	2,068,279	6.00%	30
Total	\$ 20,682,791		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽¹⁰⁾</u>
1	\$ 855,121
2	1,544,547
3	2,233,974
4	2,923,400
5	2,923,400
6	2,923,400
7	2,923,400
8	2,923,400
9	2,923,400
10	2,923,400
11	2,068,279
12	1,378,853
13	689,426
Total	\$ 29,234,001

(1) Lone Star Corporate Overnight Investment Pool Average Interest Rate as of September 2022
(2) Per Freese and Nichols Impact Fee Study
(3) Assumes all existing fund balances are already encumbered
(4) Per discussions with City Staff
(5) This assumes 25% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 75% of new project costs funded through new debt issues, unless specified otherwise
(7) Per Freese and Nichols Impact Fee Study
(8) Assumes new debt issued in equal annual amounts
(9) Estimated interest on future debt from October 2022 S&P Municipal Bond General Obligation Index
(10) Assumes new debt proceeds expended over a 3-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Pflugerville - 2022 Wastewater Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Debt Service and Expense Summary
 Wastewater Service Area 1

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	\$ 123,266	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 123,266
2	123,266	126,975	-	-	-	-	-	-	-	-	250,241
3	123,266	126,975	130,735	-	-	-	-	-	-	-	380,975
4	123,266	126,975	130,735	134,545	-	-	-	-	-	-	515,520
5	123,266	126,975	130,735	134,545	138,403	-	-	-	-	-	653,923
6	123,266	126,975	130,735	134,545	138,403	142,309	-	-	-	-	796,232
7	123,266	126,975	130,735	134,545	138,403	142,309	146,261	-	-	-	942,493
8	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	-	-	1,092,751
9	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	-	1,243,009
10	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
11	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
12	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
13	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
14	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
15	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
16	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
17	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
18	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
19	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
20	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
21	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
22	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
23	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
24	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
25	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
26	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
27	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
28	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
29	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
30	123,266	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,393,267
31	-	126,975	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,270,001
32	-	-	130,735	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,143,027
33	-	-	-	134,545	138,403	142,309	146,261	150,258	150,258	150,258	1,012,292
34	-	-	-	-	138,403	142,309	146,261	150,258	150,258	150,258	877,747
35	-	-	-	-	-	142,309	146,261	150,258	150,258	150,258	739,344
36	-	-	-	-	-	-	146,261	150,258	150,258	150,258	597,036
37	-	-	-	-	-	-	-	150,258	150,258	150,258	450,775
38	-	-	-	-	-	-	-	-	150,258	150,258	300,516
39	-	-	-	-	-	-	-	-	-	150,258	150,258
	\$ 3,697,974	\$ 3,809,245	\$ 3,922,044	\$ 4,036,336	\$ 4,152,087	\$ 4,269,263	\$ 4,387,828	\$ 4,507,747	\$ 4,507,747	\$ 4,507,747	\$ 41,798,017

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary

II. Summary of Annual Expenses

<u>Year</u>	<u>New Annual Debt Service⁽¹⁾</u>	<u>Annual Capital Expenditures⁽²⁾</u>	<u>Annual Bond Proceeds⁽²⁾</u>	<u>Existing Annual Debt Service⁽³⁾</u>	<u>Annual Credit⁽⁴⁾</u>	<u>Total Expense</u>
1	\$ 123,266	\$ 855,121	\$ (2,068,279)	\$ -	\$ (11,324)	\$ (1,101,216)
2	250,241	1,544,547	(2,068,279)	-	(42,108)	(315,599)
3	380,975	2,233,974	(2,068,279)	-	(88,698)	457,972
4	515,520	2,923,400	(2,068,279)	-	(148,505)	1,222,136
5	653,923	2,923,400	(2,068,279)	-	(219,650)	1,289,394
6	796,232	2,923,400	(2,068,279)	-	(300,737)	1,350,615
7	942,493	2,923,400	(2,068,279)	-	(390,715)	1,406,899
8	1,092,751	2,923,400	(2,068,279)	-	(488,774)	1,459,098
9	1,243,009	2,923,400	(2,068,279)	-	(592,360)	1,505,769
10	1,393,267	2,923,400	(2,068,279)	-	(700,641)	1,547,747
11	1,393,267	2,068,279	-	-	(700,641)	2,760,905
12	1,393,267	1,378,853	-	-	(700,641)	2,071,479
13	1,393,267	689,426	-	-	(700,641)	1,382,052
14	1,393,267	-	-	-	(700,641)	692,626
15	1,393,267	-	-	-	(700,641)	692,626
16	1,393,267	-	-	-	(700,641)	692,626
17	1,393,267	-	-	-	(700,641)	692,626
18	1,393,267	-	-	-	(700,641)	692,626
19	1,393,267	-	-	-	(700,641)	692,626
20	1,393,267	-	-	-	(700,641)	692,626
21	1,393,267	-	-	-	(700,641)	692,626
22	1,393,267	-	-	-	(700,641)	692,626
23	1,393,267	-	-	-	(700,641)	692,626
24	1,393,267	-	-	-	(700,641)	692,626
25	1,393,267	-	-	-	(700,641)	692,626
26	1,393,267	-	-	-	(700,641)	692,626
27	1,393,267	-	-	-	(700,641)	692,626
28	1,393,267	-	-	-	(700,641)	692,626
29	1,393,267	-	-	-	(700,641)	692,626
30	1,393,267	-	-	-	(700,641)	692,626
31	1,270,001	-	-	-	(638,654)	631,347
32	1,143,027	-	-	-	(574,801)	568,225
33	1,012,292	-	-	-	(509,058)	503,234
34	877,747	-	-	-	(441,399)	436,349
35	739,344	-	-	-	(371,799)	367,545
36	597,036	-	-	-	(300,235)	296,800
37	450,775	-	-	-	(226,684)	224,091
38	300,516	-	-	-	(151,123)	149,394
39	150,258	-	-	-	(75,561)	74,697
	\$ 41,798,017	\$ 29,234,001	\$ (20,682,791)	\$ -	\$ (20,285,654)	\$ 30,063,573

