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Capital Improvements Plan and Impact Fee Adoption for Wastewater

2025-2035

This document is for interim review and is not intended for construction, bidding or permit purposes.

CHRIS A. EDWARDS, P.E. Date: JUL 2025

Tx. Reg. # 118947

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Executive Summary

The City of Kaufman desires to adopt a wastewater impact fee. The intent of the Impact Fee Program is to ease the financial burden borne by the City's existing ratepayers for the construction of new wastewater infrastructure required to support new development. Under the Impact Fee Program, new developments within the City's established service areas pay a portion of the costs associated with new wastewater infrastructure. In accordance with Local Government Code Chapter 395, the City must update the Impact Fee Program at least every five (5) years after initial adoption.

Capital Improvements Advisory Committee

For this Impact Fee Program adoption, the City's Planning and Zoning Commission will act as the Capital Improvements Advisory Committee (CIAC) to consider recommendations for wastewater impact fees. The CIAC made recommendations to the City Council regarding Wastewater Capital Improvements Plan (CIP) and assessment rates for setting wastewater impact fees. The following individuals graciously donated their time and energies to the Impact Fee Program:

Planning and Zoning Commission Members
Burton Brown
Richard Dunn
Lindsey Haynes
Porfilo Lopez
Kathleen Sisson *
Mike Slye *
Kathy Thorpe *

* Denotes member of real estate, development, or building industry not employed by a political subdivision or governmental entity.

Land Use Assumptions

The land use assumptions used in the development of the impact fee adoption are based on the Future Land Use Plan prepared by Tim F. Glendening & Associates, Inc., dated September 2013, and adopted as the future land use assumptions for previous water and street impact fee updates via Ordinance O-32-19. A review of this Future Land Use Plan was performed by City staff to verify its relevance for the 2025 Impact Fee Program adoption. The Future Land Use Plan is included in this program adoption as **Appendix A**. City staff approved these land use assumptions for the purposes of identifying wastewater impact fee capital improvement projects and forwarded the land use assumption recommendations to the City Council for review and approval.

Wastewater Capital Improvements Plan

As part of the adoption of the Wastewater Impact Fee Program, the Wastewater Capital Improvements Plan has been updated. The plan identifies improvements to the City's wastewater service area anticipated to be completed over the next 20 years. A percentage of these improvements required to meet the projected demands of new development between 2025 and 2035 was used to calculate the wastewater impact fees. The Wastewater System Capital Improvements Plan for years 2025-2035 identified $22.8 million in wastewater capital improvements projects eligible for funding with impact fees.

City of Kaufman's Maximum Wastewater Impact Fee

Based on the results of the land use assumptions and the wastewater capital improvements plan, the cost per service unit and maximum allowable wastewater impact fees that can be assessed for a standard service unit are:

Wastewater CIP Cost per Service Unit:	**$ 12,628**

Chapter 395 of the Local Government Code requires that cities provide a 50% credit to impact fees to account for the tax revenues and utility bill revenues generated by new developments. Applying a 50% credit to the cost per service unit yields the following maximum allowable wastewater impact fee:

Max. Allowable Wastewater Impact Fee per Service Unit after 50% Credit: $ 6,314

The wastewater impact fees are based on setting a ¾" water meter as the standard service unit for single-family residential properties. American Water Works Association's (AWWA) meter equivalency data is utilized to compare the demand that larger water meters place on the system to the demand that a standard ¾" meter places on the system.

City of Kaufman's Assessed Wastewater Impact Fee

On September 8, 2025 the Kaufman City Council adopted an assessment rate of XX% of the maximum allowable wastewater impact fee that could be assessed. The resulting wastewater impact fee assessment for the City of Kaufman will be $XXXX per service unit, which is a ¾" single-family residential meter.

2025 Assessed Wastewater Impact Fee per Service Unit (3/4" meter): $ X,XXX.XX

Introduction

The City of Kaufman desires to adopt a wastewater impact fee. Impact fees are used to fund or recover the capital costs associated with improving the wastewater infrastructure necessary to support new development within the City's service areas. The City of Kaufman wastewater system service area includes the area within the current city limits as well as within the City's 1-mile extraterritorial jurisdiction (ETJ). This Impact Fee Adoption covers the 2025-2035 period. Only projects that are identified as fully or partially funded by the City and attributable to future growth are considered impact fee eligible and included in this analysis.

