CITY OF ROUND ROCK, TEXAS
ROADWAY IMPACT FEE STUDY
NOVEMBER 18, 2021 UPDATE

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Prepared for the City of Round Rock

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EXECUTIVE SUMMARY

Introduction

Impact Fees are a mechanism for funding the public infrastructure necessitated by new development. Across the country, they are used to fund police and fire facilities, parks, schools, roads and utilities. In Texas, the legislature has allowed their use for water, wastewater, roadway and drainage facilities. Since 1989, they have been used to fund public water and wastewater improvements in the City of Round Rock.

In the most basic terms, impact fees are meant to recover the incremental cost of the impact of each new unit of development creating new infrastructure needs. In the case of Roadway Impact Fees, the infrastructure need is the increased capacity on arterial and collector roadways that serve the overall transportation system. The purpose of the 2021 Roadway Impact Fee Study is to identify the fee per unit of new development necessary to fund these improvements in accordance with the enabling legislation, Chapter 395 of the Texas Local Government Code. The 2021 Update has not identified any changes that affect the fees determined in the 2018 Study as adopted March 2019.

Impact Fees are a mathematical calculation that determines a maximum impact fee that would be equivalent for growth paying for growth. The Maximum Roadway Impact Fee per Service Unit for Roadway Facilities is considered an appropriate measure of the impacts generated by a new unit of development on the City's Roadway System. An impact fee program is anticipated to be designed so that it is **predictable** for both the development community and City. An impact fee program is **equitable** since similar developments pay a similar fee regardless if they are the first or last to develop. An impact fee program is **transparent.** This report describes in detail how the fee is calculated and how a Capital Improvement Advisory Committee (CIAC) monitors the Impact Fee program. An impact fee program is **flexible** in that funds can be used on priority projects and not just on project adjacent to a specific development. An impact fee program is **consistent** with other City goals and objectives for growth. For example, the actual collection rate set by Council may be determined to be less than the Maximum Roadway Impact Fee to achieve and be in alignment with other City goals and objectives for growth.

Impact Fee Basics

Roadway Impact Fees are determined by several key variables, each described below in greater detail.

Impact Fee Study

The 2021 Roadway Impact Fee Study is to determine the maximum impact fee per unit of new development chargeable as allowed by the state law. This determination is not a recommendation; the actual fee amount ultimately assessed is at the discretion of the Round Rock City Council, so long as it does not exceed the maximum assessable fee allowed by law. The study looks at a period of 10 years to project new growth and corresponding capacity needs, as required by state law. The study and corresponding maximum fees must be restudied at least every five years. However, the study can be updated at any time to accommodate significant changes in any of the key variables of the impact fee equation.

Service Areas

A Service Area is a geographic area within which a unique maximum impact fee is determined. All fees collected within the Service Area must be spent on eligible improvements within the same Service Area. For Roadway Impact Fees, the Service Area may not exceed 6 miles. In Round Rock, this restriction necessitated the creation of 3 separate Service Areas. A map of the Service Areas can be found on Page 14.

In defining the Service Area boundaries, the project team considered the corporate boundary (including full and limited purpose jurisdiction), required size limit, adjacent land uses, highway facilities, and topography. Since each Service Area has a unique maximum impact fee, the per-unit maximum fee for an identical land use will vary from one Service Area to the next. For this reason, the team avoided drawing a Service Area boundary through uniform land uses where possible. The 2021 Study update amended these boundaries for areas annexed since the original study.

Land Use Assumptions

The Impact Fee determination is required to be based on the projected growth and corresponding capacity needs in a 10-year window. This study considers the years 2018-2028. Acknowledging

that the parameters of the study (the corporate boundaries, Transportation Plan, Comprehensive Plan, zoning maps, platting history, etc.) are changing constantly, this study is based on conditions as they were on February 1, 2018. The 2021 Study Update does not include changes to Land Use Assumptions.

One of the key elements in the determination of the impact fee is the amount of new development anticipated over 10 years. The residential and non-residential growth projections were performed using the Capital Area Metropolitan Planning Organization (CAMPO) Model projections from the Transportation Master Plan study adopted in 2017.

Roadway Impact Fee Capital Improvements Plan

The Roadway Impact Fee Capital Improvements Plan (RIF CIP) is distinct and separate from the City's traditional Capital Improvements Plan (CIP). The RIF CIP is a list of projects eligible for funding through impact fees. The City's Transportation Master Plan is the plan for the infrastructure that is estimated to be necessary to accommodate the expected growth. Only those capacity improvements included in the City's Transportation Master Plan are included in the RIF CIP. Capacity improvements may include the addition of lanes, intersection improvements, or the extension of a new road. Resurfacing or other maintenance activities do not qualify as capacity improvements under impact fee law in Texas and cannot be funding with Roadway Impact Fees.

The cost of the RIF CIP is one of the fundamental factors in the calculation of the per-unit maximum impact fee. The RIF CIP's cost was calculated through systematic evaluation of each eligible project. The project team visited each project site to determine the project scope, the presence of any special conditions (such as the need for significant drainage improvements or railroad crossings) and whether various additional construction costs were applicable (such as costing for significant grades). In determining project limits, the team identified roadway segments with uniform need. For Example, Wyoming Springs Drive has a portion with half of a 4-lane divided built from Blue Ridge Drive to the future alignment of New Hope Drive, while the remainder south to RM 1431 is a new alignment. These were split as two separate projects based on uniform need. Developing unit costs from recently City bid projects and TxDOT moving average bid prices, uniform costs were determined for the major items of work, additional construction items, and project delivery costs. Section III provides

a listing of the 10-Year RIF CIP by service area in Tables 3.A – 3.C and maps of the RIF CIP by service area in Exhibits 4.A – 4.C. Finally, detailed cost projections by project can be found in Appendix A. It should be noted that these cost projections are based on conceptual level planning, and are subject to refinement upon final design.

Only those projects listed in the RIF CIP are eligible to utilize impact fee funds. In order to optimize future flexibility, all capacity improvements included in the Transportation Master Plan are included in the RIF CIP and will be eligible to utilize impact fee funds. In some cases, an interim project designation was used due to the ultimate build out not being needed in the 10-year window. An example of this is University Boulevard east of A.W. Grimes Boulevard, which is shown as a 4- lane divided road widening in the RIF CIP, but ultimately will be built out to a 6-lane divided road based on the Transportation Master Plan.

Only the costs associated with providing the additional capacity at an anticipated level of service D necessitated by 10 years of growth can be used to calculate the maximum impact fee. To calculate the maximum impact fee, the total cost of the RIF CIP at build-out was reduced to account for (1) the portion of new capacity that will address existing needs, (2) the portion of new capacity that will not be necessitated until beyond the 10-year growth window, and (3) contributions already made by current developments. A ratio that compares 10 years' demand for capacity to the net supply of capacity (total new capacity in the RIF CIP minus existing needs) can be calculated. That ratio, which may not exceed 100%, is then applied to the cost of the net capacity supplied. The result is a determination of the costs attributable to the next 10 years' growth, which is then used to calculate the maximum impact fee in accordance with state law. The result is known as the recoverable cost of the RIF CIP.

Service Unit

The "service unit" is a measure of consumption or use of the capital facilities by new development. In other words, it is the unit of measure used in the 2021 Roadway Impact Fee Study to quantify the supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. Below is the definition for vehicle-mile. A vehicle-mile is the capacity consumed in a

single lane in the PM peak hour by a vehicle making a trip one mile in length. The PM Peak is used as the basis for transportation planning and the estimation of trips caused by new development.

Impact Fee Calculation

In simplest terms, the maximum impact fee allowable by law is calculated by dividing the recoverable cost of the RIF CIP by the number of new service units of development. In accordance with state law, both the cost of the RIF CIP and the number of new service units of development used in the equation are based on the growth and corresponding capacity needs projected to occur within a 10-year window. This calculation is performed for each service area individually; each service area has a stand-alone RIF CIP and 10-year growth projection.

In practice, there are many factors that complicate this calculation. The maximum impact fee allowable by law for each service area is calculated in **Table 8**. A detailed discussion of the calculation precedes Table 8, found on Page 40.

Collection and Use of Roadway Impact Fees

Roadway Impact fees are assessed when a final plat is recorded. The assessment defines the impact of each unit at the time of platting, according to land use, and may not exceed the maximum impact fee allowed by law. An existing plat would be assessed at the adoption of the ordinance and would be exempt from impact fees for one year. Roadway Impact Fees are collected when a building permit is issued. Therefore, funds are not collected until development-impacts are introduced to the transportation system. Funds collected within a service area can be used only within the same service area. Finally, fees must be utilized within 10 years of collection in the designated service area, or must be refunded with interest. Fees should be utilized in a first in, first out basis.

Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the amendment or update of Roadway Impact Fee Studies. A Capital Improvements Advisory Committee (CIAC) is required to review amendments to the Land Use Assumptions, RIF CIP used in calculating the maximum fee, and to provide the Committee's findings for consideration by the City Council. The

composition of the CIAC is required to adequately represent the building and development communities. The City Council then conducts a public hearing on the udpated Land Use Assumptions, RIF CIP and Impact Fee Ordinance. One public hearing is required for the 2021 Roadway Impact Fee study update.

Following policy adoption, the CIAC is tasked with advising the City Council of the need to update the Land Use Assumptions or the RIF CIP at any time within five years of adoption. Finally, the CIAC oversees the proper administration of the Impact Fee, once in place, and advises the Council as necessary.

2021 Roadway Impact Fee Study Results

Below is the listing of the 2021 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile), unchanged from the originally adopted study from March 2019:

Service Area	Maximum Fee Per Service Unit (per Vehicle-Mile)
A	$2,678
B	$2,933
C	$2,511

I. INTRODUCTION

Chapter 395 of the Texas Local Government Code describes the procedure political subdivisions must follow to create and implement impact fees. Chapter 395 define an Impact Fee as "a charge or assessment imposed by a political subdivision against new development to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development."

The City has retained Kimley-Horn and Associates, Inc. to provide professional transportation engineering services for the 2021 Rodway Impact Fee Study. This report includes details of the Roadway Impact Fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the Roadway Impact Fee RIF CIP, and the Land Use Equivalency Table.

This report references two of the basic inputs to the Roadway Impact Fee:

1) **Land Use Assumptions** (Pg. 9)
2) **Roadway Impact Fee Capital Improvements Plan (RIF CIP)** (Pg. 16)

Information from these Land Use Assumptions and RIF CIP is used extensively throughout the remainder of the report.

There is a detailed discussion of the methodology for the computation of impact fees. This discussion is broken into three components:

1) **Methodology for Roadway Impact Fees** (Pg. 23)
2) **Roadway Impact Fee Calculation** (Pg. 39)
3) **Plan for Financing and the Ad Valorem Tax Credit** (Pg. 42)

The components of the **Computation Method for Roadway Impact Fee** include development of:

- Service Areas (Pg. 24)
- Service Units (Pg. 24)
- Cost Per Service Unit (Pg. 26)
- RIF CIP Costing Methodology (Pg. 26)
- Summary of RIF CIP Costs (Pg. 30)
- Service Unit Calculation (Pg. 34)

The Roadway Impact Fee is then calculated as:

- Maximum Assessable Impact Fee Per Service Unit (Pg. 40)
- Service Unit Demand Per Unit of Development (Pg. 48)

The report also includes a section concerning the **Plan for Financing and the Ad Valorem Tax Credit**. This involves the calculation of the applicable credit required by law to offset the City's use of ad valorem taxes to help fund the RIF CIP. This plan, prepared by NewGen Strategies, and upon which we relied, details the maximum assessable impact fee per service unit the City of Round Rock may apply under Chapter 395 of the Texas Local Government Code. This plan is unchanged from the original study adopted March 2019.

II. LAND USE ASSUMPTIONS

A. Purpose and Overview

In order to assess an impact fee, Land Use Assumptions must be developed to provide the basis for residential and employment growth projections within a municipality. As defined by Chapter 395 of the Texas Local Government Code, these assumptions include a description of changes in land uses, densities, and development in the service area. The land use assumptions are then used in determining the need and timing of transportation improvements to serve future development.

This report documents the process used to develop the Land Use Assumptions for the City of Round Rock's Roadway Impact Fee (RIF) study. In accordance with Chapter 395 of the Texas Local Government Code, roadway impact fees must be calculated based on reasonable expectations of residential and employment growth within the next ten years (2018 – 2028).