(1) Wastewater Appendices - page 2 Section I
(2) Wastewater Appendices - page 1
(3) Not applicable as no existing debt was identified
(4) Wastewater Appendices - page 7

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Revenue Test
Wastewater Service Area 1

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 1,383	1,643	\$ 2,271,869	\$ (1,101,216)	\$ 3,373,085	\$ 45,031	3,418,115
2	1,383	1,643	2,271,869	(315,599)	2,587,468	125,806	6,131,390
3	1,383	1,643	2,271,869	457,972	1,813,896	187,924	8,133,210
4	1,383	1,643	2,271,869	1,222,136	1,049,733	231,171	9,414,113
5	1,383	1,643	2,271,869	1,289,394	982,474	264,473	10,661,060
6	1,383	1,643	2,271,869	1,350,615	921,253	296,949	11,879,262
7	1,383	1,643	2,271,869	1,406,899	864,970	328,724	13,072,955
8	1,383	1,643	2,271,869	1,459,098	812,770	359,898	14,245,624
9	1,383	1,643	2,271,869	1,505,769	766,099	390,586	15,402,309
10	1,383	1,643	2,271,869	1,547,747	724,122	420,909	16,547,339
11	-	-	-	2,760,905	(2,760,905)	404,956	14,191,390
12	-	-	-	2,071,479	(2,071,479)	351,256	12,471,167
13	-	-	-	1,382,052	(1,382,052)	314,530	11,403,645
14	-	-	-	692,626	(692,626)	295,231	11,006,250
15	-	-	-	692,626	(692,626)	284,620	10,598,244
16	-	-	-	692,626	(692,626)	273,727	10,179,345
17	-	-	-	692,626	(692,626)	262,542	9,749,261
18	-	-	-	692,626	(692,626)	251,059	9,307,694
19	-	-	-	692,626	(692,626)	239,269	8,854,337
20	-	-	-	692,626	(692,626)	227,164	8,388,876
21	-	-	-	692,626	(692,626)	214,736	7,910,986
22	-	-	-	692,626	(692,626)	201,977	7,420,337
23	-	-	-	692,626	(692,626)	188,876	6,916,588
24	-	-	-	692,626	(692,626)	175,426	6,399,389
25	-	-	-	692,626	(692,626)	161,617	5,868,380
26	-	-	-	692,626	(692,626)	147,439	5,323,193
27	-	-	-	692,626	(692,626)	132,883	4,763,450
28	-	-	-	692,626	(692,626)	117,938	4,188,762
29	-	-	-	692,626	(692,626)	102,593	3,598,730
30	-	-	-	692,626	(692,626)	86,840	2,992,943
31	-	-	-	631,347	(631,347)	71,483	2,433,079
32	-	-	-	568,225	(568,225)	57,377	1,922,231
33	-	-	-	503,234	(503,234)	44,605	1,463,602
34	-	-	-	436,349	(436,349)	33,253	1,060,507
35	-	-	-	367,545	(367,545)	23,409	716,370
36	-	-	-	296,800	(296,800)	15,165	434,734
37	-	-	-	224,091	(224,091)	8,616	219,260
38	-	-	-	149,394	(149,394)	3,860	73,726
39	-	-	-	74,697	(74,697)	971	0
			\$ 22,718,685	\$ 30,063,573		\$ 7,344,887	

City of Pflugerville - 2022 Wastewater Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Impact Fee Calculation
 Wastewater Service Area 1

