



# ENGINEERING EVALUATION REPORT OF THE



## WATER AND WASTEWATER 2018-2028 IMPACT FEE REVIEW



*Submitted To*



**LEWISVILLE**

Deep Roots. Broad Wings. Bright Future.



*Submitted By*



**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
***SPECIALIZING IN CIVIL ENGINEERING FOR  
MUNICIPALITIES AND GOVERNMENTAL AGENCIES  
TBPE FIRM NO. 526***



*July 2018*

**CITY OF LEWISVILLE, TEXAS**

**ENGINEERING EVALUATION REPORT**  
**FOR THE**  
**WATER AND WASTEWATER**  
**2018-2028 IMPACT FEE REVIEW**

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**Appendix "A": Water Distribution System - Impact Fee Data**

- (1) Existing Water Facilities
- (2) Existing Water Lines
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**Appendix "B": Wastewater Collection System - Impact Fee Data**

- (1) Existing Wastewater Facilities
- (2) Existing Collection Lines
- (3) Proposed Wastewater Facilities
- (4) Proposed Collection Lines

John W. Birkhoff

7/31/18



## **GENERAL**

The engineering analysis portion of the 2018-2028 Water and Wastewater Impact Fee Review determines utilized capacity cost of the major water distribution and wastewater collection system components between the year 2018 and the year 2028. It does not include water distribution lines or sewer trunk lines constructed by developers. Facilities include treatment plants, pump stations, major water transmission lines, major wastewater trunk lines, major force mains and water storage tanks. The analysis also includes the capital improvement component of the Dallas Water Utility billing known as the demand charge. The study period is a ten-year period with 2018 as the base year. The engineering analysis of the water and wastewater systems is based on the existing land uses and the projected land uses for year 2028 and for buildout, and it is based on the existing and proposed infrastructure that is required to provide service for new development.

The City's Water Distribution Master Plan and the Wastewater Collection System Master Plan were updated in 2018. These master plans utilized the City's 2018 Land Use Assumptions Report, completed by Freese and Nichols, Incorporated, and dated March 2018. The 2018 review of the impact fee includes the updated master plan data. The Master Plans include the revision by the City of its build-out population. Projections today include a 2018 population of 120,624, a 2028 population projection of 152,864, and the Master Plan build-out population of approximately 163,162 people. The equivalency factors utilized conform to the American Water Works Association Standards (C700 - C703).

## **COST OF FACILITIES**

Actual construction costs of the various elements of the water distribution and wastewater collection system were used where the information was known. The costs of completed water and sewer projects were determined from Contractor final pay requests, bid tabulation forms, or were provided by the City. Costs for proposed lines and facilities were estimated, referencing costs of recently bid projects that were similar in nature, and those costs typically considered the associated costs of engineering, land rights, and cost of financing.

## **UTILIZED CAPACITY**

Utilized capacity for the water distribution and wastewater collection systems was calculated based on population growth projections. Population Projections are from the "Land Use Assumptions" report, prepared by Freese & Nichols, March 2018. A ratio of flows is set up between the design years of 2018 and 2028 and the build-out plan for the water distribution and wastewater collection systems.

Utilized capacity of improvements in the period is used to calculate the dollar value associated with growth for that period.

## **METHOD**

The Lewisville Water and Wastewater Master Plans were updated in 2018 to reflect changes to population and land use assumptions. The existing digital hydraulic models were updated for both the Water and Wastewater Systems which simulate the hydraulic responses of the systems to the demands. The hydraulic models include three models, the 2018, 2028 and buildout scenarios. Demands, or flows, were distributed to the water model nodes and to the wastewater model manholes for each scenario. 48-hour (wastewater) and 72-hour (water) extended period computer simulations were run for each scenario, and the resulting flow rates were used as the basis for the utilized capacity calculations over the 10-year study period.

## **LAND USE ASSUMPTIONS SUMMARY**

The land use and population assumptions were updated in 2017 by Freese & Nichols, Incorporated. Land use maps were also provided by Freese & Nichols which showed the geographical distribution of the various land uses.

**Table 1** shows those population growth assumptions and the demand growth assumptions. The flow rates were used in the calculations for utilized capacities.

**Table 1 – Population and Flow Assumptions**

### **Population Growth Assumption:**

	<b>2018</b>	<b>2028</b>	<b>Buildout</b>
Population Assumption (# People)	120,624	152,864	163,162
Percent of Buildout Population (%)	73.9%	93.7%	100.0%
2018 to 2028 Population Growth:		126.7%	

### **Demand Growth Assumption:**

	<b>2018</b>	<b>2028</b>	<b>Growth</b>
Water Max-Hour Demand (MGD)	71.06	87.08	122.5%
Wastewater Average Daily Flow (MGD)	14.81	18.18	122.8%

## LIVING UNIT EQUIVALENCY CALCULATION

The approach taken to relate the demand growth for the City to the existing and future users was to apply the growth to the number and type of existing connections to the water system. Residential and commercial connections to the water system each require a water meter, and those meters can vary in flow rate capacity, by size. A connection with a high-capacity water meter can cause larger demands on the water system because they draw water from the system at a greater rate, and thus a proportionally larger maximum impact fee to the system. Additionally, wastewater production rates generally relate to the water usage rates, and therefore the same methodology was applied for the wastewater collection system.

Maximum impact fee values were calculated for the various water meter size connections by assigning unitless Living Unit Equivalency (LUE) values to each meter size, based on the flow rate capacities of the meters. The LUE values allow for ratios of capacity to be developed for projection of the calculated maximum impact fee values. The American Water Works Association Standards for Water Meters provides the table of continuous duty maximum flow rates that were used for the LUE assignment, as shown in **Table 2**.

**Table 2 – Living Unit Equivalencies for Various Types & Sizes of Water Meters**

<b>Meter Type</b>	<b>Meter Size</b>	<b>Continuous Duty Maximum Rate (gpm) <sup>(a)</sup></b>	<b>Ratio to ¾" Meter</b>
Simple	¾"	15	1
Simple	1"	25	1.7
Simple	1½"	50	3.3
Simple	2"	80	5.3
Compound	2"	80	5.3
Turbine	2"	100	6.7
Compound	3"	160	10.7
Turbine	3"	240	16
Compound	4"	250	16.7
Turbine	4"	420	28
Compound	6"	500	33.3
Turbine	6"	920	61.3
Compound	8"	800	53.3
Turbine	8"	1,600	106.7
Compound	10"	2,300	153.3
Turbine	10"	2,500	166.7
Turbine	12"	3,300	220

<sup>(a)</sup> Source: AWWA Standard C700 (2002) - C703 (1996)

## **CURRENT METER COUNT & ESTIMATION OF SERVICE UNITS**

Existing water meter counts in 2018 were provided by the City, by size. **Table 3** show the conversion of the existing meter counts to Living Units, and the projection of future Living Units at the end of the study period, based on the anticipated growth from the Land Use Assumptions.

**Table 3A – 2018 - 2028 Living Unit Equivalents (LUE) by Meter Size**

<b>Meter Size</b>	<b>2018</b>			<b>2028</b>			<b>New Living Units During Impact Fee Period</b>
	<b>Meter Count</b>	<b>Living Units per Meter</b>	<b>Total Living Units</b>	<b>Meter Count</b>	<b>Living Units per Meter</b>	<b>Total Living Units</b>	
¾"	19,551	1.0	19,551	23,959	1.0	23,958	4,407
1"	1,740	1.7	2,958	2,132	1.7	3,624	666
1½"	410	3.3	1,353	502	3.3	1,658	305
2"	1,089	6.7	7,296	1,335	6.7	8,941	1,645
3"	158	16.0	2,528	194	16.0	3,097	569
4"	48	28.0	1,344	59	28.0	1,646	302
6"	14	61.3	858	17	61.3	1,051	193
8"	7	106.7	746	9	106.7	915	169
10"	10	166.7	1,667	12	166.7	2,042	375
12"	3	220.0	660	4	220.0	808	148
<b>Totals:</b>	<b>23,030</b>		<b>38,961</b>	<b>28,222</b>		<b>47,740</b>	<b>8,779</b>

## **WATER DISTRIBUTION SYSTEM**

Changes to the water system plan are reflected in the 2018 Water Distribution System Master Plan by Birkhoff, Hendricks & Carter, L.L.P. These changes are centered around the maximum daily demand that were calculated for the revised Land Use Assumptions. Computer hydraulic models for years 2018, 2028 and Buildout were prepared based on the Master Plan, and were used for the ten-year study period analysis. The proposed waterline and facility projects, as shown in the Master Plan, were determined necessary for service to the projected populations and land uses. These facilities include ground storage reservoirs, and distribution lines.

Computer models were run for 72-hour extended period simulations to insure proper sizing of the facilities to meet peak demands. Pump stations and ground storage was analyzed with the maximum daily demand, while elevated storage was analyzed with the maximum hourly demand. This is consistent with the sizing of these facilities in the Water Distribution Master Plan.

- **Existing Water System Facilities**

The existing system includes the facilities shown in **Tables 4 and 5**:

**Table 4 – Existing Pump Stations and Ground Storage Reservoirs**

<b>Pump Station</b>	<b>Number of Pumps</b>	<b>No. of Ground Storage Reservoirs (Capacity Million Gallons)</b>
Feaster	5	1 @ (5 MG ea.) 2 @ (2 MG ea.) 1 @ (1 MG ea.)
North side	4	Combined with Feaster Ground Storage Reservoirs
East Side	4	1 @ (2 MG ea.) 1 @ (1 MG ea.)
Eastside Booster	4	Combined With Eastside Ground Storage Reservoirs
Southside	4	1 @ (2 MG ea.)
Midway	5	1 @ (3 MG ea.)

**Table 5 – Existing Elevated Storage Tanks**

<b>Existing Elevated Storage Tank</b>	<b>High Level Elevation</b>	<b>Volume</b>
Bellaire	692.5	1.0 MG
Valley Parkway	692.5	2.5 MG
F.M. 407	740.0	2.0 MG
Austin Ranch	735.0	2.0 MG

- **Capital Improvement Program**

The additions to the water distribution system during the study period are shown in **Table 6** and by **Figure 1 - 2018-2028 Water Impact Fee C.I.P. Map**, on the following page. Proposed transmission main and distribution line projects are listed in **Appendix A**.

**Table 6 – Major Water System Facilities Capital Improvement Program**

<b>Approximate Date to be Placed in Service</b>	<b>Water Facility</b>	<b>Capacity of Improvement</b>	<b>Total Capacity After Improvement</b>
2025	Southside 2.0 MG GSR	2.0 MG	4.0 MG
2027	Midway 3.0 MG GSR	3.0 MG	6.0 MG

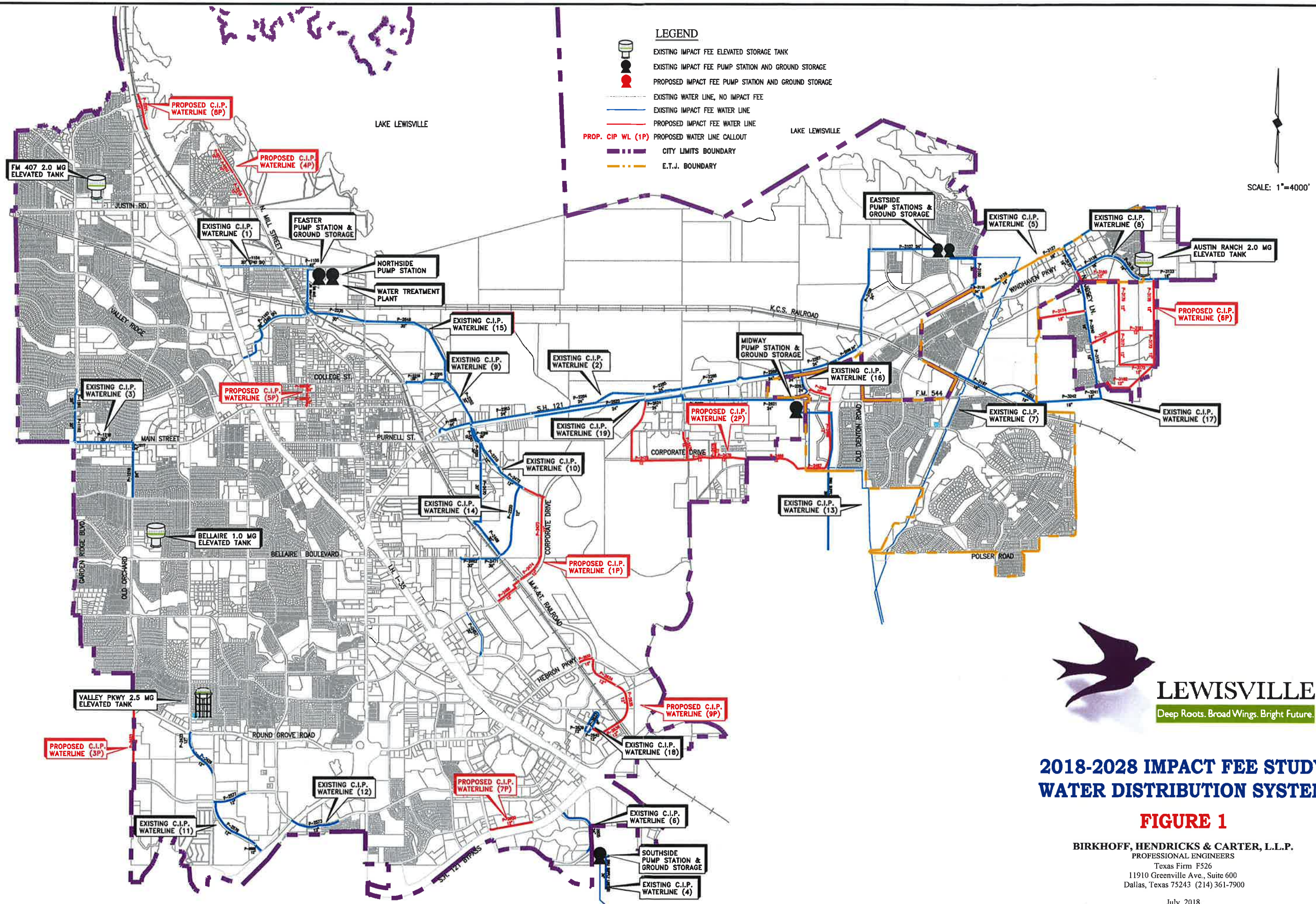
- **Water System Impact Fee Summary**

**Appendix “A”** includes the calculations for the impact fee eligible projects that were determined to have utilized capacity during the study period. Total project costs and utilized capacity costs for the impact fee projects are summarized in **Table 7**.

**Table 7 – 2018-2028 Water Distribution System C.I.P. Summary**

<b>Water System</b>	<b>Total 20-year Project Cost (\$)</b>	<b>Utilized Capacity During Fee Period (\$)</b>
Existing Water Distribution Lines	\$34,342,637	\$5,587,630
Existing Elevated Storage Tanks	\$13,058,149	\$2,514,248
Existing Pump Stations	\$22,740,081	\$3,673,374
Existing Ground Storage Reservoirs	\$18,334,844	\$2,636,428
Existing Water Treatment	\$29,219,755	\$2,308,326
Existing Water System Planning Expenses	\$61,000	\$61,000
<b>Existing Water System Subtotal:</b>	<b>\$117,756,466</b>	<b>\$16,781,006</b>
Proposed Water Distribution Lines	\$10,749,815	\$7,579,052
Proposed Facilities	\$21,962,670	\$21,552,236
<b>Proposed Water System Subtotal:</b>	<b>\$32,712,485</b>	<b>\$29,131,288</b>
<b>Total:</b>	<b>\$150,468,951</b>	<b>\$45,912,294</b>

The total 20-year project costs and utilized capacity costs over the study period include costs of construction, engineering, land rights, and cost of financing.



## **WASTEWATER COLLECTION SYSTEM**

The City's Wastewater Collection System Master Plan was updated in 2018 by Birkhoff, Hendricks & Carter, L.L.P. to reflect the revised Land Use Assumptions and to reconfigure future facilities on the east side of the wastewater collection system.

The 2028 and Buildout model scenarios include the proposed capital improvement plan improvements. The model scenarios (2018, 2028, and Buildout) were run for the 48-hour extended period simulation, and modeled flows were used in the utilized capacity calculations for the 10-year study period. For the impact fee analysis, the variable affects of rainfall-derived infiltration and inflow (RDII) flows were standardized across the entire study area, so that growth of land use and flows are proportional for all areas in the service area. Inflow and infiltration peaks were set at an allowable factor of 3.0.

- **Existing Wastewater System**

Existing trunk lines are included in the impact fee analysis. The facilities include major wastewater lift stations, force mains, and the treatment plant.

The existing system includes the wastewater lift stations shown in **Table 8**.

**Table 8 – Existing Lift Stations**

<b>Lift Station</b>	<b>Number of Pumps</b>	<b>Calculated FIRM Capacity (Million Gallons per Day)</b>
Timber Creek	4	21-MGD
Prairie Creek	4	18-MGD
Whippoorwill	4	7-MGD

- **Capital Improvement Program**

**Table 9** shows proposed facilities to the wastewater collection system for the study period. Proposed trunk lines are listed in **Appendix “B”** and shown by **Figure 2**; 2018-2028 Wastewater Impact Fee C.I.P. Map, on the following page.

**Table 9 – Wastewater System Facilities Capital Improvement Program**

Projected Date in Service	Wastewater Facility	Capacity of Improvement (MGD)	Total Capacity After Improvement (MGD)
2019	Midway Branch Lift Station & Force Main	15.0	15.0
2020	Castle Hills Lift Station & Force Main	10.0	10.0
2021	Wastewater Treatment Plant Expansion	3.0	15.0

- **Wastewater System Impact Fee Summary**

**Appendix “B”** includes the calculations for the impact fee eligible projects that were determined to have utilized capacity during the study period. Total project costs and utilized capacity costs for the impact fee projects are summarized in **Table 10**.