A Capital Improvements Plan (CIP) is developed to determine the infrastructure projects eligible for impact fee funding in the 10-year period. City staff has developed a CIP to accommodate growth of the City's wastewater system within the current ETJ.

Local Government Code, Chapter 395

This impact fee program adoption adheres to the Texas Local Government Code, Chapter 395 on *Financing Capital Improvements Required by New Development in Municipalities, Counties, and Certain Other Local Governments*. According to this state legislation, an impact fee is "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 law also states that impact fees may be used to pay for construction contract price, surveying and engineering fees, land acquisition costs, and consultants preparing or updating the capital improvements plan. Impact fees are not to pay for maintenance, operations, or repair to existing or new infrastructure.

The basis for calculating impact fees on new development is the number of *service units* the development generates. Chapter 395 defines *service units* as a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years. The service units to be used for determining impact fees for the wastewater infrastructure are defined in the applicable sections of this report.

Population Projections

The *World Population Review* estimates that the City of Kaufman's 2024 population was 9,804. The estimated population for 2025 is 10,079. This assumes a yearly growth rate of 2.80% from the 2024 population estimate. The 2.80% growth rate is based on growth rates for years 2019-2035, from the North Central Texas Council of Governments' (NCTCOG's) Open Data: *2050 NCTCOG Demographic Forecast (City)*.

Using the projected growth rate referenced above, the population projections for the City of Kaufman are provided in **Table 1**. The projected growth rate for 2025 to 2035 is 2.80% per year.

Year	Population
2024	9,804 *
2025	10,079
2026	10,361
2027	10,651
2028	10,949
2029	11,256
2030	11,571
2031	11,895
2032	12,228
2033	12,570
2034	12,922
2035	13,284

(Source: * World Population Review Estimate (2024), growth rate from 2024 to 2035 based on NCTCOG growth rates for years 2019-2035, from NCTCOG Open Data: *2050 NCTCOG Demographic Forecast (City)*

Table 1: City of Kaufman Population Projections

Existing Wastewater System

The City of Kaufman's existing wastewater system consists of a wastewater treatment plant (WWTP) permitted for an average day capacity of 1.2 million gallon per day (MGD), and a two-hour peak capacity of 3.1 MGD; thirteen wastewater lift stations of varying capacities; and the associated approximately 50.8 miles of 6-inch to 42-inch gravity pipelines and 4.4 miles of force main pipelines and other appurtenances necessary to provide service to its customers.

Wastewater Impact Fee Service Unit

Since wastewater flow is directly related to water usage, the service unit for the wastewater impact fee is based on the water usage of the single-family residence, served in the City of Kaufman by ¾" meters. Larger meters are converted to Living Unit Equivalents (LUEs) based on the relative flow rates of the larger meter to a ¾" meter. For each meter larger than ¾", an LUE multiplier is applied to calculate the equivalent number of ¾" meters. The number of projected service units is determined by calculating the total number of LUEs in the City. **Table 2** shows the conversion factors used for each meter size.

Meter Size (in)	Max. Capacity (gpm)	LUE Multiplier
3/4	30	1.00
1	50	1.67
1-1/2	100	3.33
2	160	5.33
2-1/2	240	8.00
3	350	11.67
4	630	21.00
6	1,400	46.67
8	2,400	80.00
10	3,800	126.67

(Source: Meter Capacities from AWWA C700 for Displacement-Type Meters 3/4"-2", AWWA C701 for Class II Turbine Meters 3"-10")

Table 2: Meter Conversion Table

Based on the current meter distribution provided by City staff, the existing 3,330 meters are equivalent to 4,978 LUEs. Assuming the same ratio of meter sizes in 2035 as the current distribution, the future increase of 1,188 meters is equivalent to adding 1,807 ¾" residential meters. **Table 3** outlines the current and 2035 breakdown of meters by size and their associated LUEs.