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	39	2.7581	1.0000	1,643	4,532	\$ (1,101,216)	\$ (3,037,298)
2	38	2.6864	1.0000	1,643	4,415	(315,599)	(847,827)
3	37	2.6165	1.0000	1,643	4,300	457,972	1,198,303
4	36	2.5485	1.0000	1,643	4,188	1,222,136	3,114,610
5	35	2.4822	1.0000	1,643	4,079	1,289,394	3,200,563
6	34	2.4177	1.0000	1,643	3,973	1,350,615	3,265,342
7	33	2.3548	1.0000	1,643	3,870	1,406,899	3,312,961
8	32	2.2936	1.0000	1,643	3,769	1,459,098	3,346,528
9	31	2.2339	1.0000	1,643	3,671	1,505,769	3,363,759
10	30	2.1758	1.0000	1,643	3,576	1,547,747	3,367,617
11	29	2.1192	1.0000	-	-	2,760,905	5,851,008
12	28	2.0641	1.0000	-	-	2,071,479	4,275,787
13	27	2.0104	1.0000	-	-	1,382,052	2,778,539
14	26	1.9582	1.0000	-	-	692,626	1,356,273
15	25	1.9072	1.0000	-	-	692,626	1,321,002
16	24	1.8576	1.0000	-	-	692,626	1,286,649
17	23	1.8093	1.0000	-	-	692,626	1,253,189
18	22	1.7623	1.0000	-	-	692,626	1,220,599
19	21	1.7164	1.0000	-	-	692,626	1,188,856
20	20	1.6718	1.0000	-	-	692,626	1,157,939
21	19	1.6283	1.0000	-	-	692,626	1,127,826
22	18	1.5860	1.0000	-	-	692,626	1,098,497
23	17	1.5447	1.0000	-	-	692,626	1,069,929
24	16	1.5046	1.0000	-	-	692,626	1,042,105
25	15	1.4654	1.0000	-	-	692,626	1,015,005
26	14	1.4273	1.0000	-	-	692,626	988,609
27	13	1.3902	1.0000	-	-	692,626	962,899
28	12	1.3541	1.0000	-	-	692,626	937,859
29	11	1.3188	1.0000	-	-	692,626	913,469
30	10	1.2846	1.0000	-	-	692,626	889,714
31	9	1.2511	1.0000	-	-	631,347	789,908
32	8	1.2186	1.0000	-	-	568,225	692,445
33	7	1.1869	1.0000	-	-	503,234	597,298
34	6	1.1561	1.0000	-	-	436,349	504,442
35	5	1.1260	1.0000	-	-	367,545	413,852
36	4	1.0967	1.0000	-	-	296,800	325,503
37	3	1.0682	1.0000	-	-	224,091	239,370
38	2	1.0404	1.0000	-	-	149,394	155,430
39	1	1.0134	1.0000	-	-	74,697	75,694
					<u>40,372</u>		<u>\$ 55,814,252</u>

Annual Interest Rate:	2.67%
Present Value of Initial Impact Fee Fund Balance	\$ -
Total Escalated Expense for Entire Period	\$ 55,814,252
Less Future Value of Initial Impact Fee Fund Balance	-
Sub-Total	<u>\$ 55,814,252</u>
Total Escalated Service Units	<u>40,372</u>
Maximum Assessable Impact Fee for Wastewater Service Area 1	\$ 1,383

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Project Funding
Wastewater Service Area 1

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Cost In</u>		<u>Impact Fee</u>		<u>Debt Funded⁽²⁾</u>		<u>Non-Debt Funded⁽²⁾</u>
	<u>Service Area</u>	<u>Recoverable Cost⁽¹⁾</u>	<u>Existing</u>	<u>Proposed</u>	<u>Existing</u>	<u>Proposed</u>	
SH 130 Interceptor	\$ 16,306,800	\$ 4,892,040	\$ -	\$ 3,669,030	\$ -	\$ 3,669,030	\$ 1,223,010
Central Wastewater Treatment Plant Phase 1 Expansion	51,889,172	7,658,126	-	5,743,595	-	5,743,595	1,914,532
30/24-inch Highland Park Interceptor	2,168,090	542,023	-	406,517	-	406,517	135,506
10-inch Quick Trip Interceptor	628,238	534,002	-	400,502	-	400,502	133,501
Central Wastewater Treatment Plant Expansion	25,847,457	7,085,244	-	5,313,933	-	5,313,933	1,771,311
15-inch Gilleland Creek Interceptor	2,368,558	473,712	-	-	-	-	473,712
18-inch North Central Basin Interceptor	1,366,550	136,655	-	102,491	-	102,491	34,164
8-inch Bohls Place Interceptor	2,208,175	662,452	-	-	-	-	662,452
12-inch Club Interceptor	5,017,818	501,782	-	-	-	-	501,782
Boulder Ridge Lift Station Expansion	997,100	49,855	-	37,391	-	37,391	12,464
24-inch Central Interceptor	11,192,100	2,238,420	-	1,678,815	-	1,678,815	559,605
24-inch SH 45 Interceptor	5,277,000	3,430,050	-	2,572,538	-	2,572,538	857,513
15-inch SH 45 Interceptor	1,684,400	1,010,640	-	757,980	-	757,980	252,660
Wastewater Impact Fee Update	19,000	19,000	-	-	-	-	19,000
Total	\$ 126,970,457	\$ 29,234,001	\$ -	\$ 20,682,791	\$ -	\$ 20,682,791	\$ 8,551,210

(1) Per Freese and Nichols Impact Fee Study

(2) Per discussions with City staff and City files

City of Pflugerville - 2022 Wastewater Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Credit Determination
 Wastewater Service Area 1