**Table 10 – 2018-2028 Wastewater Collection System C.I.P. Summary**

Wastewater System	Total 20-year Project Cost (\$)	Utilized Capacity During Fee Period (\$)
Existing Wastewater Collection Lines	\$31,459,516	\$3,348,959
Existing Wastewater Facilities: Lift Stations	\$28,430,918	\$2,776,262
Existing Wastewater Facilities: Treatment	\$41,936,150	\$351,474
Existing Wastewater System Planning Expenses	\$71,000	\$71,000
<b>Existing Wastewater System Subtotal:</b>	<b>\$101,897,584</b>	<b>\$6,547,695</b>
Proposed Wastewater Collection Sewer Lines	\$5,178,273	\$2,395,979
Proposed Wastewater Facilities: Lift Stations	\$33,967,606	\$14,453,251
Proposed Wastewater Facilities: Treatment	\$53,044,540	\$45,952,320
<b>Proposed Wastewater System Subtotal:</b>	<b>\$92,190,419</b>	<b>\$62,801,550</b>
<b>Total:</b>	<b>\$194,088,003</b>	<b>\$69,349,245</b>

The total 20-year project costs and utilized capacity costs over the study period include costs of construction, engineering, land rights, and cost of financing.



## **SUMMARY OF FINDINGS OF FIVE-YEAR REVIEW**

The water and wastewater Master Plans were updated in 2018 to reflect the population & Land Use Assumptions that were revised in 2017. The study area was revised for the east side of the City to remove the Lord and Clem area and include a portion of the same area, now called Lakewood Hills.

A water demand rate study was performed for the planning area to determine per-capita usage rates and the maximum usage rates for design. The results were that the per-capita usage rate was less than the usage from the previous study. Due to less usage of water in this impact fee period from the previous period, this will postpone an expansion of the water treatment plant within the 10-year period. Additional water supply from Dallas Water Utilities will be required.

The previous wastewater collection system capital improvement plan included two proposed lift stations and associated force mains that were removed from the plan for this Impact Fee Update, namely the Indian Creek and the Crossroads Centre South Lift Stations and Force Mains. The removed lift stations were proposed for the purpose of separating the ETJ (Castle Hills) flows from the City-generated flows. As a result of the removal of the lift stations, City-generated flow is allowed to pass through the Castle Hills ETJ area and be served by the existing Castle Hills Lift Station, resulting in capacity expansion to the Castle Hills lift station. Only the City-generated portion of flows were considered for the utilized capacity calculation of the impact fee for the proposed expansion. Additionally, a wastewater flow monitoring study of the existing flows was conducted in 2017 and was incorporated with the master plan study to determine the existing per-capita average wastewater flows and to project for buildout design flows.

## CALCULATION OF MAXIMUM IMPACT FEES

Impact fees for the water and wastewater systems are calculated separately by dividing the cost of the capital improvements or facility expansions necessitated and attributable to new development in the service area within the next ten years by the number of living units anticipated to be added to Lewisville within the next ten years and the calculated number is divided by two, per Chapter 395 of the Local Government Code. The maximum impact fee for each meter size is calculated in **Table 9**. To simplify collection, we recommend that the fee remain fixed for the five-year period, unless changed by Council.

**Table 11 – Maximum Impact Fee Calculations**

<b><u>Water Impact Fee</u></b>	=	$\frac{\text{Eligible Existing Utilized Cost} + \text{Eligible Proposed Utilized Cost}}{\text{Number of New Living Unit Equivalent over the Next 10 Years}}$
	=	$\frac{\$16,781,006}{8,779} + \frac{\$29,131,288}{8,779} = \frac{\$45,912,294}{8,779}$
<b>Calculated Impact Fee</b>	=	<b><u>\$ 5,229.79</u></b>
<b>Allowable Maximum Water Impact Fee: (Max Impact Fee x 50% )* =</b>		
		<b><u>\$ 2,614.89</u></b>
<i>* - Maximum allowable impact fee is 50% of the maximum calculated impact fee per Chapter 395 LGC</i>		

<b><u>Wastewater Impact Fee</u></b>	=	$\frac{\text{Eligible Existing Utilized Cost} + \text{Eligible Proposed Utilized Cost}}{\text{Number of New Living Unit Equivalent over the Next 10 Years}}$
	=	$\frac{\$6,547,695}{8,779} + \frac{\$62,801,550}{8,779} = \frac{\$69,349,245}{8,779}$
<b>Calculated Impact Fee</b>	=	<b><u>\$7,899.45</u></b>
<b>Allowable Maximum Wastewater Impact Fee: (Max Impact Fee x 50% ) =</b>		
		<b><u>\$ 3,949.72</u></b>
<i>* - Maximum allowable impact fee is 50% of the maximum calculated impact fee per Chapter 395 LGC</i>		

**Table 12 – Allowable Maximum Impact Fee per Living Unit Equivalent  
And per Meter Size & Type**

**50% Max . Water Impact Fee /LUE ..... \$2,614.89**  
**50% Max . Wastewater Impact Fee /LUE ..... \$3,949.72**

Meter Type	Meter Size	LUE	Maximum Impact Fee		Total
			Water	Wastewater	
Simple	3/4"	1	\$2,615	\$3,950	\$6,565
Simple	1"	1.7	\$4,445	\$6,715	\$11,160
Simple	1-1/2"	3.3	\$8,629	\$13,034	\$21,663
Simple	2"	5.3	\$13,859	\$20,934	\$34,792
Compound	2"	5.3	\$13,859	\$20,934	\$34,792
Turbine	2"	6.7	\$17,520	\$26,463	\$43,983
Compound	3"	10.7	\$27,979	\$42,262	\$70,241
Turbine	3"	16	\$41,838	\$63,196	\$105,034
Compound	4"	16.7	\$43,669	\$65,960	\$109,629
Turbine	4"	28	\$73,217	\$110,592	\$183,809
Compound	6"	33.3	\$87,076	\$131,526	\$218,602
Turbine	6"	61.3	\$160,293	\$242,118	\$402,411
Compound	8"	53.3	\$139,374	\$210,520	\$349,894
Turbine	8"	106.7	\$279,009	\$421,435	\$700,445
Compound	10"	153.3	\$400,863	\$605,493	\$1,006,356
Turbine	10"	166.7	\$435,903	\$658,419	\$1,094,322
Turbine	12"	220	\$575,276	\$868,939	\$1,444,216

**IMPACT FEE PERIOD**  
**CONSULTANT HISTORY**

<b><u>Study Consultant</u></b>	<b><u>Year</u></b>	<b><u>Audit Consultant</u></b>
<u>Determination:</u> <i>KSA Engineers</i>	1990	1 <sup>st</sup> 3-year period Audit by KPMG (Peat Marwick)
	1991	
	1992	
<u>Review:</u> <i>KSA Engineers</i>	1993	2 <sup>nd</sup> 3-year period Audit by Birkhoff, Hendricks & Conway, L.L.P.
	1994	
	1995	
<u>Review:</u> <i>Birkhoff, Hendricks &amp; Conway, L.L.P.</i>	1996	3 <sup>rd</sup> 3-year period Audit by Birkhoff, Hendricks & Conway, L.L.P.
	1997	
	1998	
<i>Birkhoff, Hendricks &amp; Conway, L.L.P.</i>	1999	4 <sup>th</sup> 3-year period Audit by Birkhoff, Hendricks & Conway, L.L.P.
	2000	
	2001	
<i>Birkhoff, Hendricks &amp; Conway, L.L.P.</i>	2002	Change in State Law No Audit Required Duration of Fee 5-Years Maximum
	2003	
	2004	
	2005	
	2006	
<i>Birkhoff, Hendricks &amp; Conway, L.L.P.</i>	2007	No Audit Required Duration of Fee 5-Years Maximum
	2008	
	2009	
	2010	
	2011	
<i>Birkhoff, Hendricks &amp; Carter, L.L.P.</i>	2012	No Audit Required Duration of Fee 5-Years Maximum
	2013	
	2014	
	2015	
	2016	
<i>Birkhoff, Hendricks &amp; Carter, L.L.P.</i>	2018	No Audit Required Duration of Fee 5-Years Maximum
	2019	
	2020	
	2021	
	2022	



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# **WATER AND WASTEWATER FIVE YEAR IMPACT FEE REVIEW**

## **APPENDIX “A”**

### **WATER DISTRIBUTION SYSTEM IMPACT FEE DATA**

**PUMP STATION  
GROUND STORAGE RESERVOIR  
ELEVATED STORAGE TANK  
WATER TREATMENT PLANT  
TRANSMISSION LINES  
DISTRIBUTION LINES**

(1) Estimated Cost  
(2) Cost Estimates from May, 1998 Impact Fee Study

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WATER SYSTEM IMPACT FEE STUDY**  
**EXISTING - WATER LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity		(\$ Utilized Capacity		During Fee Period
									2018	2028	2018	2028	
(1) - 740 Service Area Transmission Line													
This project begins at Feaster Pump Station and extends west as a 42" water line and diverges to a 20" & 36" from 1997 Impact Fee Report (1)													
(2) P-1154	4,442	20		\$200.71	\$891,627		\$479,270	\$1,370,897	100%	100%	\$1,370,897	0%	\$0
(2) P-1155	250	42		\$372.69	\$93,172		\$50,082	\$143,254	100%	100%	\$143,254	0%	\$0
(2) P-1156	2,070	42		\$246.60	\$510,452		\$274,380	\$784,832	100%	100%	\$784,832	0%	\$0
(2) P-1157	3,944	36		\$252.20	\$994,720		\$534,685	\$1,529,405	100%	100%	\$1,529,405	0%	\$0
Subtotal:	10,707				\$2,489,971	4.5%	1,338,417	\$3,828,388			\$3,828,388		\$0
(2) - SH 121 Transmission Line													
This project begins at the Eastside pump station and extends west to junction 2357, from 1997 Impact Fee Report (2)													
P-2282	1,527	24		\$41.81	\$63,828		\$34,309	\$98,137	80%	89%	\$78,191	9%	\$9,167
P-2283	2,760	24		\$41.81	\$115,394		\$62,027	\$177,421	100%	100%	\$177,421	0%	\$0
P-2284	5,365	24		\$41.81	\$224,293		\$120,563	\$344,856	100%	100%	\$344,856	0%	\$0
P-2285	1,746	24		\$41.81	\$72,979		\$39,228	\$112,207	100%	100%	\$112,207	0%	\$0
P-2288	2,516	24		\$41.81	\$105,169		\$56,531	\$161,700	100%	100%	\$161,700	0%	\$0
P-2289	3,238	24		\$41.81	\$135,393		\$72,777	\$208,170	100%	100%	\$208,170	0%	\$0
P-2297	1,802	24		\$41.81	\$75,327		\$40,490	\$115,817	0%	0%	\$0	0%	\$0
P-2299	879	24		\$41.81	\$36,763		\$19,761	\$56,524	0%	0%	\$0	0%	\$0
P-3107	3,114	24		\$41.81	\$130,209		\$69,990	\$200,199	100%	100%	\$200,199	0%	\$0
P-3109	4,670	24		\$41.81	\$195,258		\$104,956	\$300,214	100%	100%	\$300,214	0%	\$0
Subtotal:	27,618		1992		\$1,154,613	4.5%	620,632	\$1,775,245			\$1,582,958		\$9,167
(3) - Garden Ridge Elevated Storage Supply Line													
This project begins at J-1187 and extends north to the old Valley Ridge EST. from 1997 Impact Fee Report (3)													
P-1191	1,025	20		\$135.01	\$138,447		\$74,418	\$212,865	100%	100%	\$212,865	0%	\$0
P-1192	1,409	20		\$198.34	\$279,419		\$150,194	\$429,613	100%	100%	\$429,613	0%	\$0
P-1217	493	24		\$207.93	\$102,419		\$55,053	\$157,472	84%	84%	\$132,585	0%	\$446
P-1218	2,117	24		\$207.78	\$439,798		\$236,401	\$676,199	88%	88%	\$592,933	0%	\$0
P-1219	2,716	20		\$199.27	\$541,299		\$290,961	\$832,260	97%	100%	\$806,008	3%	\$26,252
Subtotal:	7,760		1987		\$1,501,382	4.5%	807,027	\$2,308,409			\$2,174,004		\$26,698
(4) - Dallas 36-inch Water Supply Line No. 2													
This project begins at the Southside pump station and extends to the 60" Dallas Transmission													
P-2017	8,960	36		\$164.41	\$1,473,158		\$791,856	\$2,265,014	100%	100%	\$2,265,014	0%	\$0
Subtotal:	8,960		2004		\$1,473,158	4.5%	791,856	\$2,265,014			\$2,265,014		\$0
(5) - East Pump Station 30, 24 & 16-inch Distribution Lines													
This project at the new Eastside pump station extends south to SH121 and extends east to Cysco(4)													
P-3100	2,575	30		\$156.86	\$403,981		\$217,149	\$621,130	30%	67%	\$188,569	36%	\$226,081
P-3115	295	24		\$156.86	\$46,248		\$24,859	\$71,107	40%	66%	\$28,270	26%	\$18,512
P-3126	3,257	16		\$156.86	\$510,942		\$274,643	\$785,585	52%	75%	\$412,169	22%	\$176,328
P-3127	1,076	16		\$156.86	\$168,806		\$90,737	\$259,543	56%	80%	\$206,776	24%	\$62,228
P-3128	5,902	16		\$156.86	\$925,772		\$497,624	\$1,423,396	55%	76%	\$787,661	21%	\$294,807
Subtotal:	13,106		2002		\$2,055,749	4.5%	\$ 1,105,012	\$ 3,160,761			\$ 1,561,217	\$ 2,339,173	\$ 777,956

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WATER SYSTEM IMPACT FEE STUDY**  
**EXISTING - WATER LINES**

Pipe Number	Length (FL)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/FL)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	Utilized Capacity (%)		Utilized Capacity (\$)		During Fee Period	
									2018	2028	2018	2028	2018	2028
<b>(6) - 24-inch Distribution line from the Southside Pump Station</b>														
This project begins at the Southside pump station and extends north to SH 121 Bypass (5)														
P-2605	2,624	24	2004	\$119.53	\$313,636	4.5%	\$168,587	\$482,223	91%	100%	\$436,739	\$482,223	\$45,484	\$45,484
<b>Subtotal:</b>	<b>2,624</b>				<b>\$313,636</b>		<b>168,587</b>	<b>\$482,223</b>						
<b>(7) - Old Eastside DWU Transmission Line</b>														
30-inch DWU transmission line that delivers to Eastside Pump Station														
(2) P-3045	1	30	1991	\$1,200,000	\$1,200,000	4.5%	\$645,027	\$1,845,027	100%	100%	\$1,845,027	\$1,845,027	\$0	\$0
<b>Subtotal:</b>	<b>1</b>				<b>\$1,200,000</b>		<b>645,027</b>	<b>\$1,845,027</b>						
<b>(8) - 16-inch Austin Ranch EST Upper Loop</b>														
This project begins at Memorial Drive and extends south along Josey Lane. Then extends east along Windhaven Parkway to Trinity Drive														
(1) P-3133	1,079	16		\$18.00	\$19,415		\$10,436	\$29,851	73%	79%	\$21,806	\$23,704	\$1,898	\$1,898
(1) P-3135	1,358	16		\$18.00	\$24,437		\$13,135	\$37,572	63%	80%	\$23,683	\$30,163	\$6,480	\$6,480
(1) P-3136	2,427	16		\$18.00	\$43,692		\$23,485	\$67,177	58%	83%	\$39,273	\$55,920	\$16,647	\$16,647
(1) P-3137	1,455	16		\$18.00	\$26,199		\$14,083	\$40,282	48%	78%	\$19,294	\$31,411	\$12,117	\$12,117
(1) P-3177	793	16		\$18.00	\$14,275		\$7,673	\$21,948	38%	80%	\$8,329	\$17,540	\$9,211	\$9,211
<b>Subtotal:</b>	<b>7,112</b>		<b>2006</b>		<b>\$128,018</b>	<b>4.5%</b>	<b>68,812</b>	<b>\$196,830</b>			<b>\$112,385</b>	<b>\$158,738</b>	<b>\$46,353</b>	<b>\$46,353</b>
<b>(9) - Valley Ridge Northeast 30-inch Water Line</b>														
This project begins at Railroad Street and extends east along College Street. Then extends south along Valley Ridge Boulevard														
P-2252	2,280	30		\$74.05	\$168,841		\$90,756	\$259,597	100%	100%	\$259,597	\$259,597	\$0	\$0
P-2305	1,195	30		\$74.05	\$88,512		\$47,577	\$136,089	89%	100%	\$120,471	\$136,089	\$15,618	\$15,618
P-2318	843	30		\$74.05	\$62,412		\$33,548	\$95,960	84%	91%	\$80,497	\$97,689	\$7,192	\$7,192
P-2320	823	30		\$74.05	\$60,925		\$32,749	\$93,674	78%	100%	\$72,828	\$93,674	\$20,846	\$20,846
P-2322	909	30		\$74.05	\$67,340		\$36,197	\$103,537	79%	100%	\$81,545	\$103,537	\$21,992	\$21,992
P-2457	2,077	30		\$74.05	\$153,791		\$82,666	\$236,457	82%	100%	\$193,915	\$236,457	\$42,542	\$42,542
P-2462	1,237	30		\$74.05	\$91,623		\$49,249	\$140,872	85%	100%	\$119,653	\$140,872	\$21,219	\$21,219
P-2469	1,964	30		\$74.05	\$145,431		\$78,172	\$223,603	81%	100%	\$181,568	\$223,603	\$42,035	\$42,035
P-2470	3,083	30		\$74.05	\$228,254		\$122,692	\$350,946	80%	100%	\$281,770	\$350,946	\$69,176	\$69,176
P-2471	1,237	30		\$74.05	\$91,596		\$49,235	\$140,831	87%	100%	\$122,283	\$140,831	\$18,548	\$18,548
P-2615	177	30		\$74.05	\$13,092		\$7,037	\$20,129	100%	100%	\$20,129	\$20,129	\$0	\$0
<b>* Subtotal:</b>	<b>15,825</b>		<b>2007</b>		<b>\$1,171,817</b>	<b>4.5%</b>	<b>629,878</b>	<b>\$1,801,695</b>			<b>\$1,534,256</b>	<b>\$1,793,424</b>	<b>\$259,168</b>	<b>\$259,168</b>
<b>(10) - Valley Ridge Boulevard South of SH-21 Bus. 12-inch Water Line</b>														
This project begins at SH 121 business and extends south along Valley Ridge Boulevard to Locomotive Drive														
P-2310	1,363	12		\$54.72	\$74,609		\$40,104	\$114,713	72%	99%	\$82,395	\$113,273	\$30,878	\$30,878
P-2321	901	12		\$54.72	\$49,321		\$26,511	\$75,832	80%	100%	\$60,429	\$75,832	\$15,403	\$15,403
P-2472	1,598	12		\$54.72	\$87,445		\$47,004	\$134,449	53%	89%	\$70,690	\$119,454	\$48,764	\$48,764
<b>* Subtotal:</b>	<b>3,863</b>		<b>2011</b>		<b>\$211,375</b>	<b>4.5%</b>	<b>113,619</b>	<b>\$324,994</b>			<b>\$213,514</b>	<b>\$308,559</b>	<b>\$95,045</b>	<b>\$95,045</b>