	2025		2035	
Meter Size (in)	# of Meters	Living Unit Equivalent	# of Meters	Living Unit Equivalent
3/4	2,890	2,890	3,921	3,921
1	203	339	275	459
1-1/2	39	130	53	176
2	156	831	212	1,130
2-1/2	5	40	7	56
3	24	280	33	385
4	8	168	11	231
6	3	140	4	187
8	2	160	3	240
Total	**3,330**	**4,978**	**4,518**	**6,785**
2025-2035 Growth in LUEs				**1,807**

Table 3: Living Unit Equivalents

Wastewater Capital Improvements Plan for 2025-2035

Due to the unpredictable nature of development, it is difficult to determine which future wastewater projects identified in the CIP will be necessary in the next 10 years to support growth. Therefore, to establish the capital cost eligible for impact fees, a percentage of the total cost of the CIP program was calculated to establish the 10-year total cost. Because the planning window for the improvements shown on the CIP is 20 years, 50% of the improvements are assumed to be constructed during each 10-year period. Therefore, 50% of the impact fee eligible costs were used to calculate the CIP cost per service unit.

Figure 1 is a map of the wastewater CIP projects. **Table 4** provides an inventory of the wastewater CIP projects along with estimated costs. The wastewater projects identified on the CIP map were originally developed as part of the 2014 *Sanitary Sewer Assessment Study* prepared for the City by Freese and Nichols, Inc. City staff have identified projects that have been partially or fully completed since the study's submittal, and provided additional projects to be added to the CIP. The roster of CIP wastewater projects has been revised accordingly. The total cost of the proposed wastewater facilities anticipated to be constructed during the 20-year window of the Wastewater CIP is approximately $147.1 million (2030 dollars), of which approximately $45.6 million is impact fee eligible. $22.8 million (50%) of the total impact fee eligible cost is attributable to projected growth during the 2025-2035 impact fee period.

Legend

- Lift Station
- Proposed Sewer Line
- Proposed Forcemain
- Existing Sewer Line
- City Limits
- Kaufman ETJ

NOTE: EXISTING SEWER LINES WITH NO SIZE LABELED ARE 8" DIAMETER OR SMALLER

Pyle Street LS
(2) - 10 HP Pumps
Decomission by 2034

Shannon Street LS
(2) - 30 HP Pumps
Decomission by 2034

TDRC LS
2.0 HP Pump

Alton Street LS
(2) - 10 HP Pumps (Sub)

Cottage Heights LS
(2) - 40 HP Pumps

Carver LS
(2) - 30 HP Pumps
Decomission by 2034

Adams Lane LS
(2) - 30 HP Pumps

Climbing Tree LS
(2) - 7.5 HP Pumps
Decomission by 2034

Border Circle LS
(2) - 7.5 HP Pumps
Decomission by 2034

Tractor Supply Co. LS

Five Points LS
(2) - 50 HP Pumps
Decomission by 2034

Proposed Lift Station
1.25 MGD

Windsor Park LS

Wastewater Treatment Plant
Existing Avg Day Permit: 1.20 MGD
2034 Avg Day Permit Required: 1.50 MGD
Existing Peak 2-Hr Permit: 3.10 MGD
2034 Peak 2-Hr Permit: 6.0 MGD

Highway 175 East LS
(2) - 28 HP Pumps
1,000 gpm

BASIN A
BASIN B
BASIN C
BASIN D
BASIN E
BASIN F
BASIN G
BASIN H
BASIN I
BASIN K
BASIN L
BASIN M
BASIN N

STATE HWY. 34 BY-PASS
STATE HWY. 34
U.S. HWY. 175
F.M. 243
WASHINGTON ST
HOUSTON ST
MAIN ST
FAIR RD

Kaufman

N

0 1,000 2,000

1 inch = 2,000 feet

Kaufman, Texas

Capital Improvement Plan (2025-2045 Planning Window)