<u>Year</u>	<u>Eligible Revenue Funded Cost ⁽¹⁾</u>	<u>Annual Service Units</u>	<u>Eligible Debt Service per Service Unit</u>	<u>Annual Growth in Service Units (Cumulative)</u>	<u>Credit for Annual Utility Rate Revenues</u>
1	\$ 123,266	17,888	\$ 6.89	1,643	\$ 11,324
2	250,241	19,532	12.81	3,287	42,108
3	380,975	21,175	17.99	4,930	88,698
4	515,520	22,818	22.59	6,573	148,505
5	653,923	24,462	26.73	8,217	219,650
6	796,232	26,105	30.50	9,860	300,737
7	942,493	27,748	33.97	11,503	390,715
8	1,092,751	29,391	37.18	13,146	488,774
9	1,243,009	31,035	40.05	14,790	592,360
10	1,393,267	32,678	42.64	16,433	700,641
11	1,393,267	32,678	42.64	16,433	700,641
12	1,393,267	32,678	42.64	16,433	700,641
13	1,393,267	32,678	42.64	16,433	700,641
14	1,393,267	32,678	42.64	16,433	700,641
15	1,393,267	32,678	42.64	16,433	700,641
16	1,393,267	32,678	42.64	16,433	700,641
17	1,393,267	32,678	42.64	16,433	700,641
18	1,393,267	32,678	42.64	16,433	700,641
19	1,393,267	32,678	42.64	16,433	700,641
20	1,393,267	32,678	42.64	16,433	700,641
21	1,393,267	32,678	42.64	16,433	700,641
22	1,393,267	32,678	42.64	16,433	700,641
23	1,393,267	32,678	42.64	16,433	700,641
24	1,393,267	32,678	42.64	16,433	700,641
25	1,393,267	32,678	42.64	16,433	700,641
26	1,393,267	32,678	42.64	16,433	700,641
27	1,393,267	32,678	42.64	16,433	700,641
28	1,393,267	32,678	42.64	16,433	700,641
29	1,393,267	32,678	42.64	16,433	700,641
30	1,393,267	32,678	42.64	16,433	700,641
31	1,270,001	32,678	38.86	16,433	638,654
32	1,143,027	32,678	34.98	16,433	574,801
33	1,012,292	32,678	30.98	16,433	509,058
34	877,747	32,678	26.86	16,433	441,399
35	739,344	32,678	22.63	16,433	371,799
36	597,036	32,678	18.27	16,433	300,235
37	450,775	32,678	13.79	16,433	226,684
38	300,516	32,678	9.20	16,433	151,123
39	150,258	32,678	4.60	16,433	75,561
Total	\$ 41,798,017				\$ 20,285,654

2022 Service Units ⁽²⁾	16,245
Ten Year Growth in Service Units ⁽²⁾	16,433
	<u>10</u> years
Annual Growth in Service Units	1,643
Credit Amount	\$ 20,285,654

(1) Wastewater Appendices - page 3 Section II
 (2) Per Freese and Nichols Impact Fee Study

City of Pflugerville - 2022 Wastewater Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Impact Fee Summary Table
 Wastewater Service Area 2

0	Existing Fund Balance	\$ -
1	Existing Number of Service Units	16,911
2	Total Number of Services Units for Planning Period	34,036
3	Additional Service Units Added During Planning Period (Line 2 - Line 1)	17,125
4	Total Cost of the Wastewater Impact Fee CIP	\$ 629,036,556
5	Recoverable Cost for Impact Fee Planning Period	\$ 302,918,072
6	Percent Recoverable for Wastewater Impact Fee Planning Period (Line 5 / Line 4)	48.16%
7	Financing Costs (From Financial Analysis)	\$ 234,706,983
8	Interest Earnings (From Financial Analysis)	\$ (81,604,605)
9	Recoverable Cost of Wastewater Impact Fee and Financing Costs (Line 5 + Line 7 + Line 8 - Line 0)	\$ 456,020,450
10	Pre-Credit Maximum Fee (Line 9 / Line 3)	\$ 26,629
11	Credit for Utility Revenues (From Financial Analysis)	\$ (225,608,340)
12	Recoverable Cost of Wastewater Impact Fee and Financing (Line 9 + Line 11)	\$ 230,412,109
13	Maximum Assessable Fee (Line 12 / Line 3)	\$ 13,455

SUMMARY OF WASTEWATER IMPACT FEE DETERMINATION

Wastewater Service Area 2

Recoverable Impact Fee CIP Costs	\$ 302,918,072	Per Freese & Nichols Study
Financing Cost	234,706,983	See Detail Below
Existing Fund Balance	-	Wastewater Appendices - page 1
Interest Earnings	(81,604,605)	Wastewater Appendices - page 4
Pre Credit Recoverable Cost for Impact Fee	\$ 456,020,450	Sum of Above
Credit for Utility Revenues	(225,608,340)	Wastewater Appendices - page 7
Maximum Recoverable Cost for Impact Fee	\$ 230,412,110	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is the Freese and Nichols Impact Fee Study.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. Interest costs are derived from existing debt issues and forecasted debt issues.

New Annual Debt Service	\$ 464,607,230	Wastewater Appendices - page 2
Existing Annual Debt Service	-	Wastewater Appendices - page 2
Principal Component (New and Existing Debt)	(229,900,247)	Wastewater Appendices - page 1
Financing Costs	<u>\$ 234,706,983</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Assuming all existing fund balance is already encumbered for projects from prior impact fee studies. Reference is page 1 of Wastewater Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 2.67% annual interest rate. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 4 of Wastewater Appendices.

Pre Credit Recoverable Cost for Impact Fee:

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Existing Fund Balance and Interest Earnings.

Credit for Utility Revenues:

In 2001, the Local Government Code Chapter 395 was amended to include a credit for ad valorem and/or utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes utility revenues used to fund impact fee eligible projects. Reference is page 7 of Wastewater Appendices.

Maximum Recoverable Cost for Impact Fee:

Represents Pre Credit Recoverable Cost for Impact Fee less Credit for Utility Revenues. This is the maximum cost that can be recovered through impact fees.