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WATER SYSTEM IMPACT FEE STUDY**  
**EXISTING - WATER LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
									2018	2028	During Fee Period	2018	2028	During Fee Period
<b>(11) - Southwest Lewisville Infrastructure</b>														
This project begins at Spinks Road and extends along Valley Parkway to SH 121														
P-2426	1,387	12		\$76.36	\$105,888		\$56,917	\$162,803	63%	68%	5%	\$103,041	\$110,597	\$7,556
P-2433	678	12		\$76.36	\$51,797		\$27,842	\$79,639	68%	74%	6%	\$54,304	\$59,084	\$4,780
P-2577	2,313	12		\$76.36	\$176,600		\$94,927	\$271,527	26%	100%	74%	\$71,104	\$271,527	\$200,423
P-2578	2,931	12		\$76.36	\$223,820		\$120,308	\$344,128	9%	44%	36%	\$29,894	\$152,946	\$123,052
P-2585	430	12		\$76.36	\$32,857		\$17,661	\$50,518	0%	44%	44%	\$0	\$22,362	\$22,362
* Subtotal:	7,739		2011		\$590,962	4.5%	317,655	\$908,617				\$258,343	\$616,516	\$358,173
<b>(12) - Vista Ridge Mall Drive 12-inch Water Line</b>														
This project begins at SH 121 and extends along Vista Ridge Mall Drive to Highpoint Oaks Drive														
P-2573	2,044	12		\$93.48	\$191,047		\$102,692	\$293,739	62%	64%	2%	\$182,926	\$189,234	\$6,308
* Subtotal:	2,044		2011		\$191,047	4.5%	102,692	\$293,739				\$182,926	\$189,234	\$6,308
<b>(13) - 30-inch Transmission Water from Midway Pump Station to Dallas Water Line No. 3</b>														
30-inch DWU transmission line that delivers to Midway Pump Station														
P-2169	1	30		\$2,501,413	\$2,501,413	4.5%	\$1,344,567	\$3,845,980	60%	97%	37%	\$2,307,588	\$3,748,859	\$1,441,271
* Subtotal:	1		2007		\$2,501,413	4.5%	1,344,567	\$3,845,980				\$2,307,588	\$3,748,859	\$1,441,271
<b>(14) - Railroad Athletics Complex 12-inch Water Line</b>														
This project begins at Valley Ridge Boulevard and extends south along Locomotive Drive to Railroad Street														
P-2220	3,628	12		\$59.27	\$215,000	4.5%	\$115,567	\$330,567	95%	100%	5%	\$313,101	\$330,567	\$17,466
* Subtotal:	3,628		2011		\$215,000	4.5%	115,567	\$330,567				\$313,101	\$330,567	\$17,466
<b>(15) - Valley Ridge Boulevard 30-inch Distribution Line</b>														
This project begins at Mill Street and extends along Valley Ridge Boulevard to College Street														
(2) P-2235	1,999	30		\$265.19	\$530,093		\$284,937	\$815,030	100%	100%	0%	\$815,030	\$815,030	\$0
(2) P-2235A	876	30		\$265.19	\$232,422		\$124,932	\$357,354	100%	100%	0%	\$357,354	\$357,354	\$0
(2) P-2235C	198	30		\$265.19	\$52,404		\$28,168	\$80,572	100%	100%	0%	\$80,572	\$80,572	\$0
(2) P-2648	5,512	30		\$265.19	\$1,461,605		\$785,646	\$2,247,251	100%	100%	0%	\$2,247,251	\$2,247,251	\$0
* Subtotal:	8,585				\$2,276,524	4.5%	1,223,683	\$3,500,207				\$3,500,207	\$3,500,207	\$0
<b>(16) - 24" Water Line From Midway Pump Station to S.H. 121</b>														
This project begins at Midway Pump Station and extends north along FM 544 to SH 121 business														
(2) P-2292	331	24		\$182.38	\$60,386		\$32,459	\$92,845	100%	100%	0%	\$92,845	\$92,845	\$0
(2) P-2293	1,263	24		\$182.38	\$230,320		\$123,802	\$354,122	100%	100%	0%	\$354,122	\$354,122	\$0
* Subtotal:	1,594		2011		\$290,706	4.5%	156,261	\$446,967				\$446,967	\$446,967	\$0
<b>(17) - Josey-FM 544 16-Inch Water Line</b>														
This project begins at Windhaven Parkway and extends south along Josey Lane to FM 544. Then extends west along FM 544 to Indian Creek														
(1) P-3138	1,870	16		\$77.70	\$145,266		\$78,084	\$223,350	40%	48%	8%	\$89,037	\$106,299	\$17,262
(1) P-3240	1,518	16		\$77.70	\$117,937		\$63,394	\$181,331	51%	100%	49%	\$93,120	\$181,331	\$88,211
(1) P-3242	2,971	16		\$77.70	\$230,821		\$124,072	\$354,893	36%	49%	12%	\$128,919	\$172,477	\$43,558
(1) P-3175	2,065	16		\$77.70	\$160,463		\$86,253	\$246,716	73%	100%	27%	\$180,878	\$246,716	\$65,838
(1) P-3241	495	16		\$77.70	\$38,458		\$20,672	\$59,130	45%	45%	0%	\$26,672	\$26,877	\$208
* Subtotal:	8,919				\$692,945	4.5%	372,475	\$1,065,420				\$518,623	\$733,700	\$215,077

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WATER SYSTEM IMPACT FEE STUDY**  
**EXISTING - WATER LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Date of Const.	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	Utilized Capacity (%)		Utilized Capacity (\$)		During Fee Period
									2018	2028	2018	2028	
<b>(18) - Arthur's Lane Bridge at Timber Creek</b>													
This project consists of an 8-inch line around Hebron Station Circle and 12-inch line along Union Station Parkway													
(1) P-2637	1,622	8		\$55.24	\$89,582		\$48,152	\$137,734	100%	100%	\$137,734	\$137,734	\$0
(1) P-2639	334	12		\$55.24	\$18,429		\$9,906	\$28,335	100%	100%	\$28,335	\$28,335	\$0
(1) P-2640	339	12		\$55.24	\$18,742		\$10,074	\$28,816	45%	100%	\$12,940	\$28,816	\$15,876
* Subtotal:	2,294		2011		\$126,753	4.5%	68,132	\$194,885			\$179,009	\$194,885	\$15,876
<b>(19) - SH 121 Business 24-Inch Water Line</b>													
This project extends along SH 121 business to Huffines Boulevard. Then extends from east Huffines Boulevard along Midway road to Midway Pump Station													
(2) P-2426	1,387	12		\$484.74	\$672,148		\$361,295	\$1,033,443	63%	68%	\$654,078	\$702,044	\$47,966
(2) P-2433	678	12		\$484.74	\$328,796		\$176,735	\$505,531	68%	74%	\$344,708	\$375,052	\$30,344
(2) P-2577	2,313	12		\$484.74	\$1,121,008		\$602,567	\$1,723,575	26%	100%	\$451,350	\$1,723,575	\$1,272,225
(2) P-2578	2,931	12		\$484.74	\$1,420,754		\$763,688	\$2,184,442	9%	44%	\$189,760	\$970,863	\$781,103
(2) P-2585	430	12		\$484.74	\$208,568		\$112,110	\$320,678	0%	44%	\$0	\$141,950	\$141,950
* Subtotal:	7,739		2011		\$3,751,274	4.5%	2,016,395	\$5,767,669			\$1,639,896	\$3,913,484	\$2,273,588
<b>TOTAL EXISTING WATER LINES:</b>													
	140,116				\$ 22,336,343.00		\$ 12,006,294.00	\$ 34,342,637.00			\$ 24,900,162.00	\$ 30,487,792.00	\$ 5,587,630.00

1 - City Participate in Cost Oversize

2 - City Initiated and Funded

\* - Based on Cost Provided by the City

**CITY OF LEWISVILLE, TEXAS  
2018-2028 WATER DISTRIBUTION IMPACT FEE STUDY  
PROPOSED WATER FACILITIES**

Pump Station Improvements	Projected Year	Projected Capacity	Cost (\$)					Capacity Utilized (%)			Capacity Utilized (\$)					
			Const.	Engineering, Testing and Property Acquisition	Total Project Cost	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost \$	2018	2028	In The CRF Period	2018	2028	In The CRF Period		
Proposed Facilities																
(1) Southside GSR	25	2.0 MG	\$1,310,000	\$131,000	\$1,441,000	4.5%	\$774,570	\$2,215,570	0.0%	93.3%	93.3%	\$0	\$2,067,656	\$2,067,656		
(1) Midway GSR 2	26	3.0 MG	\$2,325,000	\$232,500	\$2,557,500	4.5%	\$1,374,715	\$3,932,215	0.0%	93.3%	93.3%	\$0	\$3,669,695	\$3,669,695		
(1) DWU Water	27	7.25 MGD	\$15,814,885	\$0	\$15,814,885	0.0%	\$0	\$15,814,885	0.0%	100.0%	100.0%	\$0	\$15,814,885	\$15,814,885		
Subtotal Proposed Facilities:			\$19,449,885	\$363,500	\$19,813,385		\$2,149,285	\$21,962,670				\$0	\$21,552,236	\$21,552,236		
TOTAL PROPOSED WATER FACILITIES:			\$19,449,885	\$363,500	\$19,813,385		\$2,149,285	\$21,962,670				\$0	\$21,552,236	\$21,552,236		

(1) Estimated Cost

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WATER SYSTEM IMPACT FEE STUDY**  
**PROPOSED CIP - WATER LINES**

Birkhoff, Hendricks Carter, L.L.P.  
7/23/2018

*\*\* Average Unit costs are based in 2017 dollars unless otherwise indicated and includes 20% for engineering and easements.*

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			(S) Utilized Capacity		
								2018		2028	During Fee Period		2018
(1P) - Corporate Drive West 12-inch Distribution Line for Southern Connection													
This project will begin at Waters Ridge Drive and extends Northeast along Corporate Drive to Valley Ridge													
(2) P-2466 B	1,416	12	\$165.09	\$233,709		\$125,624	\$359,333	0%	100%	100%	\$0	\$359,333	\$359,333
(2) P-2474	1,490	12	\$122.00	\$181,826		\$97,736	\$279,562	0%	98%	98%	\$0	\$274,941	\$274,941
(2) P-2473	3,789	12	\$122.00	\$462,317		\$248,506	\$710,823	0%	100%	100%	\$0	\$710,823	\$710,823
Subtotal:	6,696			\$877,852	4.5%	471,866	\$1,349,718				\$0	\$1,345,097	\$1,345,097
(2P) - Corporate Drive East 12-inch Water Line													
This project will extend along Corporate Drive, south of Midway Pump Station													
(2) P-2306	1,959	12	\$122.00	\$239,002		\$128,469	\$367,471	0%	72%	72%	\$0	\$262,775	\$262,775
(2) P-2475	5,508	12	\$122.00	\$672,025		\$361,229	\$1,033,254	0%	36%	36%	\$0	\$375,894	\$375,894
(2) P-2476	1,194	12	\$122.00	\$145,706		\$78,320	\$224,026	0%	65%	65%	\$0	\$145,541	\$145,541
(2) P-2477	1,287	12	\$122.00	\$157,038		\$84,412	\$241,450	0%	42%	42%	\$0	\$100,744	\$100,744
(2) P-2478	389	12	\$122.00	\$47,438		\$25,499	\$72,937	0%	38%	38%	\$0	\$27,781	\$27,781
(2) P-2479	1,497	12	\$122.00	\$182,643		\$98,175	\$280,818	0%	43%	43%	\$0	\$119,452	\$119,452
(2) P-2486	2,670	12	\$122.00	\$325,679		\$175,060	\$500,739	0%	59%	59%	\$0	\$293,674	\$293,674
(2) P-2487	1,281	12	\$122.00	\$156,254		\$83,990	\$240,244	0%	65%	65%	\$0	\$155,548	\$155,548
(2) P-2489	2,933	12	\$122.00	\$357,785		\$192,318	\$550,103	0%	51%	51%	\$0	\$280,839	\$280,839
Subtotal:	18,718			\$2,283,570	4.5%	1,227,472	\$3,511,042				\$0	\$1,762,248	\$1,762,248
(3P) - Duncan Lane 12-inch Water line													
This project will begin at Spinks Road and extends along Duncan Lane to Round Grove Road													
(2) P-2423	3,953	12	\$122.00	\$482,211		\$259,199	\$741,410	0%	49%	49%	\$0	\$360,863	\$360,863
Subtotal:	3,953			\$482,211	4.5%	259,199	\$741,410				\$0	\$360,863	\$360,863
(4P) - Parallel 12-inch Waterline From Lake Park Road to Forest Park													
The project will begin at Midway Pump Station and extend north to S.H. 121.													
(2) P-2211	464	12	\$122.00	\$56,579		\$30,413	\$86,992	0%	100%	100%	\$0	\$86,992	\$86,992
(2) P-2213	1,161	12	\$122.00	\$141,635		\$76,132	\$217,767	0%	100%	100%	\$0	\$217,767	\$217,767
(2) P-2216	1,780	12	\$122.00	\$217,194		\$116,747	\$333,941	0%	100%	100%	\$0	\$333,941	\$333,941
Subtotal:	3,405			\$415,408	4.5%	223,292	\$638,700				\$0	\$638,700	\$638,700
(5P) - 12-inch New and Replacement Waterline From Southfork to Main Street													
This project will begin at Southfork and extends south along North Cowan Avenue to Main St West.													
(2) P-2267 R	408	12	\$122.00	\$49,820		\$26,779	\$76,599	0%	100%	100%	\$0	\$76,599	\$76,599
(2) P-2268 R	680	12	\$122.00	\$82,925		\$44,574	\$127,499	0%	100%	100%	\$0	\$127,499	\$127,499
Subtotal:	1,088			\$132,745	4.5%	71,353	\$204,098				\$0	\$204,098	\$204,098

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WATER SYSTEM IMPACT FEE STUDY**  
**PROPOSED CIP - WATER LINES**

Birkhoff, Hendricks Carter, L.L.P.  
7/23/2018

**\*\* Average Unit costs are based in 2017 dollars unless otherwise indicated and includes 20% for engineering and easements.**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Year Project Cost (\$)	(%) Utilized Capacity			During Fee Period
								2018	2028	2018	
<b>(6P) - 12-inch Waterline Loop South of Windhaven Parkway</b>											
This project will begin at Windhaven Parkway and extends south and loops back to Windhaven Parkway											
(2) P-3171	1,553	12	\$122.00	\$189,505		\$101,863	\$291,368	0%	100%	100%	\$291,368
(2) P-3172	1,577	12	\$122.00	\$192,334		\$103,384	\$295,718	0%	68%	68%	\$201,784
(2) P-3173	1,576	12	\$122.00	\$192,253		\$103,340	\$295,593	0%	100%	100%	\$295,593
(2) P-3178	2,320	12	\$122.00	\$283,001		\$152,120	\$435,121	0%	100%	100%	\$435,121
(2) P-3179	2,316	12	\$122.00	\$282,541		\$151,872	\$434,413	0%	100%	100%	\$434,413
(2) P-3180	2,193	12	\$122.00	\$267,515		\$143,795	\$411,310	0%	100%	100%	\$411,310
(2) P-3181	1,595	12	\$122.00	\$194,538		\$104,569	\$299,107	0%	51%	51%	\$151,513
Subtotal:	13,129			\$1,601,687	4.5%	860,943	\$2,462,630			\$0	\$2,221,102
<b>(7P) - 12-inch S.H. 121 Bypass Service Road Water Line</b>											
This project will begin west of Lake Vista Drive and extend along the eastbound service road of S.H. 121 Bypass to Mac Arthur Boulevard.											
(2) P-2600	2,050	12	\$122.00	\$250,088		\$134,428	\$384,516	0%	47%	47%	\$182,323
Subtotal:	2,050			\$250,088	4.5%	134,428	\$384,516			\$0	\$182,323
<b>(8P) - 12-Inch Water Line From Eagle Point Road to Tower Bay Park along I-35E</b>											
This project begins at Eagle Point Road and extends along I-35 to Tower Bay Park											
(2) P-1243 B	1,764	12	\$122.00	\$215,253		\$115,703	\$330,956	0%	73%	73%	\$241,508
Subtotal:	1,764			\$215,253	4.5%	115,703	\$330,956			\$0	\$241,508
<b>(9P) - Hebron Parkway 12-Inch Water Line Loop</b>											
This project begins at Union Station Parkway and extends east and north to Hebron Parkway											
(2) P-2633	709	12	\$122.00	\$86,453		\$46,470	\$132,923	0%	100%	100%	\$132,923
(2) P-2634 B	1,808	12	\$122.00	\$220,591		\$118,573	\$339,164	0%	68%	68%	\$230,341
(2) P-2635	1,976	12	\$122.00	\$241,029		\$129,559	\$370,588	0%	47%	47%	\$174,962
(2) P-2636	1,514	12	\$122.00	\$184,758		\$99,312	\$284,070	0%	30%	30%	\$84,887
Subtotal:	6,007			\$732,831	4.5%	393,914	\$1,126,745			\$0	\$623,113
<b>TOTAL PROPOSED WATER LINES:</b>											
	56,809			\$ 6,991,645		\$ 3,758,170	\$ 10,749,815			\$	\$ 7,579,052
											\$ 7,579,052

(1) - City Participate in Cost Oversize

(2) - City Initiated and Funded

B - Bore Across State Highway or Interstate

P - Parallel Water Line

\* - Based on Actual Bid Price

R-Replacement



**LEWISVILLE**

Deep Roots. Broad Wings. Bright Future.