Information from the following sources was compiled to complete the Land Use Assumptions, unchanged from the study adopted March 2019:

- Transportation Master Plan 2017 Update
- CAMPO 2040 Plan
- City of Round Rock Historical Building Permit Data 2013-2017
- City of Round Rock staff
- Current planned development projects
- Parks and Trails System map

This Land Use Assumptions Summary includes the following components:

- **Land Use Assumptions Methodology** – An overview of the general methodology used to generate the land use assumptions.
- **Roadway Impact Fee Service Areas** – Explanation of the division of Round Rock into service areas for roadway and infrastructure facilities.
- **Residential and Employment Growth** – Data on residential and employment growth within the service area over the next ten years (2018 – 2028).
- **Land Use Assumptions Summary Table** – A synopsis of the Land Use Assumptions.

The residential and employment estimates and projections were compiled in accordance with the following categories:

Units: Number of dwelling units, both single and multi-family.

Employment: Square feet of building area based on three (3) different classifications. Each classification has unique trip making characteristics.

Retail: Land use activities which provide for the retail sale of goods which primarily serve households and whose location choice is oriented toward the household sector, such as grocery stores and restaurants.

Service: Land use activities which provide personal and professional services, such as government and other professional offices.

Basic: Land use activities that produce goods and services such as those which are exported outside of the local economy, such as manufacturing, construction, transportation, wholesale, trade, warehousing, and other industrial uses.

The above categories in the Land Use Assumptions match those used to develop the travel demand model for the City of Round Rock. These broader categories are used in the development of the assumptions for impact fees; however, expanded classifications used in the assessment of impact fees are found in the Land Use / Vehicle-Mile Equivalency Table (Pg. 50).

B. Land Use Assumptions Methodology

The residential and non-residential growth projections formulated in this report were performed using reasonable and generally accepted planning principles. The following factors were considered in developing these projections:

- Character, type, density, and quantity of existing development;
- Emerging Projects;
- Growth trends;
- Location of vacant land;
- Physical restrictions (i.e. flood plains, railroads); and
- Carrying Capacity (Growth Potential) of the City of Round Rock.

Determination of the ten-year growth within the Roadway Impact Fee study area was accomplished through two general steps:

- **Step 1: Determine Base Year (2018)**
- **Step 2: Determine 10-Year Growth Projections**

Step 1: Determine Base Year (2018)

Traffic Analysis Zone (TAZ) data obtained from the CAMPO 2040 model was used to determine the 2018 residential units and employment square footage.

Residential units and basic, retail, and service employment data were interpolated to the year 2018 based on the 2010 base year and 2040 future year data in the CAMPO model. A conversion of square footage per employee was utilized to determine the number of units for non-residential land uses based on *ITE Trip Generation Manual*. Residential units were broken out into a split of 60% multifamily units and 40% single family units based on historical data from 2013 to 2017 in the City of Round Rock.

Step 2: Determine 10-Year Growth Projections

The CAMPO 2040 model was also used to determine carrying capacity using the same methodology as the 2018 base year. Growth rates for 2010 to 2040 were applied to the 2018 base year to determine growth for the City of Round Rock over the next 10 years to 2028. Growth rates for employment were converted to square footage using typical figures for employees per 1,000 square feet for each employment type. The growth rates for both residential and non-residential (employment) were then applied to the 2018 base year estimates and projected 10 years into the future to 2028. Finally, the 2028 projections were compared to historical building permit data from 2011 to 2017 to calibrate growth projections from the CAMPO 2040 Model and validate the 10-year growth assumptions.

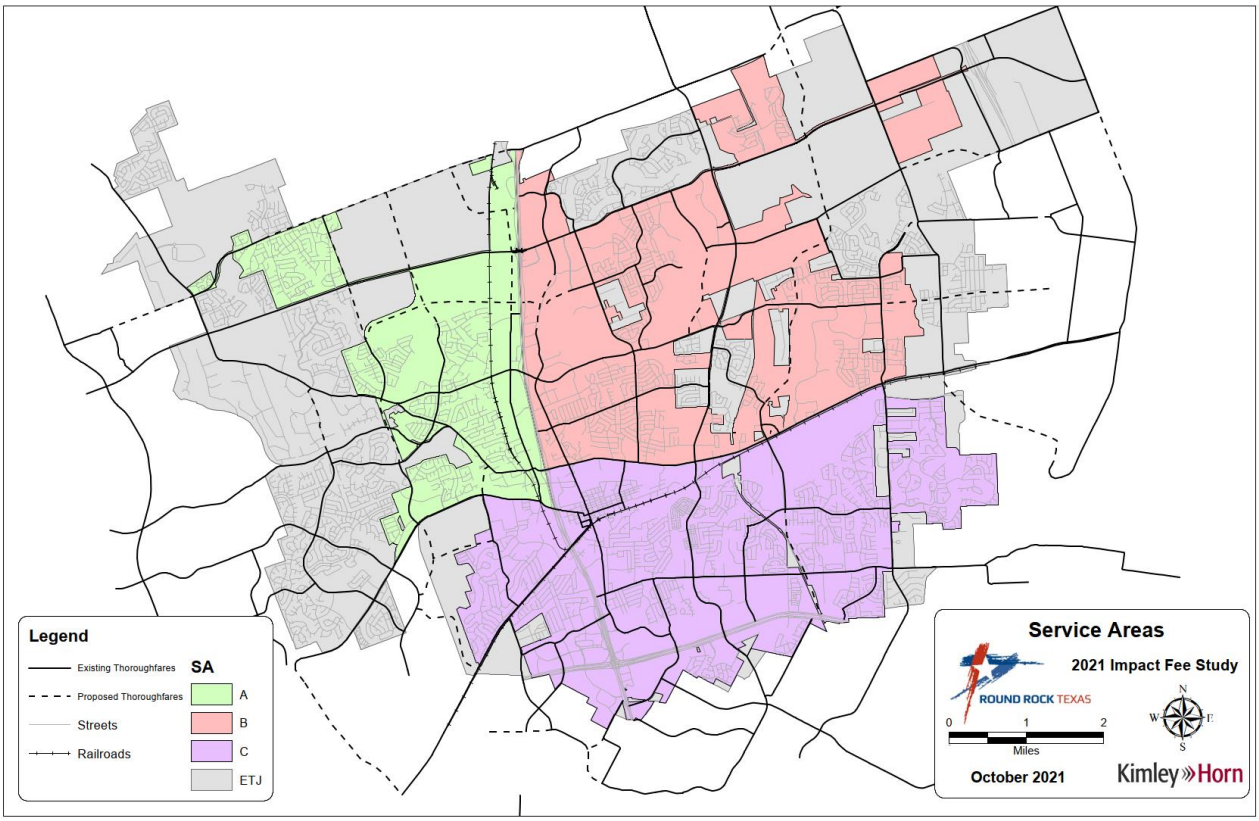
From 2013 to 2017, 4,618 dwelling units were constructed and approximately 9,700,000 square feet of non-residential space was constructed in the City of Round Rock. The average of the historical trends (assuming growth rate for 5 years from 2013 to 2017 continues from 2018 to 2028) and the CAMPO 2040 Model were used to determine growth projections. Finally, planned large projects were also added to the average of the CAMPO 2040 Model and historical trends to further calibrate the Land Use Assumptions shown in **Table 1**.

C. Roadway Impact Fee Service Areas

The geographic boundary of the proposed impact fee service areas for transportation facilities is shown in **Exhibit 1**. The City of Round Rock is divided into three (3) service areas, each based upon the six (6) mile limit, as required in Chapter 395. For transportation facilities, the service areas as required by state law are limited to areas within the current corporate City limits. In defining the Service Area boundaries, the project team considered the corporate boundary, required six (6) mile size limit, adjacent land uses, highways and topography. Since each Service Area will have a unique maximum impact fee, the per-unit maximum fee for an identical land use will vary from one Service Area to the next. For this reason, the team kept areas of uniform land use within the same Service Area where possible.

It should be noted that at locations where Service Area boundaries align with a City roadway, the proposed boundary is intended to follow the centerline of the roadway, unless otherwise noted. In cases where a Service Area boundary follows the City Limits, only those portions of the transportation facility within the City Limits are included in the Service Area. Service Area boundaries were changed from the study adopted March 2019 to reflect the City Limits current as of October 2021 in the 2021 Study Update.

Exhibit 1 – Proposed Service Areas



D. Land Use Assumptions Summary

Table 1 summarizes the residential and employment 10-year growth projections. The growth projections are unchanged from the study adopted March 2019.

Table 1. Residential and Employment 10-Year Projections

Service Area	Year	Residential (Units)		Employment (Sq. Ft.)			
		Single Family	Multi-Family	Basic	Service	Retail	Total
A	2018-2028	621	932	1,300,000	600,000	500,000	2,400,000
B		1,826	2,739	600,000	2,300,000	900,000	3,800,000
C		1,720	3,485	2,200,000	2,600,000	1,500,000	6,300,000
Total		4,167	7,156	4,100,000	5,500,000	2,900,000	12,500,000

III. ROADWAY IMPACT FEE CAPITAL IMPROVEMENTS PLAN

The City has identified the transportation projects needed to accommodate the projected growth within the City. The City's Transportation Master Plan is the plan for the infrastructure that is estimated to be necessary to accommodate the expected growth. The Roadway Impact Fee Capital Improvements Plan (RIF CIP) consists of 5 categories of projects. They are as follows:

- **Previously Constructed** – Identified corridors that were previously constructed and have access capacity for future development to utilized.
- **Widening** – Existing roadways not currently built to the ultimate class in the Transportation Master Plan and must be completely reconstructed
- **½ Widening** – Existing roadways that have built half of a 4-lane or 6-lane divided roadway previously and only need one side of the roadway to be built
- **Access Management** – Existing 5 lane undivided roadways identified for median construction in the existing center turn lane for access management purposes.
- **New** - All future roadways needed to complete the Transportation Master Plan

The RIF CIP includes arterial class roadway facilities, collector facilities as well as major intersection improvements. All the roadway facilities identified are included in the Transportation Master Plan except for some roadway alignment modifications due to city direction. Through evaluation of the Transportation Master Plan with City staff, some facilities were identified that were upgraded or downgraded from their functional classification to reflect capacity need in a 10-year window.

Major intersection improvements were identified in the Transportation Master Plan. Some improvements were left off because they did not specify capacity improvements, and some were added based on field observed need and confirmation from city staff. Improvements were categorized as follows:

- **Signal** – either a new signal or modification to an existing signal due to construction of a new roadway approach to an existing signalized intersection
- **Intersection Improvement** – construction of an intersection improvement to be determined after complete analysis
- **Turn Lanes** – addition or extension of a turn lane consistent with City, TxDOT and NCHRP Report 780 turn lane length recommendations.
- **Other** – a catch-all for other improvements, limited to new turn lanes, bond project recommendations not in the other 3 categories, removing split phasing at intersections, and special intersections (Continuous Flow Intersections (CFI), Diverging Diamond Intersections (DDI), or grade separation improvements)
- **Update ITS and Traffic Management Infrastructure** – This item was identified in the Transportation Master Plan and was split evenly between the three (3) service areas for developing the roadway impact fee.