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Calculation Assumptions
Wastewater Service Area 2

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	2.67%
Annual Service Unit Growth ⁽²⁾	1,713
Existing Fund Balance ⁽³⁾	-
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ -
Non-debt Funded Project Cost ⁽⁵⁾	73,017,825
New Project Cost Funded Through New Debt ⁽⁶⁾	229,900,247
Total Recoverable Project Cost ⁽⁷⁾	\$ 302,918,072

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁸⁾</u>	<u>Interest ⁽⁹⁾</u>	<u>Term</u>
1	\$ 22,990,025	4.25%	30
2	22,990,025	4.50%	30
3	22,990,025	4.75%	30
4	22,990,025	5.00%	30
5	22,990,025	5.25%	30
6	22,990,025	5.50%	30
7	22,990,025	5.75%	30
8	22,990,025	6.00%	30
9	22,990,025	6.00%	30
10	22,990,025	6.00%	30
Total	\$ 229,900,247		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽¹⁰⁾</u>
1	\$ 7,301,783
2	14,965,124
3	22,628,466
4	30,291,807
5	30,291,807
6	30,291,807
7	30,291,807
8	30,291,807
9	30,291,807
10	30,291,807
11	22,990,025
12	15,326,683
13	7,663,342
Total	\$ 302,918,072

(1) Lone Star Corporate Overnight Investment Pool Average Interest Rate as of September 2022
(2) Per Freese and Nichols Impact Fee Study
(3) Assumes all existing fund balances are already encumbered
(4) Per discussions with City Staff
(5) This assumes 25% of new project costs funded through sources other than debt, unless specified otherwise
(6) This assumes 75% of new project costs funded through new debt issues, unless specified otherwise
(7) Per Freese and Nichols Impact Fee Study
(8) Assumes new debt issued in equal annual amounts
(9) Estimated interest on future debt from October 2022 S&P Municipal Bond General Obligation Index
(10) Assumes new debt proceeds expended over a 3-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Pflugerville - 2022 Wastewater Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Debt Service and Expense Summary
 Wastewater Service Area 2

I. New Debt Service Detail

<u>Year</u>	<u>Series 1</u>	<u>Series 2</u>	<u>Series 3</u>	<u>Series 4</u>	<u>Series 5</u>	<u>Series 6</u>	<u>Series 7</u>	<u>Series 8</u>	<u>Series 9</u>	<u>Series 10</u>	<u>Total Annual New Debt Service</u>
1	\$ 1,370,165	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,370,165
2	1,370,165	1,411,393	-	-	-	-	-	-	-	-	2,781,558
3	1,370,165	1,411,393	1,453,187	-	-	-	-	-	-	-	4,234,745
4	1,370,165	1,411,393	1,453,187	1,495,534	-	-	-	-	-	-	5,730,279
5	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	-	-	-	-	-	7,268,701
6	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	-	-	-	-	8,850,539
7	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	-	-	-	10,476,307
8	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	-	-	12,146,507
9	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	-	13,816,707
10	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
11	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
12	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
13	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
14	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
15	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
16	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
17	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
18	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
19	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
20	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
21	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
22	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
23	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
24	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
25	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
26	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
27	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
28	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
29	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
30	1,370,165	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	15,486,908
31	-	1,411,393	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	14,116,743
32	-	-	1,453,187	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	12,705,349
33	-	-	-	1,495,534	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	11,252,163
34	-	-	-	-	1,538,422	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	9,756,628
35	-	-	-	-	-	1,581,838	1,625,768	1,670,200	1,670,200	1,670,200	8,218,206
36	-	-	-	-	-	-	1,625,768	1,670,200	1,670,200	1,670,200	6,636,369
37	-	-	-	-	-	-	-	1,670,200	1,670,200	1,670,200	5,010,601
38	-	-	-	-	-	-	-	-	1,670,200	1,670,200	3,340,401
39	-	-	-	-	-	-	-	-	-	1,670,200	1,670,200
	\$ 41,104,955	\$ 42,341,793	\$ 43,595,607	\$ 44,866,023	\$ 46,152,659	\$ 47,455,128	\$ 48,773,042	\$ 50,106,008	\$ 50,106,008	\$ 50,106,008	\$ 464,607,230