**WATER AND WASTEWATER  
FIVE YEAR IMPACT FEE REVIEW**

**APPENDIX “B”**

**WASTEWATER COLLECTION SYSTEM  
IMPACT FEE DATA**

**LIFT STATION  
WASTEWATER TREATMENT PLANT  
FORCE MAINS  
COLLECTION LINES**

**CITY OF LEWISVILLE, TEXAS  
2018-2028 WASTEWATER IMPACT FEE  
EXISTING WASTEWATER FACILITIES**

			Cost (\$)							Capacity Utilized (%)				Capacity Utilized (\$)			
Year Const.	Projected Capacity	Const.	Engineering	Total Project Cost	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost \$	2018		2028		2018		2028		In The CRF Period	
Pump Station Improvements																	
Existing Lift Station Facilities																	
(2)	Prairie Creek	1976	9.1 MGD	\$800,000	\$880,000	4.5%	\$473,020	\$1,353,020	76%	89%	13%	\$1,024,294	\$1,200,972	\$176,678			
(2)	Timber Creek	1976	6.0 MGD	\$1,000,000	\$1,100,000	4.5%	\$591,275	\$1,691,275	100%	100%	0%	\$1,691,275	\$1,691,275	\$0			
(2)	Timber Creek Interim Improvements	1995	9.0 MGD	\$150,300	\$165,330	4.5%	\$88,869	\$254,199	100%	100%	0%	\$254,199	\$254,199	\$0			
(3)	Timber Creek Phase I Improvements	1996	23.2 MGD	\$1,683,673	\$1,852,040	4.5%	\$995,514	\$2,847,554	100%	100%	0%	\$2,847,554	\$2,847,554	\$0			
(3)	Timber Creek 36" Force Main	1997	54.1 MGD	\$1,960,064	\$196,006	4.5%	\$1,158,937	\$3,315,007	75%	75%	0%	\$2,493,430	\$2,488,937	\$0			
(3)	Whippoorwill	1985	11.7 MGD	\$1,096,973	\$109,697	4.5%	\$648,613	\$1,855,283	97%	99%	2%	\$1,799,068	\$1,836,545	\$37,477			
(4)	Whippoorwill Force Main	1986	7.0 MGD	\$292,622	\$29,262	4.5%	\$173,020	\$494,904	97%	99%	2%	\$479,908	\$489,905	\$9,997			
(3)	Prairie Creek Pump Station Improvements	2004	18.6 MGD	\$579,658	\$57,966	4.5%	\$342,737	\$980,361	76%	89%	13%	\$742,175	\$870,191	\$128,016			
(3)	Timber Creek Replacement	2012	26.0 MGD	\$9,707,709	\$464,052	4.5%	\$3,467,554	\$15,639,315	53%	68%	16%	\$8,226,280	\$10,650,374	\$2,424,094			
Subtotal Existing Lift Station Facilities:				\$17,270,999	\$1,220,381		\$9,939,539	\$28,430,918				\$19,558,183	\$22,329,952	\$2,776,262			
Existing Wastewater Treatment Facilities																	
(1)	Waste Water Treatment Plant	1976	6.0 MGD	\$2,200,000	\$330,000	4.5%	\$1,359,933	\$3,889,933	100%	100%	0%	\$3,889,933	\$3,889,933	\$0			
(3)	Filter Pump Station Addition	1984		\$21,932	\$3,290	4.5%	\$13,557	\$38,779	100%	100%	0%	\$38,779	\$38,779	\$0			
(3)	Aeration System Improvements	1985		\$227,476	\$34,121	4.5%	\$140,614	\$402,211	100%	100%	0%	\$402,211	\$402,211	\$0			
(3)	WWTP Expansion Phase I	1986	12.0 MGD	\$7,485,785	\$1,122,868	4.5%	\$260,348	\$13,236,001	100%	100%	0%	\$13,236,001	\$13,236,001	\$0			
(3)	Dechlorination	1992		\$404,567	\$60,685	4.5%	\$450,084	\$715,336	100%	100%	0%	\$715,336	\$715,336	\$0			
(2)	Digester Project	1993		\$1,229,295	\$184,394	4.5%	\$759,890	\$2,173,579	100%	100%	0%	\$2,173,579	\$2,173,579	\$0			
(2)	Telemetry Project	1993		\$243,747	\$36,562	4.5%	\$150,673	\$430,982	100%	100%	0%	\$430,982	\$430,982	\$0			
(2)	WWTP & Pump Station Rehab	1996		\$3,080,550	\$462,083	4.5%	\$1,904,246	\$5,446,879	100%	100%	0%	\$5,446,879	\$5,446,879	\$0			
(2)	WWTP Upgrade	1996		\$2,800,500	\$420,075	4.5%	\$1,731,133	\$4,951,708	100%	100%	0%	\$4,951,708	\$4,951,708	\$0			
(4)	WWTP Expansion Phase II	2006	12.0 MGD	\$6,023,660	\$903,549	4.5%	\$3,723,533	\$10,650,742	97%	100%	3%	\$10,299,268	\$10,650,742	\$351,474			
Subtotal Existing Wastewater Treatment Facilities:				\$23,717,512	\$3,557,627		\$14,661,011	\$41,936,150				\$41,936,150	\$41,936,150	\$351,474			
TOTAL EXISTING WASTEWATER FACILITIES:				\$40,988,511	\$4,778,008		\$24,600,550	\$70,367,068				\$61,142,859	\$64,266,102	\$3,127,736			

- (1) Opinion of Probable Cost  
(2) Cost Obtained from the City of Lewisville  
(3) Cost Obtained from Final Pay Request  
(4) Cost from Bid Tabulation

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity (%)			Utilized Capacity (\$)		
								2018	2028	During Fee Period	2018	2028	During Fee Period
1 - Prairie Creek 21" Trunk Main To WWTP													
1001	608	21	\$71.12	\$43,267		\$23,257	\$66,524	75%	89%	13%	\$50,144	\$58,902	\$8,758
1004	681	21	\$71.12	\$48,444		\$26,040	\$74,484	75%	89%	13%	\$56,225	\$66,003	\$9,778
1005	808	21	\$71.12	\$57,481		\$30,897	\$88,378	76%	89%	13%	\$66,833	\$78,401	\$11,568
1008	567	21	\$71.12	\$40,298		\$21,661	\$61,959	76%	89%	13%	\$46,939	\$55,010	\$8,071
1009	15	21	\$71.12	\$1,068		\$574	\$1,642	76%	89%	13%	\$1,246	\$1,459	\$213
Subtotal:	2,679			\$190,558	4.5%	\$102,429	\$292,987				\$221,387	\$259,775	\$38,388
2 - Prairie Creek 42" Parallel Trunk Main To WWTP													
1000	157	42	\$176.26	\$27,735		\$14,908	\$42,643	76%	89%	13%	\$32,283	\$37,851	\$5,568
1002	607	42	\$176.26	\$106,930		\$57,477	\$164,407	76%	89%	13%	\$124,601	\$145,999	\$21,398
1003	685	42	\$176.26	\$120,755		\$64,909	\$185,664	76%	89%	13%	\$140,775	\$164,909	\$24,134
1006	819	42	\$176.26	\$144,341		\$77,587	\$221,928	76%	89%	13%	\$168,334	\$197,161	\$28,827
1007	570	42	\$176.26	\$100,535		\$54,040	\$154,575	76%	89%	13%	\$117,300	\$137,363	\$20,063
Subtotal:	2,838			\$500,296	4.5%	\$268,921	\$769,217				\$583,293	\$683,283	\$99,990
3 - Prairie Creek East Trank Main To Prairie Creek North And West													
2000	950	27	\$81.12	\$77,051		\$41,417	\$118,468	100%	100%	0%	\$118,468	\$118,468	\$0
2001	685	27	\$81.12	\$55,535		\$29,851	\$85,386	100%	100%	0%	\$85,386	\$85,386	\$0
2002	111	30	\$81.12	\$9,004		\$4,840	\$13,844	100%	100%	0%	\$13,844	\$13,844	\$0
2003	965	27	\$81.12	\$78,266		\$42,070	\$120,336	100%	100%	0%	\$120,336	\$120,336	\$0
2004	949	27	\$81.12	\$76,959		\$41,367	\$118,326	100%	100%	0%	\$118,326	\$118,326	\$0
2005	748	24	\$81.12	\$60,640		\$32,595	\$93,235	100%	100%	0%	\$93,235	\$93,235	\$0
2006	192	24	\$81.12	\$15,535		\$8,350	\$23,885	100%	100%	0%	\$23,885	\$23,885	\$0
2007	321	24	\$81.12	\$26,030		\$13,992	\$40,022	100%	100%	0%	\$40,022	\$40,022	\$0
2008	395	24	\$81.12	\$32,022		\$17,213	\$49,235	100%	100%	0%	\$49,235	\$49,235	\$0
2009	376	24	\$81.12	\$30,542		\$16,417	\$46,959	100%	100%	0%	\$46,959	\$46,959	\$0
2010	235	24	\$81.12	\$19,039		\$10,234	\$29,273	100%	100%	0%	\$29,273	\$29,273	\$0
2011	436	24	\$81.12	\$35,346		\$18,999	\$54,345	100%	100%	0%	\$54,345	\$54,345	\$0
2012	279	24	\$81.12	\$22,657		\$12,179	\$34,836	100%	100%	0%	\$34,836	\$34,836	\$0
2013	205	24	\$81.12	\$16,665		\$8,958	\$25,623	100%	100%	0%	\$25,623	\$25,623	\$0
2014	13	24	\$81.12	\$1,061		\$570	\$1,631	100%	100%	0%	\$1,631	\$1,631	\$0
2015	146	24	\$81.12	\$11,864		\$6,377	\$18,241	100%	100%	0%	\$18,241	\$18,241	\$0
2017	866	24	\$81.12	\$70,236		\$37,753	\$107,989	100%	100%	0%	\$107,989	\$107,989	\$0
Subtotal:	7,870			\$638,452	4.5%	\$343,182	\$981,634				\$981,634	\$981,634	\$0

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity			(\$)			During Fee Period
								2018	2028	During Fee Period	2018	2028	During Fee Period	
4 - Prairie Creek East Trunk Main To Lakeside														
3000	141	12	\$34.39	\$4,854		\$2,609	\$7,463	94%	100%	6%	\$7,035	\$7,457		\$422
3001	446	12	\$34.39	\$15,342		\$8,247	\$23,589	94%	100%	6%	\$22,251	\$23,589		\$1,338
3002	513	12	\$34.39	\$17,631		\$9,477	\$27,108	94%	100%	6%	\$25,585	\$27,108		\$1,523
3003	733	12	\$34.39	\$25,196		\$13,543	\$38,739	94%	100%	6%	\$36,533	\$38,706		\$2,173
3004	351	12	\$34.39	\$12,082		\$6,494	\$18,576	94%	100%	6%	\$17,502	\$18,576		\$1,074
3005	769	12	\$34.39	\$26,454		\$14,220	\$40,674	94%	100%	6%	\$38,324	\$40,674		\$2,350
3006	391	10	\$34.39	\$13,446		\$7,228	\$20,674	94%	100%	6%	\$19,461	\$20,674		\$1,213
3007	127	10	\$34.39	\$4,382		\$2,355	\$6,737	94%	100%	6%	\$6,330	\$6,731		\$401
Subtotal:	3,472			\$119,387	4.5%	\$64,173	\$183,560				\$173,021	\$183,515		\$10,494
5 - Prairie Creek West Trunk Main														
5000	111	24	\$64.09	\$7,123		\$3,829	\$10,952	99%	100%	1%	\$10,795	\$10,933		\$138
5001	191	24	\$64.09	\$12,274		\$6,598	\$18,872	99%	100%	1%	\$18,601	\$18,839		\$238
5002	294	24	\$64.09	\$18,827		\$10,120	\$28,947	99%	100%	1%	\$28,532	\$28,891		\$359
5003	203	24	\$64.09	\$13,040		\$7,009	\$20,049	99%	100%	1%	\$19,761	\$20,010		\$249
5006	271	24	\$64.09	\$17,360		\$9,331	\$26,691	99%	100%	1%	\$26,307	\$26,644		\$337
5007	478	24	\$64.09	\$30,631		\$16,465	\$47,096	99%	100%	1%	\$46,411	\$47,005		\$594
5008	355	24	\$64.09	\$22,730		\$12,218	\$34,948	99%	100%	1%	\$34,445	\$34,880		\$435
5009	665	21	\$64.09	\$42,626		\$22,912	\$65,538	99%	100%	1%	\$64,631	\$65,419		\$788
5010	138	21	\$64.09	\$8,813		\$4,737	\$13,550	99%	100%	1%	\$13,370	\$13,525		\$155
5011	139	21	\$64.09	\$8,903		\$4,786	\$13,689	99%	100%	1%	\$13,516	\$13,666		\$150
5012	297	21	\$64.09	\$19,066		\$10,248	\$29,314	99%	100%	1%	\$28,961	\$29,263		\$302
5013	160	21	\$64.09	\$10,285		\$5,528	\$15,813	99%	100%	1%	\$15,630	\$15,785		\$155
5014	167	21	\$64.09	\$10,723		\$5,764	\$16,487	99%	100%	1%	\$16,307	\$16,457		\$150
5015	265	21	\$64.09	\$17,001		\$9,138	\$26,139	99%	100%	1%	\$25,877	\$26,095		\$218
5016	689	21	\$64.09	\$44,173		\$23,744	\$67,917	99%	100%	1%	\$67,287	\$67,801		\$514
5017	40	21	\$64.09	\$2,544		\$1,367	\$3,911	99%	100%	1%	\$3,877	\$3,904		\$27
5018	607	21	\$64.09	\$38,879		\$20,898	\$59,777	99%	100%	1%	\$59,313	\$59,671		\$358
5019	816	21	\$64.09	\$52,268		\$28,095	\$80,363	99%	100%	1%	\$79,729	\$80,218		\$489
5020	115	21	\$64.09	\$7,395		\$3,975	\$11,370	99%	100%	1%	\$11,279	\$11,349		\$70
5021	61	21	\$64.09	\$3,934		\$2,115	\$6,049	99%	100%	1%	\$6,000	\$6,038		\$38
5023	112	12	\$64.09	\$7,190		\$3,865	\$11,055	100%	100%	0%	\$11,055	\$11,055		\$0
5024	465	12	\$64.09	\$29,804		\$16,020	\$45,824	100%	100%	0%	\$45,824	\$45,824		\$0
5025	642	12	\$64.09	\$41,172		\$22,131	\$63,303	100%	100%	0%	\$63,303	\$63,303		\$0
5026	125	12	\$64.09	\$8,017		\$4,309	\$12,326	100%	100%	0%	\$12,326	\$12,326		\$0
5027	51	12	\$64.09	\$3,289		\$1,768	\$5,057	100%	100%	0%	\$5,057	\$5,057		\$0
5028	329	12	\$64.09	\$21,107		\$11,345	\$32,452	100%	100%	0%	\$32,452	\$32,452		\$0
Subtotal:	7,788			\$499,174	4.5%	\$268,315	\$767,489				\$760,646	\$766,410		\$5,764

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity			During Fee Period	
								(%)	2018	2028		
6 - Prairie Creek North Trunk Main												
4000	499	24	\$70.94	\$35,405		\$19,031	\$54,436	42%			36%	\$19,484
4001	150	24	\$70.94	\$10,630		\$5,714	\$16,344	42%			36%	\$5,851
4002	346	24	\$70.94	\$24,511		\$13,175	\$37,686	42%			36%	\$13,514
4003	196	24	\$70.94	\$13,926		\$7,486	\$21,412	42%			36%	\$7,681
4004	124	24	\$70.94	\$8,762		\$4,710	\$13,472	42%			36%	\$4,837
4005	125	24	\$70.94	\$8,889		\$4,778	\$13,667	41%			36%	\$4,910
4006	664	24	\$70.94	\$47,089		\$25,311	\$72,400	41%			36%	\$26,008
4007	150	24	\$70.94	\$10,660		\$5,730	\$16,390	41%			36%	\$5,891
4008	629	24	\$70.94	\$44,631		\$23,990	\$68,621	41%			36%	\$24,680
4009	367	24	\$70.94	\$26,006		\$13,979	\$39,985	41%			36%	\$14,396
4010	349	24	\$70.94	\$24,789		\$13,325	\$38,114	37%			39%	\$14,683
4011	625	24	\$70.94	\$44,313		\$23,819	\$68,132	36%			39%	\$26,664
4012	709	21	\$70.94	\$50,316		\$27,046	\$77,362	36%			39%	\$30,407
4013	59	21	\$70.94	\$4,199		\$2,257	\$6,456	36%			39%	\$2,549
4014	465	21	\$70.94	\$32,991		\$17,733	\$50,724	36%			40%	\$20,114
4015	497	21	\$70.94	\$35,250		\$18,948	\$54,198	36%			40%	\$21,576
4016	408	21	\$70.94	\$28,961		\$15,567	\$44,528	36%			40%	\$17,813
4017	497	21	\$70.94	\$35,270		\$18,958	\$54,228	36%			40%	\$21,804
4018	206	21	\$70.94	\$14,648		\$7,874	\$22,522	57%			26%	\$5,901
4019	570	21	\$70.94	\$40,469		\$21,753	\$62,222	59%			26%	\$15,966
4020	987	21	\$70.94	\$70,003		\$37,628	\$107,631	60%			25%	\$27,001
4021	102	21	\$70.94	\$7,234		\$3,888	\$11,122	62%			24%	\$2,709
4022	400	21	\$70.94	\$28,365		\$15,247	\$43,612	63%			24%	\$10,546
4023	1,002	21	\$70.94	\$71,066		\$38,200	\$109,266	64%			24%	\$26,292
4024	91	21	\$70.94	\$6,482		\$3,484	\$9,966	66%			24%	\$2,376
4025	145	21	\$70.94	\$10,291		\$5,532	\$15,823	66%			24%	\$3,757
4026	146	21	\$70.94	\$10,387		\$5,583	\$15,970	67%			24%	\$3,777
4027	805	21	\$70.94	\$57,090		\$30,687	\$87,777	67%			24%	\$20,761
4028	74	24	\$70.94	\$5,276		\$2,836	\$8,112	42%			36%	\$2,911
4029	18	21	\$70.94	\$1,295		\$696	\$1,991	68%			24%	\$468
Subtotal:	11,407			\$809,204	4.5%	\$434,965	\$1,244,169		\$600,782	\$1,006,109		\$405,327