Figure 1
Wastewater

2025-2035

DRAFT

tnp

KAU 24442

Date Saved: 7/3/2025

Table 4: Impact Fee Capital Improvements Plan - Wastewater Facilities

IMPACT FEE CAPITAL IMPROVEMENTS PLAN - WASTEWATER FACILITIES (20 YEAR CIP PLANNING WINDOW)					
Project Number	**Description**	**Basin**	**Total Cost**	**Impact Fee Eligible Cost**	**10-Year Impact Fee Eligible Cost**
8	18" Interceptor Line to the Wastewater Treatment Plant		$10,516,000	$0	$0
10	10"/12"/15" Sewer Line in Basin D	D	$2,583,000	$0	$0
11	10" Sewer Line in Basin C	C	$362,000	$0	$0
12	12" Interceptor Line in Basin A	A	$435,000	$0	$0
13	10" Sewer Lines in Basin E	E	$131,000	$0	$0
15	8" Sewer Line in Basin A	A	$1,872,000	$1,872,000	$936,000
16	12"/15" Interceptor Line	I	$2,019,000	$2,019,000	$1,009,500
17	Proposed Lift Station and 12" Force Main	M	$4,932,000	$4,932,000	$2,466,000
18	Decommission Five Points Lift Station and 8"/12" Sewer Line	M	$3,245,000	$2,614,000	$1,307,000
19	21"/24" Interceptor Line in Basin L	L	$7,014,000	$7,014,000	$3,507,000
20	Decommission Climbing Tree Lift Station and 8"/12" Sewer Line	L	$2,747,000	$2,121,000	$1,060,500
21	15"/21" Interceptor Line in Basin L	L	$3,559,000	$3,267,000	$1,633,500
22	Decommission Carver and Border Circle Lift Stations, and 8"/10"/18" Sewer Lines	L	$5,174,000	$3,233,000	$1,616,500
23	Decommission Pyle Street and Shannon Street Lift Stations, and 10"/15" Sewer Lines	N	$3,753,000	$2,325,000	$1,162,500
24	8" Sewer Line in Basin N	N	$560,000	$560,000	$280,000
25	8"/10" Sewer Line in Basin L	L	$1,644,000	$1,644,000	$822,000
26	8" Sewer Line in Basin F	F	$700,000	$700,000	$350,000
27	8" Sewer Line Along Highway 175	H	$784,000	$784,000	$392,000
28	8" Sewer Line in Basin H	H	$360,000	$360,000	$180,000
29	12" Sewer Line in Basin L	L	$1,250,000	$1,250,000	$625,000
30	8"/10" Sewer Line around Detention Center	I	$1,544,000	$1,544,000	$772,000
31	Treatment Plant Regulatory & Efficiency Upgrades (0-5 Year Priority)		$14,305,000	$2,861,000	$1,430,500
32	Treatment Plant Regulatory & Efficiency Upgrades (5-10 Year Priority)		$32,680,000	$6,536,000	$3,268,000
33	Treatment Plant Upgrades (10+ Year Priority)		$45,000,000	$0	$0
		Total Improvement Cost	**$147,169,000**		
		Total Eligible Improvement Cost		**$45,636,000**	
		Total Eligible 10-Year Improvement Cost			**$22,818,000**
		Total City Cost Impact per Service Unit			**$12,628**
		Maximum Impact Fee (50%) per Service Unit			**$6,314**

Wastewater Impact Fee

Wastewater Maximum Impact Fee per Service Unit Calculation

In accordance with Chapter 395 of the Texas Local Government Code, the cost per service unit is calculated using the total capital improvement cost divided by "the total number of projected service units necessitated by and attributable to new development within the service area based on the approved land use assumptions." The maximum allowable impact fee per service unit is calculated as 50% of the cost per service unit.

The wastewater impact fee cost per service unit is calculated by dividing the total eligible 10-year capital improvement cost by the 10-year increase in LUEs. As previously stated, the proposed 10-year eligible capital improvement cost for proposed wastewater facilities is $22.8 million. The cost per service unit over the 10-year period is:

$$\textbf{Cost per Service Unit} = \frac{\$22{,}818{,}000}{1{,}807 \text{ LUEs}} = \textbf{\$12,628}$$

Due to the requirement in Chapter 395.014(7)(B) only 50% of the cost per service unit can be assessed:

$$\textbf{Maximum Impact Fee per Service Unit} = \$12{,}628 \times 50\% = \textbf{\$6,314}$$