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary

II. Summary of Annual Expenses

<u>Year</u>	<u>New Annual Debt Service⁽¹⁾</u>	<u>Annual Capital Expenditures⁽²⁾</u>	<u>Annual Bond Proceeds⁽²⁾</u>	<u>Existing Annual Debt Service⁽³⁾</u>	<u>Annual Credit⁽⁴⁾</u>	<u>Total Expense</u>
1	\$ 1,370,165	\$ 7,301,783	\$ (22,990,025)	\$ -	\$ (125,992)	\$ (14,444,069)
2	2,781,558	14,965,124	(22,990,025)	-	(468,472)	(5,711,814)
3	4,234,745	22,628,466	(22,990,025)	-	(986,734)	2,886,452
4	5,730,279	30,291,807	(22,990,025)	-	(1,651,968)	11,380,094
5	7,268,701	30,291,807	(22,990,025)	-	(2,443,255)	12,127,229
6	8,850,539	30,291,807	(22,990,025)	-	(3,345,078)	12,807,244
7	10,476,307	30,291,807	(22,990,025)	-	(4,345,718)	13,432,372
8	12,146,507	30,291,807	(22,990,025)	-	(5,436,188)	14,012,102
9	13,816,707	30,291,807	(22,990,025)	-	(6,588,086)	14,530,404
10	15,486,908	30,291,807	(22,990,025)	-	(7,792,140)	14,996,550
11	15,486,908	22,990,025	-	-	(7,792,140)	30,684,792
12	15,486,908	15,326,683	-	-	(7,792,140)	23,021,450
13	15,486,908	7,663,342	-	-	(7,792,140)	15,358,109
14	15,486,908	-	-	-	(7,792,140)	7,694,767
15	15,486,908	-	-	-	(7,792,140)	7,694,767
16	15,486,908	-	-	-	(7,792,140)	7,694,767
17	15,486,908	-	-	-	(7,792,140)	7,694,767
18	15,486,908	-	-	-	(7,792,140)	7,694,767
19	15,486,908	-	-	-	(7,792,140)	7,694,767
20	15,486,908	-	-	-	(7,792,140)	7,694,767
21	15,486,908	-	-	-	(7,792,140)	7,694,767
22	15,486,908	-	-	-	(7,792,140)	7,694,767
23	15,486,908	-	-	-	(7,792,140)	7,694,767
24	15,486,908	-	-	-	(7,792,140)	7,694,767
25	15,486,908	-	-	-	(7,792,140)	7,694,767
26	15,486,908	-	-	-	(7,792,140)	7,694,767
27	15,486,908	-	-	-	(7,792,140)	7,694,767
28	15,486,908	-	-	-	(7,792,140)	7,694,767
29	15,486,908	-	-	-	(7,792,140)	7,694,767
30	15,486,908	-	-	-	(7,792,140)	7,694,767
31	14,116,743	-	-	-	(7,102,750)	7,013,992
32	12,705,349	-	-	-	(6,392,617)	6,312,733
33	11,252,163	-	-	-	(5,661,455)	5,590,707
34	9,756,628	-	-	-	(4,908,986)	4,847,642
35	8,218,206	-	-	-	(4,134,939)	4,083,267
36	6,636,369	-	-	-	(3,339,047)	3,297,321
37	5,010,601	-	-	-	(2,521,052)	2,489,548
38	3,340,401	-	-	-	(1,680,702)	1,659,699
39	1,670,200	-	-	-	(840,351)	829,849
	<u>\$ 464,607,230</u>	<u>\$ 302,918,072</u>	<u>\$(229,900,247)</u>	<u>\$ -</u>	<u>\$(225,608,340)</u>	<u>\$ 312,016,715</u>

(1) Wastewater Appendices - page 2 Section I
(2) Wastewater Appendices - page 1
(3) Not applicable as no existing debt was identified
(4) Wastewater Appendices - page 7

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Revenue Test
Wastewater Service Area 2

<u>Year</u>	<u>Impact Fee</u>	<u>Service Units</u>	<u>Impact Fee Revenue</u>	<u>Annual Expenses</u>	<u>Sub-Total</u>	<u>Accumulated Interest</u>	<u>Estimated Fund Balance</u>
Initial							\$ -
1	\$ 13,455	1,713	\$ 23,041,211	\$ (14,444,069)	\$ 37,485,280	\$ 500,428	37,985,708
2	13,455	1,713	23,041,211	(5,711,814)	28,753,025	1,398,071	68,136,804
3	13,455	1,713	23,041,211	2,886,452	20,154,759	2,088,319	90,379,882
4	13,455	1,713	23,041,211	11,380,094	11,661,117	2,568,819	104,609,818
5	13,455	1,713	23,041,211	12,127,229	10,913,982	2,938,784	118,462,584
6	13,455	1,713	23,041,211	12,807,244	10,233,967	3,299,574	131,996,126
7	13,455	1,713	23,041,211	13,432,372	9,608,839	3,652,575	145,257,540
8	13,455	1,713	23,041,211	14,012,102	9,029,109	3,998,915	158,285,564
9	13,455	1,713	23,041,211	14,530,404	8,510,807	4,339,844	171,136,215
10	13,455	1,713	23,041,211	14,996,550	8,044,661	4,676,733	183,857,609
11	-	-	-	30,684,792	(30,684,792)	4,499,356	157,672,174
12	-	-	-	23,021,450	(23,021,450)	3,902,511	138,553,234
13	-	-	-	15,358,109	(15,358,109)	3,494,341	126,689,466
14	-	-	-	7,694,767	(7,694,767)	3,279,884	122,274,582
15	-	-	-	7,694,767	(7,694,767)	3,162,006	117,741,821
16	-	-	-	7,694,767	(7,694,767)	3,040,981	113,088,036
17	-	-	-	7,694,767	(7,694,767)	2,916,725	108,309,994
18	-	-	-	7,694,767	(7,694,767)	2,789,152	103,404,378
19	-	-	-	7,694,767	(7,694,767)	2,658,172	98,367,783
20	-	-	-	7,694,767	(7,694,767)	2,523,695	93,196,710
21	-	-	-	7,694,767	(7,694,767)	2,385,627	87,887,570
22	-	-	-	7,694,767	(7,694,767)	2,243,873	82,436,676
23	-	-	-	7,694,767	(7,694,767)	2,098,334	76,840,243
24	-	-	-	7,694,767	(7,694,767)	1,948,909	71,094,385
25	-	-	-	7,694,767	(7,694,767)	1,795,495	65,195,113
26	-	-	-	7,694,767	(7,694,767)	1,637,984	59,138,330
27	-	-	-	7,694,767	(7,694,767)	1,476,268	52,919,831
28	-	-	-	7,694,767	(7,694,767)	1,310,234	46,535,298
29	-	-	-	7,694,767	(7,694,767)	1,139,767	39,980,299
30	-	-	-	7,694,767	(7,694,767)	964,749	33,250,280
31	-	-	-	7,013,992	(7,013,992)	794,146	27,030,434
32	-	-	-	6,312,733	(6,312,733)	637,438	21,355,139
33	-	-	-	5,590,707	(5,590,707)	495,546	16,259,978
34	-	-	-	4,847,642	(4,847,642)	369,425	11,781,761
35	-	-	-	4,083,267	(4,083,267)	260,061	7,958,555
36	-	-	-	3,297,321	(3,297,321)	168,474	4,829,708
37	-	-	-	2,489,548	(2,489,548)	95,718	2,435,877
38	-	-	-	1,659,699	(1,659,699)	42,881	819,059
39	-	-	-	829,849	(829,849)	10,790	0
			\$ 230,412,110	\$ 312,016,715		\$ 81,604,605	