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity (%)			Utilized Capacity (\$)			During Fee Period
								2018	2028	During Fee Period	2018	2028	During Fee Period	
7 - Whippoorwill Trunk Main														
4700	92	21	\$429.73	\$39,510		\$21,238	\$60,748	69%	92%	23%	\$41,816	\$55,903	\$14,087	
4701	173	21	\$429.73	\$74,337		\$39,958	\$114,295	69%	92%	23%	\$79,127	\$105,379	\$26,252	
4702	310	21	\$429.73	\$133,270		\$71,636	\$204,906	70%	92%	23%	\$142,792	\$189,320	\$46,528	
4703	165	21	\$429.73	\$70,827		\$38,071	\$108,898	76%	94%	18%	\$82,664	\$102,292	\$19,628	
4704	381	18	\$429.73	\$163,930		\$88,116	\$252,046	76%	94%	18%	\$191,697	\$236,959	\$45,262	
4705	326	18	\$429.73	\$139,975		\$75,240	\$215,215	76%	94%	18%	\$164,395	\$202,510	\$38,115	
4706	399	18	\$429.73	\$171,518		\$92,195	\$263,713	77%	94%	17%	\$202,340	\$248,370	\$46,030	
4707	100	18	\$429.73	\$43,120		\$23,178	\$66,298	77%	94%	17%	\$51,008	\$62,384	\$11,376	
4708	293	18	\$429.73	\$125,718		\$67,576	\$193,294	77%	94%	17%	\$149,413	\$182,414	\$33,001	
4710	190	18	\$429.73	\$81,825		\$43,983	\$125,808	78%	94%	17%	\$97,717	\$118,845	\$21,128	
4711	233	18	\$429.73	\$100,163		\$53,840	\$154,003	78%	95%	17%	\$120,212	\$145,630	\$25,418	
4712	41	18	\$429.73	\$17,597		\$9,459	\$27,056	75%	94%	19%	\$20,260	\$25,389	\$5,129	
Subtotal:	2,704			\$1,161,790	4.5%	\$624,490	\$1,786,280				\$1,343,441	\$1,675,395	\$331,954	
8 - Railroad Street Trunk Main														
1010	237	27	\$214.80	\$50,936		\$27,379	\$78,315	81%	87%	7%	\$63,297	\$68,478	\$5,181	
6000	273	27	\$214.80	\$58,689		\$31,547	\$90,236	81%	88%	7%	\$73,429	\$79,327	\$5,898	
6001	237	27	\$214.80	\$50,980		\$27,403	\$78,383	82%	88%	7%	\$64,127	\$69,235	\$5,108	
6002	161	27	\$214.80	\$34,586		\$18,591	\$53,177	82%	89%	6%	\$43,750	\$47,197	\$3,447	
6003	43	27	\$214.80	\$9,258		\$4,976	\$14,234	85%	91%	6%	\$12,067	\$12,928	\$861	
6004	355	27	\$214.80	\$76,226		\$40,973	\$117,199	85%	91%	6%	\$100,044	\$107,103	\$7,059	
6005	348	27	\$214.80	\$74,646		\$40,124	\$114,770	86%	92%	6%	\$98,678	\$105,585	\$6,907	
6006	95	27	\$214.80	\$20,494		\$11,016	\$31,510	87%	93%	6%	\$27,291	\$29,172	\$1,881	
6007	274	27	\$214.80	\$58,853		\$31,635	\$90,488	87%	93%	6%	\$78,955	\$84,309	\$5,374	
6008	106	24	\$214.80	\$22,773		\$12,241	\$35,014	96%	98%	2%	\$33,514	\$34,357	\$843	
6009	83	24	\$214.80	\$17,882		\$9,612	\$27,494	97%	99%	2%	\$26,566	\$27,205	\$639	
6010	392	24	\$214.80	\$84,239		\$45,280	\$129,519	97%	99%	2%	\$125,142	\$128,158	\$3,016	
6011	294	24	\$214.80	\$63,088		\$33,911	\$96,999	97%	99%	2%	\$93,744	\$95,978	\$2,234	
6012	63	24	\$214.80	\$13,511		\$7,262	\$20,773	97%	99%	2%	\$20,075	\$20,548	\$473	
6013	162	24	\$214.80	\$34,812		\$18,712	\$53,524	97%	99%	2%	\$51,753	\$52,959	\$1,206	
6014	205	24	\$214.80	\$43,946		\$23,622	\$67,568	97%	99%	2%	\$65,329	\$66,854	\$1,525	
6015	65	24	\$214.80	\$13,961		\$7,504	\$21,465	97%	99%	2%	\$20,759	\$21,238	\$479	
6016	423	24	\$214.80	\$90,919		\$48,871	\$139,790	97%	99%	2%	\$135,184	\$138,308	\$3,124	
6017	315	24	\$214.80	\$67,674		\$36,376	\$104,050	97%	99%	2%	\$101,014	\$103,328	\$2,314	
6060	19	27	\$214.80	\$4,004		\$2,152	\$6,156	81%	87%	7%	\$4,982	\$5,385	\$403	
Subtotal:	4,150			\$891,477	4.5%	\$479,187	\$1,370,664				\$1,239,680	\$1,297,652	\$57,972	

**2018-2028 WASTEWATER IMPACT FEE  
EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity			(\$)		During Fee Period
								2018	2028	Period	2018	2028	
9 - Corporate Trunk Main													
6018	360	18	\$94.15	\$33,849		\$18,195	\$52,044	97%	99%	2%	\$50,521	\$51,683	\$1,162
6019	224	18	\$94.15	\$21,045		\$11,312	\$32,357	97%	99%	2%	\$31,417	\$32,141	\$724
6020	145	18	\$94.15	\$13,635		\$7,329	\$20,964	97%	99%	2%	\$20,353	\$20,824	\$471
6021	225	18	\$94.15	\$21,189		\$11,390	\$32,579	97%	99%	2%	\$31,626	\$32,351	\$725
6022	362	18	\$94.15	\$34,106		\$18,333	\$52,439	97%	99%	2%	\$50,900	\$52,089	\$1,189
6023	348	18	\$94.15	\$32,796		\$17,629	\$50,425	97%	99%	2%	\$48,956	\$50,107	\$1,151
6024	223	18	\$94.15	\$20,993		\$11,284	\$32,277	97%	99%	2%	\$31,333	\$32,086	\$753
6025	275	18	\$94.15	\$25,928		\$13,937	\$39,865	97%	99%	2%	\$38,695	\$39,615	\$920
6026	280	18	\$94.15	\$26,335		\$14,156	\$40,491	97%	99%	2%	\$39,297	\$40,255	\$958
6027	137	18	\$94.15	\$12,916		\$6,943	\$19,859	97%	99%	2%	\$19,279	\$19,754	\$475
6028	641	12	\$94.15	\$60,385		\$32,458	\$92,843	97%	99%	2%	\$90,101	\$92,370	\$2,269
6029	102	12	\$94.15	\$9,561		\$5,139	\$14,700	97%	100%	3%	\$14,263	\$14,635	\$372
6030	253	12	\$94.15	\$23,830		\$12,809	\$36,639	97%	100%	3%	\$35,563	\$36,507	\$944
6031	204	12	\$94.15	\$19,229		\$10,336	\$29,565	97%	100%	3%	\$28,690	\$29,487	\$797
6032	40	12	\$94.15	\$3,751		\$2,016	\$5,767	97%	100%	3%	\$5,597	\$5,752	\$155
6033	873	12	\$94.15	\$82,176		\$44,171	\$126,347	97%	100%	3%	\$122,720	\$126,088	\$3,368
6034	897	12	\$94.15	\$84,419		\$45,377	\$129,796	97%	100%	3%	\$126,088	\$129,525	\$3,437
6035	306	12	\$94.15	\$28,799		\$15,480	\$44,279	97%	100%	3%	\$43,051	\$44,216	\$1,165
6036	527	12	\$94.15	\$49,591		\$26,656	\$76,247	97%	100%	3%	\$76,144	\$76,136	\$1,992
6037	353	12	\$94.15	\$33,255		\$17,875	\$51,130	97%	100%	3%	\$49,766	\$51,092	\$1,326
6038	179	12	\$94.15	\$16,822		\$9,042	\$25,864	97%	100%	3%	\$25,179	\$25,844	\$665
6039	174	12	\$94.15	\$16,392		\$8,811	\$25,203	97%	100%	3%	\$24,559	\$25,203	\$644
6040	309	12	\$94.15	\$29,132		\$15,659	\$44,791	97%	100%	3%	\$43,657	\$44,791	\$1,134
6041	162	12	\$94.15	\$15,233		\$8,188	\$23,421	97%	100%	3%	\$22,787	\$23,421	\$634
6042	329	12	\$94.15	\$31,009		\$16,668	\$47,677	97%	100%	3%	\$46,290	\$47,677	\$1,387
6043	211	12	\$94.15	\$19,860		\$10,675	\$30,535	97%	100%	3%	\$29,575	\$30,535	\$960
6044	144	12	\$94.15	\$13,604		\$7,312	\$20,916	97%	100%	3%	\$20,201	\$20,916	\$715
6045	99	12	\$94.15	\$9,312		\$5,005	\$14,317	96%	100%	4%	\$13,781	\$14,317	\$536
6046	14	12	\$94.15	\$1,275		\$685	\$1,960	96%	100%	4%	\$1,878	\$1,960	\$82
6047	106	12	\$94.15	\$9,955		\$5,351	\$15,306	95%	100%	5%	\$14,584	\$15,306	\$722
6061	26	18	\$94.15	\$2,437		\$1,310	\$3,747	97%	100%	2%	\$3,637	\$3,729	\$92
Subtotal:	8,527			\$802,819	4.5%	\$431,531	\$1,234,350				\$1,198,488	\$1,230,412	\$31,924

## 10 - Timber Creek East

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		
								2018	2028	During Fee Period	2018	2028	During Fee Period
11 - Timber Creek East To Lakepointe Lift Station													
7037	81	18	\$64.04	\$5,211		\$2,801	\$8,012	64%	100%	36%	\$5,099	\$8,012	\$2,913
7101	57	18	\$64.04	\$3,652		\$1,963	\$5,615	64%	100%	36%	\$3,587	\$5,604	\$2,017
7102	357	18	\$64.04	\$22,883		\$12,300	\$35,183	64%	100%	36%	\$22,478	\$35,108	\$12,630
7103	344	18	\$64.04	\$22,020		\$11,836	\$33,856	64%	100%	36%	\$21,632	\$33,776	\$12,144
7104	317	18	\$64.04	\$20,331		\$10,928	\$31,259	64%	100%	36%	\$19,922	\$31,176	\$11,254
7105	451	18	\$64.04	\$28,913		\$15,541	\$44,454	64%	100%	36%	\$28,326	\$44,318	\$15,992
7106	442	18	\$64.04	\$28,296		\$15,210	\$43,506	64%	100%	36%	\$27,714	\$43,351	\$15,637
7107	500	18	\$64.04	\$32,025		\$17,214	\$49,239	64%	100%	36%	\$31,353	\$49,029	\$17,676
7108	349	18	\$64.04	\$22,340		\$12,008	\$34,348	64%	100%	36%	\$22,081	\$34,348	\$12,267
7109	438	18	\$64.04	\$28,048		\$15,076	\$43,124	64%	99%	35%	\$27,526	\$42,665	\$15,139
7110	455	18	\$64.04	\$29,169		\$15,679	\$44,848	64%	100%	36%	\$28,626	\$44,848	\$16,222
Subtotal:	3,793			\$242,888	4.5%	\$130,556	\$373,444				\$238,344	\$372,235	\$133,891

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity			(\$)		
								2018	2028	During Fee Period	2018	2028	During Fee Period
12 - Timber Creek West													
7699	772	27	\$79.35	\$61,242		\$32,919	\$94,161	100%	100%	0%	\$93,894	\$94,161	\$267
7700	229	27	\$79.35	\$18,165		\$9,764	\$27,929	100%	100%	0%	\$27,802	\$27,929	\$127
7702	542	27	\$79.35	\$42,998		\$23,112	\$66,110	100%	100%	0%	\$65,812	\$66,110	\$298
7703	185	27	\$79.35	\$14,655		\$7,877	\$22,532	100%	100%	0%	\$22,432	\$22,532	\$100
7704	289	27	\$79.35	\$22,934		\$12,328	\$35,262	100%	100%	0%	\$35,107	\$35,262	\$155
7705	154	27	\$79.35	\$12,211		\$6,564	\$18,775	100%	100%	0%	\$18,697	\$18,775	\$78
7708	621	27	\$79.35	\$49,252		\$26,474	\$75,726	100%	100%	0%	\$75,418	\$75,726	\$308
7709	696	27	\$79.35	\$55,238		\$29,692	\$84,930	100%	100%	0%	\$84,591	\$84,930	\$339
7710	215	27	\$79.35	\$17,070		\$9,176	\$26,246	100%	100%	0%	\$26,143	\$26,246	\$103
7712	658	27	\$79.35	\$52,219		\$28,069	\$80,288	100%	100%	0%	\$79,998	\$80,288	\$290
7713	439	27	\$79.35	\$34,850		\$18,733	\$53,583	100%	100%	0%	\$53,387	\$53,583	\$196
7714	341	27	\$79.35	\$27,094		\$14,564	\$41,658	100%	100%	0%	\$41,513	\$41,658	\$145
7715	167	27	\$79.35	\$13,247		\$7,121	\$20,368	100%	100%	0%	\$20,300	\$20,368	\$68
7716	129	27	\$79.35	\$10,270		\$5,520	\$15,790	100%	100%	0%	\$15,740	\$15,790	\$50
7717	338	27	\$79.35	\$26,853		\$14,434	\$41,287	100%	100%	0%	\$41,155	\$41,287	\$132
7718	240	27	\$79.35	\$19,013		\$10,220	\$29,233	100%	100%	0%	\$29,145	\$29,233	\$88
7719	627	27	\$79.35	\$49,763		\$26,749	\$76,512	100%	100%	0%	\$76,317	\$76,512	\$195
7720	361	27	\$79.35	\$28,609		\$15,378	\$43,987	100%	100%	0%	\$43,906	\$43,987	\$81
7721	126	27	\$79.35	\$9,999		\$5,375	\$15,374	100%	100%	0%	\$15,350	\$15,374	\$24
7722	725	27	\$79.35	\$57,495		\$30,905	\$88,400	100%	100%	0%	\$88,254	\$88,400	\$146
7723	713	27	\$79.35	\$56,597		\$30,422	\$87,019	100%	100%	0%	\$86,900	\$87,019	\$119
7724	135	27	\$79.35	\$10,712		\$5,758	\$16,470	100%	100%	0%	\$16,452	\$16,470	\$18
7725	68	27	\$79.35	\$5,376		\$2,890	\$8,266	100%	100%	0%	\$8,266	\$8,266	\$6
7726	153	27	\$79.35	\$12,172		\$6,543	\$18,715	100%	100%	0%	\$18,708	\$18,715	\$7
7727	487	21	\$79.35	\$38,638		\$20,769	\$59,407	100%	100%	0%	\$59,407	\$59,407	\$0
7728	335	21	\$79.35	\$26,595		\$14,295	\$40,890	100%	100%	0%	\$40,890	\$40,890	\$0
7729	515	21	\$79.35	\$40,845		\$21,955	\$62,800	100%	100%	0%	\$62,800	\$62,800	\$0
7730	428	21	\$79.35	\$33,945		\$18,246	\$52,191	100%	100%	0%	\$52,191	\$52,191	\$0
7731	111	21	\$79.35	\$8,774		\$4,716	\$13,490	100%	100%	0%	\$13,490	\$13,490	\$0
7732	478	21	\$79.35	\$37,955		\$20,402	\$58,357	100%	100%	0%	\$58,357	\$58,357	\$0
7733	594	21	\$79.35	\$47,152		\$25,345	\$72,497	100%	100%	0%	\$72,497	\$72,497	\$0
7734	171	21	\$79.35	\$13,552		\$7,285	\$20,837	100%	100%	0%	\$20,837	\$20,837	\$0
7735	94	21	\$79.35	\$7,472		\$4,016	\$11,488	100%	100%	0%	\$11,488	\$11,488	\$0
7736	208	21	\$79.35	\$16,482		\$8,859	\$25,341	100%	100%	0%	\$25,341	\$25,341	\$0
7737	186	21	\$79.35	\$14,773		\$7,941	\$22,714	100%	100%	0%	\$22,714	\$22,714	\$0
7738	70	21	\$79.35	\$5,569		\$2,993	\$8,562	100%	100%	0%	\$8,562	\$8,562	\$0
7739	38	12	\$79.35	\$3,032		\$1,630	\$4,662	100%	100%	0%	\$4,662	\$4,662	\$0
7740	33	12	\$79.35	\$2,588		\$1,391	\$3,979	100%	100%	0%	\$3,979	\$3,979	\$0
7741	13	12	\$79.35	\$1,002		\$539	\$1,541	100%	100%	0%	\$1,541	\$1,541	\$0
7742	624	15	\$79.35	\$49,542		\$26,630	\$76,172	100%	100%	0%	\$76,172	\$76,172	\$0
7743	222	10	\$79.35	\$17,648		\$9,486	\$27,134	100%	100%	0%	\$27,134	\$27,134	\$0
Subtotal:	13,530			\$1,073,598	4.5%	\$577,085	\$1,650,683				\$1,647,343	\$1,650,683	\$3,340