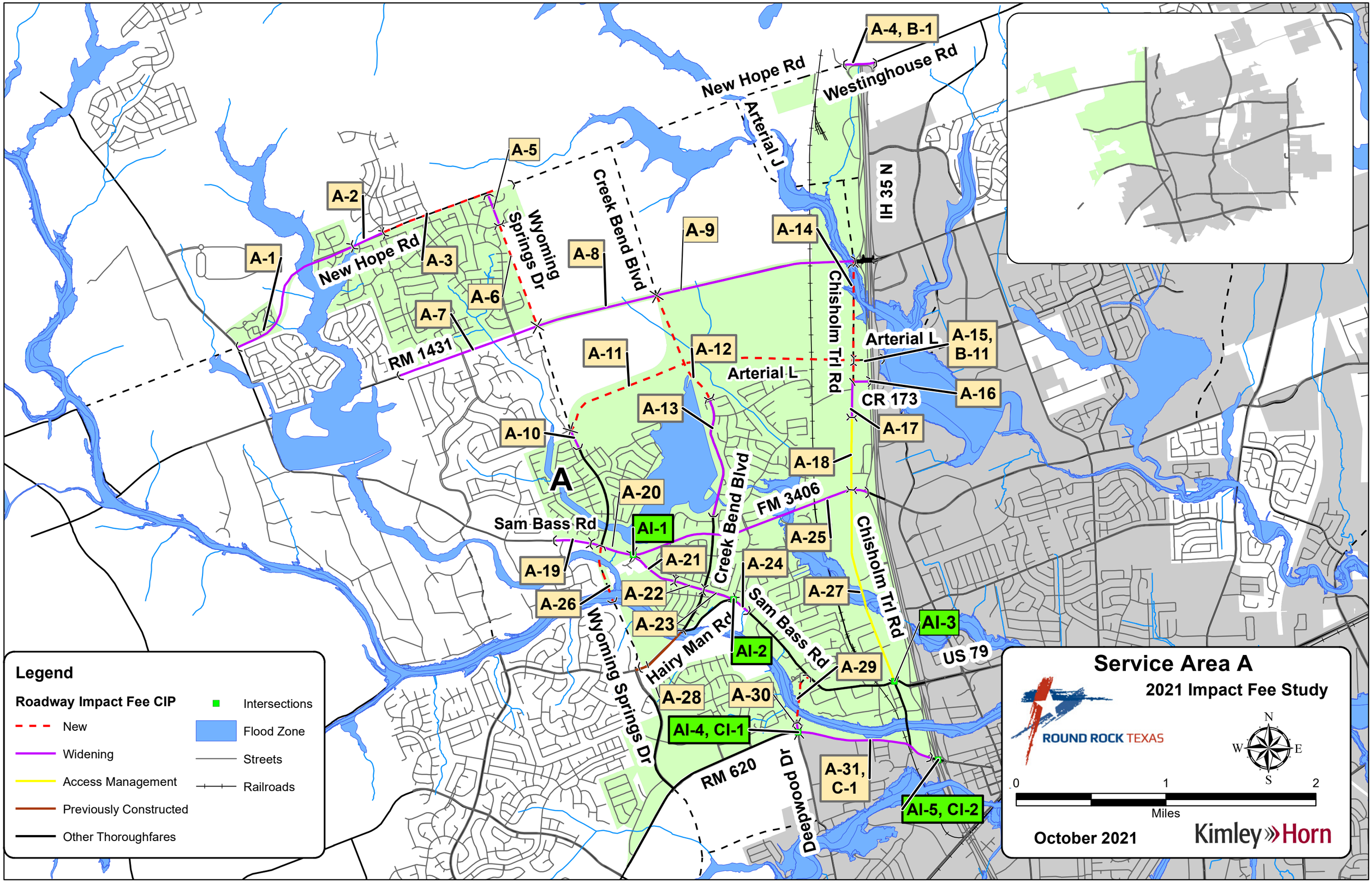
All intersection improvement recommendations are recommended to undergo a design level evaluation before implementation to ensure the most appropriate improvements are made. In the case where a design level evaluation determines improvements contrary to the RIF CIP, such as turn lane improvements in place of a signal, the RIF CIP cost allocated to the intersection may still be applied to the alternate improvements.

The proposed RIF CIP is listed in **Tables 2.A – 2.C** and mapped in **Exhibits 2.A – 2.C.** The tables show the length of each project as well as the facility's typology. The RIF CIP was developed in conjunction with input from City of Round Rock staff and represents projects that will be needed to accommodate the growth projected in the Land Use Assumptions section of this report. The only change to the RIF CIP in the 2021 Study Update is the exchange of project B-21 from Avery Nelson to Wallin Bradley.

Table 2.A. 10-Year Roadway Impact Fee Capital Improvements Plan – Service Area A

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA A	A-1	4 Lane - Enhanced (1/2)	New Hope Rd (1)	Sam Bass Rd to 240' W of Lagoona Dr	1.10	100%
	A-2	4 Lane - Enhanced (1/2)	New Hope Rd (2)	240' W of Lagoona Dr to Mayfield Ranch Blvd	0.23	50%
	A-3	4 Lane - Proposed	New Hope Rd (3)	Mayfield Ranch Blvd to 1000' E of Wyoming Springs Dr	0.93	50%
	A-4, B-1	6 Lane - Enhanced	Westinghouse Rd	IH 35 SBFR to IH 35 NBFR	0.19	50%
	A-5	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (1)	New Hope Dr (Future) to Blue Ridge Dr	0.23	100%
	A-6	4 Lane - Proposed	Wyoming Springs Dr (2)	Blue Ridge Dr to RM 1431	0.72	100%
	A-7	6 Lane - Enhanced	RM 1431 (1)	1100' W of Mayfield Ranch Blvd to 850' E of Stone Oak Dr	0.97	50%
	A-8	6 Lane - Enhanced	RM 1431 (2)	850' E of Stone Oak Dr to 5195' E of Stone Oak St	0.82	100%
	A-9	6 Lane - Enhanced	RM 1431 (3)	5195' E of Stone Oak St to IH 35 SBFR	1.34	100%
	A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (3)	390' N of Goldenoak Cir to Alondra Way	0.13	100%
	A-11	4 Lane - Proposed	Arterial L (1)	Wyoming Springs Dr to Chisholm Trl Rd (Future)	2.15	100%
	A-12	4 Lane - Proposed	Creek Bend Blvd (1)	RM 1431 to West End Pl	0.80	100%
	A-13	4 Lane - Enhanced (1/2)	Creek Bend Blvd (2)	West End Pl to Camino Del Verdes Pl	0.79	100%
	A-14	4 Lane - Proposed	Chisholm Trl Rd (1)	RM 1431 to CR 173	0.80	100%
	A-15, B-11	4 Lane - Proposed	Arterial L (2)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	50%
	A-16	4 Lane - Enhanced	CR 173	IH 35 SBFR to 3250' N of Wolle Ln	0.10	100%
	A-17	4 Lane - Enhanced	Chisholm Trl Rd (2)	3250' N of Wolle Ln to 1980' N of Wolle Ln	0.24	100%
	A-18	4 Lane - Enhanced (AM)	Chisholm Trl Rd (3)	1980' N of Wolle Ln to FM 3406	0.48	100%
	A-19	6 Lane - Enhanced	Sam Bass Rd (1)	230' W of Tonkawa Trl to 390' W of Wyoming Springs Dr	0.23	50%
	A-20	6 Lane - Enhanced	Sam Bass Rd (2)	390' W of Wyoming Springs Dr to FM 3406	0.30	100%
	A-21	4 Lane - Enhanced	Sam Bass Rd (3)	FM 3406 to Desert Willow Dr	0.35	50%
	A-22	4 Lane - Enhanced	Sam Bass Rd (4)	Desert Willow Dr to Creek Bend Blvd	0.19	100%
	A-23	4 Lane - Enhanced	Sam Bass Rd (5)	Creek Bend Blvd to Hairy Man Dr	1.86	100%
	A-24	4 Lane - Enhanced	Sam Bass Rd (6)	Hairy Man Rd to 700' E of Hairy Man Rd	0.21	50%
	A-25	6 Lane - Enhanced	FM 3406	Sam Bass Rd to IH 35 SBFR	1.65	100%
	A-26	4 Lane - Proposed	Wyoming Springs Dr (4)	Sam Bass Rd to Brushy Creek	0.39	100%
	A-27	4 Lane - Enhanced (AM)	Chisholm Trl Rd (4)	FM 3406 to Sam Bass Rd	1.33	100%
	A-28	4 Lane - Enhanced	Creek Bend Blvd (3)	Brushy Creek to Wyoming Springs Dr	0.40	100%
	A-29	4 Lane - Proposed	Deepwood Dr (1)	Sam Bass Rd to 345' N of RM 620	0.34	100%
	A-30	4 Lane - Enhanced	Deepwood Dr (2)	345' N of RM 620 to RM 620	0.07	100%
	A-31, C-1	6 Lane - Enhanced	RM 620	Deepwood Dr to IH 35 SBFR	0.93	50%
		Intersection Improvements	**Location**	**Improvement(s)**		**% In Service Area**
	AI-1		Sam Bass Rd and FM 3406	SIGNAL		100%
	AI-2		Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		75%
	AI-3		Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%
	AI-4, CI-1		Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%
	AI-5, CI-2		IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%
	-		Update ITS and Traffic Managmenet Infrastructure	-		33%

Note: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.


Service Area A
2021 Impact Fee Study
ROUND ROCK TEXAS
October 2021
Kimley»Horn
Legend
Roadway Impact Fee CIP
New
Widening
Access Management
Previously Constructed
Other Thoroughfares
Intersections
Flood Zone
Streets
Railroads
A
A-1
A-2
A-3
A-4, B-1
A-5
A-6
A-7
A-8
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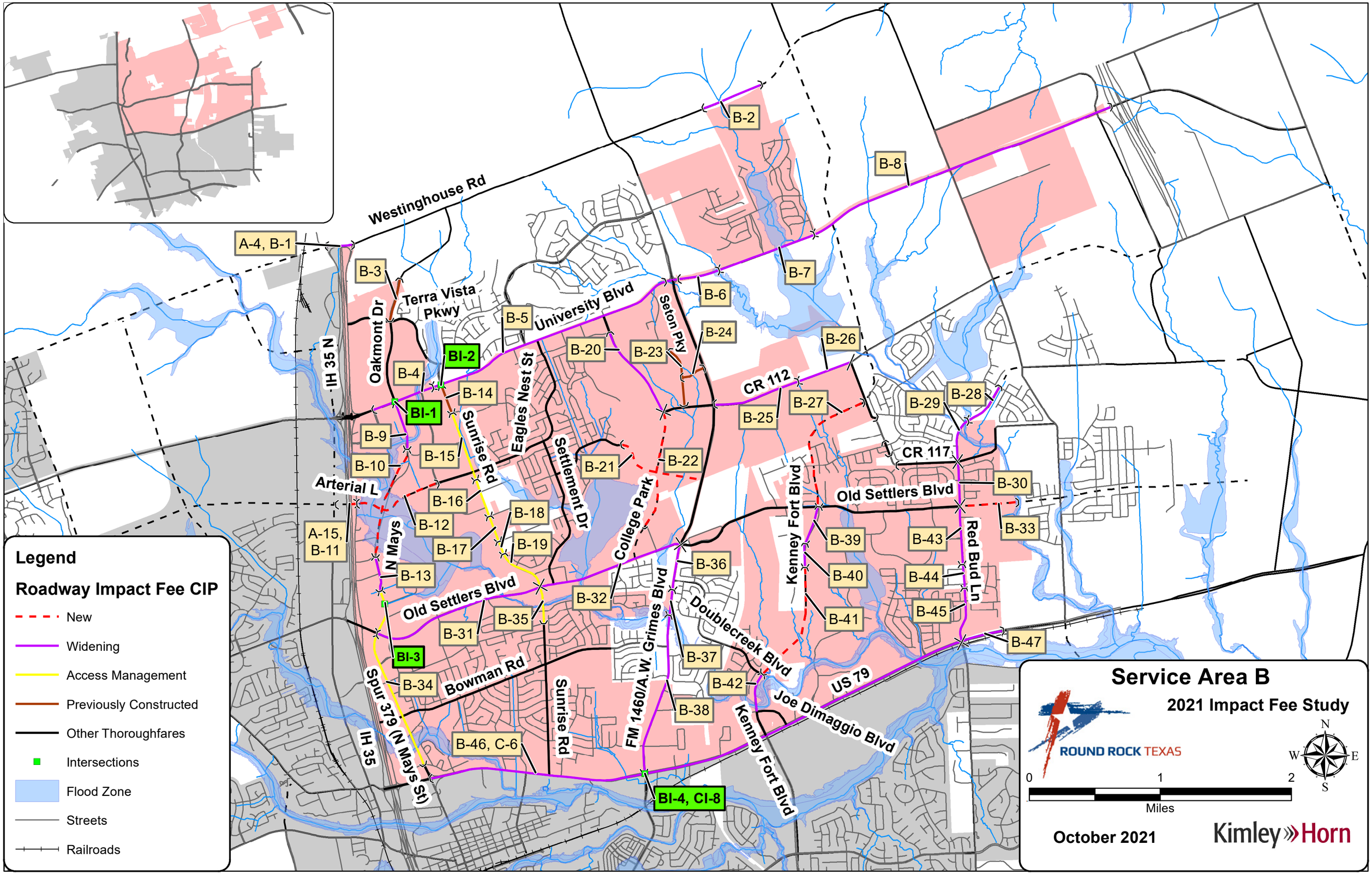
A-29
A-30
A-31, C-1
AI-1
AI-2
AI-3
AI-4, CI-1
AI-5, CI-2
New Hope Rd
Westinghouse Rd
Arterial J
IH 35 N
Wyoming Springs Dr
Creek Bend Blvd
Chisholm Trl Rd
Arterial L
RM 1431
CR 173
FM 3406
Sam Bass Rd
Hairy Man Rd
US 79
RM 620
Deepwood Dr
0
1
2
Miles
N
S
E
W

