



City of Hutto

Agenda

Capital Improvement Committee Meeting Tuesday, January 5, 2021 at 6:00 PM City Council Chambers

In accordance with the Texas Open Meetings Act this meeting agenda is posted for public information, continuously, for at least 72 hours prior to the scheduled time of the meeting on the bulletin board located on the exterior wall of the City Hall building at 500 West Live Oak, Hutto, Texas. This meeting agenda is also accessible via the Internet at www.huttotx.gov

Page

1. CALL MEETING TO ORDER
2. ROLL CALL
3. PUBLIC COMMENT

- 3.1. Dial in numbers
Toll: 1-512-717-4201
Toll Free: 1-800-717-4201
Conference ID:
242-3288

Once you are in the conference call press *5 to signal that you are requesting to speak during public comment.

Any citizen wishing to speak during public comment may do so after completing the required registration form. The purpose of this item is to allow the residents of Hutto and other interested persons an opportunity to address the Capital Improvement Committee on agenda issues and on non-agenda issues (i.e., City policy or legislative issues). Non-agenda issues regarding daily operational or administrative matters should be first dealt with at the administrative level by calling City Hall at (512) 759-4839 during business hours. Each person providing public comment will be limited to 3 minutes.

[Note: The Texas Open Meetings Act, Texas Government Code, Chapter 551, prohibits advisory boards, commissions and committees created by local governmental bodies from fully discussing, debating, or considering subjects for which public notice has not been given on the agenda. Issues that cannot be referred to the City Staff for action may be placed on the agenda of a future meeting.]

4. AGENDA ITEMS

- 4.1. Consideration and possible action on the meeting minutes from the regular scheduled Capital Improvement Committee meeting held on November 17, 2020.

3 - 5

[Capital Improvement Committee Minutes- 17 Nov 2020](#)

- 4.2. Consideration and possible action on the meeting minutes from the regular scheduled Capital Improvement Committee meeting held on December 10, 2020. 6 - 8

[Capital Improvement Committee Minutes - 10 Dec 2020](#)

- 4.3. Introductions
- 4.4. Presentation of Impact Fee Report - Final Draft 9 - 103
[2020.01.01 - Final Report](#)
- 4.5. Consideration and possible action on making a written recommendation to City Council before January 15, 2021 regarding the Water and Wastewater Impact Fees as presented in the Draft Water and Wastewater Impact Fee Report
- 4.6. Questions and Discussion

5. ADJOURNMENT

6. CERTIFICATION

I certify that this notice of the **January 5, 2021** Capital Improvement Committee meeting was posted on the City of Hutto website and the City Hall bulletin board of the City of Hutto on **December 31, 2020** at 3:00 P.M.




Angel Kavanagh, Management Assistant

The City of Hutto is committed to comply with the Americans Disability Act. The Hutto City Council Chamber is wheelchair accessible. Request for reasonable special accommodations must be made 48 hours prior to the meeting. Please email the City Secretary's office at City.Secretary@huttox.gov or call (512) 759-4033 for assistance.



MINUTES

Capital Improvement Committee Meeting

7:00 PM - Tuesday, November 17, 2020
City Council Chambers

The Capital Improvement Committee of the City of Hutto was called to order on Tuesday, November 17, 2020, at 7:00 PM, in the City Council Chambers, with the following members present:

PRESENT: Commissioner James Weaver, Commissioner Jerica Lawyer, Commissioner Randal Clark, Commissioner Richard Hudson, Chair Tony Wertz, and Commissioner Joel Coombs

EXCUSED: Commissioner John Klein and Commissioner Susanna Boyer

1 CALL MEETING TO ORDER

Meeting was called to order at 7:03 PM.

2 ROLL CALL

Members of the City of Hutto Staff present or on call were Ashby Grundman, Director of Planning, Samuel Ray, Director of Engineering

3 PUBLIC COMMENT

Gary Brown was in attendance as a member of the public.

- a) Dial in numbers
Toll: 1-512-717-4201
Toll Free: 1-800-717-4201
Conference ID:
242-3288

Once you are in the conference call press *5 to signal that you are requesting to speak during public comment.

Any citizen wishing to speak during public comment may do so after completing the required registration form. The purpose of this item is to allow the residents of Hutto and other interested persons an opportunity to address the Capital Improvement Committee on agenda issues and on non-agenda issues (i.e., City policy or legislative issues). Non-agenda issues regarding daily operational or administrative matters should be first dealt with at the administrative level by calling City Hall at (512) 759-4839 during business hours. Each person providing public comment will be limited to 3

minutes.

[Note: The Texas Open Meetings Act, Texas Government Code, Chapter 551, prohibits advisory boards, commissions and committees created by local governmental bodies from fully discussing, debating, or considering subjects for which public notice has not been given on the agenda. Issues that cannot be referred to the City Staff for action may be placed on the agenda of a future meeting.]

4 AGENDA ITEMS

a) Introductions

Darren Strozewski, Jordan Hurta, Wiley Webb and Bryce Brady introduced themselves as part of DCS-Engineering.

b) Presentation

1. Impact Fee Purpose and Principal
2. Impact Fee Comparisons
3. Land Use Assumptions
4. 5-year Water and Wastewater CIP Projects
5. Proposed Schedule

c) Questions and Discussion

Presenters and Commissioners discussed City of Hutto Water and Wastewater Impact Fee Study and had a question and answer session.

5 ADJOURNMENT

Commissioner Randal Clark made a motion to adjourn, Commissioner Rick Hudson seconded. meeting was adjourned at 8:17 PM.

6 CERTIFICATION

I certify that this notice of the **November 17, 2020** Capital Improvement Committee meeting was posted on the City of Hutto website and the City Hall bulletin board of the City of Hutto on November 4, 2020 at 3:00pm.




Angel Kavanaugh, Management Assistant

The City of Hutto is committed to comply with the Americans Disability Act. The Hutto City Council Chamber is wheelchair accessible. Request for reasonable special accommodations

must be made 48 hours prior to the meeting. Please email the City Secretary's office at City.Secretary@huttox.gov or call (512) 759-4033 for assistance.

Acting Chair



MINUTES

Capital Improvement Committee Meeting

7:00 PM - Thursday, December 10, 2020
City Council Chambers

The Capital Improvement Committee of the City of Hutto was called to order on Thursday, December 10, 2020, at 7:00 PM, in the City Council Chambers, with the following members present:

PRESENT: Commissioner John Klein, Commissioner Joel Coombs, Commissioner Jerica Lawyer, Commissioner Randal Clark, Commissioner Richard Hudson, Chair Tony Wertz, and Parks Advisory Board Member Wendell Teltow

EXCUSED: Commissioner Susanna Boyer

1 CALL MEETING TO ORDER

Meeting was called to order at 7:06 p.m.

2 ROLL CALL

Members of the City of Hutto Staff Present were Samuel Ray Director of Engineering.

3 PUBLIC COMMENT

- a) Dial in numbers
Toll: 1-512-717-4201
Toll Free: 1-800-717-4201
Conference ID:
242-3288

Once you are in the conference call press *5 to signal that you are requesting to speak during public comment.

Any citizen wishing to speak during public comment may do so after completing the required registration form. The purpose of this item is to allow the residents of Hutto and other interested persons an opportunity to address the Capital Improvement Committee on agenda issues and on non-agenda issues (i.e., City policy or legislative issues). Non-agenda issues regarding daily operational or administrative matters should be first dealt with at the administrative level by calling City Hall at (512) 759-4839 during business hours. Each person providing public comment will be limited to 3 minutes.

[Note: The Texas Open Meetings Act, Texas Government Code, Chapter 551, prohibits

advisory boards, commissions and committees created by local governmental bodies from fully discussing, debating, or considering subjects for which public notice has not been given on the agenda. Issues that cannot be referred to the City Staff for action may be placed on the agenda of a future meeting.]

4 AGENDA ITEMS

a) Introductions

Matthew Garret with NewGen Strategies the new presenter. Also present are Darren Strozewski, Wiley Webb, Jordan Hurta and Bryce Brady from DCS Engineering

b) Presentation of Draft Impact Fee Report review and Schedule

A presentation was made on Land use Assumptions, 5 year Water and Wastewater CIP projects, and Impact fee Calculations.

Questions from Commissioners included the number of Land Use Assumptions, cost of the LUE'S and Maintenance, what happens when assumptions are wrong, and discussed with presenters.

Commissioners had questions on developer funded wastewater projects and HISD site. Proposed water impact fee goes up and wastewater goes down, does the city have the ability to only update one fee? Determined it is required to update both water and wastewater.

Commissioners had questions on cash flow – large CIP cost early in 10 year period, impact to water rates regarding CIP costs. Maintenance fees not included in impact fee.

Is impact fee for residential only? Impact fee is for all new development.

Matthew Garrett- provided details on Analysis and how impact fees are calculated and discussed draft fee in comparison to surrounding cities also was available to answer Commissioners questions

c) Consideration and possible action on making a written recommendation to City Council before January 15, 2021 regarding the Water and Wastewater Impact Fees as presented in the Draft Water and Wastewater Impact Fee Report.

No action taken

d) Questions and Discussion

Staff inquired on the possibility of holding the next Capital Improvement Committee meeting on Tuesday, January 5, 2021 at 6:00 p.m Prior to the Scheduled Planning and Zoning Commission Meeting at 7:00pm. Commission agreed this would work.

5 ADJOURNMENT

Having no further business meeting was adjourned at 8:06 p.m

6 CERTIFICATION

I certify that this notice of the **December 10, 2020** Capital Improvement Committee meeting was posted on the City of Hutto website and the City Hall bulletin board of the City of Hutto on **December 4, 2020** at 12:00 P.M.




Angel Kavanaugh, Management Assistant

The City of Hutto is committed to comply with the Americans Disability Act. The Hutto City Council Chamber is wheelchair accessible. Request for reasonable special accommodations must be made 48 hours prior to the meeting. Please email the City Secretary's office at City.Secretary@huttox.gov or call (512) 759-4033 for assistance.

Chair

CITY OF HUTTO



DRAFT

**WATER & WASTEWATER
IMPACT FEE UPDATE**

December 2020

THIS DOCUMENT IS RELEASED
FOR THE PURPOSE OF
INTERIM REVIEW UNDER
THE AUTHORITY OF
DARREN STROZEWSKI, P.E. 87908
ON DECEMBER 31, 2020
IT IS NOT TO BE USED
FOR CONSTRUCTION PURPOSES

Prepared by:



DCS Engineering, LLC
1101 S. Capital of Texas Highway, Building G-100
Austin, Texas 78746
Tel: (512) 614-6171
T.B.P.E. Firm No. F-13162
Project Number: 20101436

Table of Contents

<u>Section</u>	<u>Page</u>
1	Executive Summary 1-1
	1.1 Background 1-1
	1.2 Land Use Assumptions..... 1-1
	1.3 Capital Improvement Plan..... 1-2
	1.4 Impact Fee Analysis 1-8
2	Background 2-1
3	Land Use Assumptions 3-1
	3.1 Service Areas 3-1
	3.2 Growth Projections and Land Use Assumptions 3-1
4	Water and Wastewater Capital Improvement Plan 4-1
	4.1 Existing Water and Wastewater Systems 4-1
	4.2 Water and Wastewater Model Development 4-5
	4.3 Water and Wastewater OSystem Improvements 4-5
5	Impact Fee Analysis..... 5-1
	5.1 Maximum Impact Fee Calculations 5-1

List of Tables

<u>Table</u>	<u>Page</u>
1.1	Water and Wastewater Service Area LUE Growth Projections..... 1-2
1.2	Water and Wastewater Service Area Population Growth Projections 1-2
1.3	Water System Impact Fee Eligible Projects..... 1-3
1.4	Wastewater System Impact Fee Eligible Projects..... 1-6
1.5	Maximum Water and Wastewater Impact Fee Summary Table 1-9
3.1	Land Use Densities 3-5
3.2	Engineering Department Living Unit Equivalent Table 3-6
3.3	Water and Wastewater Service Area LUE Growth Projections 3-8
3.4	Water and Wastewater Service Area Population Growth Projections 3-8
4.1	Water System Impact Fee Eligible Projects..... 4-6
4.2	Wastewater System Impact Fee Eligible Projects..... 4-9
5.1	Maximum Water and Wastewater Impact Fee Summary Table 5-3

List of Figures

<u>Figure</u>	<u>Page</u>
1.1 Eligible Water CIP Projects	1-4
1.2 Eligible Water CIP Projects	1-5
1.3 Eligible Wastewater CIP Projects and WWTP Service Areas	1-7
1.4 Regional Comparison of Combined Water and Wastewater Impact Fees	1-10
3.1 Water Service Area	3-2
3.2 Wastewater Service Area	3-3
3.3 Ultimate Land Use Map	3-7
3.4 10-Year Development Areas	3-9
4.1 Existing Water System Map	4-2
4.2 Existing Water System Map	4-3
4.3 Existing Wastewater System and WWTP Service Areas	4-4
4.4 Eligible Water CIP Projects	4-7
4.5 Eligible Water CIP Projects	4-8
4.6 Eligible Wastewater CIP Projects	4-10
5.1 Regional Comparison of Water Impact Fees	5-4
5.2 Regional Comparison of Wastewater Impact Fees	5-5
5.3 Regional Comparison of Combined Water and Wastewater Impact Fees	5-6

List of Appendices

Appendix

A	Water System Project Cost Estimates
B	Wastewater System Project Cost Estimates
C	Water and Wastewater Impact Fee Analysis

Section 1

Executive Summary

1.1 BACKGROUND

On June 30, 2020, the City of Hutto (City) contracted with DCS Engineering, LLC (DCS) to develop this impact fee update and analysis for the City’s water and wastewater systems. DCS has been working for the City for over 11 years in numerous roles including but not limited to design of CIP projects, construction administration, master planning, permitting, and operational trouble shooting associated with the water and wastewater systems. Impact fees are defined 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.” The purpose of this report is to summarize the methodology and calculations used to produce the water and wastewater impact fees. 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.

The City is one of the fastest growing cities in Williamson County, experiencing its most rapid growth in the early 2000s. The 2000 Census reported a population of 1,250 residents within the City limits (U.S. Census Bureau, Census 2000 Summary) and by 2005 the City’s population had grown to an estimated 7,401 residents. By 2010 the population had almost doubled since 2005, and as of 2017 the City has recorded a population of 26,950 in City limits. With the latest recorded population in 2017, the population increase for the City since 2000 is over 2,100 percent. This equates to a 19.8% average growth rate over this 17 year period of time. While these numbers demonstrate the rapid growth within the City limits, this report will focus strictly on growth inside the geometrically differently shaped water service area; and wastewater service area to generate the respective impact fees.

1.2 LAND USE ASSUMPTIONS

DCS worked closely with the City to develop land use assumptions and growth projections that are used to determine which CIP projects are needed in the next 10 years. These assumptions are based on the projections used in both the water and wastewater master plans and have been verified by continuing to monitor the City’s growth patterns. Because the service areas for water and wastewater service are not the same, the growth projections must be considered separately for each service area. The City’s ultimate land use map was used to determine the types of developments that are expected in the areas that are not currently under design/construction. Each land use was assigned a density in terms of LUE/Ac based on other similar developments to define how much flow can be expected from that area when it is built out. Table No. 1.1 below shows the number of LUEs in 2021 and 2031 that are discussed in this report.

Table No. 1.1 – Water and Wastewater Service Area LUE Growth Projections

Year	Water Service Area		Wastewater Service Area	
	Population	Annual Growth Rate	Population	Annual Growth Rate
2021	6,154 ⁽¹⁾	-	9,569 ⁽¹⁾	-
2031	14,551	8.99%	25,840	10.44%

⁽¹⁾ LUEs based on data from City's billing department through October 31, 2020.

The estimated equivalent population was developed for 2021 and 2031. Equivalent populations were calculated based on the assumption used in the Water and Wastewater Master Plans of 3.0 people per LUE. Table No. 1.2 shows the anticipated population growth for the water and wastewater service areas.

Table No. 1.2 – Water and Wastewater Service Area Population Growth Projections

Year	Water Service Area		Wastewater Service Area	
	Population	Annual Growth Rate	Population	Annual Growth Rate
2021	18,462 ⁽¹⁾	-	28,707 ⁽¹⁾	-
2031	43,653 ⁽¹⁾	8.99%	77,520 ⁽¹⁾	10.44%

⁽¹⁾ Population excludes City residents on septic tank systems since they are not connected to the City's system.

1.3 CAPITAL IMPROVEMENT PLAN

A 10-year water and wastewater capital improvement plan (CIP) was developed using the land use assumptions and growth projections that are discussed in this report. The projects listed on these CIPs are required to provide adequate capacity for the upcoming developments that were identified in the growth projections over the next 10 years. The proposed water and wastewater CIP projects were developed in the respective master plans and have been updated for the flows and development patterns that are discussed in this report. Each of these projects were analyzed to determine their construction cost, capacity added to the system, and capacity utilized within the next 10 years. Only the percentage of capacity that is utilized in the next 10 years is eligible to be included in the Impact Fee analysis. It should be noted here that we have listed all known water and wastewater projects identified by City Staff or DCS's 11 years of historical experience working for the City, even if they are not eligible for inclusion in the Impact Fee calculations. Those that are not eligible will have a utilization of 0% and are therefore not included in the resulting calculations. The CIP lists and the associated maps are shown in Tables No. 1.3 and 1.4; and companion Figures No. 1.1, 1.2, and 1.3.

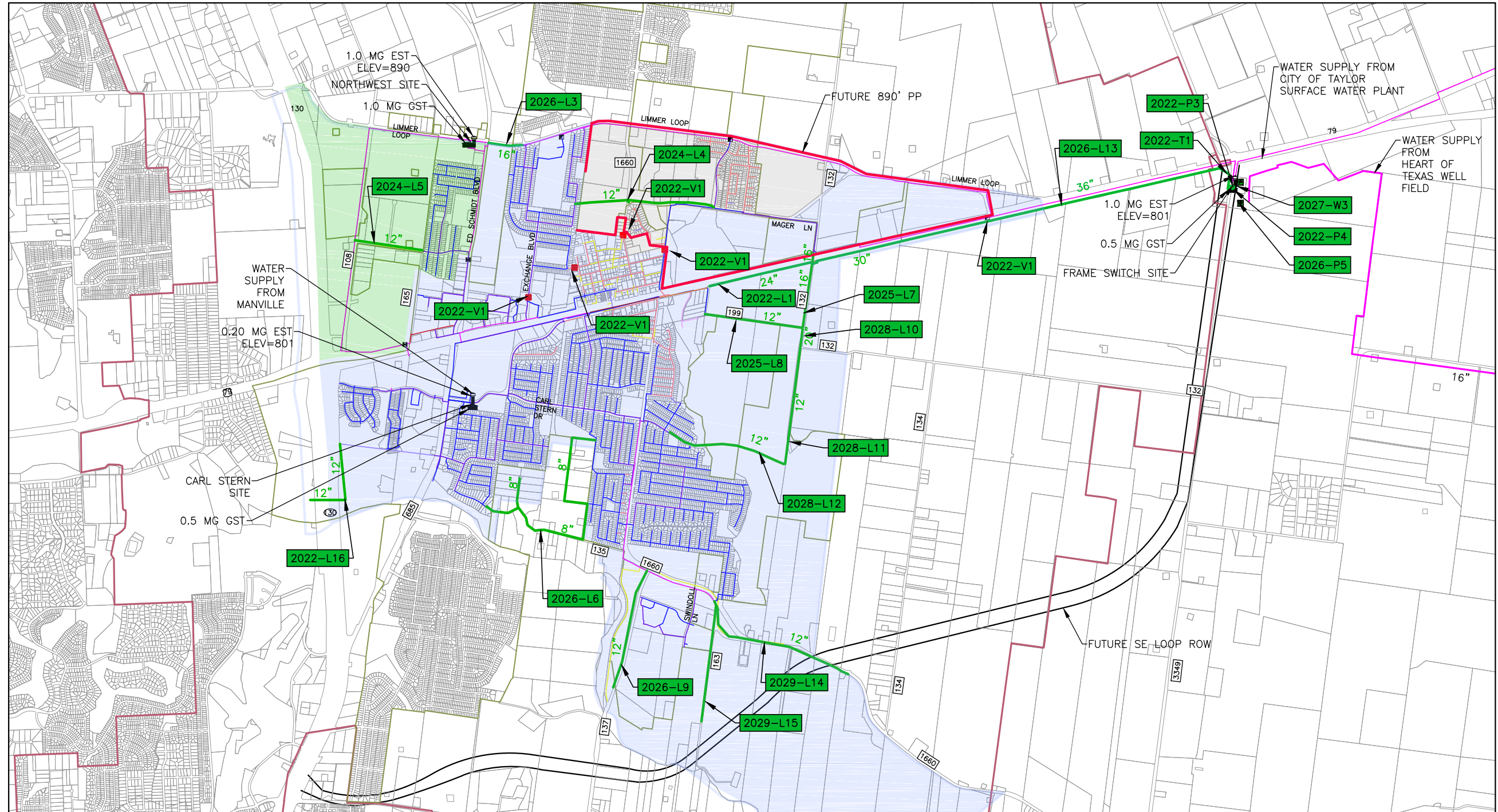
It should be noted here that future potential wholesale water contracts (i.e. with Manville WSC, Jonah, City of Taylor, etc); or future potential wholesale wastewater contracts (i.e. with Jonah, City of Taylor, MUD Districts; etc.) require special attention by the City as they relate to the impact fees calculated in this

Table 1.3 - Water System Impact Fee Eligible Projects

Project Date	Project ID	Fiscal Year Completed	Project Name	Project Description	2021 Utilization	2031 Utilization	Eligible Utilization (2031 - 2021)	Engineer's Opinion of Most Probable Cost or Actual Project Cost	Impact Fee Eligible Cost
Existing Projects¹									
Completed	N/A	2003	Frameswitch Pumping Station	1.0 MG Elevated Storage, 0.5 MG Ground Storage, 4.3 MGD Pumping Capacity, and land acquisition	27%	64%	37%	\$1,747,068	\$653,276
Completed	N/A	2004	Carl Stern Pumping Station	0.2 MG Elevated Storage, 0.5 MG Ground Storage, 4.3 MGD Pumping Capacity, and land acquisition	33%	78%	46%	\$1,226,264	\$560,952
Completed	N/A	2007	North West Pumping Station	1.0 MG Elevated Storage, 1.0 MG Ground Storage, 6.5 MGD Pumping Capacity, and land acquisition	32%	77%	45%	\$4,238,004	\$1,895,731
Completed	N/A	2011	CR 108 Waterline	12,600 linear feet of 16" waterline	56%	88%	32%	\$1,575,000	\$504,000
Completed	N/A	2014	Cottonwood Creek Elementary Booster Pumps	Booster pumps necessary to provide minimum fire flow pressures per TCEQ	100%	100%	0%	\$25,000	\$0
Completed	N/A	2016	CR 685 8" Waterline Replacement	Replace 2,600 LF of 8" waterline	100%	100%	0%	\$275,600	\$0
Completed	N/A	2017	12" Waterline - Future Carl Stern Dr (SH 130 South)	9,000 linear feet of 12" waterline to transfer water for new development areas at Future Carl Stern Dr / SH 130 South	11%	83%	72%	\$940,000	\$679,468
Completed	N/A	2017	Heart of Texas Groundwater and Wells	Value of the Water rights, Well facilities, and conveyance to Shiloh	51%	100%	49%	\$22,231,249	\$10,998,618
Completed	N/A	2017	Heart of Texas Transmission Pipeline	131,000 linear feet of 16" waterline	37%	100%	63%	\$33,013,368	\$20,939,908
Completed	N/A	2017	Heart of Texas Booster Pumping Station	2.1 MGD Booster Pumping Station and 380,000 Gallons ground storage tank	91%	100%	9%	\$3,785,391	\$324,462
Completed	N/A	2017	City Storage Tank Painting	Paint 3 ground storage tanks, and 3 elevated storage tanks.	100%	100%	0%	\$1,200,000	\$0
Completed	N/A	2018	12" Waterline - West of FM 685	1,500 linear feet of 12" waterline to transfer water	11%	83%	72%	\$156,000	\$112,763
Completed	N/A	2018	12" Waterline - Front Street	3,600 linear feet of 12" waterline	30%	100%	70%	\$376,000	\$263,200
Completed	N/A	2018	16" Waterline - Front Street	900 linear feet of 16" waterline	30%	100%	70%	\$152,000	\$106,400
Completed	N/A	2018	20" Waterline - Front Street	2,500 linear feet of 20" waterline	30%	100%	70%	\$595,000	\$416,500
Completed	N/A	2018	24" Waterline - Front Street	1,800 linear feet of 24" waterline	30%	100%	70%	\$548,000	\$383,600
Completed	N/A	2019	Heart of Texas Well Rehabilitation	Clean well screens, and replace pumps and motors on 8 HOT wells.	100%	100%	0%	\$2,400,000	\$0
Completed	N/A	2020	Old Town Waterline Replacement Program ³	Waterline Replacements: East Street Phase I, Live Oak Street, Taylor Street, West Street Phase I and II with Metcalf Street, Marvin Cove, East Street Phase II, Ross Street, and Brushy Street/Evans Street.	100%	100%	0%	\$2,085,000	\$0
Completed	N/A	2020	Shiloh Booster Station Upgrade to 3.27 MGD	Install 3 new pumps to reach a capacity of 3.27 mgd	64%	100%	36%	\$500,000	\$178,899
Proposed Projects²									
Under Design	2022-P1	2022	Shiloh Pumping Station Upgrade to 5.70 MGD	Install 5.7 mgd booster pump station at Shiloh Pump Station to replace existing 3.27 MGD pump station.	53%	100%	47%	\$4,900,000	\$2,321,053
Under Design	2022-P2	2022	Heart of Texas In-Line 5.7 MGD Pumping Station	Install 5.7 mgd inline booster pump station at the proposed Noack Pumping Station to allow the Heart of Texas Transmission Line to serve 5.7 mgd	53%	100%	47%	\$5,250,000	\$2,486,842
Under Design	2022-P3	2022	Frame Switch 890 PP 5.7 MGD Pump Station	Install 5.7 MGD 890' PP Pump Station at the Frame Switch Pumping Station.	53%	100%	47%	\$4,290,000	\$2,032,105
Under Design	2022-P4	2022	Frame Switch 801 PP 6.48 MGD Pump Station	Install 6.48 MGD 801' PP Pumping Station at the Frame Switch Pumping Station.	53%	100%	47%	\$2,960,000	\$1,402,105
Under Design	2022-T1	2022	Frame Switch 801 Pressure Plane Tank Modifications ³	Install new dedicated tank inlet to improve tank operation and mixing characteristics.	100%	100%	0%	\$520,000	\$0
Under Design	2022-V1	2022	890' Pressure Plane Expansion ³	To expand the 890' pressure plane east, 4 pressure reducing valves will be installed around Hutto's Historic Downtown. 1 Pressure sustaining valve will be converted into a pressure reducing valve.	37%	87%	50%	\$250,000	\$125,000
Under Design	2022-L1	2022	24" Waterline - US 79	5,500 linear feet of 24" waterline, and 6,000 linear feet of 30" waterline	37%	87%	50%	\$3,085,280	\$1,541,940
Under Design	2022-L2	2022	Heart of Texas 16" Parallel Pipeline	16,000 linear feet of 16" waterline	53%	100%	47%	\$2,658,000	\$1,249,260
Under Design	N/A	2021	Water Impact Fee Update	Update water impact fees.	0%	100%	100%	\$39,670	\$39,670
Under Design	N/A	2021	Water Supply Alternatives Analysis	Water Supply Alternatives Analysis	0%	75%	75%	\$200,000	\$150,000
FY 2022 thru FY 2027	N/A	2022	2022 Water Master Plan Update	Update to the 2016 Water Master Plan	100%	100%	0%	\$150,000	\$0
FY 2023 thru FY 2028	N/A	2023	2023 Water Impact Fee Update	Update water impact fees.	0%	100%	100%	\$39,670	\$39,670
FY 2021 thru FY 2026	2026-L3	2026	16" Waterline - Limmer Loop ³	1,600 linear feet of 16" waterline to transfer water from the existing 890-ft PP at Ed Schmidt Blvd to Anderson St in Hutto Square (for expanding 890-ft PP)	0%	100%	100%	\$404,000	\$404,000
FY 2021 thru FY 2026	2024-L4	2024	12" Waterline - FM 1660/Mager Ln	4,800 linear feet of 12" waterline to transfer water from Delby St in Hutto Square to Carol Dr in Carol Meadows (for expanding 890-ft PP)	0%	100%	100%	\$728,000	\$728,000
FY 2021 thru FY 2026	2024-L5	2024	12" Waterline - Alliance Blvd (CR 108)	2,400 linear feet of 12" waterline to transfer water for new development areas along Innovation Blvd	0%	100%	100%	\$265,000	\$265,000
FY 2021 thru FY 2026	2026-L6	2026	Jonah Water Service Transfer Tier II South	7,910 linear feet of 8" waterline to transfer water to Coyote Trail	0%	100%	100%	\$953,000	\$953,000
FY 2021 thru FY 2026	2025-L7	2025	16" Waterline - CR 132	2,500 linear feet of 16" waterline to transfer water for new development areas at US79 / CR 132	0%	51%	51%	\$449,000	\$228,979
FY 2021 thru FY 2026	2025-L8	2025	12" Waterline - CR 199	3,300 linear feet of 12" waterline	0%	51%	51%	\$366,000	\$186,651
FY 2021 thru FY 2026	2026-L9	2026	12" Waterline	4,000 linear feet of 12" waterline	0%	54%	54%	\$606,000	\$328,107
FY 2027 thru FY 2031	2028-L10	2028	20" Waterline - CR 132	800 linear feet of 20" waterline	0%	36%	36%	\$202,000	\$73,257
FY 2027 thru FY 2031	2028-L11	2028	12" Waterline - Future Roadway	3,800 linear feet of 12" waterline	0%	36%	36%	\$421,000	\$152,678
FY 2027 thru FY 2031	2028-L12	2028	12" Waterline - Future Carl Stern Dr	4,300 linear feet of 12" waterline	0%	54%	54%	\$477,000	\$258,262
FY 2021 thru FY 2027	2026-L13	2026	36" Waterline - US 79	9,200 linear feet of 36" waterline	0%	62%	62%	\$4,623,000	\$2,856,402
FY 2027 thru FY 2031	2029-L14	2029	12" Waterline - FM 1660	5,400 linear feet of 12" waterline	0%	79%	79%	\$771,000	\$612,599
FY 2027 thru FY 2031	2029-L15	2029	12" Waterline - CR 163	3,900 linear feet of 12" waterline	0%	63%	63%	\$557,000	\$348,362
FY 2021 thru FY 2026	2022-L16	2022	Avery Lake Waterline	2,500 linear feet of 12" waterline	0%	80%	80%	\$960,000	\$768,000
FY 2021 thru FY 2027	2026-P5	2026	Frameswitch 890' PP Pump Upgrades	Replace 4 50 HP 890' PP pumps with 4 150 HP 890' PP pumps	0%	100%	100%	\$500,000	\$500,000
FY 2021 thru FY 2026	2022-W1	2022	Well Capacity Increase to 5.7 MGD	Install 2 new Hooper wells, Drill one new Simsboro well, repermit the existing Simsboro well No. 12.	0%	100%	100%	\$3,688,000	\$3,688,000
FY 2021 thru FY 2026	2022-W2	2022	Well Collection Capacity Increase to 5.7 MGD	Install +/- 21,000 LF of 16" and 12" piping.	0%	100%	100%	\$3,955,000	\$3,955,000
FY 2027 thru FY 2031	2027-W3	2027	5 MGD Brackish Water Treatment Plant	5 MGD brackish water treatment and cooling, 3 lower trinity aquifer wells, 1 injection well.	0%	54%	54%	\$30,105,390	\$16,256,911
Total =								\$151,441,954	\$81,968,630