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity (%)		Utilized Capacity (\$)		During Fee Period
								2018	2028	2018	2028	
13 - Fox Creek South												
7499	87	21	\$61.74	\$5,385		\$2,895	\$8,280	99%	100%	\$8,225	\$8,280	\$55
7500	368	21	\$61.74	\$22,720		\$12,213	\$34,933	99%	100%	\$34,713	\$34,933	\$220
7501	141	21	\$61.74	\$8,720		\$4,687	\$13,407	99%	100%	\$13,325	\$13,407	\$82
7502	148	21	\$61.74	\$9,151		\$4,919	\$14,070	99%	100%	\$13,984	\$14,070	\$86
7503	146	21	\$61.74	\$9,041		\$4,860	\$13,901	99%	100%	\$13,816	\$13,901	\$85
7504	601	21	\$61.74	\$37,095		\$19,939	\$57,034	99%	100%	\$56,673	\$57,034	\$361
7505	277	21	\$61.74	\$17,113		\$9,199	\$26,312	99%	100%	\$26,145	\$26,312	\$167
7506	283	21	\$61.74	\$17,470		\$9,391	\$26,861	99%	100%	\$26,691	\$26,861	\$170
7507	284	21	\$61.74	\$17,554		\$9,436	\$26,990	99%	100%	\$26,825	\$26,990	\$165
7508	117	21	\$61.74	\$7,224		\$3,883	\$11,107	99%	100%	\$11,036	\$11,107	\$71
7509	133	21	\$61.74	\$8,182		\$4,398	\$12,580	99%	100%	\$12,502	\$12,580	\$78
7510	36	21	\$61.74	\$2,216		\$1,191	\$3,407	99%	100%	\$3,386	\$3,407	\$21
7511	278	21	\$61.74	\$17,145		\$9,216	\$26,361	99%	100%	\$26,195	\$26,361	\$166
7512	86	21	\$61.74	\$5,313		\$2,856	\$8,169	99%	100%	\$8,117	\$8,169	\$52
7513	113	21	\$61.74	\$6,997		\$3,761	\$10,758	99%	100%	\$10,689	\$10,758	\$69
7514	253	21	\$61.74	\$15,649		\$8,412	\$24,061	99%	100%	\$23,905	\$24,061	\$156
7515	61	21	\$61.74	\$3,757		\$2,019	\$5,776	99%	100%	\$5,738	\$5,776	\$38
7516	27	21	\$61.74	\$1,695		\$911	\$2,606	99%	100%	\$2,589	\$2,606	\$17
7517	750	21	\$61.74	\$46,308		\$24,892	\$71,200	99%	100%	\$70,727	\$71,200	\$473
7518	313	21	\$61.74	\$19,345		\$10,398	\$29,743	99%	100%	\$29,544	\$29,743	\$199
7519	148	21	\$61.74	\$9,110		\$4,897	\$14,007	99%	100%	\$13,912	\$14,007	\$95
7520	242	21	\$61.74	\$14,928		\$8,024	\$22,952	99%	100%	\$22,800	\$22,952	\$152
7521	114	21	\$61.74	\$7,054		\$3,792	\$10,846	99%	100%	\$10,772	\$10,846	\$74
7522	237	21	\$61.74	\$14,645		\$7,872	\$22,517	99%	100%	\$22,367	\$22,517	\$150
7523	208	21	\$61.74	\$12,851		\$6,908	\$19,759	99%	100%	\$19,630	\$19,759	\$129
7524	139	21	\$61.74	\$8,609		\$4,628	\$13,237	99%	100%	\$13,148	\$13,237	\$89
7525	147	21	\$61.74	\$9,100		\$4,891	\$13,991	99%	100%	\$13,899	\$13,991	\$92
7526	279	21	\$61.74	\$17,231		\$9,262	\$26,493	99%	100%	\$26,323	\$26,493	\$170
7527	659	21	\$61.74	\$40,701		\$21,878	\$62,579	99%	100%	\$62,187	\$62,579	\$392
7528	188	18	\$61.74	\$11,590		\$6,230	\$17,820	100%	100%	\$17,796	\$17,820	\$24
7529	439	18	\$61.74	\$27,137		\$14,587	\$41,724	100%	100%	\$41,666	\$41,724	\$58
7530	347	18	\$61.74	\$21,448		\$11,529	\$32,977	100%	100%	\$32,945	\$32,977	\$32
7531	375	18	\$61.74	\$23,172		\$12,455	\$35,627	100%	100%	\$35,591	\$35,627	\$36
7532	919	12	\$61.74	\$56,733		\$30,495	\$87,228	100%	100%	\$87,228	\$87,228	\$0
7533	119	12	\$61.74	\$7,377		\$3,965	\$11,342	100%	100%	\$11,342	\$11,342	\$0
7534	133	12	\$61.74	\$8,184		\$4,399	\$12,583	100%	100%	\$12,583	\$12,583	\$0
7535	667	12	\$61.74	\$41,186		\$22,138	\$63,324	100%	100%	\$63,324	\$63,324	\$0
7537	67	12	\$61.74	\$4,123		\$2,216	\$6,339	100%	100%	\$6,339	\$6,339	\$0
7538	66	15	\$61.74	\$4,074		\$2,190	\$6,264	100%	100%	\$6,264	\$6,264	\$0
7539	67	15	\$61.74	\$4,132		\$2,221	\$6,353	100%	100%	\$6,353	\$6,353	\$0
7540	82	15	\$61.74	\$5,068		\$2,724	\$7,792	100%	100%	\$7,792	\$7,792	\$0
7541	122	12	\$61.74	\$7,507		\$4,035	\$11,542	100%	100%	\$11,542	\$11,542	\$0
7542	37	12	\$61.74	\$2,309		\$1,241	\$3,550	100%	100%	\$3,550	\$3,550	\$0

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity			During Fee Period
								(%)	2018	2028	
7543	238	12	\$61.74	\$14,690		\$7,896	\$22,586	100%	\$22,586	\$22,586	\$0
7544	167	12	\$61.74	\$10,306		\$5,540	\$15,846	100%	\$15,846	\$15,846	\$0
7545	172	12	\$61.74	\$10,601		\$5,698	\$16,299	100%	\$16,299	\$16,299	\$0
7546	451	12	\$61.74	\$27,830		\$14,959	\$42,789	100%	\$42,789	\$42,789	\$0
7547	456	12	\$61.74	\$28,145		\$15,129	\$43,274	100%	\$43,274	\$43,274	\$0
7548	193	12	\$61.74	\$11,936		\$6,416	\$18,352	100%	\$18,352	\$18,352	\$0
7549	273	12	\$61.74	\$16,842		\$9,053	\$25,895	100%	\$25,895	\$25,895	\$0
7550	441	12	\$61.74	\$27,257		\$14,651	\$41,908	100%	\$41,908	\$41,908	\$0
7551	103	12	\$61.74	\$6,346		\$3,411	\$9,757	100%	\$9,757	\$9,757	\$0
7552	110	8	\$61.74	\$6,769		\$3,638	\$10,407	100%	\$10,407	\$10,407	\$0
7553	177	8	\$61.74	\$10,910		\$5,864	\$16,774	100%	\$16,774	\$16,774	\$0
7554	28	8	\$61.74	\$1,699		\$913	\$2,612	100%	\$2,612	\$2,612	\$0
7555	178	8	\$61.74	\$10,985		\$5,905	\$16,890	100%	\$16,890	\$16,890	\$0
7556	281	8	\$61.74	\$17,335		\$9,318	\$26,653	100%	\$26,653	\$26,653	\$0
7557	463	8	\$61.74	\$28,606		\$15,376	\$43,982	100%	\$43,982	\$43,982	\$0
7558	427	8	\$61.74	\$26,365		\$14,172	\$40,537	100%	\$40,537	\$40,537	\$0
7559	159	8	\$61.74	\$9,825		\$5,281	\$15,106	100%	\$15,106	\$15,106	\$0
7560	202	10	\$61.74	\$12,488		\$6,713	\$19,201	100%	\$19,201	\$19,201	\$0
7561	406	10	\$61.74	\$25,060		\$13,470	\$38,530	100%	\$38,530	\$38,530	\$0
7562	422	10	\$61.74	\$26,080		\$14,019	\$40,099	100%	\$40,099	\$40,099	\$0
7563	80	10	\$61.74	\$4,922		\$2,646	\$7,568	100%	\$7,568	\$7,568	\$0
7565	121	10	\$61.74	\$7,480		\$4,021	\$11,501	100%	\$11,501	\$11,501	\$0
7566	530	10	\$61.74	\$32,743		\$17,600	\$50,343	100%	\$50,343	\$50,343	\$0
7567	476	10	\$61.74	\$29,405		\$15,806	\$45,211	100%	\$45,211	\$45,211	\$0
7568	49	10	\$61.74	\$3,041		\$1,635	\$4,676	100%	\$4,676	\$4,676	\$0
7569	134	18	\$61.74	\$8,274		\$4,447	\$12,721	100%	\$12,721	\$12,721	\$0
7570	132	18	\$61.74	\$8,150		\$4,381	\$12,531	100%	\$12,531	\$12,531	\$0
7571	39	12	\$61.74	\$2,392		\$1,286	\$3,678	100%	\$3,678	\$3,678	\$0
7572	321	12	\$61.74	\$19,832		\$10,660	\$30,492	100%	\$30,492	\$30,492	\$0
7573	536	12	\$61.74	\$33,116		\$17,801	\$50,917	100%	\$50,917	\$50,917	\$0
7597	71	12	\$61.74	\$4,409		\$2,370	\$6,779	100%	\$6,775	\$6,779	\$4
Subtotal:	18,142			\$1,120,188	4.5%	\$602,128	\$1,722,316		\$1,718,088	\$1,722,316	\$4,228
<b>14 - Fox Creek North</b>											
7605	94	12	\$46.06	\$4,341		\$2,333	\$6,674	98%	\$6,542	\$6,674	\$132
7606	21	12	\$46.06	\$959		\$515	\$1,474	98%	\$1,444	\$1,474	\$30
7607	205	12	\$46.06	\$9,449		\$5,079	\$14,528	98%	\$14,214	\$14,528	\$314
7608	195	10	\$46.06	\$8,990		\$4,832	\$13,822	98%	\$13,484	\$13,822	\$338
7621	475	10	\$46.06	\$21,869		\$11,755	\$33,624	97%	\$32,516	\$33,624	\$1,108
7622	39	10	\$46.06	\$1,803		\$969	\$2,772	96%	\$2,671	\$2,772	\$101
Subtotal:	1,029			\$47,411	4.5%	\$25,483	\$72,894		\$70,871	\$72,894	\$2,023
<b>15 - Midway Branch - Timber Creek Lift Station To Sh 121</b>											
9000	487	30	\$149.19	\$72,691		\$39,073	\$111,764	100%	\$111,764	\$111,764	\$0

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity (%)			Utilized Capacity (\$)			During Fee Period
								2018	2028	During Fee Period	2018	2028	During Fee Period	
9001	462	30	\$149.19	\$68,927		\$37,050	\$105,977	100%	100%	0%	\$105,977	\$105,977	0%	\$0
9002	264	30	\$149.19	\$39,439		\$21,199	\$60,638	100%	100%	0%	\$60,638	\$60,638	0%	\$0
9003	306	30	\$149.19	\$45,682		\$24,555	\$70,237	100%	100%	0%	\$70,237	\$70,237	0%	\$0
9004	474	30	\$149.19	\$70,696		\$38,001	\$108,697	100%	100%	0%	\$108,697	\$108,697	0%	\$0
9005	577	30	\$149.19	\$86,154		\$46,310	\$132,464	100%	100%	0%	\$132,464	\$132,464	0%	\$0
9006	37	30	\$149.19	\$5,548		\$2,982	\$8,530	100%	100%	0%	\$8,530	\$8,530	0%	\$0
9007	1,000	30	\$149.19	\$149,181		\$80,188	\$229,369	100%	100%	0%	\$229,369	\$229,369	0%	\$0
9008	1,000	30	\$149.19	\$149,233		\$80,216	\$229,449	100%	100%	0%	\$229,449	\$229,449	0%	\$0
9009	968	30	\$149.19	\$144,419		\$77,629	\$222,048	100%	100%	0%	\$222,048	\$222,048	0%	\$0
9010	42	30	\$149.19	\$6,232		\$3,350	\$9,582	100%	100%	0%	\$9,582	\$9,582	0%	\$0
9011	275	30	\$149.19	\$41,047		\$22,064	\$63,111	100%	100%	0%	\$63,111	\$63,111	0%	\$0
9012	850	30	\$149.19	\$126,809		\$68,163	\$194,972	100%	100%	0%	\$194,972	\$194,972	0%	\$0
9013	492	30	\$149.19	\$73,388		\$39,448	\$112,836	100%	100%	0%	\$112,836	\$112,836	0%	\$0
9014	723	30	\$149.19	\$107,879		\$57,987	\$165,866	100%	100%	0%	\$165,866	\$165,866	0%	\$0
9015	998	30	\$149.19	\$148,830		\$80,000	\$228,830	100%	100%	0%	\$228,830	\$228,830	0%	\$0
9016	1,001	24	\$149.19	\$149,295		\$80,249	\$229,544	100%	100%	0%	\$229,544	\$229,544	0%	\$0
9017	1,001	24	\$149.19	\$149,392		\$80,302	\$229,694	100%	100%	0%	\$229,694	\$229,694	0%	\$0
9018	410	24	\$149.19	\$61,140		\$32,864	\$94,004	100%	100%	0%	\$94,004	\$94,004	0%	\$0
9019	583	24	\$149.19	\$86,973		\$46,750	\$133,723	100%	100%	0%	\$133,723	\$133,723	0%	\$0
9020	495	24	\$149.19	\$73,874		\$39,709	\$113,583	100%	100%	0%	\$113,583	\$113,583	0%	\$0
9021	1,107	24	\$149.19	\$165,155		\$88,775	\$253,930	100%	100%	0%	\$253,930	\$253,930	0%	\$0
9022	787	24	\$149.19	\$117,383		\$63,096	\$180,479	100%	100%	0%	\$180,479	\$180,479	0%	\$0
9023	213	24	\$149.19	\$31,810		\$17,099	\$48,909	100%	100%	0%	\$48,909	\$48,909	0%	\$0
9024	1,024	24	\$149.19	\$152,734		\$82,098	\$234,832	100%	100%	0%	\$234,832	\$234,832	0%	\$0
9025	686	24	\$149.19	\$102,272		\$54,974	\$157,246	100%	100%	0%	\$157,246	\$157,246	0%	\$0
9026	741	24	\$149.19	\$110,518		\$59,406	\$169,924	100%	100%	0%	\$169,924	\$169,924	0%	\$0
9027	256	24	\$149.19	\$38,260		\$20,566	\$58,826	100%	100%	0%	\$58,826	\$58,826	0%	\$0
9028	580	24	\$149.19	\$86,592		\$46,545	\$133,137	100%	100%	0%	\$133,137	\$133,137	0%	\$0
9029	165	24	\$149.19	\$24,651		\$13,250	\$37,901	100%	100%	0%	\$37,901	\$37,901	0%	\$0
9030	497	24	\$149.19	\$74,191		\$39,879	\$114,070	100%	100%	0%	\$114,070	\$114,070	0%	\$0
9031	617	24	\$149.19	\$92,116		\$49,514	\$141,630	100%	100%	0%	\$141,630	\$141,630	0%	\$0
9032	148	24	\$149.19	\$22,054		\$11,855	\$33,909	100%	100%	0%	\$33,909	\$33,909	0%	\$0
9033	212	24	\$149.19	\$31,616		\$16,994	\$48,610	100%	100%	0%	\$48,610	\$48,610	0%	\$0
9071	898	21	\$149.19	\$133,949		\$72,001	\$205,950	78%	95%	16%	\$160,768	\$194,714	\$33,946	\$33,946
9072	891	21	\$149.19	\$132,939		\$71,458	\$204,397	78%	95%	17%	\$159,451	\$193,220	\$33,769	\$33,769
9081	73	21	\$149.19	\$10,867		\$5,841	\$16,708	80%	98%	17%	\$13,441	\$16,349	\$2,908	\$2,908
9082	481	21	\$149.19	\$71,693		\$38,537	\$110,230	80%	98%	17%	\$88,608	\$107,771	\$19,163	\$19,163
9170	171	24	\$149.19	\$25,473		\$13,692	\$39,165	100%	100%	0%	\$39,165	\$39,165	0%	\$0
9171	138	21	\$149.19	\$20,543		\$11,042	\$31,585	78%	95%	16%	\$24,676	\$29,867	\$5,191	\$5,191
Subtotal:	22,130			\$3,301,645	4.5%	\$1,774,711	\$5,076,356				\$4,954,430	\$5,049,407		\$94,977