Table 2.B. Roadway Impact Fee Capital Improvements Plan – Service Area B

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA B	A-4, B-1	6 Lane - Enhanced	Westinghouse Rd (1)	IH 35 SBFR to IH 35 NBFR	0.19	50%
	B-2	4 Lane - Enhanced	Westinghouse Rd (2)	3895' E of A.W. Grimes to 6350' W of A.W. Grimes	0.47	50%
	B-3	4 Lane - Existing	N Mays St (1)	1777' N of Teravista Pkwy to Teravista Pkwy	0.34	100%
	B-4	6 Lane - Enhanced	University Blvd (1)	University Oaks Blvd to 335' W of Sunrise Dr	0.49	100%
	B-5	6 Lane - Enhanced	University Blvd (2)	335' W of Sunrise Dr to A.W. Grimes Blvd	2.03	50%
	B-6	4 Lane - Enhanced	University Blvd (3)	A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd	0.36	100%
	B-7	4 Lane - Enhanced	University Blvd (4)	1830' E of A.W. Grimes Blvd to Lunata Way	0.78	50%
	B-8	4 Lane - Enhanced	University Blvd (5)	Lunata Way to SH 130 SBFR	2.47	100%
	B-9	4 Lane - Enhanced	N Mays St (2)	University Blvd to 2000' S of University Blvd	0.38	100%
	B-10	4 Lane - Proposed	N Mays St (3)	2000' S of University Blvd to Paloma Dr	0.88	100%
	A-15, B-11	4 Lane - Proposed	Arterial L (1)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	50%
	B-12	4 Lane - Proposed	Arterial L (2)	IH 35 NBFR to Cypress Blvd	0.69	100%
	B-13	4 Lane - Enhanced	N Mays St (4)	Paloma Dr to 540' N of Steam Way	0.27	100%
	B-14	4 Lane - Existing	Sunrise Rd (1)	University Blvd to Hidden Valley Dr	0.23	100%
	B-15	4 Lane - Enhanced (AM)	Sunrise Rd (2)	Hidden Valley Dr to 325' S of Eagles Nest St	0.54	100%
	B-16	4 Lane - Enhanced (AM)	Sunrise Rd (3)	325' S of Eagles Nest St to Applegate Cir	0.30	50%
	B-17	4 Lane - Enhanced (AM)	Sunrise Rd (4)	Applegate Cir to Lake Dr	0.20	100%
	B-18	4 Lane - Enhanced (AM)	Sunrise Rd (5)	Lake Dr to 545' S of Lake Dr	0.10	50%
	B-19	4 Lane - Enhanced (AM)	Sunrise Rd (6)	545' S of Lake Dr to Old Settlers Blvd	0.40	100%
	B-20	4 Lane - Enhanced (1/2)	College Park (1)	Satellite View to Avery Nelson Blvd	0.75	100%
	B-21	3 Lane - Proposed	Wallin Bradley Drive	Gulf Way to A.W. Grimes Blvd	0.69	100%
	B-22	4 Lane - Proposed	College Park (2)	Avery Nelson Rd to 1355' N of Old Settlers Blvd	0.91	100%
	B-23	3 Lane - Existing	Seton Pkwy	2400' N of Avery Nelson Blvd to Avery Nelson Blvd	0.45	100%
	B-24	4 Lane - Existing	Medical Center Pkwy	Seton Pkwy to A.W. Grimes Blvd	0.18	100%
	B-25	4 Lane - Enhanced	CR 112 (1)	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd	0.68	100%
	B-26	4 Lane - Enhanced	CR 112 (2)	3580' E of A.W. Grimes Blvd to CR 117	0.43	50%
	B-27	4 Lane - Proposed	Kenney Fort Blvd (1)	CR 117 to Old Settlers Blvd	1.06	100%
	B-28	4 Lane - Enhanced (1/2)	Red Bud Ln (1)	Guadalajara St to 160' N of Margarita Loop	0.35	100%
	B-29	4 Lane - Enhanced (1/2)	Red Bud Ln (2)	160' N of Margarita Loop to CR 117	0.35	50%
	B-30	4 Lane - Enhanced	Red Bud Ln (3)	CR 117 to Old Settlers Blvd	0.34	100%
	B-31	6 Lane - Enhanced (1/3)	Old Settlers Blvd (1)	N Mays St to Sunrise Rd	1.33	100%
	B-32	6 Lane - Enhanced	Old Settlers Blvd (2)	Sunrise Rd to A.W. Grimes Blvd	1.13	100%
	B-33	4 Lane - Proposed	Old Settlers Blvd (3)	Red Bud Ln to CR 110	0.46	100%
	B-34	4 Lane - Enhanced (AM)	Spur 379 (N Mays St)	540' N of Steam Way to Northwest Dr	1.43	100%
	B-35	4 Lane - Enhanced (AM)	Sunrise Rd (7)	Old Settlers Blvd to Country Aire Dr	0.28	100%
	B-36	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (1)	Old Settlers Blvd to 375' S of Chandler Creek Blvd	0.35	100%
	B-37	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (2)	375' S of Chandler Creek Blvd to 1250' N of Tiger Trl	0.20	50%
	B-38	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (3)	1250' N of Tiger Trl to US 79	1.25	100%
	B-39	6 Lane - Proposed (1/2)	Kenney Fort Blvd (2)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.30	100%
	B-40	6 Lane - Proposed	Kenney Fort Blvd (3)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.18	50%
	B-41	6 Lane - Proposed	Kenney Fort Blvd (4)	2540' S of Old Settlers Blvd to Chandler Creek Blvd	0.95	100%
	B-42	6 Lane - Enhanced	Kenney Fort Blvd (5)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	100%
	B-43	4 Lane - Enhanced	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.45	100%
	B-44	4 Lane - Enhanced	Red Bud Ln (5)	170' N of Joseph St to 160' S of Covered Wagon Trl	0.18	50%
	B-45	4 Lane - Enhanced	Red Bud Ln (6)	160' S of Covered Wagon Trl to US 79	0.41	100%
	B-46, C-6	6 Lane - Enhanced	US 79 (1)	N Mays St to 200' E of Red Bud Ln	4.32	50%
	B-47	6 Lane - Enhanced	US 79 (2)	200' E of Red Bud Ln to 1690' E of Red Bud Ln	0.28	50%
		Intersection Improvements	**Location**	**Improvement(s)**		**% In Service Area**
	BI-1		N Mays St and University Blvd	TURN LANES		100%
	BI-2		Sunrise Rd and University Blvd	TURN LANES		100%
	BI-3		N Mays St and Steam Way	TURN LANES		100%
	BI-4, CI-8		A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%
	-		Update ITS and Traffic Managmenet Infrastructure	-		33%

Note: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.


Service Area B
2021 Impact Fee Study
ROUND ROCK TEXAS
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W
October 2021
Kimley»Horn
Legend
Roadway Impact Fee CIP
New
Widening
Access Management
Previously Constructed
Other Thoroughfares
Intersections
Flood Zone
Streets
Railroads
Westinghouse Rd
Terra Vista Pkwy
Oakmont Dr
IH 35 N
University Blvd
Seton Pky
CR 112
CR 117
Sunrise Rd
Eagles Nest St
Settlement Dr
College Park
Arterial L
N Mays
Old Settlers Blvd
Kenney Fort Blvd
Red Bud Ln
FM 1460/A.W. Grimes Blvd
Doublecreek Blvd
Bowman Rd
Spur 379 (N Mays St)
IH 35
US 79
Joe Dimaggio Blvd
A-4, B-1
B-2
B-3
B-4
B-5
B-6
B-7
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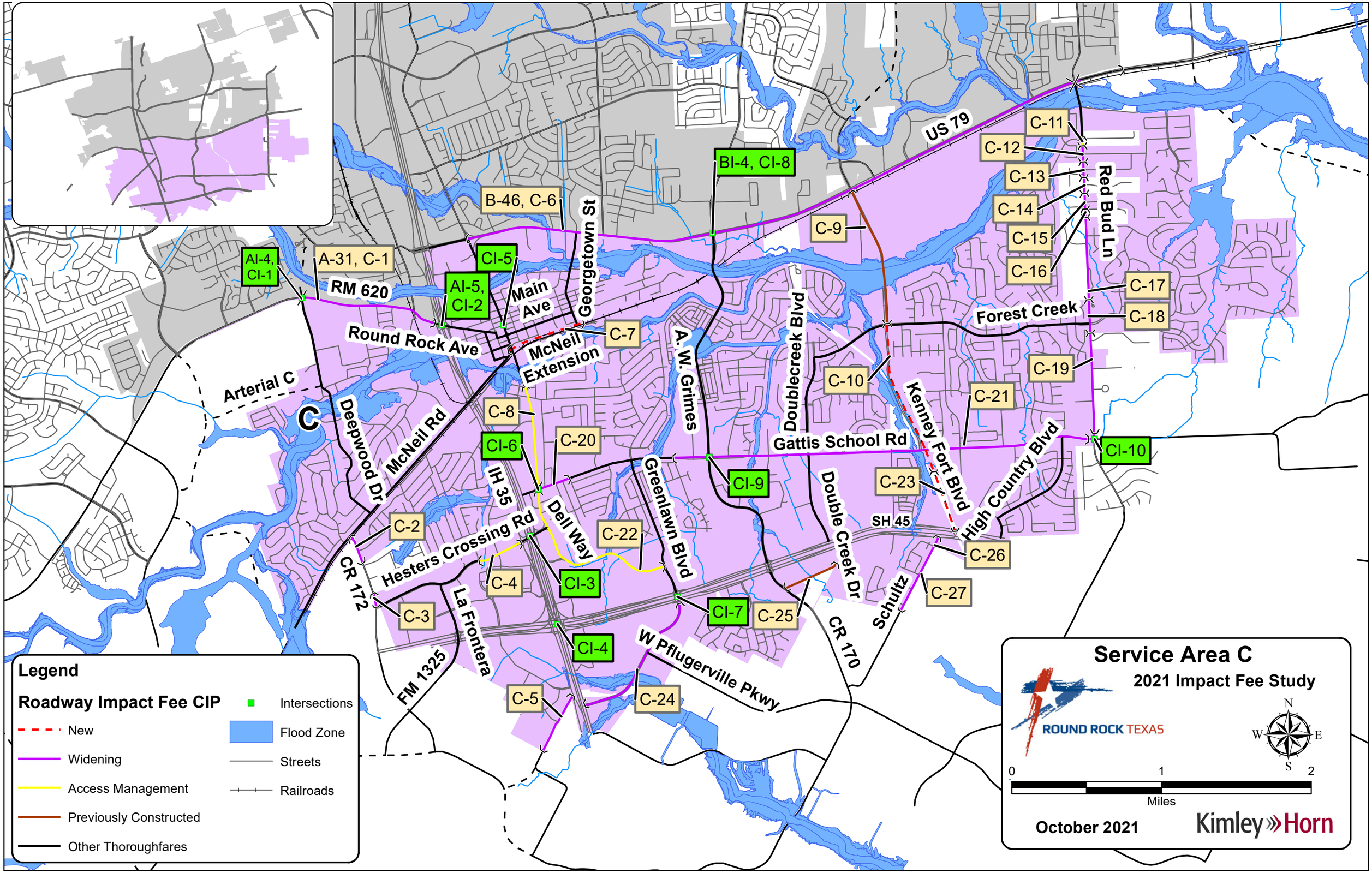
B-44
B-45
B-46, C-6
B-47
A-15,
BI-1
BI-2
BI-3
BI-4, CI-8