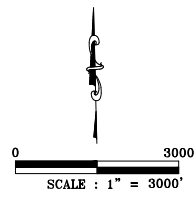
1. Existing projects includes projects currently completed that provide capacity to the system
 2. Proposed projects includes all future projects including those currently under design or construction not completed
 3. Only projects that add additional capacity are eligible for inclusion in the Impact Fee Analysis

FILENAME: Z:\Projects\1400-1499\20101436 - C04 Impact Fee Study\200 - Planning_Study\2.1 - Drawings\Sheet Files\Figure 1.1.dwg, LAST SAVED ON: Dec 30 2020 12:08pm, PLOTTED BY: SBARRY, ON: Dec 30 2020 12:08pm, CFG:



LEGEND

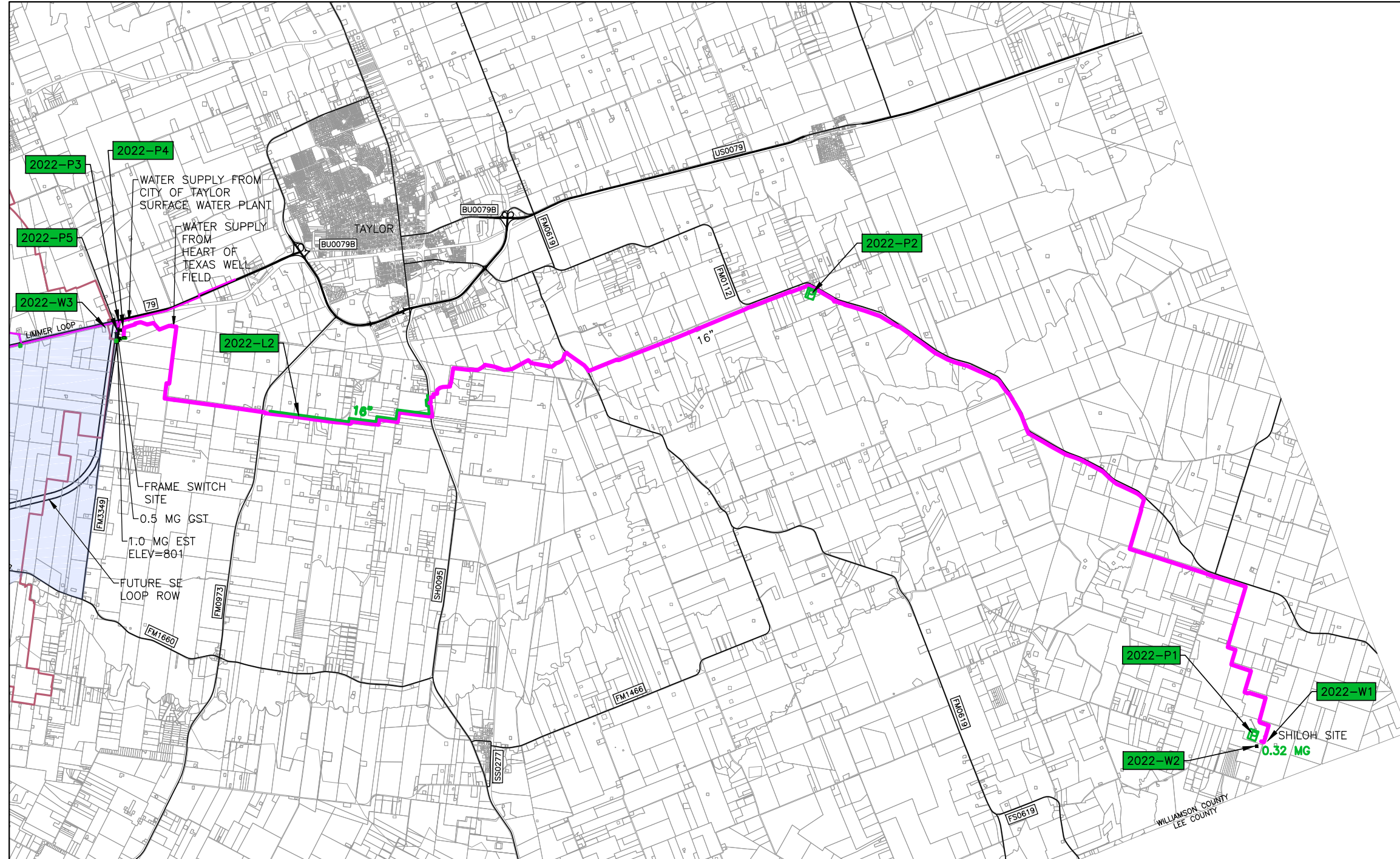
PROPOSED PUMP (NEW OR EXPANDED)		EXIST 1.5 WATERLINES		801 PRESSURE PLANE/WATER CCN	
PROPOSED ELEVATED STORAGE TANK		EXIST 2 WATERLINES		890 PRESSURE PLANE/WATER CCN	
PROPOSED GROUND STORAGE TANK		EXIST 4 WATERLINES		FUTURE 890 PRESSURE PLANE/WATER CCN	
PROPOSED PRESSURE SUSTAINING VALVE		EXIST 6 WATERLINES		PROPOSED ULTIMATE WATERLINE	
PROPOSED PRESSURE REDUCING VALVE		EXIST 8 WATERLINES		HUTTO CITY LIMIT	
EXIST ELEVATED STORAGE TANK		EXIST 10 WATERLINES		HUTTO ETJ	
EXIST GROUND STORAGE TANK		EXIST 12 WATERLINES			
EXIST PRESSURE SUSTAINING VALVE		EXIST 16 WATERLINES			
EXIST PRESSURE REDUCING VALVE		EXIST 20 WATERLINES			
		EXIST 24 WATERLINES			



**CITY OF HUTTO
IMPACT FEE UPDATE
ELIGIBLE WATER CIP PROJECTS**

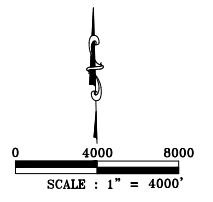
DATE:	DECEMBER 2020
SCALE:	1" = 3000'
FIGURE:	1.1

FILENAME: Z:\Projects 1400-1499\20101436 - COH Impact Fee Study\200 - Planning_Study\2.1 - Drawings\Sheet Files\Figure 1.2.dwg, LAST SAVED ON: Dec 28 2020 4:23pm, PLOTTED BY: SBARRY, DN, Dec 28 2020 4:24pm, CFC



LEGEND

PROPOSED PUMP (NEW OR EXPANDED)		EXIST 1.5 WATERLINES		801 PRESSURE PLANE/WATER CCN (ULT.)	
PROPOSED ELEVATED STORAGE TANK		EXIST 2 WATERLINES		890 PRESSURE PLANE/WATER CCN (ULT.)	
PROPOSED GROUND STORAGE TANK		EXIST 4 WATERLINES		FUTURE ULTIMATE 890 PRESSURE PLANE/WATER CCN	
PROPOSED PRESSURE SUSTAINING VALVE		EXIST 6 WATERLINES		PROPOSED WATERLINE	
PROPOSED PRESSURE REDUCING VALVE		EXIST 8 WATERLINES		HUTTO CITY LIMIT	
EXIST ELEVATED STORAGE TANK		EXIST 10 WATERLINES		HUTTO ETJ	
EXIST GROUND STORAGE TANK		EXIST 12 WATERLINES			
EXIST PRESSURE SUSTAINING VALVE		EXIST 16 WATERLINES			
EXIST PRESSURE REDUCING VALVE		EXIST 20 WATERLINES			
		EXIST 24 WATERLINES			



**CITY OF HUTTO
IMPACT FEE UPDATE
ELIGIBLE WATER CIP PROJECTS**

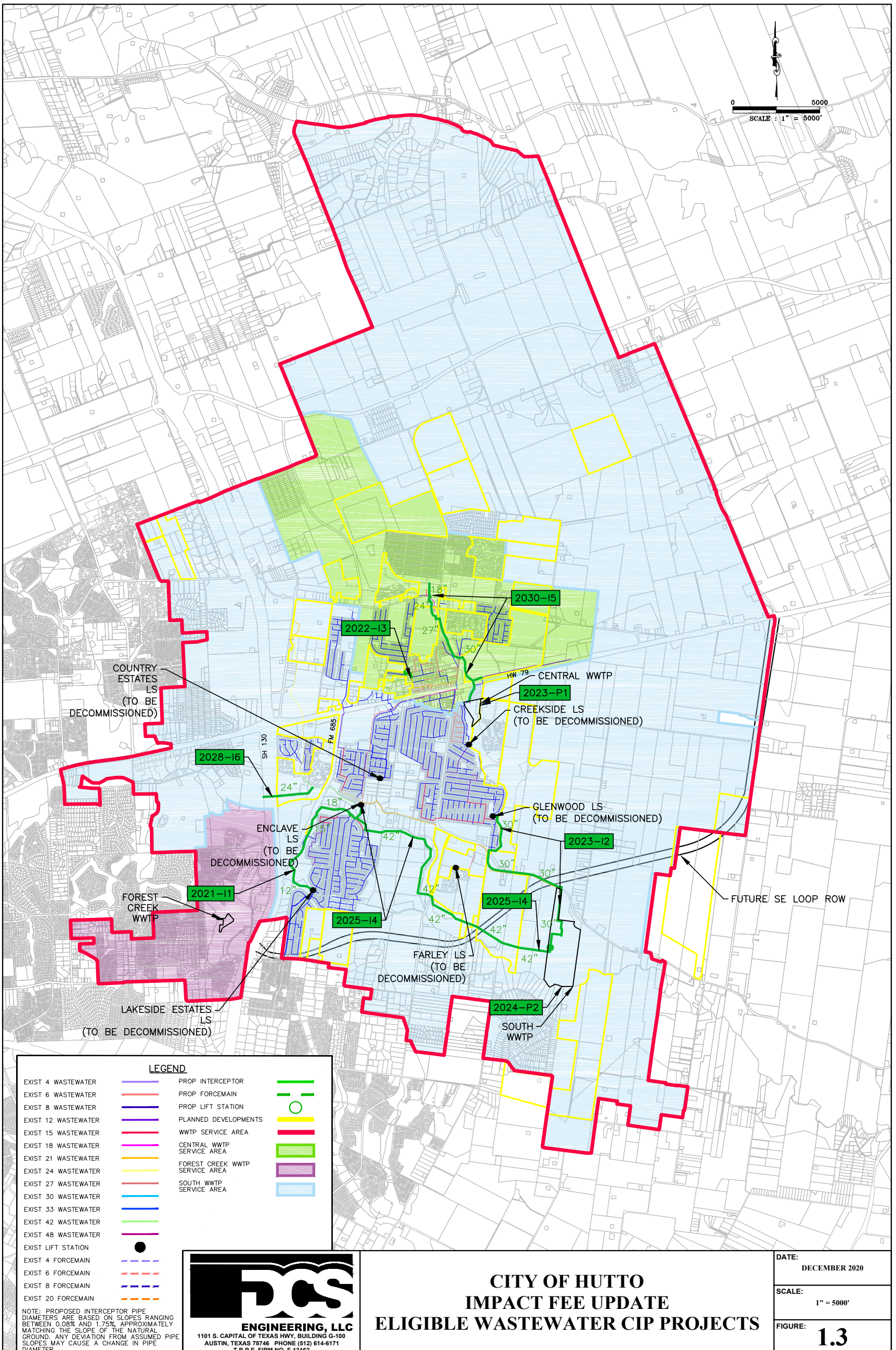
DATE:	DECEMBER 2020
SCALE:	1" = 4000'
FIGURE:	1.2

Table 1.4 - Wastewater System Impact Fee Eligible Projects

Project Date	Project ID	Project Name	Project Description	2021 Utilization	2031 Utilization	Eligible Utilization (2031 - 2021)	Engineer's Opinion of Most Probable Cost or Actual Project Cost	Impact Fee Eligible Cost
Existing Projects								
Completed	N/A	Existing 0.99 MGD Central WWTP	The existing Central WWTP with 0.99 mgd capacity and land acquisition	55%	100%	45%	\$7,896,042	\$3,525,304
Completed	N/A	Central WWTP Fine Bubble Aeration Improvements	The City implemented a fine bubble aeration system at the Central WWTP	100%	100%	0%	\$116,190	\$0
Completed	N/A	Existing 2.00 MGD South WWTP	The existing South WWTP with 2.00 mgd capacity and land acquisition	47%	100%	53%	\$20,342,455	\$10,700,131
Completed	N/A	Glenwood Forcemain Extension ²	Extend the 12" Glenwood FM to tie into an existing manhole at the Central WWTP	100%	100%	0%	\$58,441	\$0
Completed	N/A	Existing Enclave LS and FM	The existing Enclave lift station and forcemain with 8,960 LUEs of capacity	34%	100%	66%	\$3,074,224	\$2,043,193
Completed	N/A	Existing Brushy Creek Interceptor - Phase II-A	The existing 21" and 24" Brushy Creek Interceptor	42%	65%	23%	\$2,020,752	\$464,773
Completed	N/A	Exist Brushy Creek Interceptor - Phase I and II-B	The existing 42" Brushy Creek Interceptor	42%	65%	23%	\$1,347,214	\$309,859
Completed	N/A	Brushy Creek Phase I Easements along FM 1660	Easements acquired for Brushy Creek Interceptor - Phase I. The Interceptor was not built but the easements were re-purposed for the Enclave forcemain and the proposed Glenwood Interceptor.	50%	100%	50%	\$51,748	\$25,874
Completed	N/A	Existing Cottonwood Creek Interceptor	The existing Cottonwood Creek Interceptor with 9,343 LUEs of capacity	54%	100%	46%	\$527,333	\$242,303
Completed	N/A	2018 Wastewater Master Plan	Wastewater Master Plan	100%	100%	0%	\$151,520	\$0
Completed	N/A	Central WWTP and South WWTP Permit Amdendments and PER	Discharge Permit amendments for additional capacity at the Central WWTP and South WWTP including preliminary engineering design.	0%	100%	100%	\$245,000	\$245,000
Completed	N/A	Country Estates Forcemain Rerouting ²	Cut and redirect the Country Estates Forcemain to divert flow from the Central to the South WWTP	100%	100%	0%	\$59,000	\$0
Proposed Projects								
Under Design	N/A	Wastewater Impact Fee Update ¹	Update wastewater impact fees.	0%	100%	100%	\$39,670	\$39,670
Under Design	2021-11	Lakeside Estates Lift Station Abandonment ¹	8,700 LF of 12", 15", and 18" interceptor to decommission the Lakeside Estates Lift Station and provide additional capacity for future developments in the area.	26%	100%	74%	\$1,584,472	\$1,168,995
Under Design	2023-12	Glenwood Lift Station Decommission, Interceptor, and 2 - WWTP Lift Stations ¹	10,500 LF of 30" interceptor to take Glenwood lift station offline and transfer flows to the South WWTP. Includes decommissioning of Glenwood LS, construction of new lift station at the south WWTP, and construction of new lift station at the Central WWTP.	34%	75%	41%	\$8,645,099	\$3,554,167
2022-2023	N/A	2022 Wastewater Master Plan Update	Update to the Wastewater Master Plan	100%	100%	0%	\$155,000	\$0
2021-2022	2022-13	The Landing Pipe Bursting	Pipe burst existing 500 LF of 12-inch pipe to 15-inch on Whitfield, located north of Co-op to provide capacity for the future Landing development	60%	100%	40%	\$250,372	\$99,546
2021-2023	2023-P1	Phosphorus Chemical Dosing	Adding Phosphorus chemical dosing system to the Central WWTP to meet TCEQ permit requirements.	0%	100%	100%	\$420,000	\$420,000
2021-2023	2024-P2	South WWTP from 2.0 to 4.0 MGD Capacity	Expand South WWTP plant capacity from 2.00 mgd to 4.00 mgd.	0%	80%	80%	\$30,199,320	\$24,159,456
2023-2023	N/A	2023 Wastewater Impact Fee Update ¹	Update wastewater impact fees.	0%	100%	100%	\$39,670	\$39,670
2028-2030	2030-15	Cottonwood Creek Parallel Interceptor	700 LF of 18", 1,700 LF of 24", 3,900 LF of 27", and 2,100 LF of 30" Interceptor along east side of Cottonwood Creek to increase capacity of current Cottonwood Creek interceptor to ultimate conditions.	0%	75%	75%	\$4,079,222	\$3,059,416
2023-2025	2025-14	Brushy Creek Interceptor & LS	2,800 LF of 36" and 15,100 LF of 42" interceptor to take Enclave LS offline and transfer flows to the South WWTP. Includes inverted siphon with two access vaults and on-site LS at WWTP. Decommissioning of Enclave LS is included in this project.	42%	65%	23%	\$14,238,000	\$3,270,720
2025-2028	2028-16	Avery Lake Interceptor Phase I	Approximately 3,000 LF of 24" wastewater interceptor to serve the area South of hwy 79 and west of SH-130.	0%	15%	15%	\$1,778,149	\$266,722
Total =							\$97,318,893	\$53,634,799

1. Projects are currently under design

2. Only projects that add additional capacity are eligible for inclusion in the Impact Fee Analysis



study and/or the collection of impact fees. Specifically, if the City enters into wholesale water and/or wastewater contracts to provide service to developments that are outside of the water service area or wastewater service limits defined in this study, the City must carefully evaluate the increased cost of service to the City's water and wastewater system's infrastructure. The additional demands will, in almost all cases, require the City to construct new CIP projects to expand the wastewater collection system capacity, WWTP capacity, water distribution system capacity, and/or the water supply system capacity. These future projects required to be constructed to achieve this additional capacity are not in the CIP lists used to calculate the impact fees in this study. Thus, the City's cost to construct these future CIP projects would have to be paid by the wholesale water/wastewater rates charged to the City's wholesale customer; or recovered by requiring the wholesale customer to pay for the required improvements to the City's infrastructure as part of wholesale contract agreement.

Lastly, this impact fee study does not include any CIP costs for infrastructure improvements required by existing wholesale water and/or wastewater contracts. DCS has assumed that if any wholesale contracts exist that the terms of these contracts have been stipulated to address the City's cost of service as described above or by other negotiated method per the terms of the contract that is in place.

1.4 IMPACT FEE ANALYSIS

The current impact fee ordinance was adopted in February 2013. This ordinance set the water impact fee for a single service unit at \$3,625.00 and the wastewater impact fee for a single service unit at \$2,128.00 for a combined impact fee of \$5,753.00 per service unit. This project is an update to the 2013 ordinance. 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 2021 and 2031. 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.

DCS retained New Gen Strategies and Solutions, LLC (NewGen) as a subconsultant to perform the financial analysis for this impact fee update. NewGen employed the impact fee determination method via 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 associated with the use of utility revenues. The maximum impact fee summary is shown in Table No. 1.5.

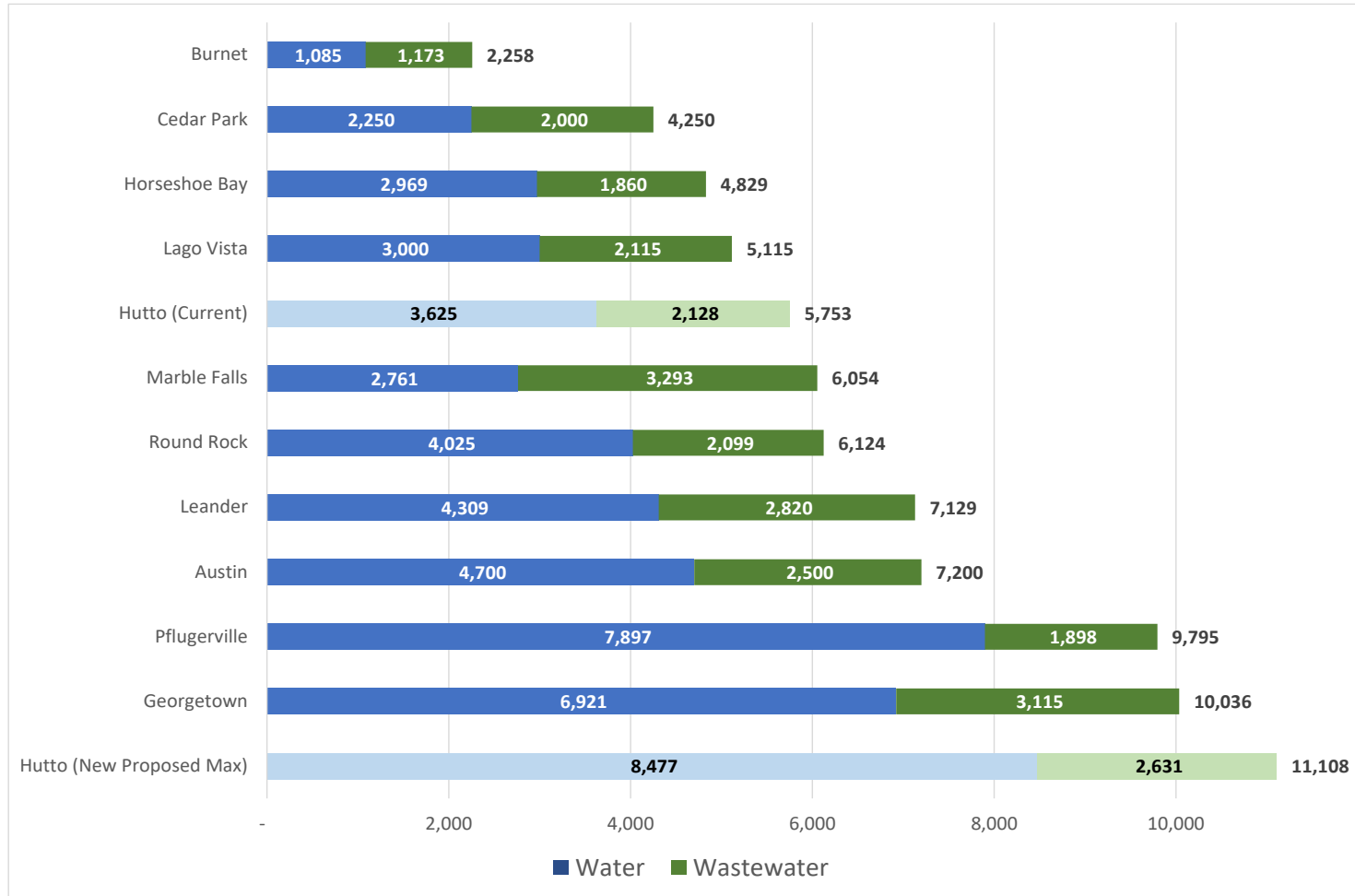
- **The maximum water impact fee is \$8,477.**
- **The maximum wastewater impact fee is \$2,631.**
- **The maximum water plus wastewater impact fee totals \$11,108.**

Table No. 1.5 – Maximum Water and Wastewater Impact Fee Summary Table

	Water	Wastewater
Recoverable Impact Fee CIP Cost	\$ 91,097,518	\$ 62,578,979
Financing Cost	61,831,827	31,337,426
Existing Fund Balance	(1,200,000)	(940,000)
Interest Earnings	(3,407,035)	(2,266,310)
Credit for Utility Revenues	(77,139,348)	(47,909,130)
Maximum Recoverable Cost for Impact Fee	\$ 71,182,962	\$ 42,800,965
10-Year Growth in LUEs	8,397	16,271
Maximum Assessable Impact Fee	\$ 8,477	\$ 2,631

Figure No. 1.4 shows comparisons of impact fees in the Central Texas region alongside the City of Hutto's new maximum assessable combined impact fee totaling \$11,108. Comparisons between communities are very common but may not tell the whole story. Each system is unique in geography, age of infrastructure, capital maintenance efforts, and typical usage patterns. The impact fees shown on this comparison are the impact fees that the cities have adopted, not the maximum assessable fee, which is what is calculated for the City of Hutto and shown in Table No. 1.5 as well as Figure No. 1.4.