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity (%)			(\$)		During Fee Period
								2018	2028	During Fee Period	2018	2028	
16 - Midway Branch - Holford's 18" Prairie Road To Castle Hills													
9034	42	18	\$147.56	\$6,253		\$3,361	\$9,614	62%	99%	37%	\$5,922	\$9,474	\$3,552
9035	236	18	\$147.56	\$34,790		\$18,700	\$53,490	62%	99%	37%	\$32,991	\$52,792	\$19,801
9036	276	18	\$147.56	\$40,722		\$21,889	\$62,611	62%	99%	37%	\$38,668	\$61,892	\$23,224
9037	565	18	\$147.56	\$83,363		\$44,810	\$128,173	62%	99%	37%	\$79,227	\$126,936	\$47,709
9038	364	18	\$147.56	\$53,716		\$28,874	\$82,590	62%	99%	37%	\$51,105	\$81,901	\$30,796
9039	505	18	\$147.56	\$74,519		\$40,056	\$114,575	62%	99%	37%	\$70,991	\$113,802	\$42,811
9040	488	18	\$147.56	\$72,000		\$38,702	\$110,702	62%	100%	37%	\$68,653	\$110,162	\$41,509
9041	545	18	\$147.56	\$80,485		\$43,263	\$123,748	62%	100%	38%	\$76,846	\$123,344	\$46,498
9042	100	18	\$147.56	\$14,756		\$7,932	\$22,688	62%	100%	38%	\$14,108	\$22,651	\$8,543
9043	245	18	\$147.56	\$36,173		\$19,444	\$55,617	62%	100%	38%	\$34,622	\$55,617	\$20,995
Subtotal:	3,367			\$496,777	4.5%	\$267,031	\$763,808				\$473,133	\$758,571	\$285,438
17 - Lower Timber Creek													
7002	982	42	\$173.05	\$169,874		\$91,311	\$261,185	97%	100%	3%	\$254,141	\$260,747	\$6,606
7003	51	42	\$173.05	\$8,743		\$4,700	\$13,443	98%	100%	2%	\$13,108	\$13,422	\$314
7004	402	42	\$173.05	\$69,511		\$37,364	\$106,875	98%	100%	2%	\$104,631	\$106,719	\$2,088
7005	14	42	\$173.05	\$2,492		\$1,340	\$3,832	98%	100%	2%	\$3,759	\$3,826	\$67
7006	63	42	\$173.05	\$10,844		\$5,829	\$16,673	98%	100%	1%	\$16,423	\$16,650	\$227
7007	1,325	42	\$173.05	\$229,336		\$123,273	\$352,609	99%	100%	1%	\$347,993	\$352,086	\$4,093
7008	71	42	\$173.05	\$12,306		\$6,615	\$18,921	99%	100%	1%	\$18,712	\$18,898	\$186
7009	907	42	\$173.05	\$156,942		\$84,360	\$241,302	99%	100%	1%	\$239,170	\$241,032	\$1,862
7010	907	42	\$173.05	\$156,996		\$84,389	\$241,385	100%	100%	0%	\$240,691	\$241,113	\$422
7038	55	42	\$173.05	\$9,558		\$5,138	\$14,696	98%	100%	2%	\$14,444	\$14,674	\$230
7039	536	42	\$173.05	\$92,712		\$49,835	\$142,547	98%	100%	2%	\$139,274	\$142,323	\$3,049
7040	25	42	\$173.05	\$4,245		\$2,282	\$6,527	97%	100%	3%	\$6,339	\$6,516	\$177
Subtotal:	5,337			\$923,559	4.5%	\$496,436	\$1,419,995				\$1,398,685	\$1,418,006	\$19,321
18 - Denton Creek East													
8000	19	36	\$56.13	\$1,043		\$561	\$1,604	84%	96%	12%	\$1,351	\$1,542	\$191
8001	53	18	\$56.13	\$2,951		\$1,586	\$4,537	89%	99%	10%	\$4,058	\$4,505	\$447
8002	734	18	\$56.13	\$41,223		\$22,158	\$63,381	90%	99%	10%	\$56,757	\$63,030	\$6,273
8003	788	18	\$56.13	\$44,220		\$23,769	\$67,989	90%	100%	10%	\$60,965	\$67,715	\$6,750
8004	376	18	\$56.13	\$21,130		\$11,358	\$32,488	90%	100%	10%	\$29,148	\$32,354	\$3,206
8005	350	18	\$56.13	\$19,672		\$10,574	\$30,246	90%	100%	10%	\$27,201	\$30,170	\$2,969
8006	799	18	\$56.13	\$44,848		\$24,107	\$68,955	90%	100%	10%	\$62,107	\$68,896	\$6,789
8007	392	18	\$56.13	\$22,003		\$11,827	\$33,830	90%	100%	10%	\$30,491	\$33,830	\$3,339
8008	295	18	\$56.13	\$16,576		\$8,910	\$25,486	90%	100%	10%	\$22,981	\$25,486	\$2,505
8009	192	15	\$56.13	\$10,760		\$5,784	\$16,544	90%	100%	10%	\$14,924	\$16,544	\$1,620
8010	353	15	\$56.13	\$19,815		\$10,651	\$30,466	90%	100%	10%	\$27,435	\$30,466	\$3,031
8011	247	15	\$56.13	\$13,880		\$7,461	\$21,341	90%	100%	10%	\$19,218	\$21,341	\$2,123
8015	13	18	\$56.13	\$732		\$393	\$1,125	90%	100%	10%	\$1,014	\$1,125	\$111
Subtotal:	4,612			\$258,853	4.5%	\$139,139	\$397,992				\$357,650	\$397,004	\$39,354

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity (%)			Utilized Capacity (\$)			During Fee Period
								2018	2028	During Fee Period	2018	2028	During Fee Period	
19 - Denton Creek West														
8100	289	36	\$115.57	\$33,394		\$17,950	\$51,344	83%	95%	13%	\$42,493	\$48,917	\$6,424	
8103	525	36	\$115.57	\$60,715		\$32,636	\$93,351	83%	95%	13%	\$77,239	\$88,916	\$11,677	
8104	817	36	\$115.57	\$94,458		\$50,773	\$145,231	83%	95%	13%	\$120,160	\$138,358	\$18,198	
8105	190	36	\$115.57	\$21,906		\$11,775	\$33,681	83%	95%	13%	\$27,873	\$32,094	\$4,221	
8106	583	36	\$115.57	\$67,433		\$36,247	\$103,680	83%	95%	13%	\$85,779	\$98,792	\$13,013	
8107	507	36	\$115.57	\$58,633		\$31,517	\$90,150	83%	95%	13%	\$74,582	\$85,917	\$11,335	
8108	660	36	\$115.57	\$76,261		\$40,992	\$117,253	83%	95%	13%	\$97,001	\$111,744	\$14,743	
8109	903	36	\$115.57	\$104,392		\$56,113	\$160,505	83%	95%	13%	\$132,784	\$152,961	\$20,177	
8147	55	27	\$115.57	\$6,358		\$3,418	\$9,776	82%	94%	12%	\$8,007	\$9,167	\$1,160	
8148	722	27	\$115.57	\$83,490		\$44,878	\$128,368	82%	94%	12%	\$105,117	\$120,291	\$15,174	
8149	727	27	\$115.57	\$84,019		\$45,162	\$129,181	82%	94%	12%	\$105,720	\$120,888	\$15,168	
8150	39	27	\$115.57	\$4,522		\$2,431	\$6,953	82%	94%	12%	\$5,686	\$6,502	\$816	
8162	489	27	\$115.57	\$56,502		\$30,371	\$86,873	81%	93%	12%	\$70,471	\$80,749	\$10,278	
8163	509	27	\$115.57	\$58,789		\$31,600	\$90,389	81%	93%	12%	\$73,243	\$83,983	\$10,740	
8164	590	27	\$115.57	\$68,181		\$36,649	\$104,830	81%	93%	12%	\$84,850	\$97,323	\$12,473	
8165	794	27	\$115.57	\$91,735		\$49,310	\$141,045	81%	93%	12%	\$114,108	\$130,886	\$16,778	
8166	14	27	\$115.57	\$1,602		\$861	\$2,463	81%	93%	12%	\$1,991	\$2,284	\$293	
8167	148	27	\$115.57	\$17,135		\$9,210	\$26,345	81%	93%	12%	\$21,282	\$24,424	\$3,142	
8168	14	27	\$115.57	\$1,599		\$859	\$2,458	81%	93%	12%	\$1,984	\$2,278	\$294	
8169	442	27	\$115.57	\$51,057		\$27,444	\$78,501	81%	93%	12%	\$63,292	\$72,710	\$9,418	
8170	38	27	\$115.57	\$4,376		\$2,352	\$6,728	81%	93%	12%	\$5,419	\$6,226	\$807	
8173	14	27	\$115.57	\$1,668		\$897	\$2,565	80%	93%	12%	\$2,065	\$2,373	\$308	
8174	20	27	\$115.57	\$2,294		\$1,233	\$3,527	92%	100%	8%	\$3,238	\$3,527	\$289	
8175	493	21	\$115.57	\$57,019		\$30,649	\$87,668	92%	100%	8%	\$80,362	\$87,668	\$7,306	
8176	530	21	\$115.57	\$61,208		\$32,901	\$94,109	92%	100%	8%	\$86,527	\$94,109	\$7,582	
8177	30	21	\$115.57	\$3,442		\$1,850	\$5,292	92%	100%	8%	\$4,860	\$5,292	\$432	
8178	657	21	\$115.57	\$75,972		\$40,837	\$116,809	94%	100%	6%	\$109,508	\$116,809	\$7,301	
8179	931	21	\$115.57	\$107,625		\$57,851	\$165,476	94%	100%	6%	\$155,134	\$165,476	\$10,342	
8183	251	15	\$115.57	\$29,062		\$15,621	\$44,683	91%	100%	9%	\$40,579	\$44,683	\$4,104	
8184	352	15	\$115.57	\$40,663		\$21,857	\$62,520	91%	100%	9%	\$57,117	\$62,520	\$5,403	
8185	217	15	\$115.57	\$25,051		\$13,465	\$38,516	92%	100%	8%	\$35,553	\$38,516	\$2,963	
8186	112	15	\$115.57	\$12,916		\$6,943	\$19,859	92%	100%	8%	\$18,238	\$19,859	\$1,621	
8187	375	15	\$115.57	\$43,387		\$23,322	\$66,709	91%	100%	9%	\$60,645	\$66,709	\$6,064	
8188	223	15	\$115.57	\$25,753		\$13,843	\$39,596	94%	100%	6%	\$37,121	\$39,596	\$2,475	
Subtotal:	13,261			\$1,532,617	4.5%	\$823,817	\$2,356,434				\$2,010,028	\$2,262,547	\$252,519	

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity (%)			Utilized Capacity (\$)			
								2018	2028	During Fee Period	2018	2028	During Fee Period	
20 - Elm Fork Sanitary Sewer - Phase 1A & 1B														
9300	349	30	\$80.71	\$28,206		\$15,161	\$43,367	66%	69%	3%	\$28,559	\$29,919	\$1,360	
9301	788	30	\$80.71	\$63,588		\$34,180	\$97,768	66%	69%	3%	\$64,384	\$67,450	\$3,066	
9302	161	30	\$80.71	\$13,025		\$7,001	\$20,026	66%	69%	3%	\$13,188	\$13,816	\$628	
9303	821	30	\$80.71	\$66,243		\$35,607	\$101,850	66%	69%	3%	\$67,072	\$70,266	\$3,194	
9304	605	30	\$80.71	\$48,829		\$26,247	\$75,076	66%	69%	3%	\$49,440	\$51,795	\$2,355	
9305	732	30	\$80.71	\$59,101		\$31,768	\$90,869	66%	69%	3%	\$59,841	\$62,690	\$2,849	
9307	413	21	\$80.71	\$33,369		\$17,937	\$51,306	68%	71%	3%	\$34,801	\$36,193	\$1,392	
9308	275	21	\$80.71	\$22,195		\$11,930	\$34,125	67%	71%	3%	\$23,015	\$24,073	\$1,058	
9309	325	21	\$80.71	\$26,198		\$14,082	\$40,280	68%	71%	3%	\$27,322	\$28,415	\$1,093	
9310	325	21	\$80.71	\$26,263		\$14,117	\$40,380	70%	72%	3%	\$28,090	\$29,144	\$1,054	
9311	120	21	\$80.71	\$9,711		\$5,220	\$14,931	72%	75%	2%	\$10,771	\$11,143	\$372	
9312	430	21	\$80.71	\$34,679		\$18,641	\$53,320	76%	78%	2%	\$40,300	\$41,540	\$1,240	
9313	350	21	\$80.71	\$28,248		\$15,184	\$43,432	80%	83%	2%	\$34,928	\$35,839	\$911	
9314	400	21	\$80.71	\$32,284		\$17,353	\$49,637	88%	89%	1%	\$43,541	\$43,977	\$436	
9315	370	21	\$80.71	\$29,847		\$16,043	\$45,890	100%	100%	0%	\$45,890	\$45,890	\$0	
9316	89	12	\$80.71	\$7,198		\$3,869	\$11,067	100%	100%	0%	\$11,067	\$11,067	\$0	
9317	450	12	\$80.71	\$36,320		\$19,523	\$55,843	100%	100%	0%	\$55,843	\$55,843	\$0	
9318	652	12	\$80.71	\$52,602		\$28,275	\$80,877	100%	100%	0%	\$80,877	\$80,877	\$0	
9319	420	8	\$80.71	\$33,872		\$18,207	\$52,079	100%	100%	0%	\$52,079	\$52,079	\$0	
9320	88	18	\$80.71	\$7,126		\$3,830	\$10,956	100%	100%	0%	\$10,956	\$10,956	\$0	
9321	49	18	\$80.71	\$3,916		\$2,105	\$6,021	100%	100%	0%	\$6,021	\$6,021	\$0	
9322	179	18	\$80.71	\$14,481		\$7,784	\$22,265	100%	100%	0%	\$22,265	\$22,265	\$0	
Subtotal:	8,392			\$677,301	4.5%	\$364,064	\$1,041,365				\$810,250	\$831,258	\$21,008	
21 - Southwest Lewisville Infrastructure														
8401	506	24	\$63.04	\$31,869		\$17,130	\$48,999	76%	91%	14%	\$37,464	\$44,511	\$7,047	
8402	582	24	\$63.04	\$36,691		\$19,722	\$56,413	76%	91%	14%	\$42,956	\$51,119	\$8,163	
8403	640	24	\$63.04	\$40,335		\$21,681	\$62,016	76%	90%	14%	\$47,006	\$55,993	\$8,987	
8404	786	24	\$63.04	\$49,567		\$26,643	\$76,210	75%	90%	15%	\$57,480	\$68,534	\$11,054	
8405	797	24	\$63.04	\$50,271		\$27,022	\$77,293	75%	90%	15%	\$57,953	\$69,251	\$11,298	
8406	400	12	\$63.04	\$25,196		\$13,543	\$38,739	75%	90%	15%	\$29,248	\$34,872	\$5,624	
8407	520	12	\$63.04	\$32,784		\$17,622	\$50,406	74%	89%	15%	\$37,432	\$44,876	\$7,444	
8408	278	12	\$63.04	\$17,553		\$9,435	\$26,988	73%	88%	15%	\$19,628	\$23,717	\$4,089	
8409	399	12	\$63.04	\$25,163		\$13,526	\$38,689	70%	86%	16%	\$27,253	\$33,336	\$6,083	
8410	350	12	\$63.04	\$22,076		\$11,866	\$33,942	66%	83%	17%	\$22,503	\$28,129	\$5,626	
8411	329	12	\$63.04	\$20,769		\$11,164	\$31,933	67%	83%	17%	\$21,289	\$26,611	\$5,322	
8412	507	12	\$63.04	\$31,940		\$17,168	\$49,108	67%	83%	17%	\$32,739	\$40,923	\$8,184	
8413	491	21	\$63.04	\$30,935		\$16,628	\$47,563	66%	83%	16%	\$31,603	\$39,346	\$7,743	
8414	481	21	\$63.04	\$30,321		\$16,298	\$46,619	66%	83%	16%	\$30,950	\$38,495	\$7,545	
8415	361	21	\$63.04	\$22,776		\$12,243	\$35,019	67%	83%	17%	\$23,346	\$29,183	\$5,837	
8416	360	21	\$63.04	\$22,678		\$12,190	\$34,868	67%	83%	17%	\$23,245	\$29,057	\$5,812	
8417	358	21	\$63.04	\$22,582		\$12,138	\$34,720	67%	83%	17%	\$23,147	\$28,933	\$5,786	

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity			Utilized Capacity		
								2018	2028	During Fee Period	2018	2028	During Fee Period
8418	475	12	\$63.04	\$29,918		\$16,082	\$46,000	82%	95%	13%	\$37,708	\$43,828	\$6,120
8419	480	12	\$63.04	\$30,240		\$16,255	\$46,495	83%	95%	13%	\$38,396	\$44,395	\$5,999
8420	442	12	\$63.04	\$27,873		\$14,982	\$42,855	82%	95%	13%	\$35,163	\$40,657	\$5,494
<b>Subtotal:</b>	<b>9,542</b>			<b>\$601,537</b>	<b>4.5%</b>	<b>\$323,338</b>	<b>\$924,875</b>				<b>\$676,509</b>	<b>\$815,766</b>	<b>\$139,257</b>
<b>22 - S.H. 121 Bypass Sanitary Sewer</b>													
8300	83	27	\$114.38	\$9,515		\$5,115	\$14,630	79%	92%	12%	\$11,595	\$13,418	\$1,823
8301	502	27	\$114.38	\$57,370		\$30,838	\$88,208	79%	92%	13%	\$69,824	\$80,854	\$11,030
8302	492	27	\$114.38	\$56,285		\$30,254	\$86,539	79%	92%	13%	\$68,417	\$79,275	\$10,858
8303	496	27	\$114.38	\$56,734		\$30,496	\$87,230	79%	92%	13%	\$68,942	\$79,855	\$10,913
8304	307	27	\$114.38	\$35,100		\$18,867	\$53,967	79%	91%	13%	\$42,598	\$49,373	\$6,775
8305	55	27	\$114.38	\$6,265		\$3,368	\$9,633	79%	91%	13%	\$7,604	\$8,813	\$1,209
8306	195	27	\$114.38	\$22,259		\$11,965	\$34,224	79%	91%	13%	\$27,014	\$31,311	\$4,297
8307	318	27	\$114.38	\$36,331		\$19,529	\$55,860	79%	91%	13%	\$44,092	\$51,105	\$7,013
8308	497	27	\$114.38	\$56,850		\$30,558	\$87,408	79%	91%	13%	\$68,994	\$79,967	\$10,973
8309	497	27	\$114.38	\$56,820		\$30,542	\$87,362	79%	91%	13%	\$68,958	\$79,925	\$10,967
8310	494	27	\$114.38	\$56,500		\$30,370	\$86,870	79%	91%	13%	\$68,570	\$79,475	\$10,905
8311	496	27	\$114.38	\$56,724		\$30,490	\$87,214	79%	91%	13%	\$68,841	\$79,790	\$10,949
8312	493	27	\$114.38	\$56,353		\$30,291	\$86,644	79%	91%	13%	\$68,391	\$79,268	\$10,877
8313	295	27	\$114.38	\$33,703		\$18,116	\$51,819	79%	91%	13%	\$40,903	\$47,408	\$6,505
8314	381	27	\$114.38	\$43,549		\$23,409	\$66,958	79%	91%	13%	\$52,852	\$61,258	\$8,406
8315	237	27	\$114.38	\$27,102		\$14,568	\$41,670	79%	91%	13%	\$32,892	\$38,123	\$5,231
8316	380	27	\$114.38	\$43,443		\$23,352	\$66,795	79%	91%	13%	\$52,724	\$61,109	\$8,385
8317	499	27	\$114.38	\$57,032		\$30,656	\$87,688	79%	91%	13%	\$69,215	\$80,224	\$11,009
8318	219	24	\$114.38	\$25,024		\$13,451	\$38,475	79%	91%	13%	\$30,315	\$35,139	\$4,824
8319	239	24	\$114.38	\$27,392		\$14,724	\$42,116	84%	92%	8%	\$35,176	\$38,578	\$3,402
8320	484	24	\$114.38	\$55,378		\$29,767	\$85,145	83%	91%	8%	\$71,004	\$77,851	\$6,847
8321	234	15	\$114.38	\$26,748		\$14,378	\$41,126	83%	91%	8%	\$34,298	\$37,594	\$3,296
8322	106	15	\$114.38	\$12,100		\$6,504	\$18,604	84%	92%	8%	\$15,555	\$17,041	\$1,486
8323	449	15	\$114.38	\$51,328		\$27,590	\$78,918	83%	91%	8%	\$65,857	\$72,112	\$6,255
8324	127	15	\$114.38	\$14,554		\$7,823	\$22,377	83%	92%	8%	\$18,677	\$20,498	\$1,821
8325	136	15	\$114.38	\$15,580		\$8,375	\$23,955	83%	92%	8%	\$19,998	\$21,941	\$1,943
8326	275	15	\$114.38	\$31,423		\$16,891	\$48,314	84%	92%	8%	\$40,374	\$44,260	\$3,886
8327	66	15	\$114.38	\$7,498		\$4,030	\$11,528	84%	92%	8%	\$9,639	\$10,559	\$920
8328	96	15	\$114.38	\$10,928		\$5,874	\$16,802	83%	91%	8%	\$13,987	\$15,307	\$1,320
8329	507	15	\$114.38	\$57,971		\$31,161	\$89,132	83%	92%	8%	\$74,173	\$81,652	\$7,479
8330	94	15	\$114.38	\$10,696		\$5,749	\$16,445	83%	92%	8%	\$13,675	\$15,060	\$1,385
8331	376	12	\$114.38	\$43,029		\$23,129	\$66,158	83%	92%	8%	\$55,132	\$60,645	\$5,513
8400	258	24	\$114.38	\$29,496		\$15,855	\$45,351	79%	91%	13%	\$35,679	\$41,361	\$5,682
<b>Subtotal:</b>	<b>10,378</b>			<b>\$1,187,080</b>	<b>4.5%</b>	<b>\$638,085</b>	<b>\$1,825,165</b>				<b>\$1,465,965</b>	<b>\$1,670,149</b>	<b>\$204,184</b>