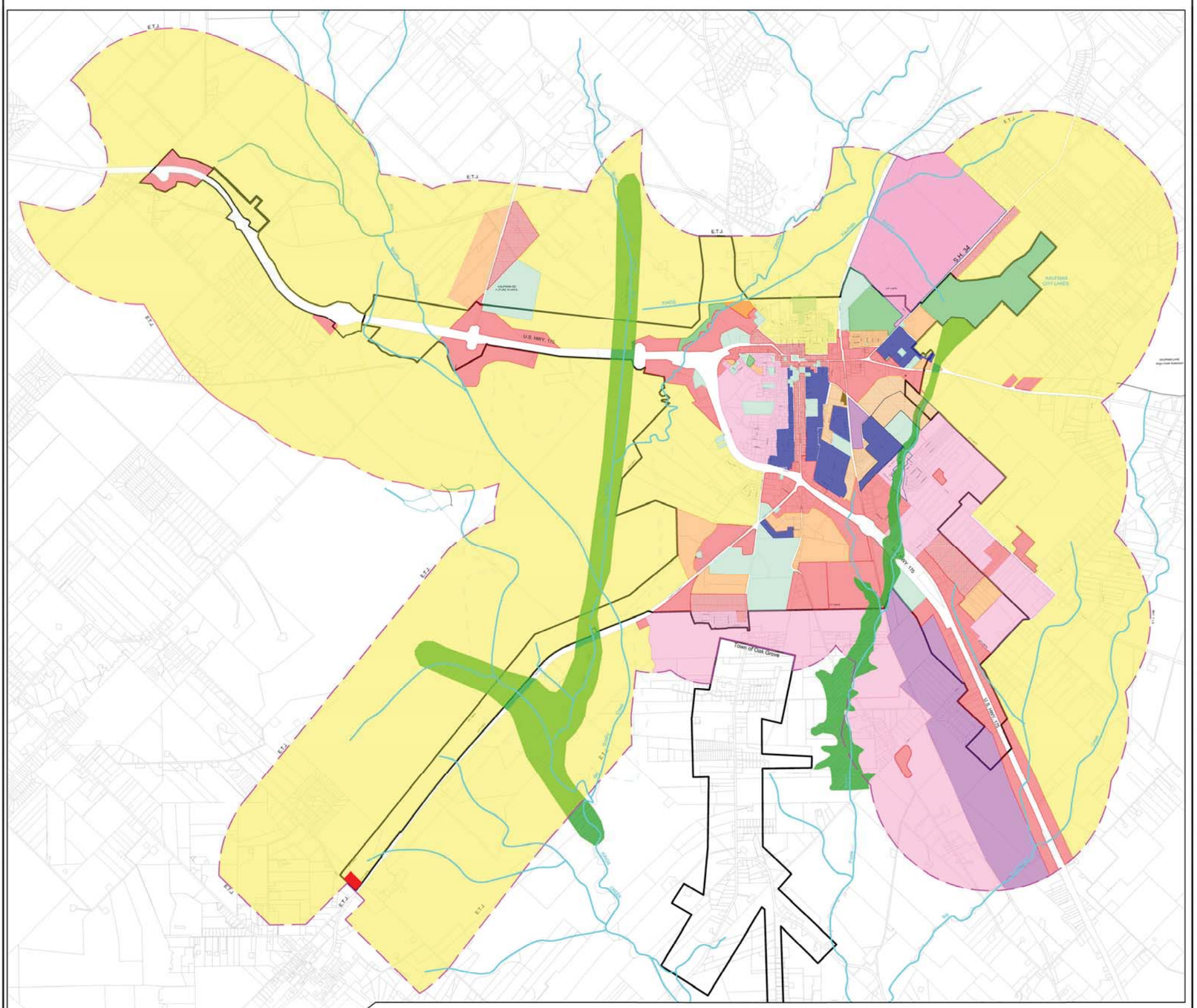
Assessed Wastewater Impact Fee

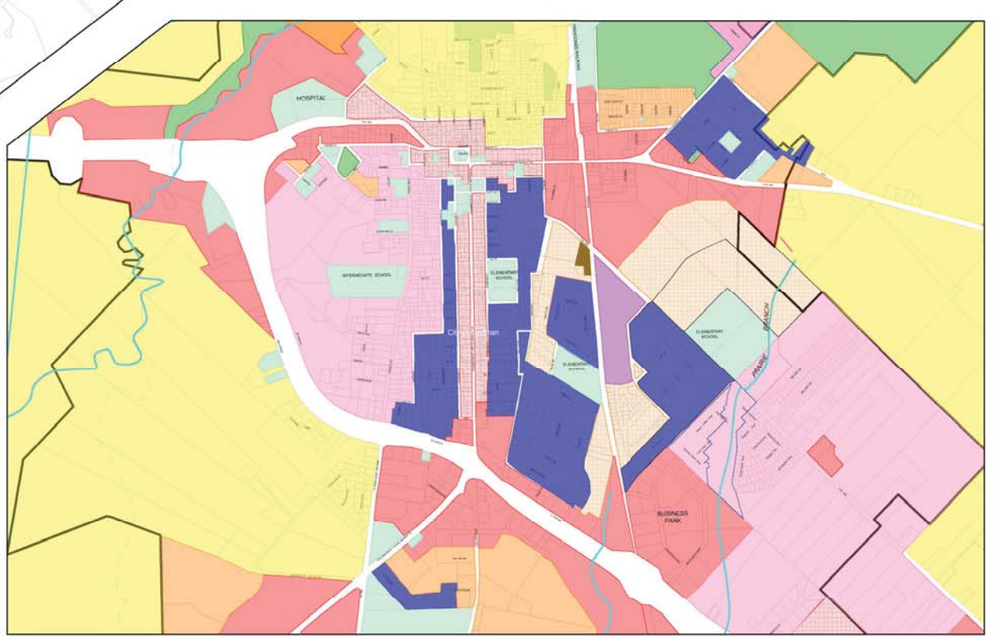
On MONTH DATE, 2025, the City Council approved an assessment of X% of the maximum assessable water impact fee per service unit for 2025 via the adoption of Ordinance No. O-XXX-25. The ordinance is included in this program update as **Appendix B**. The impact fee will increase by 2% of the maximum assessable fee each year between 2025 and 2030. The resulting wastewater impact fees that will be assessed for the next 5 years by the City of Kaufman against new development in the City are shown in **Table 5**.

Table 5: Wastewater Impact Fee Rate Schedule

Meter Size (in)	Meter Equivalents	Maximum Allowable Rate	Proposed Assessment Rate (X%)
3/4	1.00	$6,314.00	$0.00
1	1.67	$10,544.38	$0.00
1-1/2	3.33	$21,025.62	$0.00
2	5.33	$33,653.62	$0.00
3	11.67	$73,684.38	$0.00
4	21.00	$132,594.00	$0.00
6	46.67	$294,674.38	$0.00
8	80.00	$505,120.00	$0.00
10	126.67	$799,794.38	$0.00

APPENDIX A
Future Land Use Plan





INSET OF CENTRAL KAUFMAN

N

1500 750 0 1500 3000
SCALE IN FEET
1" = 1,500 FT

N

800 400 0 800 1600
SCALE IN FEET
1" = 800 FT