Figure No. 1.4 – Regional Comparison of Combined Water and Wastewater Impact Fees



Notes: Pflugerville also serves "Service Area 2" with Wastewater for 8,184; Leander also serves Lively Tract Wastewater for 4,452, Georgetown wastewater is for "Outside the Southfork area", Inside is 4,384

Section 2 Background

Impact fees are defined 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.” Chapter 395 of the Texas Local Government Code requires an impact fee analysis before impact fees can be created, updated, and assessed. 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

On June 30, 2020, the City contracted with DCS to develop this impact fee update and analysis for the City’s water and wastewater systems. DCS has been working for the City for over 11 years in numerous roles including but not limited to design of CIP projects, construction administration, master planning, permitting, and operational trouble shooting associated with the water and wastewater systems. The purpose of this report is to summarize the methodology and calculations used to produce the water and wastewater impact fees. 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.

Section 3

Land Use Assumptions

DCS worked closely with the City to develop land use assumptions and growth projections that are used to determine which CIP projects are needed in the next 10 years. These assumptions are based on the projections used in both the water and wastewater master plans and have been verified by continuing to monitor the City's growth patterns.

3.1 SERVICE AREAS

The City has significantly different geographic limits that define the water service area versus the wastewater service area. This is due in part to two private potable water suppliers who have dedicated water CCNs that serve some parts of the City and/or the City's extraterritorial jurisdiction (ETJ). The growth projections must consider the water and wastewater service areas separately in order to properly account for what the City will be responsible for providing service to.

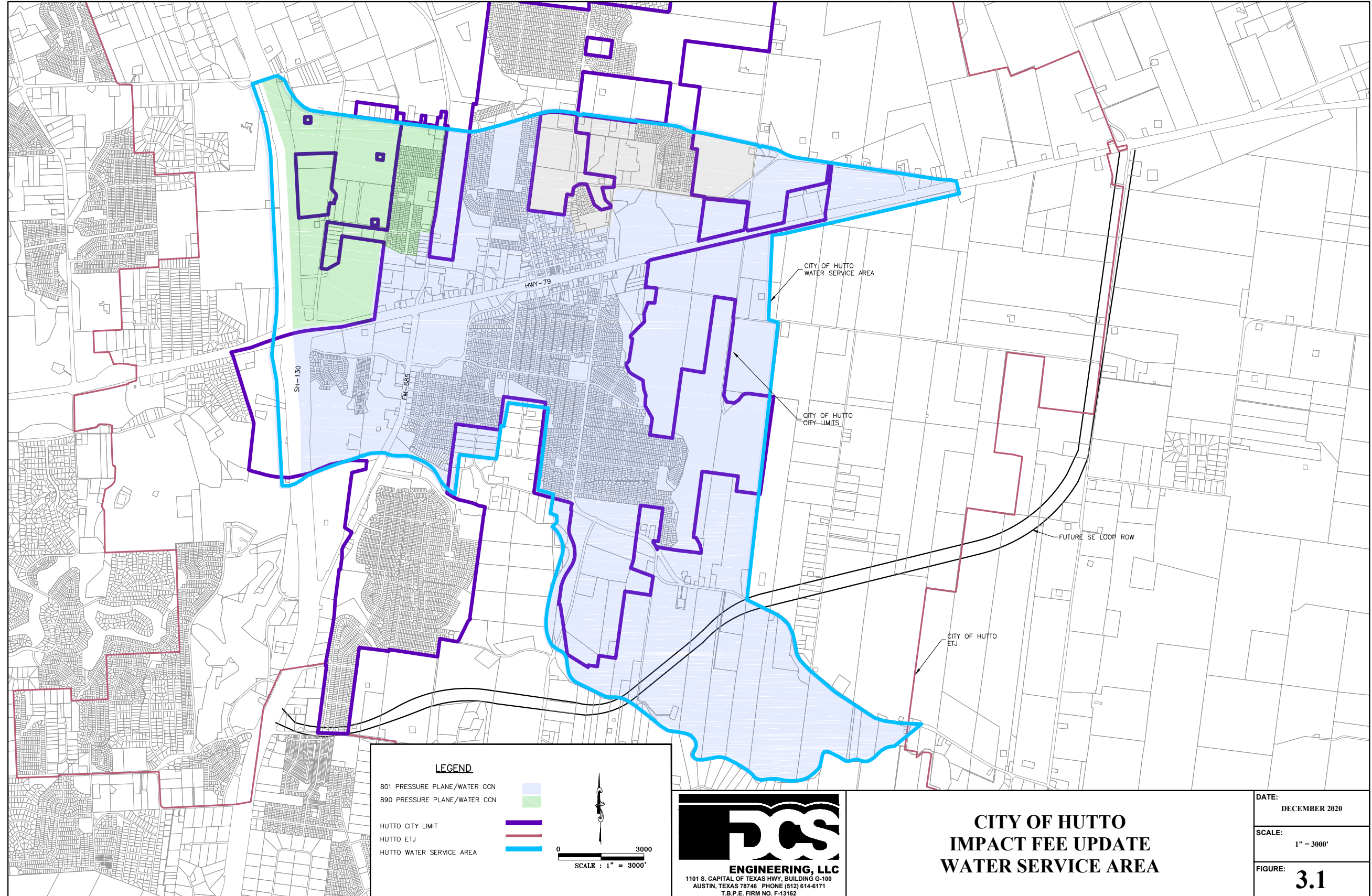
The City's existing water CCN is bound on all sides by other existing CCNs such as Jonah and Manville WSC. DCS is not aware of any negotiations with these neighboring water supply companies to adjust the City's CCN. However, the City does have a couple agreements in place to provide water on a wholesale basis to two separate portions of Jonah's Water CCN but these are not shown as part of the City's "Water Service Area". The existing City water CCN is defined as the water service area as shown in Figure No. 3.1 for the purposes of this impact fee report. Refer to Section 4.3 for additional discussion on wholesale water or wastewater agreements.

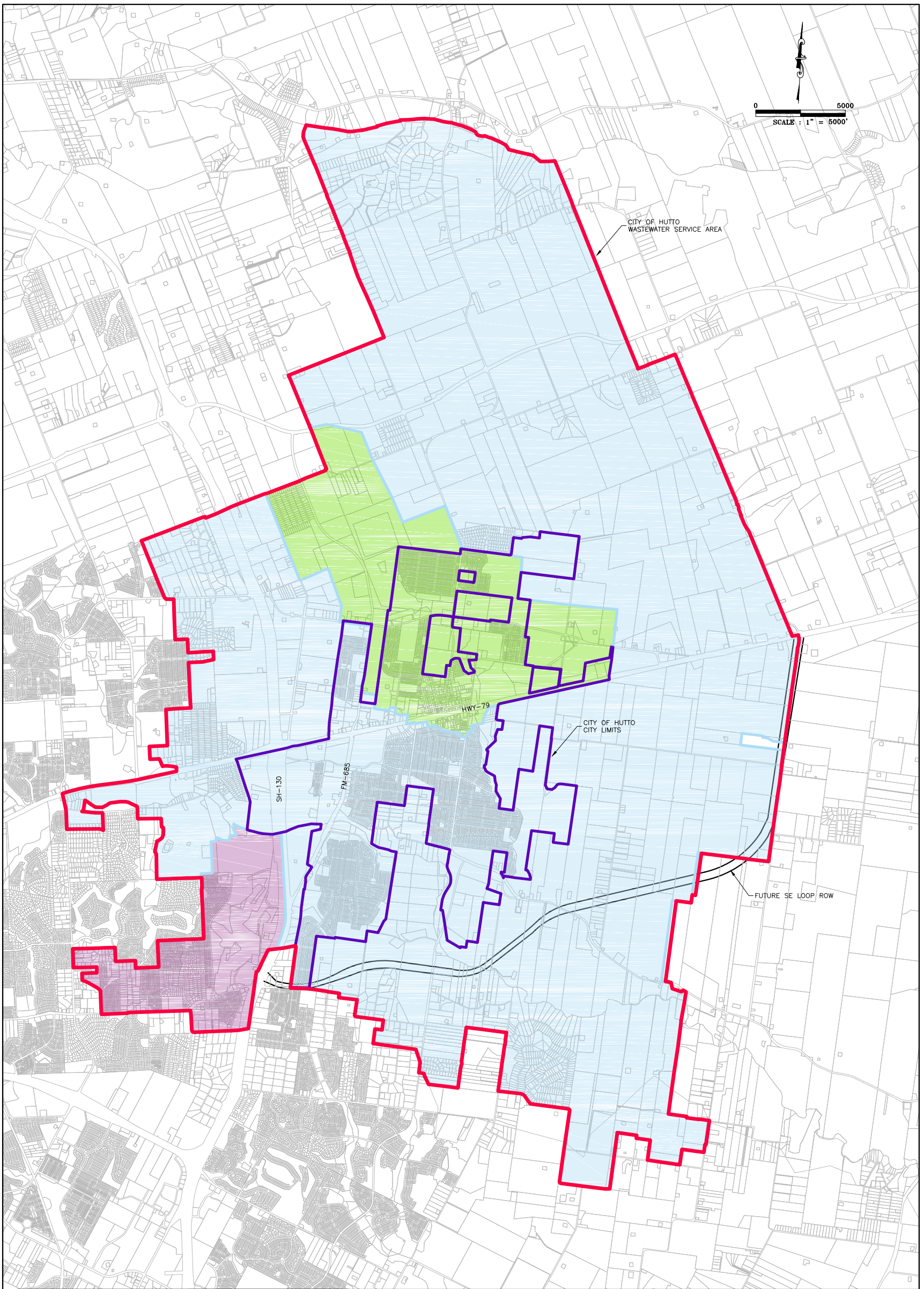
Conversely, the wastewater service area for the City is not explicitly defined by a CCN like the water service area is. Per the completion of the City's Wastewater Master Plan in July 2018 and subsequent permit amendments for the City's two wastewater treatment plants, the City's plans to be a regional wastewater service provider for all areas within the City's ETJ and some areas where the existing wastewater CCN is outside of the City's ETJ. For this study, the wastewater service area is defined by the outermost limit of the greater geographic extent of the ETJ or wastewater CCN as shown in Figure No. 3.2

3.2 GROWTH PROJECTIONS AND LAND USE ASSUMPTIONS

The City is one of the fastest growing cities in Williamson County, experiencing its most rapid growth in the early 2000s. The 2000 Census reported a population of 1,250 residents within the City limits (U.S. Census Bureau, Census 2000 Summary) and by 2005 the City's population had grown to an estimated 7,401 residents. By 2010 the population had almost doubled since 2005, and as of 2017 the City has recorded a population of 26,950 in City limits. With the latest recorded population in 2017, the population increase for

FILENAME: Z:\Projects\1400-1489\20101436 - COH Impact Fee Study\200 - Planning_Study\2.1 - Drawings\Sheet Files\Figure 3.1 - IMPACT FEE.dwg, LAST SAVED ON: Dec 04 2020 11:14am, PLOTTED BY: SBARRY, DN: Dec 04 2020 11:16am, CFC:





LEGEND	
WASTEWATER SERVICE AREA	
CENTRAL WWP SERVICE AREA	
FOREST CREEK WWP SERVICE AREA	
SOUTH WWP SERVICE AREA	
CITY OF HUTTO CITY LIMITS	



ENGINEERING, LLC
 1101 S. CAPITAL OF TEXAS HWY, BUILDING G-100
 AUSTIN, TEXAS 78746 PHONE (512) 614-6171
 T.B.P.E. FIRM NO. F-13162

CITY OF HUTTO IMPACT FEE UPDATE WASTEWATER SERVICE AREA

DATE:	DECEMBER 2020
SCALE:	1" = 5000'
FIGURE:	3.2

the City since 2000 is over 2,100 percent. This equates to a 19.8% average growth rate over this 17 year period of time. While these numbers demonstrate the rapid growth within the City limits, this report will focus strictly on growth inside the geometrically differently shaped water service area; and wastewater service area to generate the respective impact fees.

The methodology used to determine the LUEs assigned to undeveloped acreages within the water service area and wastewater service area are important to this study as well as the subsequent collection of impact fees by the City as parcels are developed in the coming years. In the past, single family residential homes (one LUE per home) have been the majority of the development which has occurred in the City with a smaller percentage coming from other land uses (i.e. commercial, mixed use, industrial, etc.). However, the City's growth pattern indicates a larger percentage of development will be coming from these other non-single family home land use types. In the past, these other land use types were assigned LUEs based on the water meter size which was installed to serve the development with a corresponding standard number of LUEs in a table of water meter sizes published by the City. This method has the potential to result in the under collection of impact fees by under estimating the LUEs solely based on water meter size and not taking into account the actual water and wastewater demands depending on the type of business which is constructed.

Therefore, DCS coordinated with City staff and agreed that the land use type LUE/acre planning number originally developed in the City's 2016 Water Master Plan and subsequently refined in the City's 2018 Wastewater Master Plan should be used. These LUE values are based on actual developments in the City, where that specific land use type had been constructed. This land use type table takes into account industry average water and wastewater demands expected by the type of land use/development to more accurately estimate future demands and the resulting infrastructure required to be constructed by the City to provide services. These LUEs per acre by land use types are shown in Table No. 3.1. Additionally, DCS coordinated with City staff and agreed that when a development begins the process of coordinating with the City to begin the design/construction process that the LUEs be calculated at that time based on the City's Engineering Department Living Unit Equivalent Table. Refer to Table No. 3.2 which was originally developed and included in the City's 2018 Wastewater Master Plan; and which is in concert, on a planning level, with the values shown for the various land uses in Table No. 3.1. Thus, the methodology used to estimate LUEs based on land use type required for the purposes of this Impact Fee Study is aligned with the methodology used to calculate the actual LUEs, and resulting impact fees which will be collected by the City in the future.

DCS met with City staff in August 2020 to update the expected demands and schedules for all known developments that are occurring within the City's service areas. Each development's schedule to achieve full build-out and the number of new LUEs per year was collected in tabular format and used to develop the near-term (i.e. next 10 years) growth projections for both water and wastewater flow. The City's ultimate land use

Table No. 3.1 – Land Use Densities

COH Future Land Use	Density (LUE/Ac)	Notes
Commercial	7.04	Actual - Hansons Corner, Townwest Commons
Mixed-Use	8	Developed for Water Master Plan (50% High Density Residential, 50% Commercial)
Flex	5.4	Developed- mix of 50% commercial and 50% mid-density residential
Old Town	3.5	Downtown Hutto
Industrial/Business Park	1.8	Actual - Tradesmens Industrial Park, 79 Business Park
Institutional	1.6	Actual - Howard Norman Elementary, Veterans Hill Elementary
Agricultural/Open Space	0.1	Defined as Floodplain and Parkland
Low-Density Residential	1.5	Actual - Carmel Creek Est, Country View Est, Green Haven
Mid-Density Residential	3.84	Actual - Enclave, Riverwalk, Park at Brushy Creek
High-Density Residential	17	COH Definition from Unified Development Code
Neighborhood Planning Area	3.84	Developed to match Mid-Density Residential

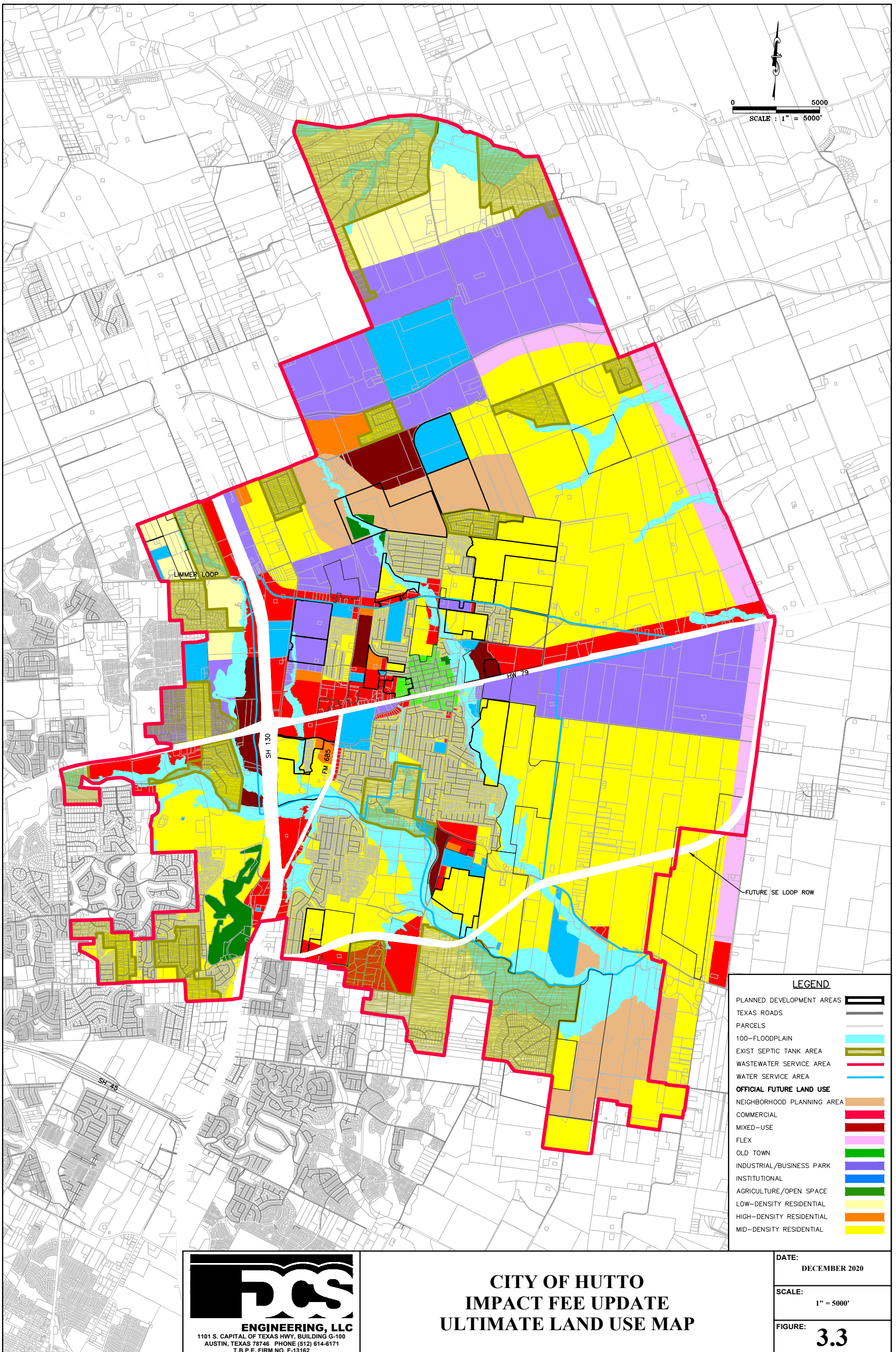
map was used to determine the types of developments that are expected in the areas that are not currently under design or construction and is shown in Figure No. 3.3. As mentioned above, each land use was assigned a density in terms of LUE/Ac based on similar developments that have been constructed in the City over the last 20 years. Where a type of land use had not yet been constructed in the City, DCS utilized actual built densities from its other master planning projects for our clients in Central Texas or the greater City of Houston Area. These densities define how much water and wastewater flow should be expected from that area when it is built out. The land uses and their densities used in this study are shown in Table No. 3.1.

Because the service areas for water and wastewater are not the same, the growth projections must be considered separately for each service area. The City's water and wastewater service areas were geographically overlaid with developments which are known at this time and the future land uses. The water and wastewater growth rates are assumed to have a minimum value of 200 LUEs/yr and 1,128 LUEs/yr, respectively, when active development totals known at this time fall below these values. These LUEs/yr are based on the City's most recent water and wastewater master plans; and are also being validated via the City's flow projection updates which are occurring on an annual basis. This minimum growth rate begins to take

**Table No. 3.2 - City of Hutto Engineering Department
Living Unit Equivalent Table**

Notes: This table is for water and wastewater system demands in LUEs. Flow per LUE shall be defined by City Utility Criteria Manual

Line No.	Type of Development	LUE	Service Unit Equivalent
1	Barber Shop or Beauty Salon	1.0	1.65 Chairs
2	Bowling Alley (Dining Additional Charge)	1.0	1.25 Lanes
3	Carwash, Tunnel, Self-Service	1.0	10 Carwashes in a Day
4	Carwash, Tunnel, Full Service	1.0	15 Carwashes in a day
5	Carwash, Self Serve	1.0	0.75 Carwash Bays
6	Church or Fellowship Hall	1.0	70 Seats
7	Club, Concert Hall, Tavern, or Lounge	1.0	25 Occupants
8	County Club	1.0	3 Members
9	Dance School or Dance Studio	1.0	25 Occupants
10	Day Care Center	1.0	25 Occupants
11	Fire Station	1.0	3 Occupants
12	Fitness Center/Club	1.0	667 Square Feet
13	Gas Station (No Carwash)	2.0	1 Station
14	Gas Station with Carwash	12.00	1 Station
15	Grocery Store	1.0	2000 Square Feet
16	Hospital	1.0	1 Bed
17	Hotel or Motel	1.0	2 Rooms
18	Laundromat	1.0	1.75 Machines
19	Manufacturing	1.0	5000 Square Feet
20	Mobile Home Park	1.0	1.5 Space
21	Movie Theater	1.0	50 Seats
22	Movie Theater - With Dining	1.0	25 Seats
23	Nursing Home	1.0	2 Beds
24	Office	1.0	3000 Square Feet
25	Park	1.0	50 Occupants
26	Post Office	1.0	3125 Square Feet
27	Recreational Vehicle Park	1.0	3.33 Vehicles
28	Residence, Apartment or Condominium	1.0	1.25 Units
29	Residence, Single Family or Townhouse	1.0	1 Unit
30	Restaurant	1.0	200 Square Feet
31	Retail	1.0	1660 Square Feet
32	High School	1.0	13 Students & Staff
33	Middle and Elementary School	1.0	15 Students & Staff
34	Stadium	1.0	80 Seats
35	Swimming Pool	1.0	50 Swimmers
36	Warehouse	1.0	4000 Square Feet



DCS
ENGINEERING, LLC
 1101 S. CAPITAL OF TEXAS HWY, BUILDING G-100
 AUSTIN, TEXAS 78746 PHONE (512) 614-6171
 T.B.P.E. FIRM NO. F-13162

**CITY OF HUTTO
 IMPACT FEE UPDATE
 ULTIMATE LAND USE MAP**

DATE:	DECEMBER 2020
SCALE:	1" = 5000'
FIGURE:	3.3

effect in approximately 7 years for wastewater and in approximately 15 years for water. The development areas used in this study that are anticipated to see growth activity are shown in Figure No. 3.4. The percentage of anticipated growth was broken into four categories including “10-year 25% Developed”, “10-year 50% Developed”, “10-year 100% Developed”, and “Future Development” (i.e. beyond 10 years). These were used to project the growth out to the 10 year limit established for this study. Table No. 3.3 below shows the number of LUEs in 2021 and 2031 using the growth projection methods described above.

It should be noted here that growth projections do not include redevelopment in areas that have existing development; and only growth in the 10-year planning period is included since growth beyond this time period is not eligible of the impact fee cost recovery. These growth projections were incorporated into the hydraulic models of the water and wastewater systems to simulate future flows so that future infrastructure locations, capacity, and phasing of the proposed system improvements could be identified.

Table No. 3.3 – Water and Wastewater Service Area LUE Growth Projections

Year	Water Service Area		Wastewater Service Area	
	Population	Annual Growth Rate	Population	Annual Growth Rate
2021	6,154 ⁽¹⁾	-	9,569 ⁽¹⁾	-
2031	14,551	8.99%	25,840	10.44%

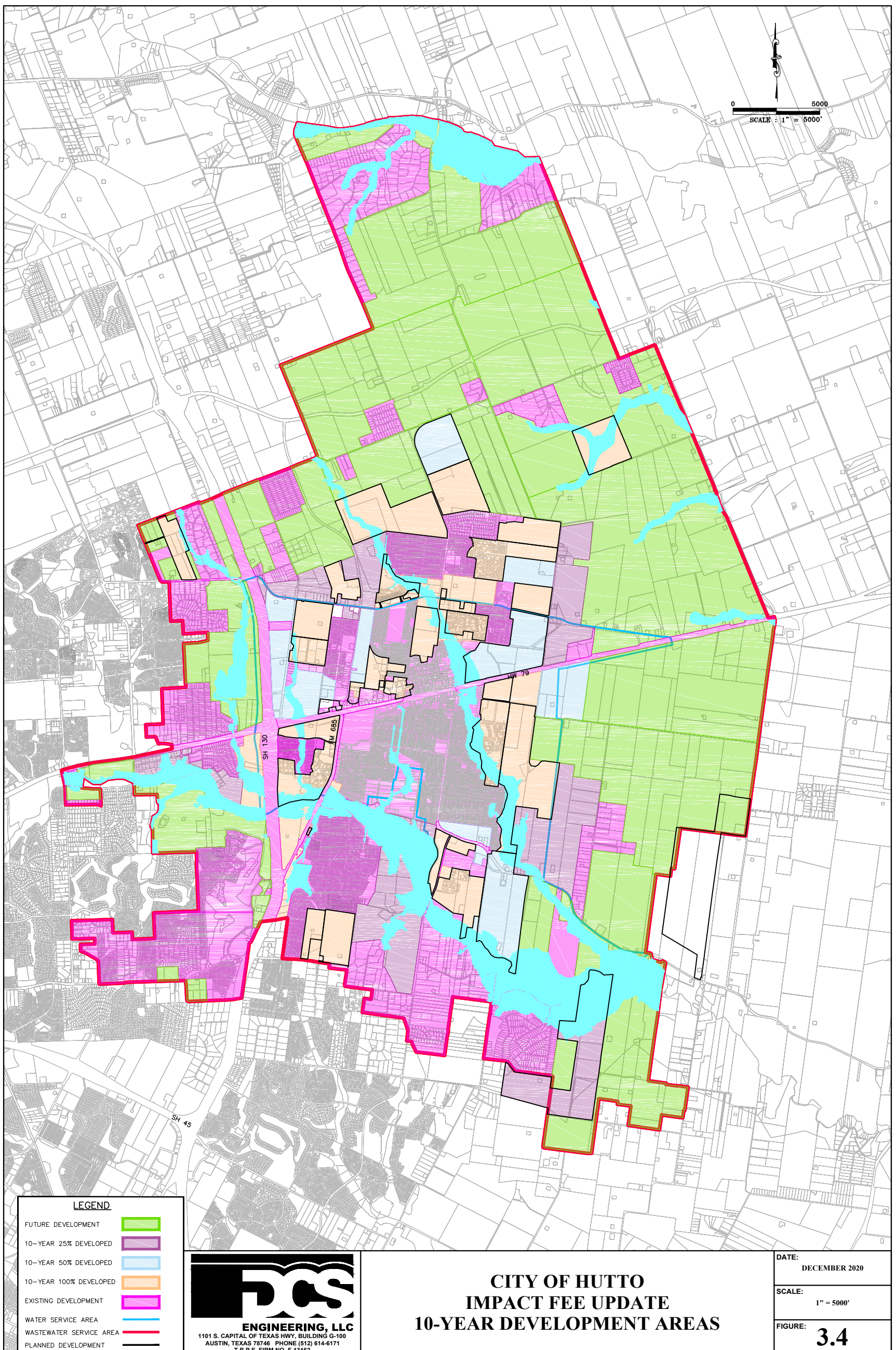
⁽¹⁾ LUEs based on data from City’s billing department through October 31, 2020.