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity (%)			Utilized Capacity (\$)			During Fee Period
								2018	2028	During Fee Period	2018	2028	During Fee Period	
23 - S.H. 121 East Sanitary Sewer														
9083	403	21	\$84.81	\$34,143		\$18,353	\$52,496	80%	98%	17%	\$42,199	\$51,325	\$9,126	
9084	283	21	\$84.81	\$23,968		\$12,883	\$36,851	80%	98%	17%	\$29,623	\$36,029	\$6,406	
9085	179	21	\$84.81	\$15,181		\$8,160	\$23,341	80%	98%	17%	\$18,763	\$22,820	\$4,057	
9086	65	21	\$84.81	\$5,522		\$2,968	\$8,490	80%	98%	17%	\$6,825	\$8,301	\$1,476	
9087	426	21	\$84.81	\$36,135		\$19,423	\$55,558	80%	98%	17%	\$44,660	\$54,319	\$9,659	
9088	553	21	\$84.81	\$46,902		\$25,211	\$72,113	80%	98%	17%	\$57,968	\$70,504	\$12,536	
9089	361	21	\$84.81	\$30,618		\$16,458	\$47,076	80%	98%	17%	\$37,842	\$46,026	\$8,184	
9090	356	21	\$84.81	\$30,180		\$16,222	\$46,402	80%	98%	17%	\$37,300	\$45,367	\$8,067	
9091	272	21	\$84.81	\$23,070		\$12,401	\$35,471	80%	98%	17%	\$28,513	\$34,680	\$6,167	
9092	260	21	\$84.81	\$22,052		\$11,853	\$33,905	80%	98%	17%	\$27,254	\$33,149	\$5,895	
9093	302	21	\$84.81	\$25,614		\$13,768	\$39,382	80%	98%	17%	\$31,657	\$38,503	\$6,846	
9094	304	21	\$84.81	\$25,784		\$13,859	\$39,643	80%	98%	17%	\$31,867	\$38,759	\$6,892	
9095	390	21	\$84.81	\$33,078		\$17,780	\$50,858	80%	98%	17%	\$40,882	\$49,723	\$8,841	
9096	71	21	\$84.81	\$6,000		\$3,225	\$9,225	80%	98%	17%	\$7,415	\$9,019	\$1,604	
9097	442	21	\$84.81	\$37,488		\$20,151	\$57,639	80%	98%	17%	\$46,333	\$56,353	\$10,020	
9098	430	21	\$84.81	\$36,470		\$19,603	\$56,073	80%	98%	17%	\$45,074	\$54,822	\$9,748	
9099	439	21	\$84.81	\$37,234		\$20,014	\$57,248	80%	98%	17%	\$46,019	\$55,971	\$9,952	
9100	284	21	\$84.81	\$24,087		\$12,947	\$37,034	80%	98%	17%	\$29,770	\$36,208	\$6,438	
9101	274	21	\$84.81	\$23,273		\$12,510	\$35,783	80%	98%	17%	\$28,764	\$34,985	\$6,221	
9102	248	21	\$84.81	\$20,992		\$11,284	\$32,276	80%	98%	17%	\$25,945	\$31,556	\$5,611	
9103	273	21	\$84.81	\$23,112		\$12,423	\$35,535	80%	98%	17%	\$28,565	\$34,742	\$6,177	
9104	273	21	\$84.81	\$23,154		\$12,446	\$35,600	80%	98%	17%	\$28,617	\$34,806	\$6,189	
9105	483	21	\$84.81	\$40,932		\$22,002	\$62,934	80%	98%	17%	\$50,589	\$61,530	\$10,941	
9106	181	21	\$84.81	\$15,359		\$8,256	\$23,615	80%	98%	17%	\$18,983	\$23,088	\$4,105	
9107	117	21	\$84.81	\$9,965		\$5,356	\$15,321	80%	98%	17%	\$12,316	\$14,979	\$2,663	
9108	281	21	\$84.81	\$23,799		\$12,793	\$36,592	80%	98%	17%	\$29,414	\$35,776	\$6,362	
9109	89	21	\$84.81	\$7,507		\$4,035	\$11,542	80%	98%	17%	\$9,278	\$11,285	\$2,007	
9172	124	21	\$84.81	\$10,549		\$5,670	\$16,219	80%	98%	17%	\$13,038	\$15,857	\$2,819	
Subtotal:	8,161			\$692,168	4.5%	\$372,054	\$1,064,222				\$855,473	\$1,040,482	\$185,009	
24 - Holford's Prairie 30" Parallel														
9940	60	30	\$103.68	\$6,262		\$3,366	\$9,628	38%	86%	48%	\$3,667	\$8,319	\$4,652	
9941	217	30	\$103.68	\$22,545		\$12,118	\$34,663	38%	86%	48%	\$13,201	\$29,965	\$16,764	
9942	265	30	\$103.68	\$27,483		\$14,773	\$42,256	38%	86%	48%	\$16,092	\$36,549	\$20,457	
9943	579	30	\$103.68	\$60,049		\$32,278	\$92,327	38%	87%	48%	\$35,150	\$79,909	\$44,759	
9944	378	30	\$103.68	\$39,230		\$21,087	\$60,317	38%	87%	49%	\$22,963	\$52,233	\$29,270	
9945	506	30	\$103.68	\$52,455		\$28,196	\$80,651	38%	87%	49%	\$30,704	\$69,879	\$39,175	
9946	509	30	\$103.68	\$52,722		\$28,339	\$81,061	38%	87%	49%	\$30,850	\$70,272	\$39,422	
9947	543	30	\$103.68	\$56,288		\$30,256	\$86,544	38%	87%	49%	\$32,937	\$75,075	\$42,138	
9948	99	30	\$103.68	\$10,281		\$5,526	\$15,807	38%	87%	49%	\$6,016	\$13,720	\$7,704	
9949	247	30	\$103.68	\$25,628		\$13,776	\$39,404	38%	87%	49%	\$14,996	\$34,219	\$19,223	
Subtotal:	3,404			\$352,943	4.5%	\$189,715	\$542,658				\$206,576	\$470,140	\$263,564	

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**EXISTING WASTEWATER COLLECTION LINES**

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	Utilized Capacity			During Fee Period		
								(\$)		2018		2028	During Fee Period
25 - Indian Creek Trunk Main - Eastside Sanitary Sewer Extension													
9184	395	15	\$63.57	\$25,112		\$13,498	\$38,610	21%	94%	73%	\$8,118	\$36,351	\$28,233
9625	313	24	\$63.57	\$19,926		\$10,711	\$30,637	22%	94%	73%	\$6,622	\$28,912	\$22,290
9626	45	24	\$63.57	\$2,843		\$1,528	\$4,371	22%	94%	73%	\$945	\$4,125	\$3,180
9627	752	18	\$63.57	\$47,784		\$25,685	\$73,469	22%	94%	73%	\$15,880	\$69,333	\$53,453
9628	346	18	\$63.57	\$22,010		\$11,831	\$33,841	22%	94%	73%	\$7,315	\$31,936	\$24,621
9629	336	18	\$63.57	\$21,354		\$11,478	\$32,832	22%	94%	73%	\$7,097	\$30,984	\$23,887
9630	396	18	\$63.57	\$25,177		\$13,533	\$38,710	22%	94%	73%	\$8,367	\$36,531	\$28,164
9631	353	18	\$63.57	\$22,458		\$12,072	\$34,530	22%	94%	73%	\$7,464	\$32,586	\$25,122
9632	161	18	\$63.57	\$10,242		\$5,505	\$15,747	22%	94%	73%	\$3,393	\$14,856	\$11,463
9633	474	18	\$63.57	\$30,165		\$16,214	\$46,379	22%	94%	73%	\$9,973	\$43,751	\$33,778
9634	437	18	\$63.57	\$27,802		\$14,944	\$42,746	21%	94%	73%	\$9,158	\$40,310	\$31,152
9635	155	18	\$63.57	\$9,849		\$5,294	\$15,143	21%	94%	73%	\$3,231	\$14,275	\$11,044
9636	327	15	\$63.57	\$20,789		\$11,175	\$31,964	21%	94%	73%	\$6,790	\$30,118	\$23,328
9637	525	15	\$63.57	\$33,376		\$17,940	\$51,316	21%	94%	73%	\$10,848	\$48,330	\$37,482
9638	355	15	\$63.57	\$22,601		\$12,149	\$34,750	21%	94%	73%	\$7,306	\$32,711	\$25,405
9639	80	15	\$63.57	\$5,086		\$2,734	\$7,820	21%	94%	73%	\$1,645	\$7,363	\$5,718
9640	554	15	\$63.57	\$35,198		\$18,920	\$54,118	21%	94%	73%	\$11,390	\$30,936	\$39,546
9641	553	15	\$63.57	\$35,144		\$18,891	\$54,035	21%	94%	73%	\$11,367	\$30,870	\$39,503
9642	508	15	\$63.57	\$32,296		\$17,360	\$49,656	21%	94%	73%	\$10,451	\$46,724	\$36,273
9643	349	12	\$63.57	\$22,201		\$11,934	\$34,135	21%	94%	73%	\$7,176	\$32,131	\$24,955
9644	500	12	\$63.57	\$31,787		\$17,086	\$48,873	21%	94%	73%	\$10,279	\$45,999	\$35,720
9645	500	12	\$63.57	\$31,787		\$17,086	\$48,873	21%	94%	73%	\$10,290	\$46,019	\$35,729
9646	500	12	\$63.57	\$31,768		\$17,076	\$48,844	21%	94%	73%	\$10,265	\$45,961	\$35,696
9647	514	12	\$63.57	\$32,653		\$17,552	\$50,205	21%	94%	73%	\$10,563	\$47,264	\$36,701
Subtotal:	9,428			\$599,408	4.5%	\$322,196	\$921,604				\$195,933	\$868,376	\$672,443
TOTAL EXISTING COLLECTION LINES:											\$26,806,889	\$30,155,848	\$3,348,959
	197,501			\$20,461,172		\$10,998,344	\$31,459,516						

**CITY OF LEWISVILLE, TEXAS  
2012 WASTE WATER IMPACT FEE  
WASTE WATER TREATMENT PLANT FACILITIES**

		Year Const.	Projected Capacity	Facility Cost (\$)				Capacity Utilized (%)		Capacity Utilized (\$)		In The CRF Period
				Const.	Engineering*	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost \$	2012	2022	2012	
Waste Water Treatment Improvements												
Existing Facilities												
1	Waste Water Treatment Plant	1976	6.0 MGD	\$2,200,000	\$330,000	4.5%	\$1,195,425	\$3,725,425	100.0%	100.0%	\$3,725,425	\$0
2	Filter Pump Station Addition	1984		\$21,932	\$3,290	4.5%	\$11,917	\$37,139	100.0%	100.0%	\$37,139	\$0
3	Aeration System Improvements	1985		\$227,476	\$34,121	4.5%	\$123,605	\$385,202	100.0%	100.0%	\$385,202	\$0
3	WWTP Expansion Phase I	1986	12.0 MGD	\$7,485,785	\$1,122,868	4.5%	\$4,067,588	\$12,676,241	100.0%	100.0%	\$12,676,241	\$0
5	Dechlorination	1992		\$404,657	\$60,699	4.5%	\$219,880	\$685,236	100.0%	100.0%	\$685,236	\$0
2	Digester Project	1993		\$1,229,295	\$184,394	4.5%	\$667,968	\$2,081,657	100.0%	100.0%	\$2,081,657	\$0
2	Telemetry Project	1993		\$268,122	\$40,218	4.5%	\$145,691	\$454,031	100.0%	100.0%	\$454,031	\$0
2	WWTP Upgrade	1996		\$2,800,500	\$420,075	4.5%	\$1,521,722	\$4,742,297	100.0%	100.0%	\$4,742,297	\$0
4	WWTP Expansion Phase II	2006	12.0 MGD	\$6,023,660	\$903,549	4.5%	\$3,273,106	\$10,200,315	96.7%	100.0%	\$9,863,705	\$336,610
Subtotal - Existing Facilities				\$20,661,427	\$3,099,214		\$11,226,902	\$34,987,543			\$34,650,933	\$336,610
Proposed Facilities 2012 Through 2022												
1	WWTP Expansion III	2016	15.0 MGD	\$6,000,000	\$900,000	4.5%	\$0	\$6,900,000	0.0%	100.0%	\$0	\$6,900,000
1	WWTP Expansion IV	2020	18.0 MGD	\$6,000,000	\$900,000	4.5%	\$3,260,250	\$10,160,250	0.0%	95.0%	\$0	\$9,652,238
Subtotal - Proposed Facilities				\$12,000,000	\$1,800,000		\$3,260,250	\$17,060,250			\$0	\$16,552,238
Total Existing + Proposed												
				\$32,661,427	\$4,899,214		\$14,487,152	\$52,047,794			\$34,650,933	\$16,888,848

- (1) Opinion of Probable Cost  
(2) Cost Obtained from the City of Lewisville  
(3) Cost Obtained from Final Pay Request  
(4) Cost from Bid Tabulation  
\* Multiplied Construction Cost Times 15%

**CITY OF LEWISVILLE, TEXAS**  
**2018-2028 WASTEWATER IMPACT FEE**  
**PROPOSED WASTEWATER COLLECTION LINES**

*\*\* Average Unit costs are based in 2017 dollars unless otherwise indicated and includes 20% for engineering and easements.  
\*\*\* Project LP Utilized Capacity was calculated for flows generated within the City Limits Only.*

Pipe Number	Length (Ft.)	Diameter (Inches)	Avg. Unit Cost (\$/Ft.)	Total Capital Cost (\$)	Debt Service Interest Rate %	20 Year Debt Service Utilizing Simple Interest	Total 20 Yr. Project Cost (\$)	(%) Utilized Capacity			(\$ Utilized Capacity		During Fee Period
								2018	2028	During Fee Period	2018	2028	
1P - Castle Hills 21"Parallel Trunk Main (ETJ)													
(2) 9182 B	2,174	21	\$405.61	\$881,714		\$473,941	\$1,355,655	0%	38%	\$0	\$514,825	\$514,825	
(2) 9183 B	5,094	21	\$310.67	\$1,582,505		\$850,633	\$2,433,138	0%	43%	\$0	\$1,043,505	\$1,043,505	
Subtotal:	7,268			\$2,464,219	4.5%	\$1,324,574	\$3,788,793			\$0	\$1,558,330	\$1,558,330	
2P - Prairie Creek East Parallel Trunk Main													
(2) 9905	919	18	\$212.00	\$194,771		\$104,694	\$299,465	0%	63%	\$0	\$187,778	\$187,778	
(2) 9906	753	18	\$212.00	\$159,699		\$85,842	\$245,541	0%	63%	\$0	\$154,246	\$154,246	
(2) 9907	222	18	\$212.00	\$47,158		\$25,349	\$72,507	0%	63%	\$0	\$45,656	\$45,656	
(2) 9908	335	18	\$212.00	\$70,973		\$38,150	\$109,123	0%	63%	\$0	\$68,840	\$68,840	
(2) 9927	428	18	\$212.00	\$90,649		\$48,726	\$139,375	0%	57%	\$0	\$79,333	\$79,333	
(2) 9928	419	18	\$212.00	\$88,794		\$47,729	\$136,523	0%	57%	\$0	\$77,745	\$77,745	
(2) 9929	706	15	\$175.00	\$123,488		\$66,378	\$189,866	0%	58%	\$0	\$109,711	\$109,711	
(2) 9931	319	15	\$175.00	\$55,769		\$29,977	\$85,746	0%	58%	\$0	\$50,053	\$50,053	
(2) 9930	414	15	\$175.00	\$72,411		\$38,923	\$111,334	0%	58%	\$0	\$64,287	\$64,287	
Subtotal:	4,514			\$903,712	4.5%	\$485,768	\$1,389,480			\$0	\$837,649	\$837,649	
TOTAL PROPOSED COLLECTION LINES:													
	11,781			\$3,367,931		\$1,810,342	\$5,178,273			\$0	\$2,395,979	\$2,395,979	

(1) - City Participate in Cost Oversize

(2) - City Initiated and Funded

B - Bore Across State Highway or Interstate



**ENGINEERING EVALUATION REPORT  
OF THE  
WATER AND WASTEWATER  
2018-2028 IMPACT FEE REVIEW**

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**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
***PROFESSIONAL ENGINEERS***  
***DALLAS, TEXAS***  
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JULY 2018