Table 2.C. Roadway Impact Fee Capital Improvements Plan – Service Area C

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
SA C	A-31, C-1	6 Lane - Enhanced	RM 620	Deepwood Dr to IH 35 SBFR	0.93	50%
	C-2	4 Lane - Enhanced	CR 172 (1)	McNeil Dr to Lynda Sue St	0.20	50%
	C-3	4 Lane - Enhanced	CR 172 (2)	Hesters Crossing Rd to 445' N of Hesters Crossing Rd	0.08	50%
	C-4	4 Lane - Enhanced (AM)	Hesters Crossing Rd	Dry Creek Dr to IH 35 SBFR	0.32	100%
	C-5	4 Lane - Enhanced	Bratton Ln	IH 35 SBFR to 1160' S of Michael Angelo Way	0.42	50%
	B-46, C-6	6 Lane - Enhanced	US 79 (1)	N Mays St to 200' E of Red Bud Ln	4.32	50%
	C-7	3 Lane - Proposed	McNeil Extension	S Mays St to Georgetown St	0.52	100%
	C-8	4 Lane - Enhanced (AM)	S Mays St	Nash St to Gattis School Rd	0.69	100%
	C-9	6 Lane - Existing	Kenney Fort Blvd (1)	US 79 to Forest Creek Blvd	0.95	100%
	C-10	6 Lane - Proposed	Kenney Fort Blvd (2)	Forest Creek Dr to 830' S of Gattis School Rd	1.04	100%
	C-11	4 Lane - Enhanced (AM)	Red Bud Ln (1)	Forest Ridge Blvd to 265' S of Forest Ridge Blvd	0.05	50%
	C-12	4 Lane - Enhanced	Red Bud Ln (2)	265' S of Forest Ridge Blvd to 280' S of Woodlawn Ln	0.11	100%
	C-13	4 Lane - Enhanced	Red Bud Ln (3)	280' S of Woodlawn Ln to 130' S of Old Oaks Dr	0.10	50%
	C-14	4 Lane - Enhanced	Red Bud Ln (4)	130' S of Old Oaks Dr to 315' S of Country Dr	0.11	100%
	C-15	4 Lane - Enhanced	Red Bud Ln (5)	315' S of Country Dr to Wildflower Trl	0.10	50%
	C-16	4 Lane - Enhanced	Red Bud Ln (6)	Wildflower Trl to 295' S of Wildflower Trl	0.06	100%
	C-17	4 Lane - Enhanced	Red Bud Ln (7)	295' S of Wildflower Trl to 840' N of Forest Creek Dr	0.55	50%
	C-18	4 Lane - Enhanced	Red Bud Ln (8)	840' N of Forest Creek Dr to 340' S of Forest Creek Dr	0.22	100%
	C-19	4 Lane - Enhanced	Red Bud Ln (9)	340' S of Forest Creek Dr to Gattis School Rd	0.71	50%
	C-20	4 Lane - Enhanced	Gattis School Rd (1)	S Mays St to Surrey Dr	0.65	100%
	C-21	6 Lane - Enhanced	Gattis School Rd (2)	Windy Park Dr to Red Bud Ln	2.82	100%
	C-22	4 Lane - Enhanced (AM)	S Mays St / Dell Way	Gattis School Rd to Greenlawn Blvd	1.24	100%
	C-23	6 Lane - Proposed	Kenney Fort Blvd (3)	830' S of Gattis School Rd to SH 45	0.41	50%
	C-24	6 Lane - Enhanced (1/3)	Greenlawn Blvd	IH 35 NBFR to SH 45 EBFR	1.86	100%
	C-25	3 Lane - Proposed	Roundville Ln	A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd	0.21	100%
	C-26	4 Lane - Enhanced	Schultz (1)	SH 45 EBFR to 290' S of SH 45 EBFR	1.45	100%
	C-27	4 Lane - Enhanced	Schultz (2)	290' S of SH 45 EBFR to 255' S of Autumn Sage Way	0.50	50%
		Intersection Improvements	**Location**	**Improvement(s)**		**% In Service Area**
	AI-4, CI-1		Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%
	AI-5, CI-2		IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%
	CI-3		IH 35 and Hesters Crossing Rd	TURN LANES		100%
	CI-4		IH 35 and Louis Henna Blvd (SH 45 FR)	TURN LANES & SIGNAL		100%
	CI-5		Mays St and Liberty Ave	SIGNAL		100%
	CI-6		Mays St and Gattis School Rd	TURN LANES		100%
	CI-7		Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER		100%
	BI-4, CI-8		A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%
	CI-9		A.W. Grimes Blvd and Gattis School Rd	TURN LANES		100%
	CI-10		Red Bud Ln and Gattis School Rd	TURN LANES		100%
	-		Update ITS and Traffic Managmenet Infrastructure	-		33%

Note: The 10-Year Roadway Impact Fee CIP is not in a prioritized order.


Service Area C
2021 Impact Fee Study
ROUND ROCK TEXAS
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Streets
Railroads
Arterial C
C
US 79
RM 620
Round Rock Ave
Main Ave
Georgetown St
McNeil Extension
A. W. Grimes
Doublecreek Blvd
Red Bud Ln
Forest Creek
Kenney Fort Blvd
Gattis School Rd
High Country Blvd
Deepwood Dr
McNeil Rd
IH 35
Dell Way
Greenlawn Blvd
Double Creek Dr
SH 45
Schultz
CR 170
CR 172
Hesters Crossing Rd
La Frontera
FM 1325
W Pflugerville Pkwy
AI-4, CI-1
A-31, C-1
CI-5
AI-5, CI-2
B-46, C-6
BI-4, CI-8
C-9
C-11
C-12
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C-27
CI-4
C-5
C-24

IV. METHODOLOGY FOR ROADWAY IMPACT FEES

A. Service Areas

The three (3) service areas used in the 2021 Roadway Impact Fee Study are shown in the previously referenced **Exhibit 1**. These service areas cover the entire corporate area of the City of Round Rock (both limited and full purpose jurisdictions) as of October 2021. Chapter 395 of the Texas Local Government Code specifies that "the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles." The service areas in the 2018 Roadway Impact Fee Study are consistent with the specification of Chapter 395 of the Texas Local Government Code.

B. Service Units

The "service unit" is a measure of consumption or use of the capital facilities by new development. In other words, it is the unit of measure used in the 2021 Roadway Impact Fee Study to quantify the supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. Below is the definition for vehicle-mile.

Vehicle-Mile: The capacity consumed in a single lane in the PM peak hour by a vehicle making a trip one mile in length. The PM Peak is used as the basis for transportation planning and the estimation of trips caused by new development.

Total Vehicle-Miles of Supply: Based on the total length (miles), number of lanes, and capacity (vehicles per hour) provided by the Transportation Master Plan (see **Appendix B**).

Total Vehicle-Miles of Demand: Based on the 10-year growth projections (Pg. 38). The demand is equal to PM Trip Rate (trips) * Trip Length (miles).

The capacity values used in the 2021 Roadway Impact Fee Study are based upon Capacity Criteria published by the Capital Area Metropolitan Planning Organization (CAMPO) and modified to accommodate different contexts within the City of Round Rock corporate limits. This capacity represents an approximate level of service D. **Table 3A** and **3B** show the service volumes as a function of the facility classification and type.

Table 3A. Service Volumes for Proposed Facilities
(used in Appendix B – Rodway Impact Fee CIP Service Units of Supply)

Facility Classification	Lanes	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
6 Lane	6	Divided	900
4 Lane Proposed	4	Divided	810
3 Lane Proposed	3	Undivided	410
2 Lane Existing	2	Undivided	410

Table 3B. Service Volumes for Existing Facilities

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
2U-G	Rural Cross-Section (i.e., gravel, dirt, etc.)	100
2U-H	Two lane undivided – rural setting, high speed	770
2U	Two lane undivided – built-out	410
2U-OP	Two lane undivided with on-street parking	330
2U-Half	Two lane undivided – half of a 4 lane divided	410
3U	Three lane undivided (two-way, left-turn lane)	510
3U-OP	Three lane undivided with on street parking	410
4U	Four lane undivided	680
4D	Four lane divided	810
5U	Five lane undivided	770
6U	Six lane undivided	770
6D	Six lane divided	900
7U	Seven lane undivided	860

C. Cost Per Service Unit

A fundamental step in the impact fee process is to establish the cost for each service unit. In the case of the Roadway Impact Fee, this is the cost for each vehicle-mile of travel. Thus, it is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel. The cost per service unit is calculated for each service area based on the roadway projects within that service area.

The second component of the cost per service unit is the determination of the number of service units in each service area. This number is the measure of the growth in transportation demand that is projected to occur in the ten-year period.

D. Cost of the RIF CIP

All of the project costs for an arterial or collector facility which serves the overall transportation system are eligible to be included in the Roadway Impact Fee Capital Improvements Plan (RIF CIP). Chapter 395 of the Texas Local Government Code specifies that the allowable costs are "…including and limited to the:

1. Construction contract price;
2. Surveying and engineering fees;
3. Land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and
4. Fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision."

The engineer's opinion of the probable costs of the projects in the RIF CIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the probable cost to be determined by the type of facility being constructed, the number of lanes, and the length of the project. The cost for location specific items such as bridges, highway ramps, drainage structures, and any other special components are added to each project, as appropriate. The following is a detailed description of the costing worksheet/methodology for the RIF CIP.

1. Overview of RIF CIP Costing Worksheets

For each project a specific costing worksheet was developed (see **Appendix A**). Each worksheet contained the following four (4) main components:

- Project Information,
- Construction Pay Items,
- Construction Component Allowances and
- Summary of Costs and Allowances

Project Information

Construction Pay Items

Construction Component Allowances

Summary of Costs and Allowances

City of Round Rock
2018 Roadway Impact Fee Study
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 4/30/2018

Project Information: Description: Project No. B-9

Name:	N Mays St (2)
Limits:	University Blvd to 2000' S of University Blvd
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	2,002
Service Area(s):	B

This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	14,558	cy	$ 15.00	$ 218,000
203	12" Asphalt (Type C)	7,928	ton	$ 72.00	$ 571,000
303	16" Base	5,339	cy	$ 55.00	$ 294,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	12,902	sy	$ 6.00	$ 77,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,402	gal	$ 6.00	$ 14,000
603	10' Concrete Sidewalk	40,040	sf	$ 5.50	$ 220,000
703	Machine Laid Curb & Gutter	8,008	lf	$ 16.00	$ 128,000
803	Turn Lanes and Median Openings	1,213	sy	$ 134.62	$ 163,000
				Paving Construction Cost Subtotal:	**$ 1,685,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 84,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 34,000
√	Roadway Drainage	Standard Internal System	30%	$ 506,000
√	Illumination		10%	$ 169,000
√	Special Drainage Structures	Bridge Crossing		$ 800,000
√	Water	Minor Adjustments	2%	$ 34,000
√	Sewer	Minor Adjustments	2%	$ 34,000
√	Turf and Erosion Control		4%	$ 67,000
√	Landscaping and Irrigation		2%	$ 34,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,762,000**
			Paving and Allowance Subtotal:	**$ 3,447,000**
			Construction Contingency: 15%	$ 517,000
			Mobilization 8%	$ 276,000
			Prep ROW 4%	$ 138,000
			Construction Cost TOTAL:	**$ 4,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,400,000**
Engineering/Survey/Testing:		16%	$ 704,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 660,000
		Impact Fee Project Cost TOTAL:	**$ 5,800,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Round Rock.
The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

2. Project Information

In order to correctly estimate the cost of a roadway project, several attributes are first identified:

- Project Number – Identifies which Service Area the project is in with a corresponding number. The corresponding number does not represent any prioritizations and is used only to identify projects. For example, Project A-9 is in Service Area A and is the 9th project on the list.
- Name – A unique identifier for each project. In some cases, abbreviations are used for the project name.
- Limits – Represents the beginning and ending location for each project.
- Service Area(s) – Represents the service areas where the project is located. Multiple service areas will be listed if the project lies along a service area boundary.
- Impact Fee Class – The costing class to be used in the analysis. The impact fee class provides the width for the various elements in the roadway. The construction costs are variable, based on the Transportation Master Plan classification of the roadway. Modification to roadway element widths are utilized in cases where a portion of the facility currently exists and the road is only to be widened, or where the road is planned to be widened to an interim configuration. Examples of these are access management projects, median widening projects (widening that occurs in an existing median), and are designated in the summary sheets at the beginning of each service area's Conceptual Level Cost Projections in **Appendix A**. Other specialized cases are noted in the short description box located in this section
- Ultimate Class – the ultimate classification of the roadway, if different from the Impact Fee Class based on determination of need in the 10-year window
- Length (ft) – The distance measured in feet that is used to cost out the project.