The estimated equivalent population was developed for 2021 and 2031. Equivalent populations were calculated based on the assumption used in the Water and Wastewater Master Plans of 3.0 people per LUE. Table No. 3.4 shows the anticipated population growth for the water and wastewater service areas.

Table No. 3.4 – Water and Wastewater Service Area Population Growth Projections

Year	Water Service Area		Wastewater Service Area	
	Population	Annual Growth Rate	Population	Annual Growth Rate
2021	18,462 ⁽¹⁾	-	28,707 ⁽¹⁾	-
2031	43,653 ⁽¹⁾	8.99%	77,520 ⁽¹⁾	10.44%

⁽¹⁾ Population excludes City residents on septic tank systems since they are not connected to the City’s system.



LEGEND	
FUTURE DEVELOPMENT	
10-YEAR 25% DEVELOPED	
10-YEAR 50% DEVELOPED	
10-YEAR 100% DEVELOPED	
EXISTING DEVELOPMENT	
WATER SERVICE AREA	
WASTEWATER SERVICE AREA	
PLANNED DEVELOPMENT	



DCS ENGINEERING, LLC
 1101 S. CAPITAL OF TEXAS HWY, BUILDING G-100
 AUSTIN, TEXAS 78746 PHONE (512) 614-6171
 T.B.P.E. FIRM NO. F-13162

**CITY OF HUTTO
 IMPACT FEE UPDATE
 10-YEAR DEVELOPMENT AREAS**

DATE:	DECEMBER 2020
SCALE:	1" = 5000'
FIGURE:	3.4

Section 4

Water and Wastewater Capital Improvement Plan

A 10-year water and wastewater capital improvement plan (CIP) was developed using the land use assumptions and growth projections described above. The projects listed on these CIPs are required to provide adequate capacity for the upcoming developments that were identified in the growth projections over the next 10 years.

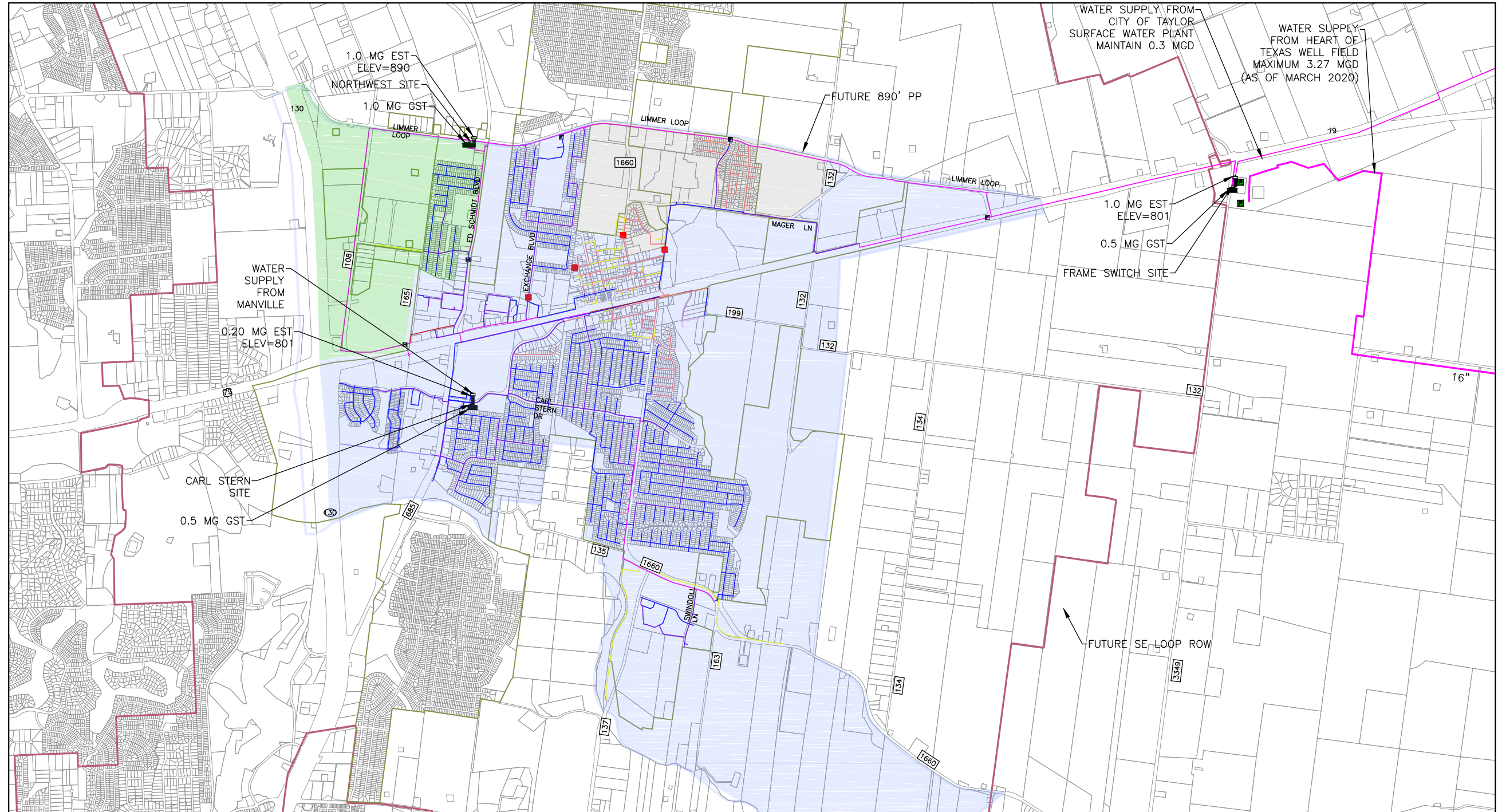
4.1 EXISTING WATER AND WASTEWATER SYSTEMS

The City's water system consists of two pressure plans (PP), a network of waterlines ranging in diameter from 2 inches to 30 inches, five ground storage tanks (GST) ranging in size from 0.38 MG to 1.0 MG, three active elevated storage tanks (EST) ranging in size from 0.2 MG to 1.0 MG, eight active groundwater wells, and 26 miles of 16 inch diameter transmission pipeline. A map of the existing water distribution system and pressure plane boundaries covering the City's Water CCN limits (i.e. water service area) is shown in Figure No. 4.1. A second map of the existing 16" transmission line supplying water to the City from its Heart of Texas well field and associated Shiloh Pumping Station is shown in Figure No. 4.2.

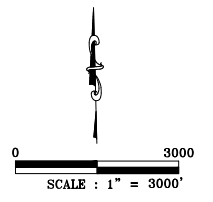
Groundwater is pumped from the eight wells to the Shiloh Pumping Station, where the water is disinfected to drinking water standards before being pumping 26 miles to the Frameswitch Pumping Station. The City also receives water from two take or pay contracts. The City can purchase up to 0.30 million gallons per day (mgd) from the City of Taylor at a connection point located at the Frameswitch Pumping Station. The City can also purchase up to 0.82 mgd from the Manville Water Supply Corporation (Manville) with a connection point at the Carl Stern Pumping Station. The City does not supply water to any entities; however, the City does have a mutual emergency interconnect agreement with the Jonah Water Special Utility District (Jonah) for up to 1.0 mgd under emergency conditions. This allows the City to take this quantity or give this quantity to Jonah under emergency conditions from either party. The City operates two pressure planes including the 890' PP which serves locations Northwest of Highway 79, and the 801' PP which serves the rest of the City and makes up the majority of the water service area.

The City's existing wastewater system consists of the 0.99 mgd Central Wastewater Treatment Plant (WWTP), the 2.0 mgd South WWTP, 6 lift stations, and a collection system ranging from 4" diameter up to 42" diameter. This wastewater system is currently serving a significantly larger area than the City's water service area. A map of the existing wastewater collection system and WWTP locations with their respective WWTP service area boundaries covering the City's wastewater service area limits is shown in Figure No. 4.3.

FILENAME: Z:\Projects\1400-1498\20101436 - COH Impact Fee Study\200 - Planning_Study\2.1 - Drawings\Sheet Files\Figure 4.1.dwg, LAST SAVED ON: Dec 03 2020 11:38am, PLOTTED BY: SBARRY, ON: Dec 04 2020 11:18am, CFG:



LEGEND			
EXIST ELEVATED STORAGE TANK		EXIST 1.5 WATERLINES	
EXIST GROUND STORAGE TANK		EXIST 2 WATERLINES	
EXIST PRESSURE SUSTAINING VALVE		EXIST 4 WATERLINES	
EXIST PRESSURE REDUCING VALVE		EXIST 6 WATERLINES	
		EXIST 8 WATERLINES	
		EXIST 10 WATERLINES	
		EXIST 12 WATERLINES	
		EXIST 16 WATERLINES	
		EXIST 20 WATERLINES	
		EXIST 24 WATERLINES	
		801 PRESSURE PLANE/WATER CCN	
		890 PRESSURE PLANE/WATER CCN	
		FUTURE 890 PRESSURE PLANE/WATER CCN	
		PROPOSED ULTIMATE WATERLINE	
		HUTTO CITY LIMIT	
		HUTTO ETJ	

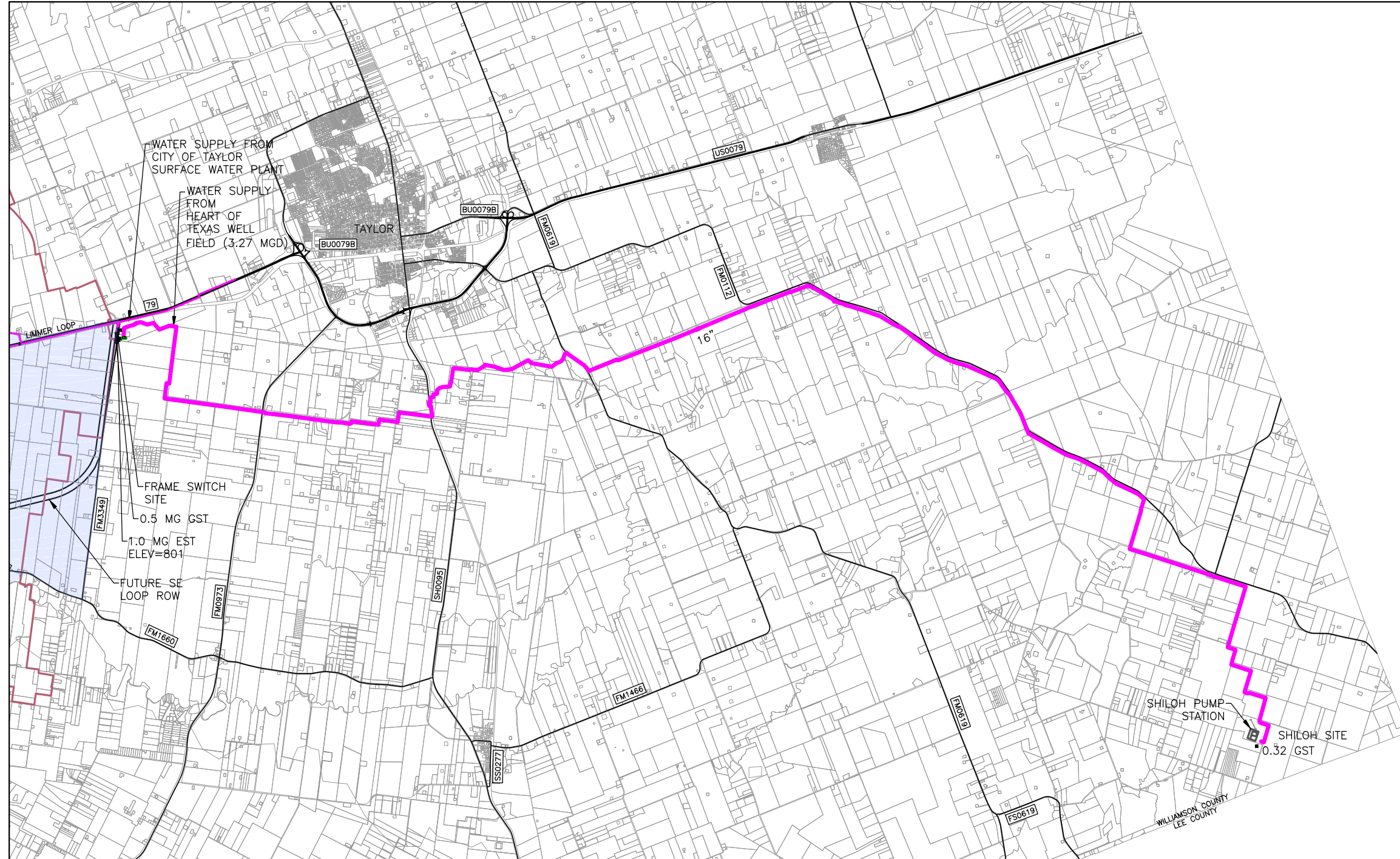


DES
ENGINEERING, LLC
 1101 S. CAPITAL OF TEXAS HWY, BUILDING G-100
 AUSTIN, TEXAS 78746 PHONE (512) 614-6171
 T.B.P.E. FIRM NO. E-13162

**CITY OF HUTTO
 IMPACT FEE UPDATE
 EXISTING WATER SYSTEM MAP**

DATE:	DECEMBER 2020
SCALE:	1" = 3000'
FIGURE:	4.1

FILENAME: Z:\Projects 1400-1499\20101436 - COH Impact Fee Study\200 - Planning_Study\2.1 - Drawings\Sheet Files\Figure 4.2 - IMPACT FEE.dwg, LAST SAVED ON: Dec 03 2020 11:38am, PLOTTED BY: SBARRY, ON: Dec 04 2020 11:18am, CFS:

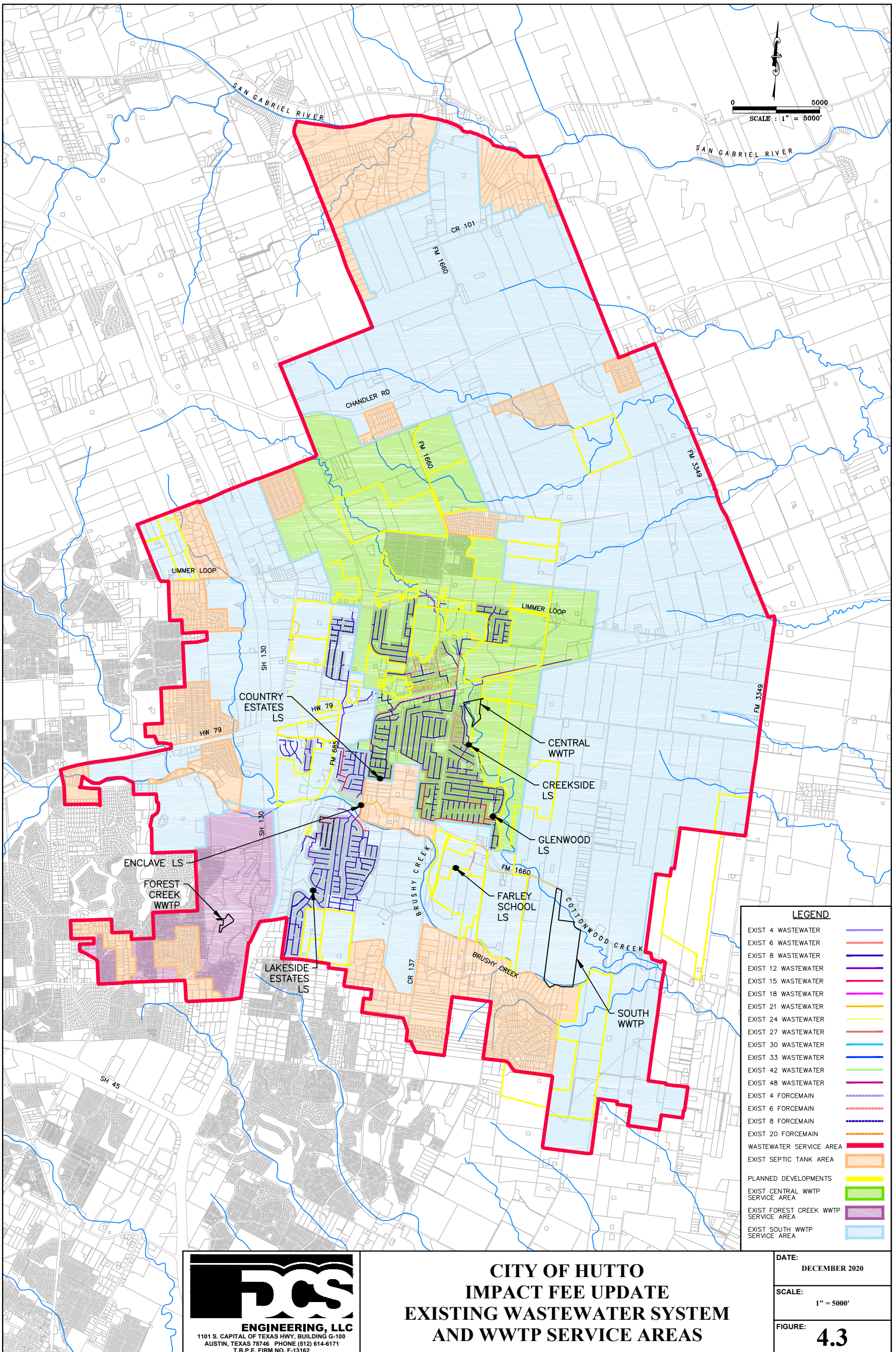


LEGEND			
EXIST ELEVATED STORAGE TANK	EXIST 1.5 WATERLINES	FUTURE ULTIMATE 890 PRESSURE PLANE/WATER CCN	HUTTO CITY LIMIT
EXIST GROUND STORAGE TANK	EXIST 2 WATERLINES	HUTTO ETJ	
EXIST PRESSURE SUSTAINING VALVE	EXIST 4 WATERLINES		
EXIST PRESSURE REDUCING VALVE	EXIST 6 WATERLINES		
	EXIST 8 WATERLINES		
	EXIST 10 WATERLINES		
	EXIST 12 WATERLINES		
	EXIST 16 WATERLINES		
	EXIST 20 WATERLINES		
	EXIST 24 WATERLINES		

SCALE : 1" = 4000'

CITY OF HUTTO IMPACT FEE UPDATE EXISTING WATER SYSTEM MAP

DATE:	DECEMBER 2020
SCALE:	1" = 4000'
FIGURE:	4.2




DCS
ENGINEERING, LLC
1101 S. CAPITAL OF TEXAS HWY, BUILDING G-100
AUSTIN, TEXAS 78746 PHONE (512) 614-6171
T.B.P.E. FIRM NO. F-13162

**CITY OF HUTTO
IMPACT FEE UPDATE
EXISTING WASTEWATER SYSTEM
AND WWTTP SERVICE AREAS**

DATE: DECEMBER 2020

SCALE: 1" = 5000'

FIGURE: **4.3**

4.2 WATER AND WASTEWATER MODEL DEVELOPMENT

As part of the 2016 Water Master Plan, DCS built and calibrated the existing water model in Bentley's WaterCAD (unlimited pipe) software using up to date GIS and operational data from the City. The existing condition of the model was updated in 2019 as part of the 5 year CIP update that DCS performed. DCS performed 48 hour extended period simulations (EPS) for the existing system, 5 year growth, 10 year growth, and ultimate water systems including modeling demands for Average and Max day flows. EPS analysis involves modeling the dynamic performance of the distribution system using variable demand, pump controls, tank elevations, and groundwater pumping. DCS used this model to develop the 10-yr water CIP list of projects related to the distribution system capacity. Water Supply projects were developed based on water projections.

In the wastewater master plan, completed in July 2018, DCS prepared pipe models for each of the wastewater collection system trunk lines in the City to evaluate the total and remaining capacities of these lines. Since this time, DCS has monitored the development in the City and updated the flows to the trunk lines in order to reevaluate how much capacity remains from these completed projects. DCS has also been monitoring the flow at the City's WWTPs to determine when expansions to the treatment capacity will be required.

4.3 WATER AND WASTEWATER SYSTEM IMPROVEMENTS

The proposed water and wastewater CIP projects were originally developed in their respective master plans completed in 2016 and 2018. Since that time, the CIP projects have been updated based on flow projection updates using active development data being collected by City staff that was discussed in Section 3. Furthermore, these CIP projects were reviewed and confirmed by DCS and City Staff to still be needed based on the flow projection update performed as part of this impact fee study. It should be noted here that CIP projects may have been added, start date modified, or deleted from the CIP list completed in 2019 due to the most current data available on active developments and growth.

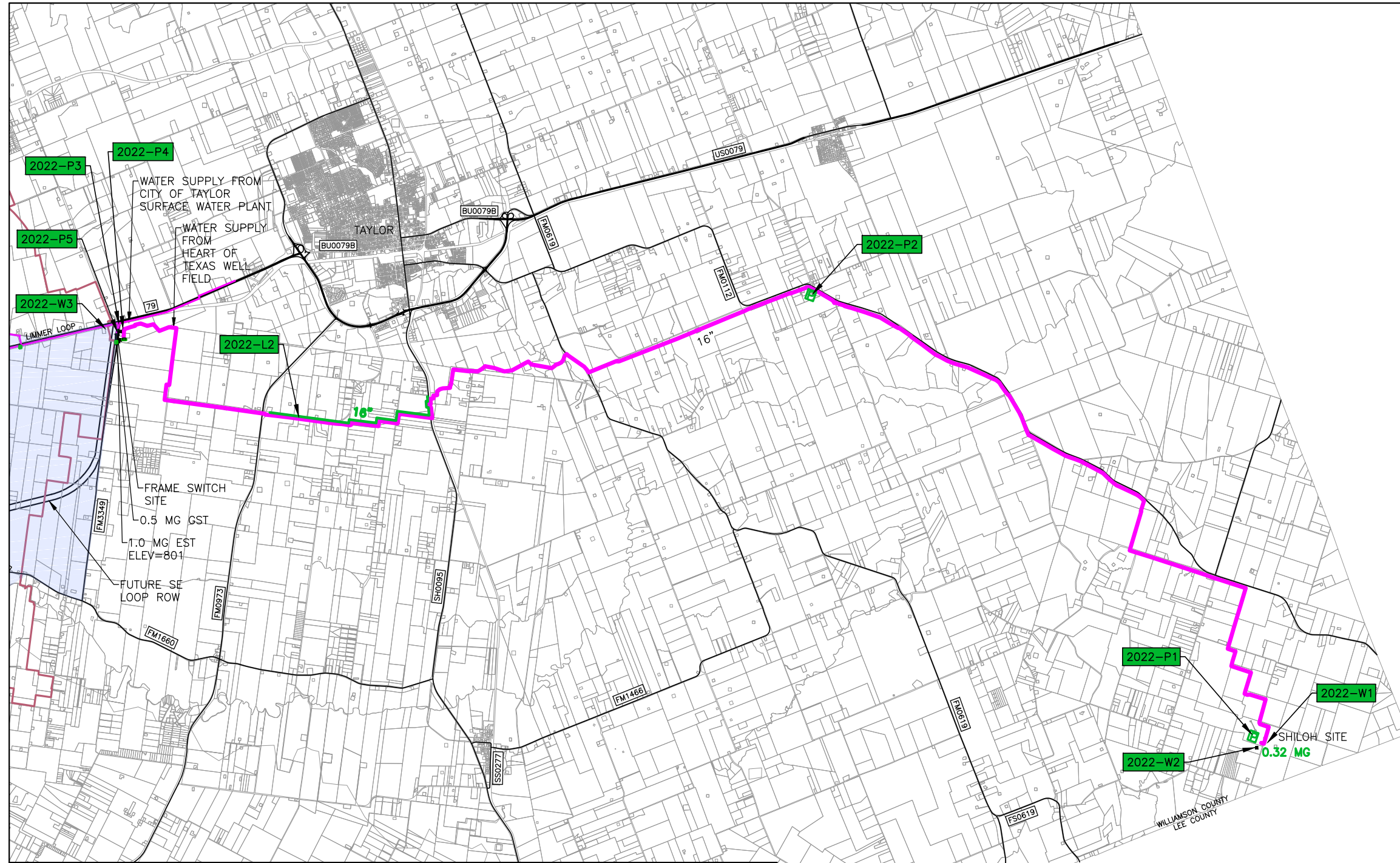
Each of these projects were analyzed to determine their construction cost, capacity added to the system, and capacity utilized within the next 10 years. Only the percentage of capacity that is utilized in the next 10 years is eligible to be included in the Impact Fee analysis. It should be noted here that we have listed all known water and wastewater projects identified by City Staff or DCS's 11 years of historical experience working for the City, even if they are not eligible for inclusion in the Impact Fee calculations. Those that are not eligible will have a utilization of 0% and are therefore not included in the resulting calculations. This data can be found in the Water System Impact Fee Eligible Projects Table No. 4.1; its companion Figure No. 4.4 titled Eligible Water CIP Projects for projects in proximity to the City's water service area; and its companion Figure No. 4.5 titled Eligible Water CIP Projects for projects associated with the City's Heart of Texas water wells and transmission system. The Wastewater System Impact Fee Eligible Projects are shown in Table No. 4.2; and its companion Figure No. 4.5 titled Eligible Wastewater CIP Projects.