LEGEND

- CITY OF KAUFMAN CITY LIMITS
- CITY OF KAUFMAN 1 MILE ETJ
- FEMA FLOOD PLAIN
- FUTURE COMMERCIAL
- FUTURE INDUSTRIAL
- FUTURE MULTI-FAMILY (HD)
- FUTURE MULTI-FAMILY (LD)
- FUTURE MANUFACTURED HOMES
- FUTURE NS
- FUTURE PARK
- FUTURE PARK (LINEAR)
- FUTURE PUBLIC
- FUTURE SINGLE FAMILY (HD)
- FUTURE SINGLE FAMILY (LD)
- FUTURE SINGLE FAMILY (MD)

MAP PREPARED IN NAD 83, TEXAS STATE PLANE COORDINATE NORTH CENTRAL ZONE, 4202, US FOOT. UTILIZING INFORMATION OBTAINED FROM TNRIS, TCEQ, KAUFMAN COUNTY APPRAISAL DISTRICT, AND THE CITY OF KAUFMAN.

TRA
TIM F. GLENDENNING & ASSOCIATES, INC.
PLANNING AND MANAGEMENT CONSULTANTS
1021 TRAIL LAKE DRIVE
PLANO, TEXAS 75093
972/368-8424

SEPTEMBER, 2013

FUTURE LAND USE PLAN

MLA CONSULTING, LLC
FIRM REG. #F-12755
101 W. RENNER ROAD, SUITE 140
RICHARDSON, TEXAS 75082
P) 972-578-9300
F) 214-242-2422
WWW.MLACONSULTINGLLC.COM

SCALE:	1"=1500' / 1" = 800'
DATE:	1/22/2014
MLA JOB#:	10623
SHEET:	1 OF 1
FILE:	

CITY OF KAUFMAN
CITY HALL
209 S. WASHINGTON ST
KAUFMAN, TEXAS

APPENDIX B

Wastewater Impact Fee Ordinance

O-XXX-XX

APPENDIX C

Capital Improvements Plan (CIP) and Land Use Assumptions

O-XX-XX