3. Construction Pay Items

A typical roadway project consists of several costs, including the following: planning, survey, design engineering, permitting, right-of way acquisition, and construction and testing. While the construction cost component of a project may consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. The pay items used in the 2018 RIF CIP are as follows:

- Unclassified street excavation;
- HMAC Surface courses (asphalt, in depth);
- Flexible roadway base;
- Lime stabilized subgrade;
- Surface treated prime coat;
- Concrete sidewalks;
- Concrete curb and gutter; and
- Turn lanes and median openings.

4. Construction Component Allowances

A percentage of the paving construction cost is allotted for various major construction component allowances, as appropriate. These allowances include traffic control, pavement markings, signs and posts, roadway drainage, illumination, water and sewer adjustments, turf and erosion control, landscaping and irrigation, mobilization, and preparation of right-of-way. These allowance percentages are also based on historical data.

In addition, lump sum dollar allowances are provided for special drainage structures (bridges and culverts) and railroad crossings. The paving and allowance subtotal is given a fifteen percent (15%) contingency.

5. Summary of Cost and Allowances

To determine the total Impact Fee Project Cost, sixteen percent (16%) of the construction cost total is added for engineering, surveying, and testing. Percentages are also allotted ROW/easement acquisition in the amount of ten percent (10%) for TxDOT roadways and access management projects, fifteen percent (15%) for existing roadway alignments with widening, and thirty percent (30%) for new roadway alignments.

The Impact Fee Project Cost Total is then the Construction Cost Total plus engineering, surveying, and testing; plus contingency, plus ROW/easement acquisition; and minus roadway escrow agreements.

E. Summary of Roadway Impact Fee CIP Costs

Tables 4.A – 4.C are the 10-Year RIF CIP project lists for each service area with planning level project costs. Individual project cost worksheets can be seen in **Appendix A**, Conceptual Level Project Cost Projections. It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are recoverable through impact fees. Actual project costs are likely to change with time and are dependent on market and economic conditions that cannot be predicted.

The RIF CIP establishes the list of projects for which Impact Fees may be utilized. Projects not included in the RIF CIP are not eligible to receive impact fee funding. The cost projections utilized in this study should not be utilized for the City's construction CIP. Cost projections are unchanged in the 2021 Study Update. The only project changed (B-21 Wallin Bradley Drive) was conservatively kept at the same cost as the previous project B-21 in the adopted study from March 2019, which would have a higher cost due to longer length than the previous project. This would result in a slightly higher maximum fee for Service Area B, but for simplicity was not changed in the 2021 Study Update.

Table 4.A – 10-Year RIF CIP
with Conceptual Level Cost Projections – Service Area A

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
SA A	A-1	4 Lane - Enhanced (1/2)	New Hope Rd (1)	Sam Bass Rd to 240' W of Lagoona Dr	1.10	100%	$ 7,800,000	$ 7,800,000
	A-2	4 Lane - Enhanced (1/2)	New Hope Rd (2)	240' W of Lagoona Dr to Mayfield Ranch Blvd	0.23	50%	$ 1,900,000	$ 950,000
	A-3	4 Lane - Proposed	New Hope Rd (3)	Mayfield Ranch Blvd to 1000' E of Wyoming Springs Dr	0.93	50%	$ 9,300,000	$ 4,650,000
	A-4, B-1	6 Lane - Enhanced	Westinghouse Rd	IH 35 SBFR to IH 35 NBFR	0.19	50%	$ 9,031,296	$ 4,515,648
	A-5	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (1)	New Hope Dr (Future) to Blue Ridge Dr	0.23	100%	$ 1,700,000	$ 1,700,000
	A-6	4 Lane - Proposed	Wyoming Springs Dr (2)	Blue Ridge Dr to RM 1431	0.72	100%	$ 9,100,000	$ 9,100,000
	A-7	6 Lane - Enhanced	RM 1431 (1)	1100' W of Mayfield Ranch Blvd to 850' E of Stone Oak Dr	0.97	50%	$ 2,880,000	$ 1,440,000
	A-8	6 Lane - Enhanced	RM 1431 (2)	850' E of Stone Oak Dr to 5195' E of Stone Oak St	0.82	100%	$ 3,020,000	$ 3,020,000
	A-9	6 Lane - Enhanced	RM 1431 (3)	5195' E of Stone Oak St to IH 35 SBFR	1.34	100%	$ 3,840,000	$ 3,840,000
	A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (3)	390' N of Goldenoak Cir to Alondra Way	0.13	100%	$ 1,000,000	$ 1,000,000
	A-11	4 Lane - Proposed	Arterial L (1)	Wyoming Springs Dr to Chisholm Trl Rd (Future)	2.15	100%	$ 27,400,000	$ 27,400,000
	A-12	4 Lane - Proposed	Creek Bend Blvd (1)	RM 1431 to West End Pl	0.80	100%	$ 10,500,000	$ 10,500,000
	A-13	4 Lane - Enhanced (1/2)	Creek Bend Blvd (2)	West End Pl to Camino Del Verdes Pl	0.79	100%	$ 5,900,000	$ 5,900,000
	A-14	4 Lane - Proposed	Chisholm Trl Rd (1)	RM 1431 to CR 173	0.80	100%	$ 11,200,000	$ 11,200,000
	A-15, B-11	4 Lane - Proposed	Arterial L (2)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	50%	$ 5,700,000	$ 2,850,000
	A-16	4 Lane - Enhanced	CR 173	IH 35 SBFR to 3250' N of Wolle Ln	0.10	100%	$ 1,300,000	$ 1,300,000
	A-17	4 Lane - Enhanced	Chisholm Trl Rd (2)	3250' N of Wolle Ln to 1980' N of Wolle Ln	0.24	100%	$ 2,900,000	$ 2,900,000
	A-18	4 Lane - Enhanced (AM)	Chisholm Trl Rd (3)	1980' N of Wolle Ln to FM 3406	0.48	100%	$ 900,000	$ 900,000
	A-19	6 Lane - Enhanced	Sam Bass Rd (1)	230' W of Tonkawa Trl to 390' W of Wyoming Springs Dr	0.23	50%	$ 3,500,000	$ 1,750,000
	A-20	6 Lane - Enhanced	Sam Bass Rd (2)	390' W of Wyoming Springs Dr to FM 3406	0.30	100%	$ 4,500,000	$ 4,500,000
	A-21	4 Lane - Enhanced	Sam Bass Rd (3)	FM 3406 to Desert Willow Dr	0.35	50%	$ 4,200,000	$ 2,100,000
	A-22	4 Lane - Enhanced	Sam Bass Rd (4)	Desert Willow Dr to Creek Bend Blvd	0.19	100%	$ 2,200,000	$ 2,200,000
	A-23	4 Lane - Enhanced	Sam Bass Rd (5)	Creek Bend Blvd to Hairy Man Dr	1.86	100%	$ 2,500,000	$ 2,500,000
	A-24	4 Lane - Enhanced	Sam Bass Rd (6)	Hairy Man Rd to 700' E of Hairy Man Rd	0.21	50%	$ 1,600,000	$ 800,000
	A-25	6 Lane - Enhanced	FM 3406	Sam Bass Rd to IH 35 SBFR	1.65	100%	$ 6,980,000	$ 6,980,000
	A-26	4 Lane - Proposed	Wyoming Springs Dr (4)	Sam Bass Rd to Brushy Creek	0.39	100%	$ 8,500,000	$ 8,500,000
	A-27	4 Lane - Enhanced (AM)	Chisholm Trl Rd (4)	FM 3406 to Sam Bass Rd	1.33	100%	$ 2,600,000	$ 2,600,000
	A-28	4 Lane - Enhanced	Creek Bend Blvd (3)	Brushy Creek to Wyoming Springs Dr	0.40	100%	$ 11,012,302	$ 11,012,302
	A-29	4 Lane - Proposed	Deepwood Dr (1)	Sam Bass Rd to 345' N of RM 620	0.34	100%	$ 6,000,000	$ 6,000,000
	A-30	4 Lane - Enhanced	Deepwood Dr (2)	345' N of RM 620 to RM 620	0.07	100%	$ 800,000	$ 800,000
	A-31, C-1	6 Lane - Enhanced	RM 620	Deepwood Dr to IH 35 SBFR	0.93	50%	$ 12,560,624	$ 6,280,312
	Proj. #	**Intersection Improvements**	**Location**	**Improvement(s)**		**% In Service Area**	**Total Project Cost**	**Cost in Service Area**
	AI-1		Sam Bass Rd and FM 3406	SIGNAL		100%	$ 295,000	$ 295,000
	AI-2		Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		75%	$ 2,000,000	$ 1,500,000
	AI-3		Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%	$ 139,000	$ 139,000
	AI-4, CI-1		Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%	$ 392,000	$ 196,000
	AI-5, CI-2		IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%	$ 588,000	$ 294,000
	-		Update ITS and Traffic Managmenet Infrastructure	-		33%	$ 20,900,000	$ 6,967,000
	Service Area Roadway Project Cost Subtotal							**$ 156,988,262**
	Service Area Intersection Project Cost Subtotal							**$ 9,391,000**
	2018 Roadway Impact Fee Study Cost Per Service Area							**$ 34,673**
Total Cost in SERVICE AREA A								**$ 166,413,935**

a. These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Roadway Capacity Projects within the City of Round Rock.

b. These planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

Table 4.B – 10-Year RIF CIP
with Conceptual Level Cost Projections – Service Area B