Table 4.1 - Water System Impact Fee Eligible Projects

Project Date	Project ID	Fiscal Year Completed	Project Name	Project Description	2021 Utilization	2031 Utilization	Eligible Utilization (2031 - 2021)	Engineer's Opinion of Most Probable Cost or Actual Project Cost	Impact Fee Eligible Cost
Existing Projects¹									
Completed	N/A	2003	Frameswitch Pumping Station	1.0 MG Elevated Storage, 0.5 MG Ground Storage, 4.3 MGD Pumping Capacity, and land acquisition	27%	64%	37%	\$1,747,068	\$653,276
Completed	N/A	2004	Carl Stern Pumping Station	0.2 MG Elevated Storage, 0.5 MG Ground Storage, 4.3 MGD Pumping Capacity, and land acquisition	33%	78%	46%	\$1,226,264	\$560,952
Completed	N/A	2007	North West Pumping Station	1.0 MG Elevated Storage, 1.0 MG Ground Storage, 6.5 MGD Pumping Capacity, and land acquisition	32%	77%	45%	\$4,238,004	\$1,895,731
Completed	N/A	2011	CR 108 Waterline	12,600 linear feet of 16" waterline	56%	88%	32%	\$1,575,000	\$504,000
Completed	N/A	2014	Cottonwood Creek Elementary Booster Pumps	Booster pumps necessary to provide minimum fire flow pressures per TCEQ	100%	100%	0%	\$25,000	\$0
Completed	N/A	2016	CR 685 8" Waterline Replacement	Replace 2,600 LF of 8" waterline	100%	100%	0%	\$275,600	\$0
Completed	N/A	2017	12" Waterline - Future Carl Stern Dr (SH 130 South)	9,000 linear feet of 12" waterline to transfer water for new development areas at Future Carl Stern Dr / SH 130 South	11%	83%	72%	\$940,000	\$679,468
Completed	N/A	2017	Heart of Texas Groundwater and Wells	Value of the Water rights, Well facilities, and conveyance to Shiloh	51%	100%	49%	\$22,231,249	\$10,998,618
Completed	N/A	2017	Heart of Texas Transmission Pipeline	131,000 linear feet of 16" waterline	37%	100%	63%	\$33,013,368	\$20,939,908
Completed	N/A	2017	Heart of Texas Booster Pumping Station	2.1 MGD Booster Pumping Station and 380,000 Gallons ground storage tank	91%	100%	9%	\$3,785,391	\$324,462
Completed	N/A	2017	City Storage Tank Painting	Paint 3 ground storage tanks, and 3 elevated storage tanks.	100%	100%	0%	\$1,200,000	\$0
Completed	N/A	2018	12" Waterline - West of FM 685	1,500 linear feet of 12" waterline to transfer water	11%	83%	72%	\$156,000	\$112,763
Completed	N/A	2018	12" Waterline - Front Street	3,600 linear feet of 12" waterline	30%	100%	70%	\$376,000	\$263,200
Completed	N/A	2018	16" Waterline - Front Street	900 linear feet of 16" waterline	30%	100%	70%	\$152,000	\$106,400
Completed	N/A	2018	20" Waterline - Front Street	2,500 linear feet of 20" waterline	30%	100%	70%	\$595,000	\$416,500
Completed	N/A	2018	24" Waterline - Front Street	1,800 linear feet of 24" waterline	30%	100%	70%	\$548,000	\$383,600
Completed	N/A	2019	Heart of Texas Well Rehabilitation	Clean well screens, and replace pumps and motors on 8 HOT wells.	100%	100%	0%	\$2,400,000	\$0
Completed	N/A	2020	Old Town Waterline Replacement Program ³	Waterline Replacements: East Street Phase I, Live Oak Street, Taylor Street, West Street Phase I and II with Metcalf Street, Marvin Cove, East Street Phase II, Ross Street, and Brushy Street/Evans Street.	100%	100%	0%	\$2,085,000	\$0
Completed	N/A	2020	Shiloh Booster Station Upgrade to 3.27 MGD	Install 3 new pumps to reach a capacity of 3.27 mgd	64%	100%	36%	\$500,000	\$178,899
Proposed Projects²									
Under Design	2022-P1	2022	Shiloh Pumping Station Upgrade to 5.70 MGD	Install 5.7 mgd booster pump station at Shiloh Pump Station to replace existing 3.27 MGD pump station.	53%	100%	47%	\$4,900,000	\$2,321,053
Under Design	2022-P2	2022	Heart of Texas In-Line 5.7 MGD Pumping Station	Install 5.7 mgd inline booster pump station at the proposed Noack Pumping Station to allow the Heart of Texas Transmission Line to serve 5.7 mgd	53%	100%	47%	\$5,250,000	\$2,486,842
Under Design	2022-P3	2022	Frame Switch 890 PP 5.7 MGD Pump Station	Install 5.7 MGD 890' PP Pump Station at the Frame Switch Pumping Station.	53%	100%	47%	\$4,290,000	\$2,032,105
Under Design	2022-P4	2022	Frame Switch 801 PP 6.48 MGD Pump Station	Install 6.48 MGD 801' PP Pumping Station at the Frame Switch Pumping Station.	53%	100%	47%	\$2,960,000	\$1,402,105
Under Design	2022-T1	2022	Frame Switch 801 Pressure Plane Tank Modifications ³	Install new dedicated tank inlet to improve tank operation and mixing characteristics.	100%	100%	0%	\$520,000	\$0
Under Design	2022-V1	2022	890' Pressure Plane Expansion ³	To expand the 890' pressure plane east, 4 pressure reducing valves will be installed around Hutto's Historic Downtown. 1 Pressure sustaining valve will be converted into a pressure reducing valve.	37%	87%	50%	\$250,000	\$125,000
Under Design	2022-L1	2022	24" Waterline - US 79	5,500 linear feet of 24" waterline, and 6,000 linear feet of 30" waterline	37%	87%	50%	\$3,085,280	\$1,541,940
Under Design	2022-L2	2022	Heart of Texas 16" Parallel Pipeline	16,000 linear feet of 16" waterline	53%	100%	47%	\$2,658,000	\$1,249,260
Under Design	N/A	2021	Water Impact Fee Update	Update water impact fees.	0%	100%	100%	\$39,670	\$39,670
Under Design	N/A	2021	Water Supply Alternatives Analysis	Water Supply Alternatives Analysis	0%	75%	75%	\$200,000	\$150,000
FY 2022 thru FY 2027	N/A	2022	2022 Water Master Plan Update	Update to the 2016 Water Master Plan	100%	100%	0%	\$150,000	\$0
FY 2023 thru FY 2028	N/A	2023	2023 Water Impact Fee Update	Update water impact fees.	0%	100%	100%	\$39,670	\$39,670
FY 2021 thru FY 2026	2026-L3	2026	16" Waterline - Limmer Loop ³	1,600 linear feet of 16" waterline to transfer water from the existing 890-ft PP at Ed Schmidt Blvd to Anderson St in Hutto Square (for expanding 890-ft PP)	0%	100%	100%	\$404,000	\$404,000
FY 2021 thru FY 2026	2024-L4	2024	12" Waterline - FM 1660/Mager Ln	4,800 linear feet of 12" waterline to transfer water from Delby St in Hutto Square to Carol Dr in Carol Meadows (for expanding 890-ft PP)	0%	100%	100%	\$728,000	\$728,000
FY 2021 thru FY 2026	2024-L5	2024	12" Waterline - Alliance Blvd (CR 108)	2,400 linear feet of 12" waterline to transfer water for new development areas along Innovation Blvd	0%	100%	100%	\$265,000	\$265,000
FY 2021 thru FY 2026	2026-L6	2026	Jonah Water Service Transfer Tier II South	7,910 linear feet of 8" waterline to transfer water to Coyote Trail	0%	100%	100%	\$953,000	\$953,000
FY 2021 thru FY 2026	2025-L7	2025	16" Waterline - CR 132	2,500 linear feet of 16" waterline to transfer water for new development areas at US79 / CR 132	0%	51%	51%	\$449,000	\$228,979
FY 2021 thru FY 2026	2025-L8	2025	12" Waterline - CR 199	3,300 linear feet of 12" waterline	0%	51%	51%	\$366,000	\$186,651
FY 2021 thru FY 2026	2026-L9	2026	12" Waterline	4,000 linear feet of 12" waterline	0%	54%	54%	\$606,000	\$328,107
FY 2027 thru FY 2031	2028-L10	2028	20" Waterline - CR 132	800 linear feet of 20" waterline	0%	36%	36%	\$202,000	\$73,257
FY 2027 thru FY 2031	2028-L11	2028	12" Waterline - Future Roadway	3,800 linear feet of 12" waterline	0%	36%	36%	\$421,000	\$152,678
FY 2027 thru FY 2031	2028-L12	2028	12" Waterline - Future Carl Stern Dr	4,300 linear feet of 12" waterline	0%	54%	54%	\$477,000	\$258,262
FY 2021 thru FY 2027	2026-L13	2026	36" Waterline - US 79	9,200 linear feet of 36" waterline	0%	62%	62%	\$4,623,000	\$2,856,402
FY 2027 thru FY 2031	2029-L14	2029	12" Waterline - FM 1660	5,400 linear feet of 12" waterline	0%	79%	79%	\$771,000	\$612,599
FY 2027 thru FY 2031	2029-L15	2029	12" Waterline - CR 163	3,900 linear feet of 12" waterline	0%	63%	63%	\$557,000	\$348,362
FY 2021 thru FY 2026	2022-L16	2022	Avery Lake Waterline	2,500 linear feet of 12" waterline	0%	80%	80%	\$960,000	\$768,000
FY 2021 thru FY 2027	2026-P5	2026	Frameswitch 890' PP Pump Upgrades	Replace 4 50 HP 890' PP pumps with 4 150 HP 890' PP pumps	0%	100%	100%	\$500,000	\$500,000
FY 2021 thru FY 2026	2022-W1	2022	Well Capacity Increase to 5.7 MGD	Install 2 new Hooper wells, Drill one new Simsboro well, repermit the existing Simsboro well No. 12.	0%	100%	100%	\$3,688,000	\$3,688,000
FY 2021 thru FY 2026	2022-W2	2022	Well Collection Capacity Increase to 5.7 MGD	Install +/- 21,000 LF of 16" and 12" piping.	0%	100%	100%	\$3,955,000	\$3,955,000
FY 2027 thru FY 2031	2027-W3	2027	5 MGD Brackish Water Treatment Plant	5 MGD brackish water treatment and cooling, 3 lower trinity aquifer wells, 1 injection well.	0%	54%	54%	\$30,105,390	\$16,256,911
Total =								\$151,441,954	\$81,968,630

1. Existing projects includes projects currently completed that provide capacity to the system
2. Proposed projects includes all future projects including those currently under design or construction not completed
3. Only projects that add additional capacity are eligible for inclusion in the Impact Fee Analysis

FILENAME: Z:\Projects\1400-1498\20101436 - COH Impact Fee Study\200 - Planning_Study\2.1 - Drawings\Sheet Files\Figure 4.5.dwg, LAST SAVED ON: Nov 20 2020 3:25pm, PLOTTED BY: SBARRY, ON: Dec 04 2020 11:19am, CFG:



LEGEND	
PROPOSED PUMP (NEW OR EXPANDED)	EXIST 1.5 WATERLINES
PROPOSED ELEVATED STORAGE TANK	EXIST 2 WATERLINES
PROPOSED GROUND STORAGE TANK	EXIST 4 WATERLINES
PROPOSED PRESSURE SUSTAINING VALVE	EXIST 6 WATERLINES
PROPOSED PRESSURE REDUCING VALVE	EXIST 8 WATERLINES
EXIST ELEVATED STORAGE TANK	EXIST 10 WATERLINES
EXIST GROUND STORAGE TANK	EXIST 12 WATERLINES
EXIST PRESSURE SUSTAINING VALVE	EXIST 16 WATERLINES
EXIST PRESSURE REDUCING VALVE	EXIST 20 WATERLINES
	EXIST 24 WATERLINES
	801 PRESSURE PLANE/WATER CCN (ULT.)
	890 PRESSURE PLANE/WATER CCN (ULT.)
	FUTURE ULTIMATE 890 PRESSURE PLANE/WATER CCN
	PROPOSED WATERLINE
	HUTTO CITY LIMIT
	HUTTO ETJ

CITY OF HUTTO IMPACT FEE UPDATE ELIGIBLE WATER CIP PROJECTS

DATE:	DECEMBER 2020
SCALE:	1" = 4000'
FIGURE:	4.5

Table 4.2 - Wastewater System Impact Fee Eligible Projects

Project Date	Project ID	Project Name	Project Description	2021 Utilization	2031 Utilization	Eligible Utilization (2031 - 2021)	Engineer's Opinion of Most Probable Cost or Actual Project Cost	Impact Fee Eligible Cost
Existing Projects								
Completed	N/A	Existing 0.99 MGD Central WWTP	The existing Central WWTP with 0.99 mgd capacity and land acquisition	55%	100%	45%	\$7,896,042	\$3,525,304
Completed	N/A	Central WWTP Fine Bubble Aeration Improvements	The City implemented a fine bubble aeration system at the Central WWTP	100%	100%	0%	\$116,190	\$0
Completed	N/A	Existing 2.00 MGD South WWTP	The existing South WWTP with 2.00 mgd capacity and land acquisition	47%	100%	53%	\$20,342,455	\$10,700,131
Completed	N/A	Glenwood Forcemain Extension ²	Extend the 12" Glenwood FM to tie into an existing manhole at the Central WWTP	100%	100%	0%	\$58,441	\$0
Completed	N/A	Existing Enclave LS and FM	The existing Enclave lift station and forcemain with 8,960 LUEs of capacity	34%	100%	66%	\$3,074,224	\$2,043,193
Completed	N/A	Existing Brushy Creek Interceptor - Phase II-A	The existing 21" and 24" Brushy Creek Interceptor	42%	65%	23%	\$2,020,752	\$464,773
Completed	N/A	Exist Brushy Creek Interceptor - Phase I and II-B	The existing 42" Brushy Creek Interceptor	42%	65%	23%	\$1,347,214	\$309,859
Completed	N/A	Brushy Creek Phase I Easements along FM 1660	Easements acquired for Brushy Creek Interceptor - Phase I. The Interceptor was not built but the easements were re-purposed for the Enclave forcemain and the proposed Glenwood Interceptor.	50%	100%	50%	\$51,748	\$25,874
Completed	N/A	Existing Cottonwood Creek Interceptor	The existing Cottonwood Creek Interceptor with 9,343 LUEs of capacity	54%	100%	46%	\$527,333	\$242,303
Completed	N/A	2018 Wastewater Master Plan	Wastewater Master Plan	100%	100%	0%	\$151,520	\$0
Completed	N/A	Central WWTP and South WWTP Permit Amendments and PER	Discharge Permit amendments for additional capacity at the Central WWTP and South WWTP including preliminary engineering design.	0%	100%	100%	\$245,000	\$245,000
Completed	N/A	Country Estates Forcemain Rerouting ²	Cut and redirect the Country Estates Forcemain to divert flow from the Central to the South WWTP	100%	100%	0%	\$59,000	\$0
Proposed Projects								
Under Design	N/A	Wastewater Impact Fee Update ¹	Update wastewater impact fees.	0%	100%	100%	\$39,670	\$39,670
Under Design	2021-11	Lakeside Estates Lift Station Abandonment ¹	8,700 LF of 12", 15", and 18" interceptor to decommission the Lakeside Estates Lift Station and provide additional capacity for future developments in the area.	26%	100%	74%	\$1,584,472	\$1,168,995
Under Design	2023-12	Glenwood Lift Station Decommission, Interceptor, and 2 - WWTP Lift Stations ¹	10,500 LF of 30" interceptor to take Glenwood lift station offline and transfer flows to the South WWTP. Includes decommissioning of Glenwood LS, construction of new lift station at the south WWTP, and construction of new lift station at the Central WWTP.	34%	75%	41%	\$8,645,099	\$3,554,167
2022-2023	N/A	2022 Wastewater Master Plan Update	Update to the Wastewater Master Plan	100%	100%	0%	\$155,000	\$0
2021-2022	2022-13	The Landing Pipe Bursting	Pipe burst existing 500 LF of 12-inch pipe to 15-inch on Whitfield, located north of Co-op to provide capacity for the future Landing development	60%	100%	40%	\$250,372	\$99,546
2021-2023	2023-P1	Phosphorus Chemical Dosing	Adding Phosphorus chemical dosing system to the Central WWTP to meet TCEQ permit requirements.	0%	100%	100%	\$420,000	\$420,000
2021-2023	2024-P2	South WWTP from 2.0 to 4.0 MGD Capacity	Expand South WWTP plant capacity from 2.00 mgd to 4.00 mgd.	0%	80%	80%	\$30,199,320	\$24,159,456
2023-2023	N/A	2023 Wastewater Impact Fee Update ¹	Update wastewater impact fees.	0%	100%	100%	\$39,670	\$39,670
2028-2030	2030-15	Cottonwood Creek Parallel Interceptor	700 LF of 18", 1,700 LF of 24", 3,900 LF of 27", and 2,100 LF of 30" Interceptor along east side of Cottonwood Creek to increase capacity of current Cottonwood Creek interceptor to ultimate conditions.	0%	75%	75%	\$4,079,222	\$3,059,416
2023-2025	2025-14	Brushy Creek Interceptor & LS	2,800 LF of 36" and 15,100 LF of 42" interceptor to take Enclave LS offline and transfer flows to the South WWTP. Includes inverted siphon with two access vaults and on-site LS at WWTP. Decommissioning of Enclave LS is included in this project.	42%	65%	23%	\$14,238,000	\$3,270,720
2025-2028	2028-16	Avery Lake Interceptor Phase I	Approximately 3,000 LF of 24" wastewater interceptor to serve the area South of hwy 79 and west of SH-130.	0%	15%	15%	\$1,778,149	\$266,722
Total =							\$97,318,893	\$53,634,799

1. Projects are currently under design
2. Only projects that add additional capacity are eligible for inclusion in the Impact Fee Analysis

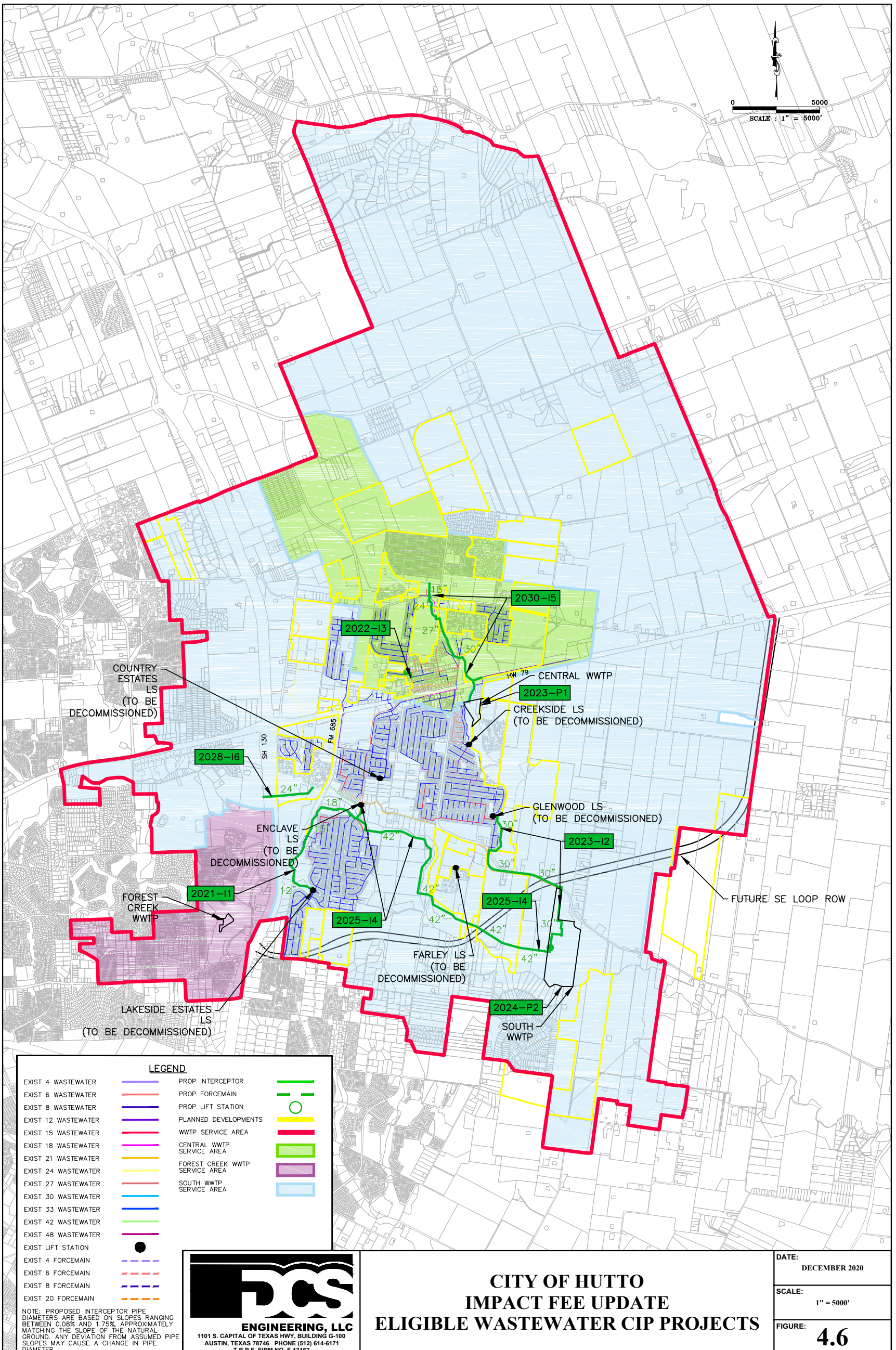


Table No. 4.1 and 4.2 shows a column titled “2021 Utilization”, which is the portion of a project’s capacity that is required to serve the existing LUEs. This portion of the project cost is not eligible for inclusion in the impact fee calculations. The column titled “2031 Utilization” is the portion of the project’s capacity that will be required to serve the projected growth in the City by 2031. The column titled “Eligible Utilization (2021-2031)” is the difference between the 2021 and 2031 percent utilization; and is the portion of the project’s capacity required to serve development from 2021 to 2031. The impact fee eligible cost for each project is calculated as the total capital cost multiplied by the “Eligible Utilization (2021-2031)”. Only this portion of the cost can be used to calculate the maximum allowable impact fees. It should be noted here that proposed projects that address deficiencies within the existing system serving only existing LUEs; or rehabilitate existing infrastructure serving existing LUEs are not eligible for inclusion in the impact fee calculations.

The costs listed for the existing projects are actual design and construction costs provided by the City and the future projects include the engineer’s opinion of most probable construction costs, easement acquisitions, contingencies, and professional fees. These costs are also adjusted for inflation at a rate of 3% per year from 2021. Detailed cost estimates for the water and wastewater projects can be found in Appendix A and Appendix B, respectively.

It should be noted here that future potential wholesale water contracts (i.e. with Manville WSC, Jonah, City of Taylor, etc); or future potential wholesale wastewater contracts (i.e. with Jonah, City of Taylor, MUD Districts; etc.) require special attention by the City as they relate to the impact fees calculated in this study and/or the collection of impact fees. Specifically, if the City enters into wholesale water and/or wastewater contracts to provide service to developments that are outside of the water service area or wastewater service limits defined in this study, the City must carefully evaluate the increased cost of service to the City’s water and wastewater system’s infrastructure. The additional demands will, in almost all cases, require the City to construct new CIP projects to expand the wastewater collection system capacity, WWTP capacity, water distribution system capacity, and/or the water supply system capacity. These future projects required to be constructed to achieve this additional capacity are not in the CIP lists used to calculate the impact fees in this study. Thus, the City’s cost to construct these future CIP projects would have to be paid by the wholesale water/wastewater rates charged to the City’s wholesale customer; or recovered by requiring the wholesale customer to pay for the required improvements to the City’s infrastructure as part of wholesale contract agreement.

Lastly, this impact fee study does not include any CIP costs for infrastructure improvements required by existing wholesale water and/or wastewater contracts. DCS has assumed that if any wholesale contracts exist that the terms of these contracts have addressed the City’s cost of service issues as described above or by other negotiated method per the terms of the contract that is in place.

Section 5

Impact Fee Analysis

The current impact fee ordinance was adopted in February 2013. This ordinance set the water impact fee for a single service unit at \$3,625.00 and the wastewater impact fee for a single service unit at \$2,128.00 for a combined impact fee of \$5,753.00 per service unit. This project is an update to the 2013 ordinance. 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 2021 and 2031. 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.

5.1 MAXIMUM IMPACT FEE CALCULATIONS

DCS retained New Gen Strategies and Solutions, LLC (NewGen) as a subconsultant to perform the financial analysis for this impact fee update. NewGen employed the impact fee determination method via 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 associated with the use of utility revenues. In developing the components of the financial model several assumptions must be made, including the following:

- Financing
 - Method of financing (i.e. cash or debt financing)
 - The level of financing (e.g. 80% debt and 20% cash)
 - Cost of financing
 - Debt repayment structure
- Timing and Level of Expenditures and Revenues
- Interest Earnings
- Annual Service Unit Growth
- Portion of Utility Revenue Used to Fund Impact Fee Water and Wastewater Improvements

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. Based on discussions with City staff, unless specific funding has already been determined, it is assumed that the City will debt finance 80% of the future project costs, and the remaining 20% with cash. For debt financing, the cost of financing is based on the City's Financial Advisor estimates of debt costs for All in True Interest Cost (TIC) for bonds issued with 30-year terms with 15 basis points added each year, as shown in Appendix C. For waterline projects, a 20-year term was used with the Financial Advisor's estimates for debt cost at a 20-year term plus 15 basis points each year. 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. Given inflationary expectations, an adjustment has been made to future expenses accounting for a 3.16% factor. This is based on Engineering News-Record's 20-Year average Construction Cost Index. It is also assumed that for debt-financed capital projects, the City will expend debt proceeds over a 2-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 and 20-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. Fund balances were identified for each service area as a potential source for the current Impact Fee CIP. Because of the generation of the fund balance, excess monies 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 impact fee eligible improvements, 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 0.41%, which is the average of 10-Year TexStar Interest Rate Average as of October 2020 and City's TexStar Yield as of July 2020.

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 and Wastewater Impact Fee CIP. As an alternative, a credit equal to 50% of the total cost of implementing the Water and Wastewater Impact Fee CIP may be used. The City has elected to pursue the determination of a credit for the portion of utility revenues generated by new service units during the program period that are used for payment of improvements that are included in the Water and Wastewater Impact Fee CIP. It should be noted that the credit is not a determination to recognize the total utility revenue generated by new service units, but is only a credit for the portion of utility revenue that is used for payment of improvements that are included in the Water and Wastewater Impact Fee CIP. Theoretically, the credit determination could be zero (\$0) if the City does not utilize any of the new service unit utility revenue to fund improvements that are included in the Water and Wastewater Impact Fee CIP. However, to be conservative and recognize potential cash flow issues that can occur with the funding of major capital improvement projects, it is assumed that the debt-funded projects (80% of the improvement costs included in the Water and Wastewater Impact Fee CIP but not otherwise funded) could potentially be funded by utility revenue.

Since payments made through utility revenue will consist of not only the revenue generated by new service units in the defined service area, but also existing service units throughout the City, the portion attributable to the new service units in the defined service area must be isolated, as illustrated in the credit calculation in Appendix C.

Table No. 5.1 – Maximum Water and Wastewater Impact Fee Summary Table

	Water	Wastewater
Recoverable Impact Fee CIP Cost	\$ 91,097,518	\$ 62,578,979
Financing Cost	61,831,827	31,337,426
Existing Fund Balance	(1,200,000)	(940,000)
Interest Earnings	(3,407,035)	(2,266,310)
Credit for Utility Revenues	(77,139,348)	(47,909,130)
Maximum Recoverable Cost for Impact Fee	\$ 71,182,962	\$ 42,800,965
10-Year Growth in LUEs	8,397	16,271
Maximum Assessable Impact Fee	\$ 8,477	\$ 2,631

Figure No. 5.1, 5.2, and 5.3 show comparisons of impact fees in the Central Texas region alongside the City of Hutto's new maximum assessable combined impact fee totaling \$11,108. Comparisons between communities are very common but may not tell the whole story. Each system is unique in geography, age of infrastructure, capital maintenance efforts, and typical usage patterns. The impact fees shown on this comparison are the impact fees that the cities have adopted, not the maximum assessable fee, which is what is calculated for the City of Hutto and shown in Table No. 5.1 as well as Figure No. 5.1, 5.2, and 5.3.