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Calculation
Wastewater Service Area 2

<u>Year</u>	<u>Number of Years to End of Period</u>	<u>Future Value Escalation</u>		<u>Annual Service Units</u>		<u>Annual Expense</u>	
		<u>Interest Rate Factor</u>	<u>Recovery Fee Factor</u>	<u>Actual</u>	<u>Escalated</u>	<u>Actual</u>	<u>Escalated</u>
1	39	2.7581	1.0000	1,713	4,723	\$ (14,444,069)	\$ (39,838,628)
2	38	2.6864	1.0000	1,713	4,600	(5,711,814)	(15,344,237)
3	37	2.6165	1.0000	1,713	4,481	2,886,452	7,552,523
4	36	2.5485	1.0000	1,713	4,364	11,380,094	29,002,136
5	35	2.4822	1.0000	1,713	4,251	12,127,229	30,102,471
6	34	2.4177	1.0000	1,713	4,140	12,807,244	30,963,688
7	33	2.3548	1.0000	1,713	4,033	13,432,372	31,630,507
8	32	2.2936	1.0000	1,713	3,928	14,012,102	32,137,581
9	31	2.2339	1.0000	1,713	3,826	14,530,404	32,459,664
10	30	2.1758	1.0000	1,713	3,726	14,996,550	32,629,778
11	29	2.1192	1.0000	-	-	30,684,792	65,028,298
12	28	2.0641	1.0000	-	-	23,021,450	47,519,113
13	27	2.0104	1.0000	-	-	15,358,109	30,876,625
14	26	1.9582	1.0000	-	-	7,694,767	15,067,597
15	25	1.9072	1.0000	-	-	7,694,767	14,675,755
16	24	1.8576	1.0000	-	-	7,694,767	14,294,102
17	23	1.8093	1.0000	-	-	7,694,767	13,922,375
18	22	1.7623	1.0000	-	-	7,694,767	13,560,314
19	21	1.7164	1.0000	-	-	7,694,767	13,207,670
20	20	1.6718	1.0000	-	-	7,694,767	12,864,196
21	19	1.6283	1.0000	-	-	7,694,767	12,529,654
22	18	1.5860	1.0000	-	-	7,694,767	12,203,812
23	17	1.5447	1.0000	-	-	7,694,767	11,886,444
24	16	1.5046	1.0000	-	-	7,694,767	11,577,329
25	15	1.4654	1.0000	-	-	7,694,767	11,276,253
26	14	1.4273	1.0000	-	-	7,694,767	10,983,007
27	13	1.3902	1.0000	-	-	7,694,767	10,697,387
28	12	1.3541	1.0000	-	-	7,694,767	10,419,194
29	11	1.3188	1.0000	-	-	7,694,767	10,148,236
30	10	1.2846	1.0000	-	-	7,694,767	9,884,325
31	9	1.2511	1.0000	-	-	7,013,992	8,775,528
32	8	1.2186	1.0000	-	-	6,312,733	7,692,753
33	7	1.1869	1.0000	-	-	5,590,707	6,635,713
34	6	1.1561	1.0000	-	-	4,847,642	5,604,125
35	5	1.1260	1.0000	-	-	4,083,267	4,597,710
36	4	1.0967	1.0000	-	-	3,297,321	3,616,192
37	3	1.0682	1.0000	-	-	2,489,548	2,659,299
38	2	1.0404	1.0000	-	-	1,659,699	1,726,761
39	1	1.0134	1.0000	-	-	829,849	840,928
					<u>42,072</u>		<u>\$ 566,066,178</u>

Annual Interest Rate:	2.67%
Present Value of Initial Impact Fee Fund Balance	\$ -
Total Escalated Expense for Entire Period	\$ 566,066,178
Less Future Value of Initial Impact Fee Fund Balance	-
Sub-Total	<u>\$ 566,066,178</u>
Total Escalated Service Units	<u>42,072</u>
Maximum Assessable Impact Fee for Wastewater Service Area 2	\$ 13,455

City of Pflugerville - 2022 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Project Funding
Wastewater Service Area 2