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
SA B	A-4, B-1	6 Lane - Enhanced	Westinghouse Rd (1)	IH 35 SBFR to IH 35 NBFR	0.19	50%	$ 9,031,296	$ 4,515,648
	B-2	4 Lane - Enhanced	Westinghouse Rd (2)	3895' E of A.W. Grimes to 6350' W of A.W. Grimes	0.47	50%	$ 5,500,000	$ 2,750,000
	B-3	4 Lane - Existing	N Mays St (1)	1777' N of Teravista Pkwy to Teravista Pkwy	0.34	100%	$ 1,889,219	$ 1,889,219
	B-4	6 Lane - Enhanced	University Blvd (1)	University Oaks Blvd to 335' W of Sunrise Dr	0.49	100%	$ 8,900,000	$ 8,900,000
	B-5	6 Lane - Enhanced	University Blvd (2)	335' W of Sunrise Dr to A.W. Grimes Blvd	2.03	50%	$ 30,700,000	$ 15,350,000
	B-6	4 Lane - Enhanced	University Blvd (3)	A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd	0.36	100%	$ 4,800,000	$ 4,800,000
	B-7	4 Lane - Enhanced	University Blvd (4)	1830' E of A.W. Grimes Blvd to Lunata Way	0.78	50%	$ 9,700,000	$ 4,850,000
	B-8	4 Lane - Enhanced	University Blvd (5)	Lunata Way to SH 130 SBFR	2.47	100%	$ 29,300,000	$ 29,300,000
	B-9	4 Lane - Enhanced	N Mays St (2)	University Blvd to 2000' S of University Blvd	0.38	100%	$ 5,800,000	$ 5,800,000
	B-10	4 Lane - Proposed	N Mays St (3)	2000' S of University Blvd to Paloma Dr	0.88	100%	$ 24,800,000	$ 24,800,000
	A-15, B-11	4 Lane - Proposed	Arterial L (1)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	50%	$ 5,700,000	$ 2,850,000
	B-12	4 Lane - Proposed	Arterial L (2)	IH 35 NBFR to Cypress Blvd	0.69	100%	$ 21,200,000	$ 21,200,000
	B-13	4 Lane - Enhanced	N Mays St (4)	Paloma Dr to 540' N of Steam Way	0.27	100%	$ 3,100,000	$ 3,100,000
	B-14	4 Lane - Existing	Sunrise Rd (1)	University Blvd to Hidden Valley Dr	0.23	100%	$ 979,190	$ 979,190
	B-15	4 Lane - Enhanced (AM)	Sunrise Rd (2)	Hidden Valley Dr to 325' S of Eagles Nest St	0.54	100%	$ 1,000,000	$ 1,000,000
	B-16	4 Lane - Enhanced (AM)	Sunrise Rd (3)	325' S of Eagles Nest St to Applegate Cir	0.30	50%	$ 600,000	$ 300,000
	B-17	4 Lane - Enhanced (AM)	Sunrise Rd (4)	Applegate Cir to Lake Dr	0.20	100%	$ 500,000	$ 500,000
	B-18	4 Lane - Enhanced (AM)	Sunrise Rd (5)	Lake Dr to 545' S of Lake Dr	0.10	50%	$ 200,000	$ 100,000
	B-19	4 Lane - Enhanced (AM)	Sunrise Rd (6)	545' S of Lake Dr to Old Settlers Blvd	0.40	100%	$ 800,000	$ 800,000
	B-20	4 Lane - Enhanced (1/2)	College Park (1)	Satellite View to Avery Nelson Blvd	0.75	100%	$ 5,400,000	$ 5,400,000
	B-21	3 Lane - Proposed	Wallin Bradley Drive	Gulf Way to A.W. Grimes Blvd	0.69	100%	$ 2,800,000	$ 2,800,000
	B-22	4 Lane - Proposed	College Park (2)	Avery Nelson Rd to 1355' N of Old Settlers Blvd	0.91	100%	$ 11,500,000	$ 11,500,000
	B-23	3 Lane - Existing	Seton Pkwy	2400' N of Avery Nelson Blvd to Avery Nelson Blvd	0.45	100%	$ 2,043,320	$ 2,043,320
	B-24	4 Lane - Existing	Medical Center Pkwy	Seton Pkwy to A.W. Grimes Blvd	0.18	100%	$ 810,679	$ 810,679
	B-25	4 Lane - Enhanced	CR 112 (1)	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd	0.68	100%	$ 8,000,000	$ 8,000,000
	B-26	4 Lane - Enhanced	CR 112 (2)	3580' E of A.W. Grimes Blvd to CR 117	0.43	50%	$ 5,000,000	$ 2,500,000
	B-27	4 Lane - Proposed	Kenney Fort Blvd (1)	CR 117 to Old Settlers Blvd	1.06	100%	$ 13,700,000	$ 13,700,000
	B-28	4 Lane - Enhanced (1/2)	Red Bud Ln (1)	Guadalajara St to 160' N of Margarita Loop	0.35	100%	$ 2,600,000	$ 2,600,000
	B-29	4 Lane - Enhanced (1/2)	Red Bud Ln (2)	160' N of Margarita Loop to CR 117	0.35	50%	$ 3,000,000	$ 1,500,000
	B-30	4 Lane - Enhanced	Red Bud Ln (3)	CR 117 to Old Settlers Blvd	0.34	100%	$ 4,100,000	$ 4,100,000
	B-31	6 Lane - Enhanced (1/3)	Old Settlers Blvd (1)	N Mays St to Sunrise Rd	1.33	100%	$ 6,800,000	$ 6,800,000
	B-32	6 Lane - Enhanced	Old Settlers Blvd (2)	Sunrise Rd to A.W. Grimes Blvd	1.13	100%	$ 18,100,000	$ 18,100,000
	B-33	4 Lane - Proposed	Old Settlers Blvd (3)	Red Bud Ln to CR 110	0.46	100%	$ 5,800,000	$ 5,800,000
	B-34	4 Lane - Enhanced (AM)	Spur 379 (N Mays St)	540' N of Steam Way to Northwest Dr	1.43	100%	$ 2,700,000	$ 2,700,000
	B-35	4 Lane - Enhanced (AM)	Sunrise Rd (7)	Old Settlers Blvd to Country Aire Dr	0.28	100%	$ 600,000	$ 600,000
	B-36	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (1)	Old Settlers Blvd to 375' S of Chandler Creek Blvd	0.35	100%	$ 1,000,000	$ 1,000,000
	B-37	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (2)	375' S of Chandler Creek Blvd to 1250' N of Tiger Trl	0.20	50%	$ 1,000,000	$ 500,000
	B-38	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (3)	1250' N of Tiger Trl to US 79	1.25	100%	$ 3,940,000	$ 3,940,000
	B-39	6 Lane - Proposed (1/2)	Kenney Fort Blvd (2)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.30	100%	$ 2,600,000	$ 2,600,000
	B-40	6 Lane - Proposed	Kenney Fort Blvd (3)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.18	50%	$ 2,800,000	$ 1,400,000
	B-41	6 Lane - Proposed	Kenney Fort Blvd (4)	2540' S of Old Settlers Blvd to Chandler Creek Blvd	0.95	100%	$ 15,200,000	$ 15,200,000
	B-42	6 Lane - Enhanced	Kenney Fort Blvd (5)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	100%	$ 5,800,000	$ 5,800,000
	B-43	4 Lane - Enhanced	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.45	100%	$ 5,200,000	$ 5,200,000
	B-44	4 Lane - Enhanced	Red Bud Ln (5)	170' N of Joseph St to 160' S of Covered Wagon Trl	0.18	50%	$ 2,200,000	$ 1,100,000
	B-45	4 Lane - Enhanced	Red Bud Ln (6)	160' S of Covered Wagon Trl to US 79	0.41	100%	$ 4,700,000	$ 4,700,000
	B-46, C-6	6 Lane - Enhanced	US 79 (1)	N Mays St to 200' E of Red Bud Ln	4.32	50%	$ 13,340,000	$ 6,670,000
	B-47	6 Lane - Enhanced	US 79 (2)	200' E of Red Bud Ln to 1690' E of Red Bud Ln	0.28	50%	$ 900,000	$ 450,000
	Proj. #	**Intersection Improvements**	**A.W. Grimes Blvd and Palm Valley Blvd**	**OTHER & TURN LANES**		**% In Service Area**	**Total Project Cost**	**Cost in Service Area**
	BI-1		N Mays St and University Blvd	TURN LANES		100%	$ 784,000	$ 784,000
	BI-2		Sunrise Rd and University Blvd	TURN LANES		100%	$ 1,063,000	$ 1,063,000
	BI-3		N Mays St and Steam Way	TURN LANES		100%	$ 170,235	$ 170,235
	BI-4, CI-8		A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%	$ 2,041,000	$ 1,020,500
	-		Update ITS and Traffic Managmenet Infrastructure	-		33%	$ 20,900,000	$ 6,966,667
							Service Area Roadway Project Cost Subtotal	**$ 271,298,056**
							Service Area Intersection Project Cost Subtotal	**$ 10,004,402**
							2018 Roadway Impact Fee Study Cost Per Service Area	**$ 34,673**
							Total Cost in SERVICE AREA B	**$ 281,337,131**

a. These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Roadway Capacity Projects within the City of Round Rock.

b. These planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

Table 4.C – 10-Year RIF CIP
with Conceptual Level Cost Projections – Service Area C

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
SA C	A-31, C-1	6 Lane - Enhanced	RM 620	Deepwood Dr to IH 35 SBFR	0.93	50%	$ 12,560,624	$ 6,280,312
	C-2	4 Lane - Enhanced	CR 172 (1)	McNeil Dr to Lynda Sue St	0.20	50%	$ 2,400,000	$ 1,200,000
	C-3	4 Lane - Enhanced	CR 172 (2)	Hesters Crossing Rd to 445' N of Hesters Crossing Rd	0.08	50%	$ 1,000,000	$ 500,000
	C-4	4 Lane - Enhanced (AM)	Hesters Crossing Rd	Dry Creek Dr to IH 35 SBFR	0.32	100%	$ 700,000	$ 700,000
	C-5	4 Lane - Enhanced	Bratton Ln	IH 35 SBFR to 1160' S of Michael Angelo Way	0.42	50%	$ 5,000,000	$ 2,500,000
	B-46, C-6	6 Lane - Enhanced	US 79 (1)	N Mays St to 200' E of Red Bud Ln	4.32	50%	$ 13,340,000	$ 6,670,000
	C-7	3 Lane - Proposed	McNeil Extension	S Mays St to Georgetown St	0.52	100%	$ 4,799,620	$ 4,799,620
	C-8	4 Lane - Enhanced (AM)	S Mays St	Nash St to Gattis School Rd	0.69	100%	$ 1,400,000	$ 1,400,000
	C-9	6 Lane - Existing	Kenney Fort Blvd (1)	US 79 to Forest Creek Blvd	0.95	100%	$ 23,375,873	$ 23,375,873
	C-10	6 Lane - Proposed	Kenney Fort Blvd (2)	Forest Creek Dr to 830' S of Gattis School Rd	1.04	100%	$ 24,500,000	$ 24,500,000
	C-11	4 Lane - Enhanced (AM)	Red Bud Ln (1)	Forest Ridge Blvd to 265' S of Forest Ridge Blvd	0.05	50%	$ 100,000	$ 50,000
	C-12	4 Lane - Enhanced	Red Bud Ln (2)	265' S of Forest Ridge Blvd to 280' S of Woodlawn Ln	0.11	100%	$ 1,300,000	$ 1,300,000
	C-13	4 Lane - Enhanced	Red Bud Ln (3)	280' S of Woodlawn Ln to 130' S of Old Oaks Dr	0.10	50%	$ 1,300,000	$ 650,000
	C-14	4 Lane - Enhanced	Red Bud Ln (4)	130' S of Old Oaks Dr to 315' S of Country Dr	0.11	100%	$ 1,300,000	$ 1,300,000
	C-15	4 Lane - Enhanced	Red Bud Ln (5)	315' S of Country Dr to Wildflower Trl	0.10	50%	$ 1,300,000	$ 650,000
	C-16	4 Lane - Enhanced	Red Bud Ln (6)	Wildflower Trl to 295' S of Wildflower Trl	0.06	100%	$ 700,000	$ 700,000
	C-17	4 Lane - Enhanced	Red Bud Ln (7)	295' S of Wildflower Trl to 840' N of Forest Creek Dr	0.55	50%	$ 7,700,000	$ 3,850,000
	C-18	4 Lane - Enhanced	Red Bud Ln (8)	840' N of Forest Creek Dr to 340' S of Forest Creek Dr	0.22	100%	$ 2,600,000	$ 2,600,000
	C-19	4 Lane - Enhanced	Red Bud Ln (9)	340' S of Forest Creek Dr to Gattis School Rd	0.71	50%	$ 8,300,000	$ 4,150,000
	C-20	4 Lane - Enhanced	Gattis School Rd (1)	S Mays St to Surrey Dr	0.65	100%	$ 7,600,000	$ 7,600,000
	C-21	6 Lane - Enhanced	Gattis School Rd (2)	Windy Park Dr to Red Bud Ln	2.82	100%	$ 48,300,000	$ 48,300,000
	C-22	4 Lane - Enhanced (AM)	S Mays St / Dell Way	Gattis School Rd to Greenlawn Blvd	1.24	100%	$ 2,400,000	$ 2,400,000
	C-23	6 Lane - Proposed	Kenney Fort Blvd (3)	830' S of Gattis School Rd to SH 45	0.41	50%	$ 6,700,000	$ 3,350,000
	C-24	6 Lane - Enhanced (1/3)	Greenlawn Blvd	IH 35 NBFR to SH 45 EBFR	1.86	100%	$ 6,400,000	$ 6,400,000
	C-25	3 Lane - Proposed	Roundville Ln	A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd	0.21	100%	$ 1,134,412	$ 1,134,412
	C-26	4 Lane - Enhanced	Schultz (1)	SH 45 EBFR to 290' S of SH 45 EBFR	1.45	100%	$ 700,000	$ 700,000
	C-27	4 Lane - Enhanced	Schultz (2)	290' S of SH 45 EBFR to 255' S of Autumn Sage Way	0.50	50%	$ 5,900,000	$ 2,950,000
	Proj. #	**Intersection Improvements**	**Location**	**Improvement(s)**		**% In Service Area**	**Total Project Cost**	**Cost in Service Area**
	AI-4, CI-1		Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%	$ 392,000	$ 196,000
	AI-5, CI-2		IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%	$ 588,000	$ 294,000
	CI-3		IH 35 and Hesters Crossing Rd	TURN LANES		100%	$ 196,000	$ 196,000
	CI-4		IH 35 and Louis Henna Blvd (SH 45 FR)	TURN LANES & SIGNAL		100%	$ 2,037,000	$ 2,037,000
	CI-5		Mays St and Liberty Ave	SIGNAL		100%	$ 353,000	$ 353,000
	CI-6		Mays St and Gattis School Rd	TURN LANES		100%	$ 1,847,503	$ 1,847,503
	CI-7		Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER		100%	$ 784,000	$ 784,000
	BI-4, CI-8		A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%	$ 2,041,000	$ 1,020,500
	CI-9		A.W. Grimes Blvd and Gattis School Rd	TURN LANES		100%	$ 1,921,000	$ 1,921,000
	CI-10		Red Bud Ln and Gattis School Rd	TURN LANES		100%	$ 1,595,000	$ 1,595,000
	-		Update ITS and Traffic Managmenet Infrastructure	-		33%	$ 20,900,000	$ 6,966,667
	Service Area Roadway Project Cost Subtotal							**$ 160,010,217**
	Service Area Intersection Project Cost Subtotal							**$ 17,210,670**
	2018 Roadway Impact Fee Study Cost Per Service Area							**$ 34,673**
Total Cost in SERVICE AREA C								**$ 177,255,560**

a. These planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Roadway Capacity Projects within the City of Round Rock.

b. These planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

F. Service Unit Calculation

The basic service unit for the computation of Round Rock's Roadway Impact Fees is the vehicle-mile of travel during the afternoon peak-hour (as explained on Pg. 24). To determine the cost per service unit, it is necessary to project the growth in vehicle-miles of travel for the service area for the ten-year period.