Figure No. 5.1 – Regional Comparison of Water Impact Fees

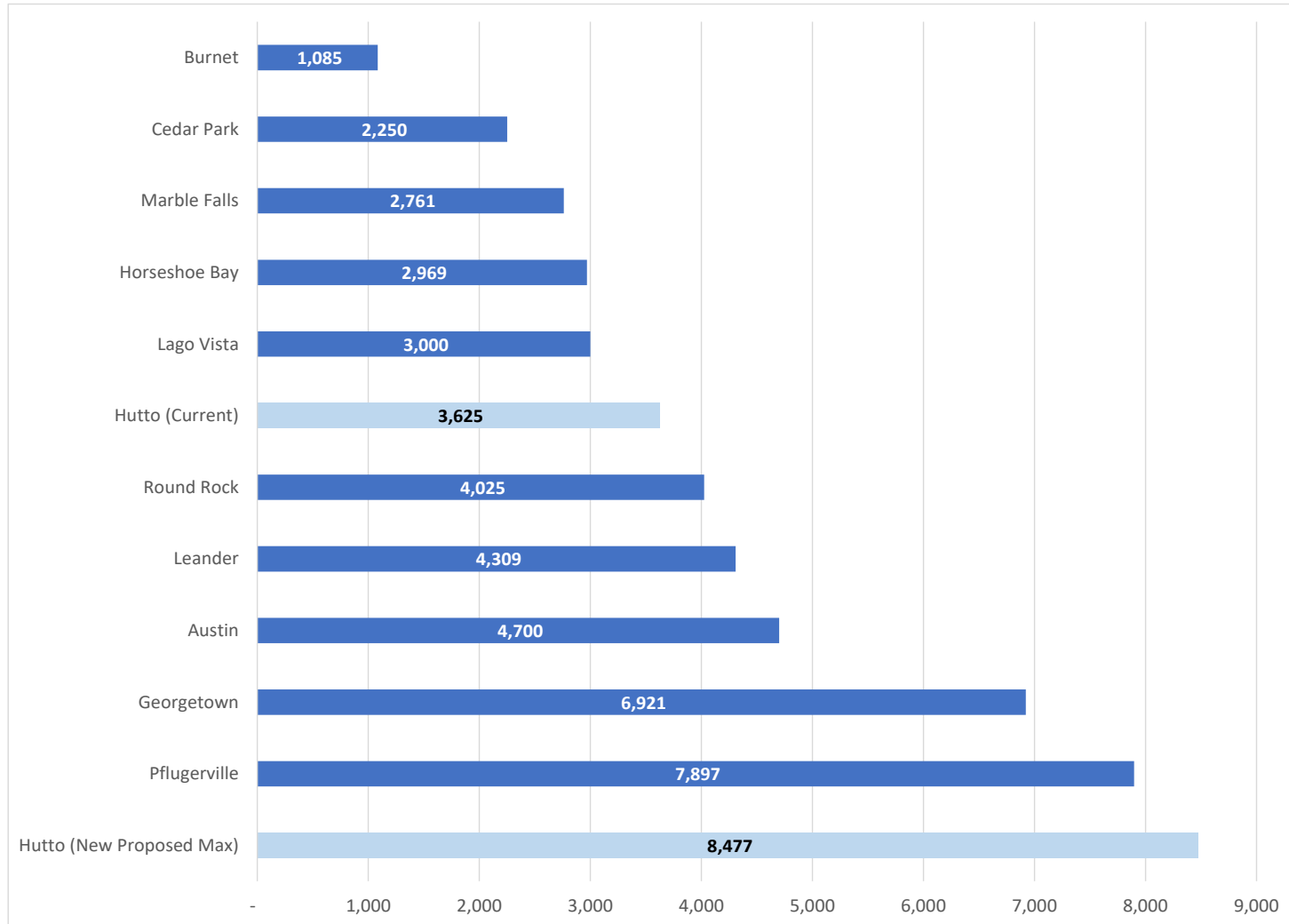
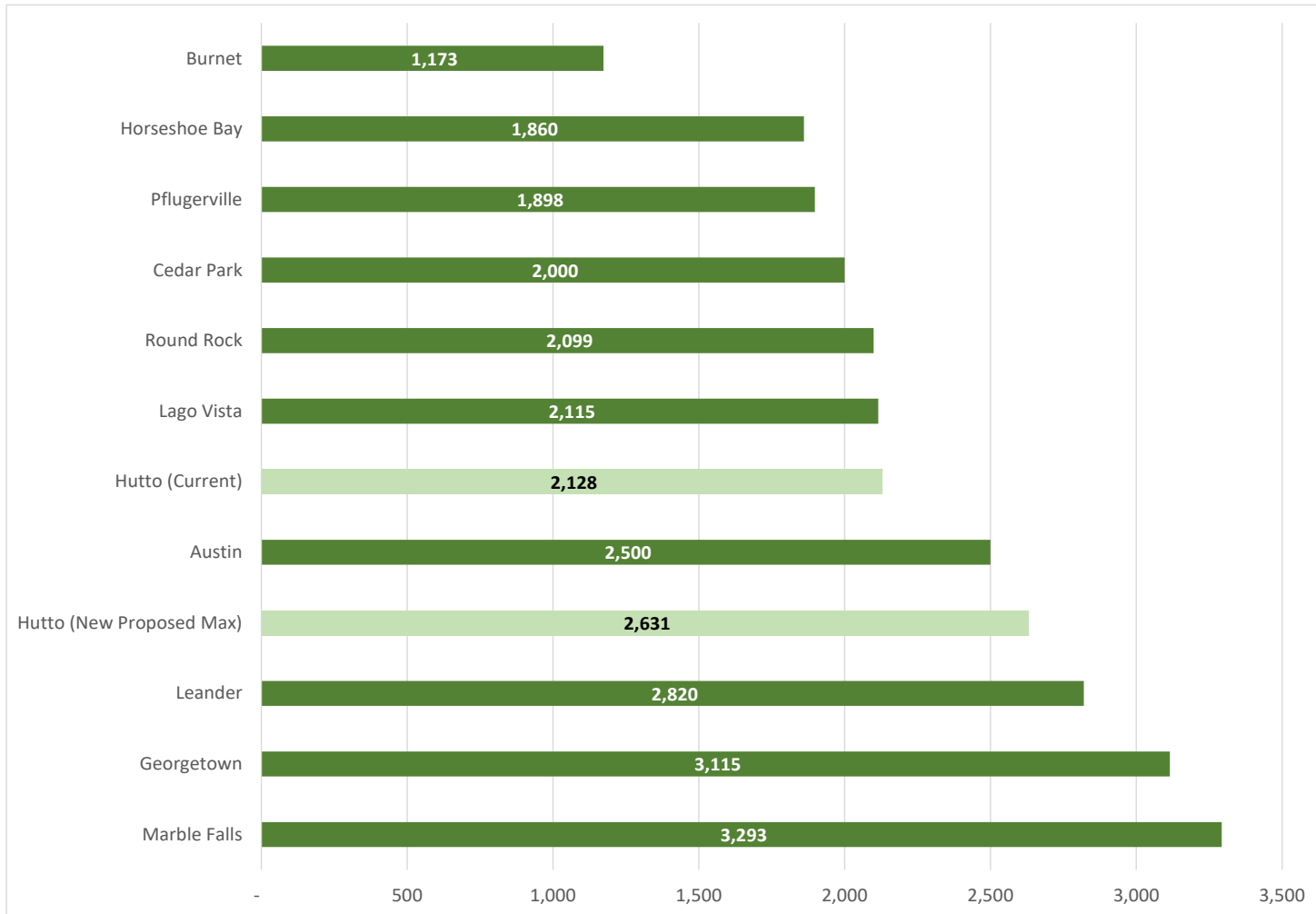
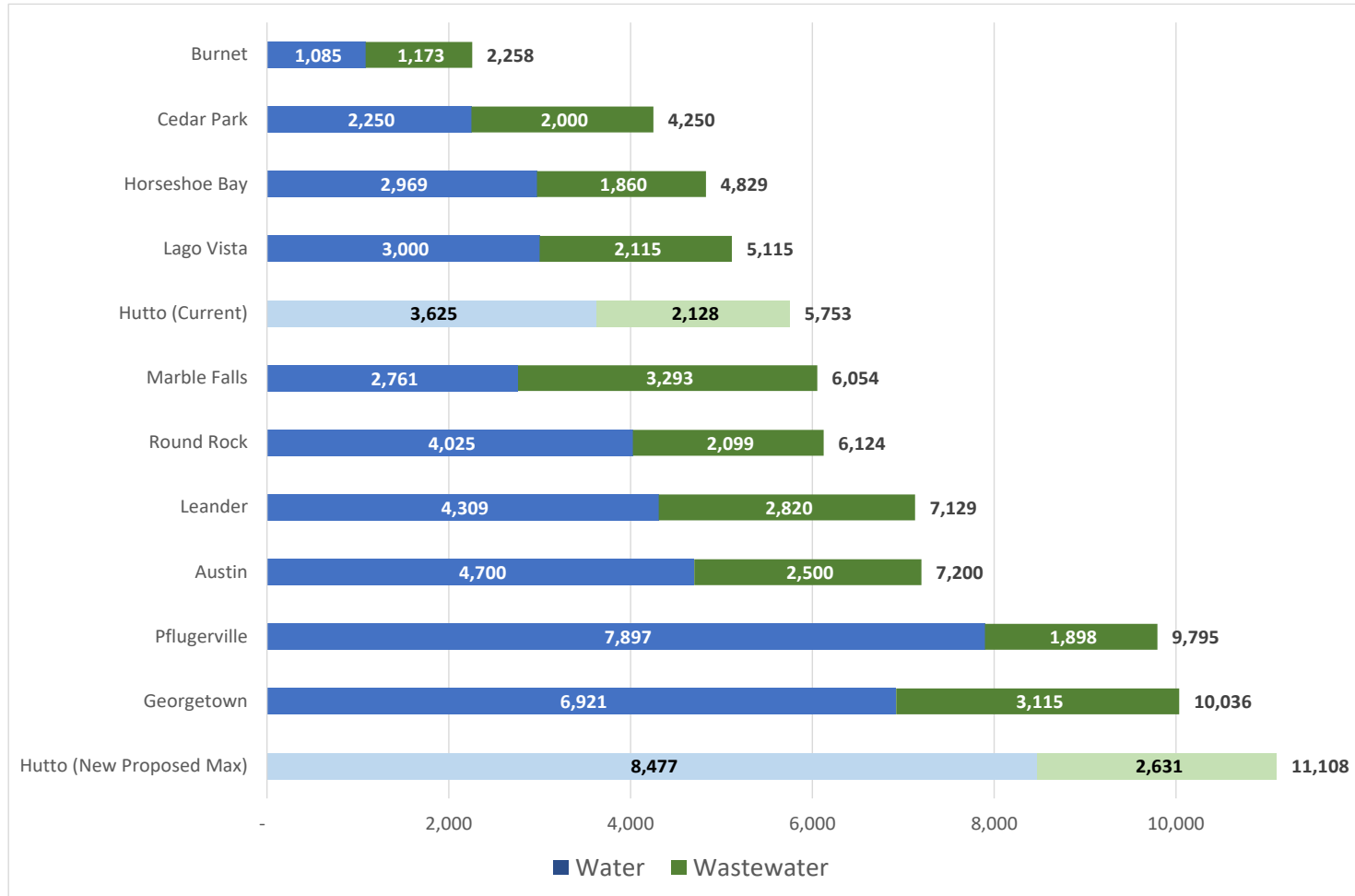


Figure No. 5.2 – Regional Comparison of Wastewater Impact Fees



Notes: Pflugerville also serves "Service Area 2" with Wastewater for 8,184; Leander also serves Lively Tract Wastewater for 4,452, Georgetown wastewater is for "Outside the Southfork area", Inside is 4,384

Figure No. 5.3 – Regional Comparison of Combined Water and Wastewater Impact Fees



Notes: Pflugerville also serves "Service Area 2" with Wastewater for 8,184; Leander also serves Lively Tract Wastewater for 4,452, Georgetown wastewater is for "Outside the Southfork area", Inside is 4,384

**APPENDIX A
WATER SYSTEM
PROJECT COST ESTIMATES**



Impact Fee CIP Cost Estimate
Shiloh Pumping Station Upgrade to 5.70 MGD



Project ID :2022-P1 **Project Start:**
Project Description: **Project Completion:** **2022**

Install 5.7 mgd booster pump station at Shiloh Pump Station to replace existing 3.27 MGD pump station.

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	Four 200 horse power vertical turbine pumps, pump building, and emergency generator	\$3,705,104
	SUBTOTAL:	\$3,705,104
	CONTINGENCY 15%	\$555,766
	SUBTOTAL:	\$4,260,870
	PROFESSIONAL FEES 15%	\$639,130
	SUBTOTAL:	\$4,900,000
	PERCENT ELIGIBLE	47%
Eligible Project Total:		\$2,321,053

Notes:



Impact Fee CIP Cost Estimate
Heart of Texas In-Line 5.7 MGD Pumping Station



Project ID :2022-P2 **Project Start:**
Project Description: **Project Completion:** 2022

Install 5.7 mgd inline booster pump station at the proposed Noack Pumping Station to allow the Heart of Texas Transmission Line to serve 5.7 mgd

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	Four 250 horse power turbine pumps, pump building, and emergency generator	\$3,969,754
	SUBTOTAL:	\$3,969,754
	CONTINGENCY 15%	\$595,463
	SUBTOTAL:	\$4,565,217
	PROFESSIONAL FEES 15%	\$684,783
	SUBTOTAL:	\$5,250,000
	PERCENT ELIGIBLE	47%
	Eligible Project Total:	\$2,486,842

Notes:



Impact Fee CIP Cost Estimate
Frame Switch 890 PP 5.7 MGD Pump Station



Project ID :2022-P3

Project Start:

Project Description:

Project Completion:

2022

Install 5.7 MGD 890' PP Pump Station at the Frame Switch Pumping Station.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	Five 50 HP Vertical Turbine Pumps, pump building, and emergency generator	\$3,243,856
	SUBTOTAL:	\$3,243,856
	CONTINGENCY 15%	\$486,578
	SUBTOTAL:	\$3,730,435
	PROFESSIONAL FEES 15%	\$559,565
	SUBTOTAL:	\$4,290,000
	PERCENT ELIGIBLE	47%
	Eligible Project Total:	\$2,032,105

Notes:



Impact Fee CIP Cost Estimate
Frame Switch 801 PP 6.48 MGD Pump Station



Project ID :2022-P4 **Project Start:**
Project Description: **Project Completion:** 2022

Install 6.48 MGD 801' PP Pumping Station at the Frame Switch Pumping Station.

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	6.48 mgd pumping station	\$2,238,185
	SUBTOTAL:	\$2,238,185
	CONTINGENCY 15%	\$335,728
	SUBTOTAL:	\$2,573,913
	PROFESSIONAL FEES 15%	\$386,087
	SUBTOTAL:	\$2,960,000
	PERCENT ELIGIBLE	47%
	Eligible Project Total:	\$1,402,105

Notes:



**Impact Fee CIP Cost Estimate
Frame Switch 801 PP Tank Modifications**



Project ID :2022-T1	Project Start:
Project Description:	Project Completion: 2022

Install new dedicated tank inlet to improve tank operation and mixing characteristics.

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	Install new dedicated tank inlet and mixing system	\$393,195
	SUBTOTAL:	\$393,195
	CONTINGENCY 15%	\$58,979
	SUBTOTAL:	\$452,174
	PROFESSIONAL FEES 15%	\$67,826
	SUBTOTAL:	\$520,000
	PERCENT ELIGIBLE	0%
Eligible Project Total:		\$0

Notes:



Impact Fee CIP Cost Estimate 890' Pressure Plane Expansion



Project ID :2022-V1

Project Start:

Project Description:

Project Completion:

2022

To expand the 890' pressure plane east, 4 pressure reducing valves will be installed around Hutto's Historic Downtown. 1 Pressure sustaining valve will be converted into a pressure reducing valve.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	5 Cla-Val pressure reducing valves and vaults	\$189,036
	SUBTOTAL:	\$189,036
	CONTINGENCY 15%	\$28,355
	SUBTOTAL:	\$217,391
	PROFESSIONAL FEES 15%	\$32,609
	SUBTOTAL:	\$250,000
	PERCENT ELIGIBLE	50%
Eligible Project Total:		\$125,000

Notes:



**Impact Fee CIP Cost Estimate
24" and 30" Waterline - US 79**



Project ID :2022-L1 **Project Start:**
Project Description: **Project Completion:** **2022**

5,500 linear feet of 24" waterline, and 6,000 linear feet of 30" waterline

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	5,500 LF of 24" waterline and 6,000 LF of 30" waterline	\$2,332,915
	SUBTOTAL:	\$2,332,915
	CONTINGENCY 15%	\$349,937
	SUBTOTAL:	\$2,682,852
	PROFESSIONAL FEES 15%	\$402,428
	SUBTOTAL:	\$3,085,280
	PERCENT ELIGIBLE	50%
	Eligible Project Total:	\$1,541,940

Notes:



**Impact Fee CIP Cost Estimate
Heart of Texas 16" Parallel Pipeline**



Project ID : 2022-L2	Project Start:
Project Description:	Project Completion: 2021

16,000 linear feet of 16" pipeline

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	16,000 LF of 16" pipeline	\$2,009,830
	SUBTOTAL:	\$2,009,830
	CONTINGENCY 15%	\$301,474
	SUBTOTAL:	\$2,311,304
	PROFESSIONAL FEES 15%	\$346,696
	SUBTOTAL:	\$2,658,000
	PERCENT ELIGIBLE	47%
	Eligible Project Total:	\$1,249,260

Notes:



Impact Fee CIP Cost Estimate 16" Waterline - Limmer Loop



Project ID : 2026-L3	Project Start:	2021
Project Description:	Project Completion:	2026

1,600 linear feet of 16" waterline to transfer water from the existing 890-ft PP at Ed Schmidt Blvd to Anderson St in Hutto Square (for expanding 890-ft PP)

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	1600 LF of 16" waterline	\$305,482
	SUBTOTAL:	\$305,482
	CONTINGENCY	15%
		\$45,822
	SUBTOTAL:	\$351,304
	PROFESSIONAL FEES	15%
		\$52,696
	SUBTOTAL:	\$404,000
	PERCENT ELIGIBLE	100%
Eligible Project Total:		\$404,000

Notes:



Impact Fee CIP Cost Estimate
12" Waterline - FM 1660/Mager Ln



Project ID : 2024-L4 **Project Start:** 2021

Project Description: **Project Completion:** 2026

4,800 linear feet of 12" waterline to transfer water from Delby St in Hutto Square to Carol Dr in Carol Meadows (for expanding 890-ft PP)

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	4,800 LF of 12" waterline	\$550,473
	SUBTOTAL:	\$550,473
	CONTINGENCY 15%	\$82,571
	SUBTOTAL:	\$633,043
	PROFESSIONAL FEES 15%	\$94,957
	SUBTOTAL:	\$728,000
	PERCENT ELIGIBLE	100%
	Eligible Project Total:	\$728,000

Notes:



**Impact Fee CIP Cost Estimate
12" Waterline - Alliance Blvd (CR 108)**



Project ID : 2024-L5 **Project Start: 2021**

Project Description: **Project Completion: 2026**

2,400 linear feet of 12" waterline to transfer water for new development areas along Innovation Blvd

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	2,400 LF of 12" waterline	\$200,378
	SUBTOTAL:	\$200,378
	CONTINGENCY 15%	\$30,057
	SUBTOTAL:	\$230,435
	PROFESSIONAL FEES 15%	\$34,565
	SUBTOTAL:	\$265,000
	PERCENT ELIGIBLE	100%
	Eligible Project Total:	\$265,000

Notes:



Impact Fee CIP Cost Estimate
Jonah Water Service Transer Tier II South



Project ID : 2026-L6 **Project Start: 2021**

Project Description: **Project Completion: 2026**

7,910 linear feet of 8" waterline to transfer water to Coyote Trail

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	7,910 LF of 8" waterline	\$720,605
	SUBTOTAL:	\$720,605
	CONTINGENCY 15%	\$108,091
	SUBTOTAL:	\$828,696
	PROFESSIONAL FEES 15%	\$124,304
	SUBTOTAL:	\$953,000
	PERCENT ELIGIBLE	100%
	Eligible Project Total:	\$953,000

Notes:



**Impact Fee CIP Cost Estimate
16" Waterline - CR 132**



Project ID : 2025-L7 **Project Start: 2021**

Project Description: **Project Completion: 2026**

2,500 linear feet of 16" waterline to transfer water for new development areas at US79 / CR 132

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	2,500 LF of 16" waterline	\$339,509
	SUBTOTAL:	\$339,509
	CONTINGENCY 15%	\$50,926
	SUBTOTAL:	\$390,435
	PROFESSIONAL FEES 15%	\$58,565
	SUBTOTAL:	\$449,000
	PERCENT ELIGIBLE	51%
	Eligible Project Total:	\$228,979

Notes:



**Impact Fee CIP Cost Estimate
12" Waterline - CR 199**



Project ID : 2025-L8 **Project Start: 2021**

Project Description: **Project Completion: 2026**

3,300 linear feet of 12" waterline

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	3,300 LF of 12" waterline	\$276,749
	SUBTOTAL:	\$276,749
	CONTINGENCY 15%	\$41,512
	SUBTOTAL:	\$318,261
	PROFESSIONAL FEES 15%	\$47,739
	SUBTOTAL:	\$366,000
	PERCENT ELIGIBLE	51%
	Eligible Project Total:	\$186,651

Notes:



Impact Fee CIP Cost Estimate 12" Waterline



Project ID : 2026-L9 **Project Start:** 2021

Project Description: 4,000 linear feet of 12" waterline **Project Completion:** 2026

4,000 linear feet of 12" waterline

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	4,000 LF of 12" waterline	\$458,223
	SUBTOTAL:	\$458,223
	CONTINGENCY 15%	\$68,733
	SUBTOTAL:	\$526,957
	PROFESSIONAL FEES 15%	\$79,043
	SUBTOTAL:	\$606,000
	PERCENT ELIGIBLE	54%
Eligible Project Total:		\$328,107

Notes:



**Impact Fee CIP Cost Estimate
20" Waterline - CR 132**



Project ID : 2028-L10 **Project Start: 2027**

Project Description: **Project Completion: 2031**

800 linear feet of 20" waterline

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	800 LF of 20" waterline	\$152,741
	SUBTOTAL:	\$152,741
	CONTINGENCY 15%	\$22,911
	SUBTOTAL:	\$175,652
	PROFESSIONAL FEES 15%	\$26,348
	SUBTOTAL:	\$202,000
	PERCENT ELIGIBLE	36%
	Eligible Project Total:	\$73,257

Notes:



**Impact Fee CIP Cost Estimate
12" Waterline - Future Roadway**



Project ID : 2028-L11 **Project Start: 2027**

Project Description: **Project Completion: 2031**

3,800 linear feet of 12" waterline

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	3,800 LF of 12" waterline	\$318,336
	SUBTOTAL:	\$318,336
	CONTINGENCY 15%	\$47,750
	SUBTOTAL:	\$366,087
	PROFESSIONAL FEES 15%	\$54,913
	SUBTOTAL:	\$421,000
	PERCENT ELIGIBLE	36%
	Eligible Project Total:	\$152,678

Notes:



Impact Fee CIP Cost Estimate
12" Waterline - Future Carl Stern Drive



Project ID : 2028-L12 **Project Start: 2027**

Project Description: **Project Completion: 2031**

4,300 linear feet of 12" waterline

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	4,300 LF of 12" waterline	\$360,681
	SUBTOTAL:	\$360,681
	CONTINGENCY 15%	\$54,102
	SUBTOTAL:	\$414,783
	PROFESSIONAL FEES 15%	\$62,217
	SUBTOTAL:	\$477,000
	PERCENT ELIGIBLE	54%
	Eligible Project Total:	\$258,262

Notes:



**Impact Fee CIP Cost Estimate
36" Waterline - US 79**



Project ID : 2026-L13 **Project Start: 2021**

Project Description: **Project Completion: 2027**

9,200 linear feet of 36" waterline

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	9,200 LF of 36" waterline	\$3,495,652
	SUBTOTAL:	\$3,495,652
	CONTINGENCY 15%	\$524,348
	SUBTOTAL:	\$4,020,000
	PROFESSIONAL FEES 15%	\$603,000
	SUBTOTAL:	\$4,623,000
	PERCENT ELIGIBLE	62%
	Eligible Project Total:	\$2,856,402

Notes:



**Impact Fee CIP Cost Estimate
12" Waterline - FM 1660**



Project ID : 2029-L14 **Project Start: 2027**

Project Description: **Project Completion: 2031**

5,400 linear feet of 12" waterline

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	5,400 LF of 12" waterline	\$582,987
	SUBTOTAL:	\$582,987
	CONTINGENCY 15%	\$87,448
	SUBTOTAL:	\$670,435
	PROFESSIONAL FEES 15%	\$100,565
	SUBTOTAL:	\$771,000
	PERCENT ELIGIBLE	79%
	Eligible Project Total:	\$612,599

Notes:



**Impact Fee CIP Cost Estimate
12" Waterline - CR 163**



Project ID : 2029-L15 **Project Start: 2027**

Project Description: **Project Completion: 2031**

3,900 linear feet of 12" waterline

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	3,900 LF of 12" waterline	\$421,172
	SUBTOTAL:	\$421,172
	CONTINGENCY 15%	\$63,176
	SUBTOTAL:	\$484,348
	PROFESSIONAL FEES 15%	\$72,652
	SUBTOTAL:	\$557,000
	PERCENT ELIGIBLE	63%
	Eligible Project Total:	\$348,362

Notes:



**Impact Fee CIP Cost Estimate
Avery Lake Waterline**



Project ID : 2022-L16	Project Start:	2021
Project Description:	Project Completion:	2026

2,500 linear feet of 12" waterline

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	12" Water Line	\$725,898
	SUBTOTAL:	\$725,898
	CONTINGENCY 15%	\$108,885
	SUBTOTAL:	\$834,783
	PROFESSIONAL FEES 15%	\$125,217
	SUBTOTAL:	\$960,000
	PERCENT ELIGIBLE	80%
	Eligible Project Total:	\$768,000

Notes:



**Impact Fee CIP Cost Estimate
Frameswitch 890' PP Pump Upgrades**



Project ID : 2026-P5 **Project Start: 2021**

Project Description: **Project Completion: 2027**

Replace 4 50 HP 890' PP pumps with 4 150 HP 890' PP pumps

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	Four 150 HP Pumps	\$378,072
	SUBTOTAL:	\$378,072
	CONTINGENCY 15%	\$56,711
	SUBTOTAL:	\$434,783
	PROFESSIONAL FEES 15%	\$65,217
	SUBTOTAL:	\$500,000
	PERCENT ELIGIBLE	100%
	Eligible Project Total:	\$500,000

Notes:



**Impact Fee CIP Cost Estimate
Well Capacity Increase to 5.7 MGD**



Project ID : 2022-W1 **Project Start: 2021**

Project Description: **Project Completion: 2026**

Install 2 new Hooper wells, Drill one new Simsboro well, repermit the existing Simsboro well No. 12.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	Two new Hooper Wells	\$1,659,105
2	One new Simsboro Well	\$829,553
3	Repermit existing Simsboro well No. 12	\$300,000
		SUBTOTAL: \$2,788,658
		CONTINGENCY 15% \$418,299
		SUBTOTAL: \$3,206,956
		PROFESSIONAL FEES 15% \$481,043
		SUBTOTAL: \$3,688,000
		PERCENT ELIGIBLE 100%
		Eligible Project Total: \$3,688,000

Notes:



Impact Fee CIP Cost Estimate
Well Collection Capacity Increase to 5.7 MGD



Project ID : 2022-W2	Project Start:	2021
Project Description:	Project Completion:	2026

Install +/- 21,000 LF of 16" and 12" well collection piping.

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	16" and 12" piping	\$2,990,548
	SUBTOTAL:	\$2,990,548
	CONTINGENCY 15%	\$448,582
	SUBTOTAL:	\$3,439,130
	PROFESSIONAL FEES 15%	\$515,870
	SUBTOTAL:	\$3,955,000
	PERCENT ELIGIBLE	100%
Eligible Project Total:		\$3,955,000

Notes:



Impact Fee CIP Cost Estimate 5 MGD Brackish Water Treatment Plant



Project ID : 2027-W3 **Project Start: 2027**

Project Description: **Project Completion: 2031**

5 MGD brackish water treatment and cooling, 3 lower trinity aquifer wells, 1 injection well.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	5 MGD brackish WTP and cooling	\$17,300,000
2	Three lower trinity aquifer wells	\$5,060,000
3	One injection well	\$404,000
		SUBTOTAL: \$22,764,000
		CONTINGENCY 15% \$3,414,600
		SUBTOTAL: \$26,178,600
		PROFESSIONAL FEES 15% \$3,926,790
		SUBTOTAL: \$30,105,390
		PERCENT ELIGIBLE 54%
Eligible Project Total:		\$16,256,911

Notes:

**APPENDIX B
WASTEWATER SYSTEM
PROJECT COST ESTIMATES**



Impact Fee CIP Cost Estimate
Lakeside Estates Lift Station Abandonement



Project ID : 2020-I1 **Project Start: 2020**

Project Description: **Project Completion: 2021**

8,700 LF of 12", 15", and 18" interceptor to decommission the Lakeside Estates Lift Station and provide additional capacity for future developments in the area.