<u>Impact Fee Project Name⁽¹⁾</u>	<u>Cost In</u>	<u>Impact Fee</u>	<u>Debt Funded⁽²⁾</u>		<u>Non-Debt</u>
	<u>Service Area⁽¹⁾</u>	<u>Recoverable Cost⁽¹⁾</u>	<u>Existing</u>	<u>Proposed</u>	<u>Funded⁽²⁾</u>
Carmel Lift Station and Force Main	\$ 3,853,330	\$ 1,391,094	\$ -	\$ 1,043,321	\$ 347,774
36/24/21/18-inch Wilbarger Interceptors	4,188,786	2,903,962	-	2,177,972	725,991
Vine Creek Lift Station and 12-inch Force Main	1,810,411	1,338,130	-	1,003,598	334,533
Wilbarger Wastewater Treatment Plant	247,000,000	100,858,333	-	75,643,750	25,214,583
54-inch Wilbarger Creek Interceptor	29,196,328	12,516,048	-	12,516,048	-
Carmel Lift Station Pump Upgrades	536,900	483,210	-	362,408	120,803
Sorento Interceptor Phase 2	21,658,855	3,248,828	-	2,436,621	812,207
Kelly Lane Interceptor	18,500,000	5,550,000	-	4,162,500	1,387,500
15-inch North Wilbarger Interceptor	4,361,365	1,308,410	-	641,311	667,099
Cottonwood West Lift Station	7,720,060	3,088,024	-	2,316,018	772,006
New Sweden Lift Station and Force Main	6,281,100	6,281,100	-	4,710,825	1,570,275
24-inch Carmel Interceptor	3,933,200	3,539,880	-	2,654,910	884,970
24-inch Colorado Sands Interceptor	13,306,000	9,314,200	-	6,985,650	2,328,550
18-inch Colorado Sands Interceptor	4,049,800	2,227,390	-	1,670,543	556,848
12-inch Wilbarger Interceptor	1,573,900	944,340	-	708,255	236,085
Wilbarger Wastewater Treatment Plant Expansion	202,488,000	127,736,180	-	95,802,135	31,934,045
New Sweden Lift Station Expansion and Force Main	8,171,400	8,171,400	-	6,128,550	2,042,850
Cottonwood West Interceptor	35,156,420	10,195,362	-	7,474,571	2,720,791
18-inch North Cottonwood Interceptor	4,139,300	693,941	-	629,333	64,608
Cottonwood North Interceptor	11,092,400	1,109,240	-	831,930	277,310
Wastewater Impact Fee Update	19,000	19,000	-	-	19,000
Total	\$ 629,036,556	\$ 302,918,072	\$ -	\$ 229,900,247	\$ 73,017,825

(1) Per Freese and Nichols Impact Fee Study
(2) Per discussions with City staff and City files

City of Pflugerville - 2022 Wastewater Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Credit Determination
 Wastewater Service Area 2

<u>Year</u>	<u>Eligible Revenue Funded Cost ⁽¹⁾</u>	<u>Annual Service Units</u>	<u>Eligible Debt Service per Service Unit</u>	<u>Annual Growth in Service Units (Cumulative)</u>	<u>Credit for Annual Utility Rate Revenues</u>
1	\$ 1,370,165	18,624	\$ 73.57	1,713	\$ 125,992
2	2,781,558	20,336	136.78	3,425	468,472
3	4,234,745	22,049	192.06	5,138	986,734
4	5,730,279	23,761	241.16	6,850	1,651,968
5	7,268,701	25,474	285.34	8,563	2,443,255
6	8,850,539	27,186	325.56	10,275	3,345,078
7	10,476,307	28,899	362.52	11,988	4,345,718
8	12,146,507	30,611	396.80	13,700	5,436,188
9	13,816,707	32,324	427.45	15,413	6,588,086
10	15,486,908	34,036	455.02	17,125	7,792,140
11	15,486,908	34,036	455.02	17,125	7,792,140
12	15,486,908	34,036	455.02	17,125	7,792,140
13	15,486,908	34,036	455.02	17,125	7,792,140
14	15,486,908	34,036	455.02	17,125	7,792,140
15	15,486,908	34,036	455.02	17,125	7,792,140
16	15,486,908	34,036	455.02	17,125	7,792,140
17	15,486,908	34,036	455.02	17,125	7,792,140
18	15,486,908	34,036	455.02	17,125	7,792,140
19	15,486,908	34,036	455.02	17,125	7,792,140
20	15,486,908	34,036	455.02	17,125	7,792,140
21	15,486,908	34,036	455.02	17,125	7,792,140
22	15,486,908	34,036	455.02	17,125	7,792,140
23	15,486,908	34,036	455.02	17,125	7,792,140
24	15,486,908	34,036	455.02	17,125	7,792,140
25	15,486,908	34,036	455.02	17,125	7,792,140
26	15,486,908	34,036	455.02	17,125	7,792,140
27	15,486,908	34,036	455.02	17,125	7,792,140
28	15,486,908	34,036	455.02	17,125	7,792,140
29	15,486,908	34,036	455.02	17,125	7,792,140
30	15,486,908	34,036	455.02	17,125	7,792,140
31	14,116,743	34,036	414.76	17,125	7,102,750
32	12,705,349	34,036	373.29	17,125	6,392,617
33	11,252,163	34,036	330.60	17,125	5,661,455
34	9,756,628	34,036	286.66	17,125	4,908,986
35	8,218,206	34,036	241.46	17,125	4,134,939
36	6,636,369	34,036	194.98	17,125	3,339,047
37	5,010,601	34,036	147.21	17,125	2,521,052
38	3,340,401	34,036	98.14	17,125	1,680,702
39	1,670,200	34,036	49.07	17,125	840,351
Total	\$ 464,607,230				\$ 225,608,340

2022 Service Units ⁽²⁾	16,911
Ten Year Growth in Service Units ⁽²⁾	17,125
	<u>10</u> years
Annual Growth in Service Units	1,713
Credit Amount	\$ 225,608,340

(1) Wastewater Appendices - page 3 Section II
 (2) Per Freese and Nichols Impact Fee Study