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	Wastewater Interceptor and Lift Station Decommissioning	\$1,372,497
	SUBTOTAL:	\$1,372,497
	CONTINGENCY	\$0
	SUBTOTAL:	\$1,372,497
	PROFESSIONAL FEES	0% \$211,975
	SUBTOTAL:	\$1,584,472
	PERCENT ELIGIBLE	74%
	Eligible Project Total:	\$1,168,995

Notes:



Impact Fee CIP Cost Estimate

Glenwood Lift Station Decomission, Interceptor, and 2- WWTP Lift Stations



Project ID : 2023-I2 **Project Start: 2019**

Project Description: **Project Completion: 2023**

10,500 LF of 30" interceptor to take Glenwood lift station offline and transfer flows to the South WWTP. Includes decommissioning of Glenwood LS, construction of new lift station at the south WWTP, and construction of new lift station at the Central WWTP.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	30" Wastewater Line	\$3,587,397
2	South Lift Station	\$1,529,970
3	Central Lift Station	\$1,419,569
	SUBTOTAL:	\$6,536,936
	CONTINGENCY 15%	\$980,540
	SUBTOTAL:	\$7,517,476
	PROFESSIONAL FEES	\$1,127,621
	SUBTOTAL:	\$8,645,098
	PERCENT ELIGIBLE	41%
Eligible Project Total:		\$3,554,167

Notes:



Impact Fee CIP Cost Estimate The Landing Pipe Bursting



Project ID : 2022-I3	Project Start:	2021
Project Description:	Project Completion:	2022

Pipe burst existing 500 LF of 12-inch pipe to 15-inch on Whitfield, located north of Co-op to provide capacity for the future Landing development

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	500 LF of 12" to 15" pipe bursting	\$189,317
SUBTOTAL:		\$189,317
	CONTINGENCY	15%
		\$28,398
SUBTOTAL:		\$217,715
	PROFESSIONAL FEES	15%
		\$32,657
SUBTOTAL:		\$250,372
	PERCENT ELIGIBLE	40%
Eligible Project Total:		\$99,545

Notes:



Impact Fee CIP Cost Estimate Phosphorus Chemical Dosing



Project ID : 2023-P1	Project Start:	2021
Project Description:	Project Completion:	2023

Adding Phosphorus chemical dosing system to the Central WWTP to meet TCEQ permit requirements.

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	Phosphorus chemical dosing	\$317,580
	SUBTOTAL:	\$317,580
	CONTINGENCY	15%
		\$47,637
	SUBTOTAL:	\$365,217
	PROFESSIONAL FEES	15%
		\$54,783
	SUBTOTAL:	\$420,000
	PERCENT ELIGIBLE	100%
	Eligible Project Total:	\$420,000

Notes:



Impact Fee CIP Cost Estimate
South WWTP from 2.0 to 4.0 MGD Capacity



Project ID : 2024-P2	Project Start:	2021
Project Description:	Project Completion:	2023

Expand South WWTP plant capacity from 2.00 mgd to 4.00 mgd.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	WWTP Expansion from 2 mgd to 4 mgd	\$22,835,025
	SUBTOTAL:	\$22,835,025
	CONTINGENCY 15%	\$3,425,254
	SUBTOTAL:	\$26,260,278
	PROFESSIONAL FEES 15%	\$3,939,042
	SUBTOTAL:	\$30,199,320
	PERCENT ELIGIBLE	80%
	Eligible Project Total:	\$24,159,456

Notes:



Impact Fee CIP Cost Estimate Cottonwood Creek Parallel Interceptor



Project ID : 2030-I5	Project Start:	2028
Project Description:	Project Completion:	2030

700 LF of 18", 1,700 LF of 24", 3,900 LF of 27", and 2,100 LF of 30" Interceptor along east side of Cottonwood Creek to increase capacity of current Cottonwood Creek interceptor to ultimate conditions.

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	Wastewater Interceptor	\$3,084,478
	SUBTOTAL:	\$3,084,478
	CONTINGENCY	15%
		\$462,672
	SUBTOTAL:	\$3,547,150
	PROFESSIONAL FEES	15%
		\$532,072
	SUBTOTAL:	\$4,079,222
	PERCENT ELIGIBLE	75%
Eligible Project Total:		\$3,059,417

Notes:



Impact Fee CIP Cost Estimate Brushy Creek Interceptor & LS



Project ID : 2025-I4	Project Start:	2023
Project Description:	Project Completion:	2025

2,800 LF of 36" and 15,100 LF of 42" interceptor to take Enclave LS offline and transfer flows to the South WWTP. Includes inverted siphon with two access vaults and on-site LS at WWTP. Decommissioning of Enclave LS is included in this project.

Opinion of Probable Construction Cost

ITEM	DESCRIPTION	TOTAL COST
1	Wastewater Interceptor	\$10,269,006
2	South Wastewater Treatment Plant Lift Station	\$496,968
	SUBTOTAL:	\$10,765,974
	CONTINGENCY	15%
		\$1,614,896
	SUBTOTAL:	\$12,380,870
	PROFESSIONAL FEES	15%
		\$1,857,130
	SUBTOTAL:	\$14,238,000
	PERCENT ELIGIBLE	23%
	Eligible Project Total:	\$3,270,719

Notes:



**Impact Fee CIP Cost Estimate
Avery Lake Interceptor Phase I**



Project ID : 2028-I6	Project Start:	2025
Project Description:	Project Completion:	2028

Approximately 3,000 LF of 24" wastewater interceptor to serve the area South of hwy 79 and west of SH-130.

Opinion of Probable Construction Cost		
ITEM	DESCRIPTION	TOTAL COST
1	24" Wastewater Line	\$1,344,536
	SUBTOTAL:	\$1,344,536
	CONTINGENCY 15%	\$201,680
	SUBTOTAL:	\$1,546,217
	PROFESSIONAL FEES 15%	\$231,932
	SUBTOTAL:	\$1,778,149
	PERCENT ELIGIBLE	15%
	Eligible Project Total:	\$266,722

Notes:

**APPENDIX C
WATER AND WASTEWATER
IMPACT FEE ANALYSIS**

City of Hutto - 2020 Water Impact Fee Study
Impact Fee Summary Table
Water Service Area

0	Existing Fund Balance	\$ 1,200,000
1	Existing Number of Service Units	6,154
2	Total Number of Services Units for Planning Period	14,551
3	Additional Service Units Added During Planning Period (Line 2 - Line 1)	8,397
4	Total Cost of the Water Impact Fee CIP	\$ 144,786,354
5	Recoverable Cost for Impact Fee Planning Period	\$ 91,097,518
6	Percent Recoverable for Water Impact Fee Planning Period (Line 5 / Line 4)	62.92%
7	Financing Costs (From Financial Analysis)	\$ 61,831,827
8	Interest Earnings (From Financial Analysis)	\$ (3,407,035)
9	Recoverable Cost of Water Impact Fee and Financing Costs (Line 5 + Line 7 + Line 8 - Line 0)	\$ 148,322,310
10	Pre-Credit Maximum Fee (Line 9 / Line 3)	\$ 17,664
11	Credit for Utility Revenues (From Financial Analysis)	\$ (77,139,348)
12	Recoverable Cost of Water Impact Fee and Financing (Line 9 + Line 11)	\$ 71,182,962
13	Maximum Assessable Fee (Line 12 / Line 3)	\$ 8,477

City of Hutto - 2020 Water Impact Fee Study
Summary of Water Impact Fee Determination
Water Service Area

Recoverable Impact Fee CIP Costs	\$ 91,097,518	Table 4.1, Plus Inflation
Financing Cost	61,831,827	See Detail Below
Existing Fund Balance	(1,200,000)	Water Appendices - page 3
Interest Earnings	(3,407,035)	Water Appendices - page 6
Pre Credit Recoverable Cost for Impact Fee	\$ 148,322,310	Sum of Above
Credit for Utility Revenues	(77,139,348)	Water Appendices - page 9
Maximum Recoverable Cost for Impact Fee	\$ 71,182,962	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is the Table 4.1 Water CIP List. Inflation is ENR's - 20 Year Average CCI of 3.16%.

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	\$ 71,150,436	Water Appendices - page 5
Existing Annual Debt Service	70,755,894	Water Appendices - page 5
Principal Component (New and Existing Debt)	(80,074,504)	Water Appendices - page 3
Financing Costs	<u>\$ 61,831,827</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Reference is page 3 of Water Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 0.41% 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 6 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 9 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 Hutto - 2020 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⁾	0.41%
Annual Service Unit Growth ⁽²⁾	840
Existing Fund Balance ⁽³⁾	1,200,000
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 36,330,169
Non-debt Funded Project Cost ⁽⁵⁾	11,023,015
New Project Cost Funded Through New Debt ⁽⁶⁾	43,744,334
Total Recoverable Project Cost ⁽⁷⁾	\$ 91,097,518

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal</u> ⁽⁸⁾	<u>30-Year Term</u> ⁽⁹⁾	<u>20-Year Term</u> ⁽⁹⁾
1	\$ 3,787,811	3.02%	2.46%
2	3,907,506	3.17%	2.61%
3	4,030,983	3.32%	2.76%
4	4,158,362	3.47%	2.91%
5	4,289,766	3.62%	3.06%
6	4,425,323	3.77%	3.21%
7	4,565,163	3.92%	3.36%
8	4,709,422	4.07%	3.51%
9	4,858,240	4.22%	3.66%
10	5,011,760	4.37%	3.81%
Total	\$ 43,744,334		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures</u> ⁽¹⁰⁾
1	\$ 954,480
2	2,878,547
3	4,863,414
4	5,017,098
5	5,175,639
6	5,339,189
7	5,507,907
8	5,681,957
9	5,861,507
10	6,046,731
11	4,935,000
12	2,505,880
Total	54,767,349

- (1) Average of 10-Year TexStar Interest Rate Average as of October 2020 and City's TexStar Yield as of July 2020
- (2) Derived from Table No. 1.1 - 2021 and 2031 LUEs
- (3) Per discussions with City Staff and City files
- (4) Per discussions with City Staff and City files
- (5) This assumes 20% of new project costs funded through sources other than debt, unless specified otherwise
- (6) This assumes 80% of new project costs funded through new debt issues, unless specified otherwise
- (7) Table 4.1 Water CIP List plus inflation
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest on debt from City's Financial Advisor November 2020 All in TIC; 15 Basis Points added per year
20-year term for waterline projects, 30-year for all other projects
- (10) Assumes new debt proceeds expended over a 2-year timeframe
Non-debt funded capital expenditures allocated per discussions with City Staff

City of Hutto - 2020 Water Impact Fee Study
Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary
Water Service Area

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	\$ 202,251	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 202,251
2	202,251	212,476	-	-	-	-	-	-	-	-	414,727
3	202,251	212,476	223,182	-	-	-	-	-	-	-	637,909
4	202,251	212,476	223,182	234,391	-	-	-	-	-	-	872,300
5	202,251	212,476	223,182	234,391	246,125	-	-	-	-	-	1,118,425
6	202,251	212,476	223,182	234,391	246,125	258,406	-	-	-	-	1,376,831
7	202,251	212,476	223,182	234,391	246,125	258,406	271,259	-	-	-	1,648,091
8	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	-	-	1,932,799
9	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	-	2,231,577
10	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
11	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
12	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
13	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
14	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
15	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
16	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
17	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
18	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
19	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
20	202,251	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,545,075
21	160,123	212,476	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,502,947
22	160,123	168,397	223,182	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,458,868
23	160,123	168,397	177,067	234,391	246,125	258,406	271,259	284,708	298,779	313,498	2,412,753
24	160,123	168,397	177,067	186,150	246,125	258,406	271,259	284,708	298,779	313,498	2,364,511
25	160,123	168,397	177,067	186,150	195,664	258,406	271,259	284,708	298,779	313,498	2,314,050
26	160,123	168,397	177,067	186,150	195,664	205,628	271,259	284,708	298,779	313,498	2,261,272
27	160,123	168,397	177,067	186,150	195,664	205,628	216,062	284,708	298,779	313,498	2,206,075
28	160,123	168,397	177,067	186,150	195,664	205,628	216,062	226,987	298,779	313,498	2,148,354
29	160,123	168,397	177,067	186,150	195,664	205,628	216,062	226,987	238,423	313,498	2,087,998
30	160,123	168,397	177,067	186,150	195,664	205,628	216,062	226,987	238,423	250,393	2,024,894
31	-	168,397	177,067	186,150	195,664	205,628	216,062	226,987	238,423	250,393	1,864,770
32	-	-	177,067	186,150	195,664	205,628	216,062	226,987	238,423	250,393	1,696,373
33	-	-	-	186,150	195,664	205,628	216,062	226,987	238,423	250,393	1,519,307
34	-	-	-	-	195,664	205,628	216,062	226,987	238,423	250,393	1,333,157
35	-	-	-	-	-	205,628	216,062	226,987	238,423	250,393	1,137,493
36	-	-	-	-	-	-	216,062	226,987	238,423	250,393	931,865
37	-	-	-	-	-	-	-	226,987	238,423	250,393	715,803
38	-	-	-	-	-	-	-	-	238,423	250,393	488,816
39	-	-	-	-	-	-	-	-	-	250,393	250,393
	\$ 5,646,260	\$ 5,933,485	\$ 6,234,305	\$ 6,549,315	\$ 6,879,135	\$ 7,224,409	\$ 7,585,809	\$ 7,964,032	\$ 8,359,804	\$ 8,773,881	\$ 71,150,436

City of Hutto - 2020 Water Impact Fee Study
Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary
Water Service Area

II. Summary of Annual Expenses

Year	New Annual Debt Service⁽¹⁾	Annual Capital Expenditures⁽²⁾	Annual Bond Proceeds⁽²⁾	Existing Annual Debt Service⁽³⁾	Annual Credit⁽⁴⁾	Total Expense
1	\$ 202,251	\$ 954,480	\$ (3,787,811)	\$ 1,748,051	\$ (234,163)	\$ (1,117,192)
2	414,727	2,878,547	(3,907,506)	1,791,241	(472,937)	704,073
3	637,909	4,863,414	(4,030,983)	1,827,732	(716,145)	2,581,928
4	872,300	5,017,098	(4,158,362)	2,087,444	(1,045,033)	2,773,447
5	1,118,425	5,175,639	(4,289,766)	2,150,526	(1,325,737)	2,829,086
6	1,376,831	5,339,189	(4,425,323)	2,171,393	(1,597,243)	2,864,848
7	1,648,091	5,507,907	(4,565,163)	2,172,435	(1,866,428)	2,896,843
8	1,932,799	5,681,957	(4,709,422)	2,174,463	(2,143,552)	2,936,245
9	2,231,577	5,861,507	(4,858,240)	2,171,916	(2,427,087)	2,979,673
10	2,545,075	6,046,731	(5,011,760)	2,176,398	(2,724,638)	3,031,805
11	2,545,075	4,935,000	-	2,171,974	(2,722,085)	6,929,964
12	2,545,075	2,505,880	-	2,172,734	(2,722,523)	4,501,165
13	2,545,075	-	-	2,171,981	(2,722,089)	1,994,967
14	2,545,075	-	-	2,174,038	(2,723,276)	1,995,837
15	2,545,075	-	-	2,173,234	(2,722,812)	1,995,497
16	2,545,075	-	-	2,172,214	(2,722,224)	1,995,065
17	2,545,075	-	-	2,174,353	(2,723,458)	1,995,970
18	2,545,075	-	-	2,172,685	(2,722,496)	1,995,265
19	2,545,075	-	-	2,123,488	(2,694,105)	1,974,458
20	2,545,075	-	-	2,123,622	(2,694,182)	1,974,514
21	2,502,947	-	-	2,339,358	(2,794,367)	2,047,938
22	2,458,868	-	-	2,339,402	(2,768,956)	2,029,314
23	2,412,753	-	-	2,338,646	(2,741,907)	2,009,491
24	2,364,511	-	-	1,856,023	(2,435,560)	1,784,975
25	2,314,050	-	-	1,857,879	(2,407,511)	1,764,418
26	2,261,272	-	-	1,856,044	(2,375,995)	1,741,321
27	2,206,075	-	-	1,338,751	(2,045,626)	1,499,200
28	2,148,354	-	-	1,337,743	(2,011,735)	1,474,362
29	2,087,998	-	-	1,338,952	(1,977,603)	1,449,347
30	2,024,894	-	-	1,338,146	(1,940,722)	1,422,318
31	1,864,770	-	-	1,339,355	(1,849,017)	1,355,109
32	1,696,373	-	-	1,338,348	(1,751,258)	1,283,463
33	1,519,307	-	-	1,339,154	(1,649,542)	1,208,918
34	1,333,157	-	-	1,339,557	(1,542,353)	1,130,361
35	1,137,493	-	-	1,339,456	(1,429,382)	1,047,567
36	931,865	-	-	1,338,751	(1,310,313)	960,303
37	715,803	-	-	1,339,355	(1,185,978)	869,180
38	488,816	-	-	1,339,053	(1,054,815)	773,054
39	250,393	-	-	-	(144,495)	105,898
	\$ 71,150,436	\$ 54,767,349	\$ (43,744,334)	\$ 70,755,894	\$ (77,139,348)	\$ 75,789,997

(1) Water Appendices - page 4 Section I
(2) Water Appendices - page 3
(3) Eligible debt funded projects as a percent of total principal times original annual debt service
(4) Water Appendices - page 9

City of Hutto - 2020 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							\$ 1,200,000
1	\$ 8,477	840	\$ 7,118,296	\$ (1,117,192)	\$ 8,235,488	\$ 21,803	9,457,291
2	8,477	840	7,118,296	704,073	6,414,223	51,924	15,923,438
3	8,477	840	7,118,296	2,581,928	4,536,368	74,586	20,534,392
4	8,477	840	7,118,296	2,773,447	4,344,849	93,098	24,972,339
5	8,477	840	7,118,296	2,829,086	4,289,210	111,179	29,372,728
6	8,477	840	7,118,296	2,864,848	4,253,449	129,148	33,755,325
7	8,477	840	7,118,296	2,896,843	4,221,453	147,051	38,123,829
8	8,477	840	7,118,296	2,936,245	4,182,051	164,881	42,470,761
9	8,477	840	7,118,296	2,979,673	4,138,623	182,614	46,791,998
10	8,477	840	7,118,296	3,031,805	4,086,491	200,224	51,078,714
11	-	-	-	6,929,964	(6,929,964)	195,216	44,343,966
12	-	-	-	4,501,165	(4,501,165)	172,583	40,015,384
13	-	-	-	1,994,967	(1,994,967)	159,973	38,180,391
14	-	-	-	1,995,837	(1,995,837)	152,448	36,337,002
15	-	-	-	1,995,497	(1,995,497)	144,891	34,486,396
16	-	-	-	1,995,065	(1,995,065)	137,304	32,628,635
17	-	-	-	1,995,970	(1,995,970)	129,686	30,762,350
18	-	-	-	1,995,265	(1,995,265)	122,035	28,889,121
19	-	-	-	1,974,458	(1,974,458)	114,398	27,029,061
20	-	-	-	1,974,514	(1,974,514)	106,771	25,161,318
21	-	-	-	2,047,938	(2,047,938)	98,963	23,212,343
22	-	-	-	2,029,314	(2,029,314)	91,011	21,274,039
23	-	-	-	2,009,491	(2,009,491)	83,104	19,347,652
24	-	-	-	1,784,975	(1,784,975)	75,666	17,638,343
25	-	-	-	1,764,418	(1,764,418)	68,700	15,942,625
26	-	-	-	1,741,321	(1,741,321)	61,795	14,263,099
27	-	-	-	1,499,200	(1,499,200)	55,405	12,819,304
28	-	-	-	1,474,362	(1,474,362)	49,537	11,394,479
29	-	-	-	1,449,347	(1,449,347)	43,746	9,988,878
30	-	-	-	1,422,318	(1,422,318)	38,039	8,604,598
31	-	-	-	1,355,109	(1,355,109)	32,501	7,281,990
32	-	-	-	1,283,463	(1,283,463)	27,225	6,025,752
33	-	-	-	1,208,918	(1,208,918)	22,227	4,839,061
34	-	-	-	1,130,361	(1,130,361)	17,523	3,726,223
35	-	-	-	1,047,567	(1,047,567)	13,130	2,691,787
36	-	-	-	960,303	(960,303)	9,068	1,740,551
37	-	-	-	869,180	(869,180)	5,354	876,725
38	-	-	-	773,054	(773,054)	2,010	105,681
39	-	-	-	105,898	(105,898)	216	-
			<u>\$ 71,182,962</u>	<u>\$ 75,789,997</u>		<u>\$ 3,407,035</u>	

City of Hutto - 2020 Water Impact Fee Study
 Capital Improvement Plan for Impact Fees
 Impact Fee Calculation
 Water Service Area

Year	Number of Years to End of Period	Future Value Escalation		Annual Service Units		Annual Expense	
		Interest Rate Factor	Recovery Fee Factor	Actual	Escalated	Actual	Escalated
1	39	1.1706	1.0000	840	983	\$ (1,117,192)	\$ (1,307,802)
2	38	1.1658	1.0000	840	979	704,073	820,833
3	37	1.1611	1.0000	840	975	2,581,928	2,997,811
4	36	1.1563	1.0000	840	971	2,773,447	3,207,031
5	35	1.1516	1.0000	840	967	2,829,086	3,258,011
6	34	1.1469	1.0000	840	963	2,864,848	3,285,722
7	33	1.1422	1.0000	840	959	2,896,843	3,308,851
8	32	1.1376	1.0000	840	955	2,936,245	3,340,163
9	31	1.1329	1.0000	840	951	2,979,673	3,375,725
10	30	1.1283	1.0000	840	947	3,031,805	3,420,761
11	29	1.1237	1.0000	-	-	6,929,964	7,787,094
12	28	1.1191	1.0000	-	-	4,501,165	5,037,238
13	27	1.1145	1.0000	-	-	1,994,967	2,223,444
14	26	1.1100	1.0000	-	-	1,995,837	2,215,331
15	25	1.1054	1.0000	-	-	1,995,497	2,205,909
16	24	1.1009	1.0000	-	-	1,995,065	2,196,427
17	23	1.0964	1.0000	-	-	1,995,970	2,188,450
18	22	1.0920	1.0000	-	-	1,995,265	2,178,744
19	21	1.0875	1.0000	-	-	1,974,458	2,147,221
20	20	1.0831	1.0000	-	-	1,974,514	2,138,514
21	19	1.0786	1.0000	-	-	2,047,938	2,208,979
22	18	1.0742	1.0000	-	-	2,029,314	2,179,953
23	17	1.0698	1.0000	-	-	2,009,491	2,149,844
24	16	1.0655	1.0000	-	-	1,784,975	1,901,849
25	15	1.0611	1.0000	-	-	1,764,418	1,872,270
26	14	1.0568	1.0000	-	-	1,741,321	1,840,216
27	13	1.0525	1.0000	-	-	1,499,200	1,577,875
28	12	1.0482	1.0000	-	-	1,474,362	1,545,398
29	11	1.0439	1.0000	-	-	1,449,347	1,512,974
30	10	1.0396	1.0000	-	-	1,422,318	1,478,696
31	9	1.0354	1.0000	-	-	1,355,109	1,403,070
32	8	1.0312	1.0000	-	-	1,283,463	1,323,462
33	7	1.0270	1.0000	-	-	1,208,918	1,241,504
34	6	1.0228	1.0000	-	-	1,130,361	1,156,089
35	5	1.0186	1.0000	-	-	1,047,567	1,067,036
36	4	1.0144	1.0000	-	-	960,303	974,156
37	3	1.0103	1.0000	-	-	869,180	878,119
38	2	1.0062	1.0000	-	-	773,054	777,814
39	1	1.0021	1.0000	-	-	105,898	106,115
					9,651		\$ 83,220,898

Annual Interest Rate:	0.41%
Present Value of Initial Impact Fee Fund Balance	\$ 1,200,000
Total Escalated Expense for Entire Period	\$ 83,220,898
Less Future Value of Initial Impact Fee Fund Balance	1,407,612
Sub-Total	\$ 81,813,286
Total Escalated Service Units	9,651
Maximum Assessable Impact Fee for Water Service Area	\$ 8,477

City of Hutto - 2020 Water Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Project Funding
Water Service Area

Impact Fee Project Name⁽¹⁾	Cost In Service Area ⁽¹⁾	Percent in Demand	Impact Fee Cost⁽²⁾	Debt Funded⁽³⁾		Non-Debt Funded⁽³⁾
				Existing	Proposed	
12" Waterline - Future Carl Stern Dr (S 130 South)	\$ 940,000	72%	\$ 679,468	\$ 679,468	\$ -	\$ -
12" Waterline - West of FM 685	156,000	72%	112,763	112,763	-	-
12" Waterline - Front Street	376,000	70%	263,200	263,200	-	-
16" Waterline - Front Street	152,000	70%	106,400	106,400	-	-
20" Waterline - Front Street	595,000	70%	416,500	416,500	-	-
24" Waterline - Front Street	548,000	70%	383,600	383,600	-	-
Heart of Texas Groundwater and Wells	22,231,249	49%	10,998,618	10,998,618	-	-
Heart of Texas Transmission Pipeline	33,013,368	63%	20,939,908	20,939,908	-	-
Heart of Texas Booster Pumping Station	3,785,391	9%	324,462	-	-	-
Shiloh Booster Station Upgrade to 3.27 MGD	500,000	36%	213,134	44,725	134,727	33,682
Shiloh Pumping Station Upgrade to 5.70 MGD	4,900,000	47%	2,765,221	580,263	1,747,966	436,992
Heart of Texas In-Line 5.7 MGD Pumping Station	5,250,000	47%	2,962,737	621,711	1,872,821	468,205
Frame Switch 890 PP 5.7 MGD Pump Station	4,290,000	47%	2,420,979	508,026	1,530,362	382,591
Frame Switch 801 PP 6.48 MGD Pump Station	2,960,000	47%	1,670,419	350,526	1,055,914	263,979
24" Waterline - US 79	3,085,280	50%	1,837,013	-	1,469,611	367,403
Heart of Texas 16" Parallel Pipeline	2,658,000	47%	1,488,325	-	1,190,660	297,665
12" Waterline - FM 1660/Mager Ln	728,000	100%	867,314	-	693,851	173,463
12" Waterline - Alliance Blvd (CR 108)	265,000	100%	315,712	-	252,569	63,142
Jonah Water Service Transfer Tier II South	953,000	100%	1,135,371	-	908,297	227,074
16" Waterline - CR 132	449,000	51%	272,798	-	218,238	54,560
12" Waterline - CR 199	366,000	51%	222,370	-	177,896	44,474
12" Waterline	606,000	54%	390,895	-	312,716	78,179
20" Waterline - CR 132	202,000	36%	87,275	-	69,820	17,455
12" Waterline - Future Roadway	421,000	36%	181,895	-	145,516	36,379
12" Waterline - Future Carl Stern Dr	477,000	54%	307,685	-	246,148	61,537
36" Waterline - US 79	4,623,000	62%	3,403,018	-	2,722,415	680,604
12" Waterline - FM 1660	771,000	79%	729,829	-	583,864	145,966
12" Waterline - CR 163	557,000	63%	415,026	-	332,021	83,005
Avery Lake Waterline	960,000	80%	914,968	-	731,975	182,994
Frameswitch 890' PP Pump Upgrades	500,000	100%	595,683	-	476,546	119,137
Well Capacity Increase to 5.7 MGD	3,688,000	100%	4,393,754	-	3,515,004	878,751
Well Collection Capacity Increase to 5.7 MGD	3,955,000	100%	4,711,849	-	3,769,479	942,370
5 MGD Brackish Water Treatment Plant	30,105,390	54%	19,367,916	-	15,494,333	3,873,583
Frameswitch Pumping Station	1,747,068	37%	778,290	-	622,632	155,658
Carl Stern Pumping Station	1,226,264	46%	668,299	-	534,639	133,660
North West Pumping Station	4,238,004	45%	2,258,508	-	1,806,806	451,702
CR 108 Waterline	1,575,000	32%	600,448	-	480,358	120,090
890' Pressure Plane Expansion	250,000	50%	148,921	-	119,137	29,784
Water Supply Study	200,000	75%	178,705	-	142,964	35,741
2023 Water Impact Fee Update	39,670	100%	47,261	-	-	47,261
16" Waterline - Limmer Loop	404,000	100%	481,311	-	385,049	96,262
Water Impact Fee Update	39,670	100%	39,670	-	-	39,670
Total	\$ 144,786,354		\$ 91,097,518	\$ 36,330,169	\$ 43,744,334	\$ 11,023,015

(1) Table 4.1 Water CIP List in 2020 Values

(2) Includes Construction Cost Index, ENR's - 20 Year Average 3.16%, Distributed evenly on future expenses

(3) Per discussions with City staff and City files

City of Hutto - 2020 Water Impact Fee Study

Capital Improvement Plan for Impact Fees

Credit Determination

Water Service Area

Year	Eligible Revenue Funded Cost ⁽¹⁾	Annual Service Units	Eligible Debt Service per Service Unit	Annual Growth in Service Units (Cumulative)	Credit for Annual Utility Rate Revenues
1	\$ 1,950,302	6,994	\$ 278.87	840	\$ 234,163
2	2,205,968	7,833	281.61	1,679	472,937
3	2,465,641	8,673	284.29	2,519	716,145
4	2,959,744	9,513	311.13	3,359	1,045,033
5	3,268,950	10,353	315.76	4,199	1,325,737
6	3,548,225	11,192	317.03	5,038	1,597,243
7	3,820,526	12,032	317.53	5,878	1,866,428
8	4,107,261	12,872	319.09	6,718	2,143,552
9	4,403,493	13,711	321.16	7,557	2,427,087
10	4,721,473	14,551	324.48	8,397	2,724,638
11	4,717,049	14,551	324.17	8,397	2,722,085
12	4,717,809	14,551	324.23	8,397	2,722,523
13	4,717,056	14,551	324.17	8,397	2,722,089
14	4,719,113	14,551	324.32	8,397	2,723,276
15	4,718,309	14,551	324.26	8,397	2,722,812
16	4,717,289	14,551	324.19	8,397	2,722,224
17	4,719,428	14,551	324.34	8,397	2,723,458
18	4,717,760	14,551	324.22	8,397	2,722,496
19	4,668,563	14,551	320.84	8,397	2,694,105
20	4,668,697	14,551	320.85	8,397	2,694,182
21	4,842,305	14,551	332.78	8,397	2,794,367
22	4,798,270	14,551	329.76	8,397	2,768,956
23	4,751,399	14,551	326.53	8,397	2,741,907
24	4,220,535	14,551	290.05	8,397	2,435,560
25	4,171,929	14,551	286.71	8,397	2,407,511
26	4,117,316	14,551	282.96	8,397	2,375,995
27	3,544,826	14,551	243.61	8,397	2,045,626
28	3,486,098	14,551	239.58	8,397	2,011,735
29	3,426,951	14,551	235.51	8,397	1,977,603
30	3,363,040	14,551	231.12	8,397	1,940,722
31	3,204,126	14,551	220.20	8,397	1,849,017
32	3,034,721	14,551	208.56	8,397	1,751,258
33	2,858,460	14,551	196.44	8,397	1,649,542
34	2,672,714	14,551	183.68	8,397	1,542,353
35	2,476,949	14,551	170.23	8,397	1,429,382
36	2,270,616	14,551	156.05	8,397	1,310,313
37	2,055,158	14,551	141.24	8,397	1,185,978
38	1,827,869	14,551	125.62	8,397	1,054,815
39	250,393	14,551	17.21	8,397	144,495
Total	\$ 141,906,330				\$ 77,139,348

2021 Service Units ⁽²⁾	6,154
Ten Year Growth in Service Units ⁽²⁾	8,397
Annual Growth in Service Units	<u>10</u> years 840
Credit Amount	\$ 77,139,348

(1) Water Appendices - page 5 Section II
(2) Derived from Table No. 1.1 - 2021 and 2031 LUEs

City of Hutto - 2020 Wastewater Impact Fee Study
Impact Fee Summary Table
Wastewater Service Area

0	Existing Fund Balance	\$ 940,000
1	Existing Number of Service Units	9,569
2	Total Number of Services Units for Planning Period	25,840
3	Additional Service Units Added During Planning Period (Line 2 - Line 1)	16,271
4	Total Cost of the Wastewater Impact Fee CIP	\$ 96,778,742
5	Recoverable Cost for Impact Fee Planning Period	\$ 62,578,979
6	Percent Recoverable for Wastewater Impact Fee Planning Period (Line 5 / Line 4)	64.66%
7	Financing Costs (From Financial Analysis)	\$ 31,337,426
8	Interest Earnings (From Financial Analysis)	\$ (2,266,310)
9	Recoverable Cost of Wastewater Impact Fee and Financing Costs (Line 5 + Line 7 + Line 8 - Line 0)	\$ 90,710,094
10	Pre-Credit Maximum Fee (Line 9 / Line 3)	\$ 5,575
11	Credit for Utility Revenues (From Financial Analysis)	\$ (47,909,130)
12	Recoverable Cost of Wastewater Impact Fee and Financing (Line 9 + Line 11)	\$ 42,800,965
13	Maximum Assessable Fee (Line 12 / Line 3)	\$ 2,631

City of Hutto - 2020 Wastewater Impact Fee Study
Summary of Wastewater Impact Fee Determination
Wastewater Service Area

Recoverable Impact Fee CIP Costs	\$ 62,578,979	Table 4.2, Plus Inflation
Financing Cost	31,337,426	See Detail Below
Existing Fund Balance	(940,000)	Wastewater Appendices - page 3
Interest Earnings	(2,266,310)	Wastewater Appendices - page 6
Pre Credit Recoverable Cost for Impact Fee	\$ 90,710,094	Sum of Above
Credit for Utility Revenues	(47,909,130)	Wastewater Appendices - page 9
Maximum Recoverable Cost for Impact Fee	\$ 42,800,964	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is the Table 4.2 Wastewater CIP List. Inflation is ENR's - 20 Year Average CCI of 3.16%.

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	\$ 61,421,677	Wastewater Appendices - page 5
Existing Annual Debt Service	23,273,781	Wastewater Appendices - page 5
Principal Component (New and Existing Debt)	(53,358,032)	Wastewater Appendices - page 3
Financing Costs	<u>\$ 31,337,426</u>	

Existing Fund Balance:

Represents impact fee revenue collected but not yet expended. Reference is page 3 of Wastewater Appendices.

Interest Earnings:

Represents the interest earned on cash flows and assumes a 0.41% 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 6 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 9 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 Hutto - 2020 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Calculation Assumptions
Wastewater Service Area

I. General Assumptions

Annual Interest Rate on Deposits ⁽¹⁾	0.41%
Annual Service Unit Growth ⁽²⁾	1,627
Existing Fund Balance ⁽³⁾	940,000
Portion of Projects Funded by Existing Debt ⁽⁴⁾	\$ 16,821,971
Non-debt Funded Project Cost ⁽⁵⁾	9,220,947
New Project Cost Funded Through New Debt ⁽⁶⁾	36,536,061
Total Recoverable Project Cost ⁽⁷⁾	\$ 62,578,979

II. New Debt Issues Assumptions

<u>Year</u>	<u>Principal ⁽⁸⁾</u>	<u>Interest ⁽⁹⁾</u>	<u>Term</u>
1	\$ 3,163,648	3.02%	30
2	3,263,619	3.17%	30
3	3,366,750	3.32%	30
4	3,473,139	3.47%	30
5	3,582,890	3.62%	30
6	3,696,110	3.77%	30
7	3,812,907	3.92%	30
8	3,933,395	4.07%	30
9	4,057,690	4.22%	30
10	4,185,913	4.37%	30
Total	\$ 36,536,061		

III. Capital Expenditure Assumptions

<u>Year</u>	<u>Annual Capital Expenditures ⁽¹⁰⁾</u>
1	\$ 798,439
2	2,405,494
3	4,063,332
4	4,191,733
5	4,324,192
6	4,460,836
7	4,601,799
8	4,747,216
9	4,897,228
10	5,051,980
11	4,121,801
12	2,092,956
Total	\$ 45,757,007

- (1) Average of 10-Year TexStar Interest Rate Average as of October 2020 and City's TexStar Yield as of July 2020
- (2) Derived from Table No. 1.1 - 2021 and 2031 LUEs
- (3) Per discussions with City Staff and City files
- (4) Per discussions with City Staff and City files
- (5) This assumes 20% of new project costs funded through sources other than debt, unless specified otherwise
- (6) This assumes 80% of new project costs funded through new debt issues, unless specified otherwise
- (7) Table 4.2 Wastewater CIP List plus inflation
- (8) Assumes new debt issued in equal annual amounts
- (9) Estimated interest on debt from City's Financial Advisor November 2020 All in TIC; 15 Basis Points added per year
- (10) Assumes new debt proceeds expended over a 2-year timeframe
 Non-debt funded capital expenditures allocated per discussions with City Staff

City of Hutto - 2020 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary
Wastewater Service Area

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	\$ 161,902	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 161,902
2	161,902	170,268	-	-	-	-	-	-	-	-	332,170
3	161,902	170,268	179,034	-	-	-	-	-	-	-	511,204
4	161,902	170,268	179,034	188,218	-	-	-	-	-	-	699,421
5	161,902	170,268	179,034	188,218	197,838	-	-	-	-	-	897,259
6	161,902	170,268	179,034	188,218	197,838	207,913	-	-	-	-	1,105,171
7	161,902	170,268	179,034	188,218	197,838	207,913	218,463	-	-	-	1,323,634
8	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	-	-	1,553,143
9	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	-	1,794,215
10	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
11	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
12	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
13	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
14	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
15	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
16	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
17	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
18	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
19	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
20	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
21	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
22	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
23	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
24	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
25	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
26	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
27	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
28	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
29	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
30	161,902	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	2,047,389
31	-	170,268	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	1,885,487
32	-	-	179,034	188,218	197,838	207,913	218,463	229,509	241,072	253,175	1,715,219
33	-	-	-	188,218	197,838	207,913	218,463	229,509	241,072	253,175	1,536,186
34	-	-	-	-	197,838	207,913	218,463	229,509	241,072	253,175	1,347,968
35	-	-	-	-	-	207,913	218,463	229,509	241,072	253,175	1,150,130
36	-	-	-	-	-	-	218,463	229,509	241,072	253,175	942,218
37	-	-	-	-	-	-	-	229,509	241,072	253,175	723,755
38	-	-	-	-	-	-	-	-	241,072	253,175	494,246
39	-	-	-	-	-	-	-	-	-	253,175	253,175
	\$ 4,857,060	\$ 5,108,036	\$ 5,371,016	\$ 5,646,529	\$ 5,935,126	\$ 6,237,378	\$ 6,553,883	\$ 6,885,260	\$ 7,232,154	\$ 7,595,235	\$ 61,421,677

City of Hutto - 2020 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Debt Service and Expense Summary
Wastewater Service Area

II. Summary of Annual Expenses

Year	New Annual Debt Service⁽¹⁾	Annual Capital Expenditures⁽²⁾	Annual Bond Proceeds⁽²⁾	Existing Annual Debt Service⁽³⁾	Annual Credit⁽⁴⁾	Total Expense
1	\$ 161,902	\$ 798,439	\$ (3,163,648)	\$ 934,895	\$ (159,395)	\$ (1,427,806)
2	332,170	2,405,494	(3,263,619)	944,856	(324,076)	94,824
3	511,204	4,063,332	(3,366,750)	947,030	(492,590)	1,662,226
4	699,421	4,191,733	(3,473,139)	945,346	(665,829)	1,697,532
5	897,259	4,324,192	(3,582,890)	947,289	(847,599)	1,738,250
6	1,105,171	4,460,836	(3,696,110)	946,349	(1,036,033)	1,780,214
7	1,323,634	4,601,799	(3,812,907)	944,582	(1,232,629)	1,824,479
8	1,553,143	4,747,216	(3,933,395)	946,604	(1,440,671)	1,872,897
9	1,794,215	4,897,228	(4,057,690)	947,627	(1,658,259)	1,923,121
10	2,047,389	5,051,980	(4,185,913)	947,994	(1,886,141)	1,975,310
11	2,047,389	4,121,801	-	947,244	(1,885,669)	5,230,766
12	2,047,389	2,092,956	-	947,722	(1,885,970)	3,202,098
13	2,047,389	-	-	947,241	(1,885,667)	1,108,963
14	2,047,389	-	-	946,027	(1,884,902)	1,108,514
15	2,047,389	-	-	946,290	(1,885,068)	1,108,612
16	2,047,389	-	-	707,380	(1,734,630)	1,020,139
17	2,047,389	-	-	707,515	(1,734,716)	1,020,189
18	2,047,389	-	-	707,211	(1,734,524)	1,020,076
19	2,047,389	-	-	691,884	(1,724,873)	1,014,400
20	2,047,389	-	-	693,412	(1,725,835)	1,014,966
21	2,047,389	-	-	166,623	(1,394,125)	819,887
22	2,047,389	-	-	168,099	(1,395,054)	820,434
23	2,047,389	-	-	167,448	(1,394,645)	820,193
24	2,047,389	-	-	289,766	(1,471,666)	865,489
25	2,047,389	-	-	290,716	(1,472,264)	865,841
26	2,047,389	-	-	290,591	(1,472,185)	865,795
27	2,047,389	-	-	-	(1,289,206)	758,184
28	2,047,389	-	-	-	(1,289,206)	758,184
29	2,047,389	-	-	-	(1,289,206)	758,184
30	2,047,389	-	-	-	(1,289,206)	758,184
31	1,885,487	-	-	-	(1,187,259)	698,229
32	1,715,219	-	-	-	(1,080,044)	635,175
33	1,536,186	-	-	-	(967,309)	568,876
34	1,347,968	-	-	-	(848,792)	499,176
35	1,150,130	-	-	-	(724,217)	425,913
36	942,218	-	-	-	(593,298)	348,920
37	723,755	-	-	-	(455,736)	268,019
38	494,246	-	-	-	(311,218)	183,028
39	253,175	-	-	-	(159,420)	93,755
PTD	-	-	-	4,206,042	-	4,206,042
	\$ 61,421,677	\$ 45,757,007	\$ (36,536,061)	\$ 23,273,781	\$ (47,909,130)	\$ 46,007,275

(1) Wastewater Appendices - page 4 Section I

(2) Wastewater Appendices - page 3

(3) Eligible debt funded projects as a percent of total principal times original annual debt service, including Paid-To-Date (PTD) amounts

(4) Wastewater Appendices - page 9

City of Hutto - 2020 Wastewater Impact Fee Study

Capital Improvement Plan for Impact Fees

Revenue Test

Wastewater 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							\$ 940,000
1	\$ 2,631	1,627	\$ 4,280,096	\$ (1,427,806)	\$ 5,707,903	\$ 15,555	6,663,458
2	2,631	1,627	4,280,096	94,824	4,185,272	35,900	10,884,630
3	2,631	1,627	4,280,096	1,662,226	2,617,871	49,994	13,552,495
4	2,631	1,627	4,280,096	1,697,532	2,582,565	60,859	16,195,919
5	2,631	1,627	4,280,096	1,738,250	2,541,846	71,614	18,809,379
6	2,631	1,627	4,280,096	1,780,214	2,499,882	82,243	21,391,504
7	2,631	1,627	4,280,096	1,824,479	2,455,617	92,739	23,939,861
8	2,631	1,627	4,280,096	1,872,897	2,407,200	103,088	26,450,148
9	2,631	1,627	4,280,096	1,923,121	2,356,976	113,277	28,920,402
10	2,631	1,627	4,280,096	1,975,310	2,304,787	123,298	31,348,487
11	-	-	-	5,230,766	(5,230,766)	117,806	26,235,527
12	-	-	-	3,202,098	(3,202,098)	101,001	23,134,430
13	-	-	-	1,108,963	(1,108,963)	92,578	22,118,044
14	-	-	-	1,108,514	(1,108,514)	88,412	21,097,942
15	-	-	-	1,108,612	(1,108,612)	84,229	20,073,559
16	-	-	-	1,020,139	(1,020,139)	80,210	19,133,631
17	-	-	-	1,020,189	(1,020,189)	76,357	18,189,799
18	-	-	-	1,020,076	(1,020,076)	72,487	17,242,210
19	-	-	-	1,014,400	(1,014,400)	68,614	16,296,423
20	-	-	-	1,014,966	(1,014,966)	64,735	15,346,191
21	-	-	-	819,887	(819,887)	61,239	14,587,543
22	-	-	-	820,434	(820,434)	58,127	13,825,236
23	-	-	-	820,193	(820,193)	55,002	13,060,045
24	-	-	-	865,489	(865,489)	51,772	12,246,328
25	-	-	-	865,841	(865,841)	48,435	11,428,922
26	-	-	-	865,795	(865,795)	45,084	10,608,212
27	-	-	-	758,184	(758,184)	41,939	9,891,967
28	-	-	-	758,184	(758,184)	39,003	9,172,786
29	-	-	-	758,184	(758,184)	36,054	8,450,657
30	-	-	-	758,184	(758,184)	33,093	7,725,566
31	-	-	-	698,229	(698,229)	30,243	7,057,581
32	-	-	-	635,175	(635,175)	27,634	6,450,040
33	-	-	-	568,876	(568,876)	25,279	5,906,443
34	-	-	-	499,176	(499,176)	23,193	5,430,460
35	-	-	-	425,913	(425,913)	21,392	5,025,938
36	-	-	-	348,920	(348,920)	19,891	4,696,910
37	-	-	-	268,019	(268,019)	18,708	4,447,599
38	-	-	-	183,028	(183,028)	17,860	4,282,431
39	-	-	-	93,755	(93,755)	17,366	4,206,042
PTD	-	-	-	4,206,042	(4,206,042)	-	-
			\$ 42,800,965	\$ 46,007,275		\$ 2,266,310	

City of Hutto - 2020 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Calculation
Wastewater 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	1.1706	1.0000	1,627	1,905	\$ (1,427,806)	\$ (1,671,412)
2	38	1.1658	1.0000	1,627	1,897	94,824	110,549
3	37	1.1611	1.0000	1,627	1,889	1,662,226	1,929,969
4	36	1.1563	1.0000	1,627	1,881	1,697,532	1,962,914
5	35	1.1516	1.0000	1,627	1,874	1,738,250	2,001,790
6	34	1.1469	1.0000	1,627	1,866	1,780,214	2,041,745
7	33	1.1422	1.0000	1,627	1,859	1,824,479	2,083,969
8	32	1.1376	1.0000	1,627	1,851	1,872,897	2,130,538
9	31	1.1329	1.0000	1,627	1,843	1,923,121	2,178,738
10	30	1.1283	1.0000	1,627	1,836	1,975,310	2,228,726
11	29	1.1237	1.0000	-	-	5,230,766	5,877,732
12	28	1.1191	1.0000	-	-	3,202,098	3,583,456
13	27	1.1145	1.0000	-	-	1,108,963	1,235,969
14	26	1.1100	1.0000	-	-	1,108,514	1,230,424
15	25	1.1054	1.0000	-	-	1,108,612	1,225,508
16	24	1.1009	1.0000	-	-	1,020,139	1,123,101
17	23	1.0964	1.0000	-	-	1,020,189	1,118,570
18	22	1.0920	1.0000	-	-	1,020,076	1,113,880
19	21	1.0875	1.0000	-	-	1,014,400	1,103,159
20	20	1.0831	1.0000	-	-	1,014,966	1,099,267
21	19	1.0786	1.0000	-	-	819,887	884,360
22	18	1.0742	1.0000	-	-	820,434	881,335
23	17	1.0698	1.0000	-	-	820,193	877,479
24	16	1.0655	1.0000	-	-	865,489	922,158
25	15	1.0611	1.0000	-	-	865,841	918,766
26	14	1.0568	1.0000	-	-	865,795	914,966
27	13	1.0525	1.0000	-	-	758,184	797,972
28	12	1.0482	1.0000	-	-	758,184	794,713
29	11	1.0439	1.0000	-	-	758,184	791,468
30	10	1.0396	1.0000	-	-	758,184	788,237
31	9	1.0354	1.0000	-	-	698,229	722,941
32	8	1.0312	1.0000	-	-	635,175	654,971
33	7	1.0270	1.0000	-	-	568,876	584,210
34	6	1.0228	1.0000	-	-	499,176	510,538
35	5	1.0186	1.0000	-	-	425,913	433,829
36	4	1.0144	1.0000	-	-	348,920	353,953
37	3	1.0103	1.0000	-	-	268,019	270,775
38	2	1.0062	1.0000	-	-	183,028	184,155
39	1	1.0021	1.0000	-	-	93,755	93,947
PTD		1.0000	1.0000	-	-	4,206,042	4,206,042
					18,701		\$ 50,295,406

Annual Interest Rate:	0.41%
Present Value of Initial Impact Fee Fund Balance	\$ 940,000
Total Escalated Expense for Entire Period	\$ 50,295,406
Less Future Value of Initial Impact Fee Fund Balance	1,102,629
Sub-Total	\$ 49,192,777
Total Escalated Service Units	18,701
Maximum Assessable Impact Fee for Wastewater Service Area	\$ 2,631

City of Hutto - 2020 Wastewater Impact Fee Study
Capital Improvement Plan for Impact Fees
Impact Fee Project Funding
Wastewater Service Area

Impact Fee Project Name⁽¹⁾	Cost In Service Area⁽¹⁾	Percent in Demand	Impact Fee Cost⁽²⁾	Debt Funded⁽³⁾		Non-Debt Funded⁽³⁾
				Existing	Proposed	
Existing 0.99 MGD Central WWTP	\$ 7,896,042	45%	\$ 3,525,304	\$ 3,525,304	\$ -	\$ -
Existing 2.00 MGD South WWTP	20,342,455	53%	12,747,763	9,029,875	2,974,311	743,578
Existing Enclave LS and FM	3,074,224	66%	2,043,193	2,043,193	-	-
Existing Brushy Creek Interceptor - Phase II-A	2,020,752	23%	464,773	464,773	-	-
Exist Brushy Creek Interceptor - Phase I and II-B	1,347,214	23%	309,859	309,859	-	-
Brushy Creek Phase I Easements along FM 1660	51,748	50%	25,874	25,874	-	-
Existing Cottonwood Creek Interceptor	527,333	46%	242,303	242,303	-	-
Lakeside Estates Lift Station Abandonment	1,584,472	74%	1,392,700	292,249	880,361	220,090
Glenwood Lift Station Decommission, Interceptor, and 2 - WWTP Lift Stations	8,645,099	41%	4,234,311	888,542	2,676,615	669,154
The Landing Piper Bursting	250,372	40%	118,595	-	94,876	23,719
Phosphorus Chemical Dosing	420,000	100%	500,373	-	400,299	100,075
South WWTP from 2.0 to 4.0 MGD Capacity	30,199,320	80%	28,782,733	-	23,026,186	5,756,547
Cottonwood Creek Parallel Interceptor	4,079,222	75%	3,644,882	-	2,915,905	728,976
Brushy Creek Interceptor & LS	14,238,000	23%	3,896,621	-	3,117,297	779,324
Avery Lake Interceptor Phase I	1,778,149	15%	317,764	-	254,211	63,553
Central WWTP and South WWTP Permit Amendments	245,000	100%	245,000	-	196,000	49,000
2023 Wastewater Impact Fee Update	39,670	100%	47,261	-	-	47,261
Wastewater Impact Fee Update	39,670	100%	39,670	-	-	39,670
Total	\$ 96,778,742		\$ 62,578,979	\$ 16,821,971	\$ 36,536,061	\$ 9,220,947

(1) Table 4.2 Wastewater CIP List in 2020 Values

(2) Includes Construction Cost Index, ENR's - 20 Year Average 3.16%, distributed evenly on future expenses

(3) Per discussions with City staff and City files

City of Hutto - 2020 Wastewater Impact Fee Study

Capital Improvement Plan for Impact Fees

Credit Determination

Wastewater Service Area

Year	Eligible Revenue Funded Cost ⁽¹⁾	Annual Service Units	Eligible Debt Service per Service Unit	Annual Growth in Service Units (Cumulative)	Credit for Annual Utility Rate Revenues
1	\$ 1,096,797	11,196	\$ 97.96	1,627	\$ 159,395
2	1,277,026	12,823	99.59	3,254	324,076
3	1,458,234	14,450	100.91	4,881	492,590
4	1,644,767	16,077	102.30	6,508	665,829
5	1,844,548	17,705	104.19	8,136	847,599
6	2,051,520	19,332	106.12	9,763	1,036,033
7	2,268,216	20,959	108.22	11,390	1,232,629
8	2,499,747	22,586	110.68	13,017	1,440,671
9	2,741,841	24,213	113.24	14,644	1,658,259
10	2,995,383	25,840	115.92	16,271	1,886,141
11	2,994,633	25,840	115.89	16,271	1,885,669
12	2,995,111	25,840	115.91	16,271	1,885,970
13	2,994,630	25,840	115.89	16,271	1,885,667
14	2,993,416	25,840	115.84	16,271	1,884,902
15	2,993,680	25,840	115.85	16,271	1,885,068
16	2,754,769	25,840	106.61	16,271	1,734,630
17	2,754,905	25,840	106.61	16,271	1,734,716
18	2,754,600	25,840	106.60	16,271	1,734,524
19	2,739,273	25,840	106.01	16,271	1,724,873
20	2,740,801	25,840	106.07	16,271	1,725,835
21	2,214,013	25,840	85.68	16,271	1,394,125
22	2,215,488	25,840	85.74	16,271	1,395,054
23	2,214,838	25,840	85.71	16,271	1,394,645
24	2,337,155	25,840	90.45	16,271	1,471,666
25	2,338,105	25,840	90.48	16,271	1,472,264
26	2,337,980	25,840	90.48	16,271	1,472,185
27	2,047,389	25,840	79.23	16,271	1,289,206
28	2,047,389	25,840	79.23	16,271	1,289,206
29	2,047,389	25,840	79.23	16,271	1,289,206
30	2,047,389	25,840	79.23	16,271	1,289,206
31	1,885,487	25,840	72.97	16,271	1,187,259
32	1,715,219	25,840	66.38	16,271	1,080,044
33	1,536,186	25,840	59.45	16,271	967,309
34	1,347,968	25,840	52.17	16,271	848,792
35	1,150,130	25,840	44.51	16,271	724,217
36	942,218	25,840	36.46	16,271	593,298
37	723,755	25,840	28.01	16,271	455,736
38	494,246	25,840	19.13	16,271	311,218
39	253,175	25,840	9.80	16,271	159,420
Total	\$ 80,489,416				\$ 47,909,130

2021 Service Units ⁽²⁾	9,569
Ten Year Growth in Service Units ⁽²⁾	16,271
Annual Growth in Service Units	$\frac{16,271}{10 \text{ years}} = 1,627$
Credit Amount	\$ 47,909,130

(1) Wastewater Appendices - page 5 Section II

(2) Derived from Table No. 1.1 - 2021 and 2031 LUEs