The growth in vehicle-miles from 2018 to 2028 is based upon projected changes in residential units and employment for the period. To determine this growth, estimates of residential units, basic employment, service employment, and retail employment for 2018 were made, along with growth projections for each of these demographic statistics through 2028. The Land Use Assumptions section of this report details the growth estimates used for impact fee determination.

For the purposes of impact fees, all developed and developable land is categorized as either residential or non-residential. For residential land uses, the existing and projected number of dwelling units are estimated. The number of dwelling units in each service area is multiplied by a *transportation demand factor* (discussed in more detail below) to compute the vehicle-miles of travel that occur during the afternoon peak hour. This factor indicates the average amount of demand created by the residential land uses in the service area.

For non-residential land uses, the process is similar. The Land Use Assumptions section of this report provides existing and projected number of building square footages for three (3) categories of employment – basic, service, and retail. These categories correspond to an aggregation of other specific land use categories based on the North American Industrial Classification System (NAICS).

Building square footage is the most common independent variable for the estimation of non-residential trips in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition*. This characteristic is more appropriate than the number of employees, because building square footage is tied more closely to trip generation and

is known at the time of application for any development that would require the assessment of an impact fee.

The existing and projected land use assumptions for the dwelling units and the square footage of basic, service, and retail land uses provide the basis for the projected increase in vehicle-miles of travel. As noted earlier, a *transportation demand factor* is applied to these values and then summed to calculate the total peak hour vehicle-miles of demand for each service area.

The *transportation demand factors* are aggregate rates derived from two sources – the *ITE Trip Generation Manual, 10th Edition* and the National Household Travel Survey performed by the Federal Highway Administration (FHWA). The *ITE Trip Generation Manual, 10th Edition* provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. For example, a stop at a nearby supermarket on the way home from work does not create a new trip onto the roadway network. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail trip generation rates to avoid double counting trips. The next component of the *transportation demand factor* accounts for the length of each trip. The average trip length for each category is based on the Capital Area Metropolitan Planning Organization (CAMPO) long-range transportation model and supplemented with the National Household Travel Survey conducted by the FHWA.

The computation of the *transportation demand factor* is based on the following equation:

Variables:

$$TDF = T * (1 - P_b) * L_{\max}$$

$$\text{where...}\ L_{\max} = \min(L * OD \text{ or } 6)$$

TDF = Transportation Demand Factor,
T = Trip Rate (peak hour trips / unit),
P_b = Pass-By Discount (% of trips),
L_{max} = Maximum Trip Length (miles),
L = Average Trip Length (miles), and
OD = Origin-Destination Reduction (50%)

The maximum trip length was limited to six (6) miles based on the maximum trip length within each service area. Chapter 395 of the Texas Local Government Code allows for a service area of six (6) miles, and the service areas within Round Rock are closely approximated with a six (6) mile distance.

The adjustment made to the average trip length statistic in the computation of the maximum trip length is the origin-destination reduction. This adjustment is made because the Roadway Impact Fee is charged to both the origin and destination end of the trip. For example, impact fee methodology will account for a trip from home to work within Round Rock to both residential and non-residential land uses. To avoid counting these trips twice as both residential and non-residential trips, a 50% origin-destination (OD) reduction factor is applied. Therefore, only half of the trip length is assessed to each land use, and the total trip is only counted once. This methodology is consistent with that used in the National Household Travel Survey. These lengths were developed based on the CAMPO long-range transportation model.

Table 5 shows the derivation of the *Transportation Demand Factor* for the residential land uses and the three (3) non-residential land use categories. The values utilized for all variables shown in the *transportation demand factor* equation are also shown in the table.

Table 5. Transportation Demand Factor Calculations

Variable	Residential, Single Family	Residential, Multifamily	Basic	Service	Retail
T	0.99	0.56	0.63	1.15	3.81
P_b	0%	0%	0%	0%	34%
L	8.59	8.59	12.89	6.76	6.35
L_{max}	4.30	4.30	6.00	3.38	3.18
TDF	**4.26**	**2.41**	**3.78**	**3.89**	**7.98**
	* L_{max} is less than 6 miles for residential and retail land uses; therefore this lower trip length is used for calculating the TDF for these land uses.				

Variables:

TDF = Transportation Demand Factor,
T = Trip Rate (peak hour trips / unit),
P_b = Pass-By Discount (% of trips),
L_{max} = Maximum Trip Length (miles),
L = Average Trip Length (miles), and
OD = Origin-Destination Reduction (50%)

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in **Table 6**. This table shows the growth in total vehicle-miles by service area between the years 2018 – 2028.

Table 6. 10-Year Growth Projections

2018 - 2028 Growth Projections[1]

SERVICE AREA	RESIDENTIAL VEHICLE-MILES					NON-RESIDENTIAL SQUARE FEET[5]			TRANS. DEMAND FACTOR[6]			NON-RESIDENTIAL VEHICLE-MILES[10]				TOTAL VEHICLE MILES[11]
	Single Family Units	Trip Rate TDF[2]	Multi-Family Units	Trip Rate TDF[3]	VEHICLE MILES[4]	BASIC	SERVICE	RETAIL	BASIC[7]	SERVICE[8]	RETAIL[9]	BASIC	SERVICE	RETAIL	TOTAL	
		0.99		*0.56*					*0.63*	*1.15*	*2.51*					
A	621		932		4,892	1,300,000	600,000	500,000				4,914	2,334	3,990	11,238	16,130
B	1,826	4.26	2,739	2.41	14,379	600,000	2,300,000	900,000	3.78	3.89	7.98	2,268	8,947	7,182	18,397	32,776
C	1,720		3,485		15,725	2,200,000	2,600,000	1,500,000				8,316	10,114	11,970	30,400	46,125
Totals	**4,167**		**7,156**		**34,997**	**4,100,000**	**5,500,000**	**2,900,000**				**15,498**	**21,395**	**23,142**	**60,035**	**95,032**

Notes:

[1] From *City of Round Rock 2018 Land Use Assumptions for Roadway Impact Fees*
[2] Transportation Demand Factor for each Service Area (from LUVMET) using Single Family Detached Housing land use and *trip generation rate*
[3] Transportation Demand Factor for each Service Area (from LUVMET) using Multifamily Housing (Low-Rise) land use and *trip generation rate*
[4] Calculated by multiplying TDF by the number of dwelling units
[5] From *City of Round Rock 2018 Land Use Assumptions for Roadway Impact Fees*
[6] *Trip generation rate* and Transportation Demand Factors from LUVMET for each land use
[7] 'Basic' corresponds to General Light Industrial land use and *trip generation rate*
[8] 'Service' corresponds to General Office land use and *trip generation rate*
[9] 'Retail' corresponds to Shopping Center land use and *trip generation rate*
[10] Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use
[11] Residential plus non-residential vehicle-mile totals for each Service Area

Table 6 (Continued). 10-Year Growth Projections
Vehicle Miles of Increase (2018-2028)

SERVICE AREA	VEH-MILES
A	16,130
B	32,776
C	46,125

V. ROADWAY IMPACT FEE CALCULATION

A. Maximum Assessable Impact Fee Per Service Unit

This section presents the maximum assessable impact fee rate calculated for each service area. The maximum assessable impact fee is the sum of the eligible RIF CIP costs for the service area divided by the growth in travel attributable to new development projected to occur within the 10-year period. A majority of the components of this calculation have been described and presented in previous sections of this report. The purpose of this section is to document the computation for each service area and to demonstrate that the guidelines provided by Chapter 395 of the Texas Local Government Code have been addressed. **Table 7** illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation. The calculation of the maximum assessable impact fee is shown in **Table 8**. The Roadway Impact Fee CIP consists of both roadway segment and intersection improvements. The roadway segment component is referred to as the "Roadway Impact Fee CIP," while the intersection component is referred to as the "Intersection Impact Fee CIP."

Table 7. Maximum Assessable Roadway Impact Fee Computation

Line	Title	Description
1	*Total Vehicle-Miles of Capacity Added by the Roadway Impact Fee CIP*	The total number of vehicle-miles added to the service area based on the capacity, length, and number of lanes in each project (from **Appendix B** – Roadway Impact Fee CIP Units of Supply)

Each project identified in the RIF CIP will add a certain amount of capacity to the City's roadway network based on its length and classification. This line displays the total amount added within each service area.

2	*Total Vehicle-Miles of Existing Demand*	A measure of the amount of traffic currently using the roadway facilities upon which capacity is being added. (from **Appendix B** – Roadway Impact Fee CIP Units of Supply)

A number of facilities identified in the RIF CIP have traffic currently utilizing a portion of their existing capacity. This line displays the total amount of capacity along these facilities currently being used by existing traffic.

3	*Total Vehicle-Miles of Existing Deficiencies*	Number of vehicle-miles of travel that are not accommodated by the existing roadway system (from **Appendix C** – Existing Roadway Facilities Inventory)

In order to ensure that existing deficiencies on the City's roadway network are not recoverable through impact fees, this line is based on the entire roadway network within the service area. Any roadway within the service area that is deficient – even those not identified on the Roadway Impact Fee CIP – will have these additional trips removed from the calculation.

4	*Net Amount of Vehicle-Miles of Capacity Added*	A measurement of the amount of vehicle-miles added by the RIF CIP that will not be utilized by existing demand **(Line 1 – Line 2 – Line 3)**

This calculation identifies the portion of the RIF CIP (in vehicle-miles) that may be recoverable through the collection of impact fees.

5	*Total Cost of the **Roadway** Impact Fee CIP within the Service Area*	The total cost of the **roadway** projects within each service area (from **Table 4**: 10-Year Roadway Impact Fee CIP with Conceptual Level Cost Projections)

This line simply identifies the total cost of all the roadway projects identified in each service area.

6	*Cost of Net Capacity Supplied*	The total Roadway Impact Fee CIP cost (**Line 5**) prorated by the ratio of Net Capacity Added (**Line 4**) to Total Capacity Added (**Line 1**). **[(Line 4 / Line 1) * (Line 5)]**

Using the ratio of vehicle-miles added by the Roadway Impact Fee CIP available to serve future growth to the total vehicle-miles added, the total cost of the RIF CIP is reduced to the amount available for future growth (i.e. excluding existing usage and deficiencies).

7	*Cost to Meet Existing Needs and Usage*	The difference between the Total Cost of the Roadway Impact Fee CIP (**Line 5**) and the Cost of the Net Capacity supplied (**Line 6**). **(Line 5 – Line 6)**

This line is provided for information purposes only – it is to present the portion of the total cost of the Roadway Impact Fee CIP that is required to meet existing demand.

8	*Total Vehicle-Miles of New Demand over Ten Years*	Based upon the growth projection provided in the **Land Use Assumptions**, an estimate of the number of new vehicle-miles within the service area over the next ten years. (from **Table 6**)

This line presents the amount of growth (in vehicle-miles) projected to occur within each service area over the next ten years.

9	*Percent of Capacity Added Attributable to New Growth*	The result of dividing Total Vehicle-Miles of New Demand (**Line 8**) by the Net Amount of Capacity Added (**Line 4**), limited to 100% (**Line 10**). This calculation is required by Chapter 395 to ensure capacity added is attributable to new growth.
10	*Chapter 395 Check*	

In order to ensure that the vehicle-miles added by the Roadway Impact Fee CIP do not exceed the amount needed to accommodate growth beyond the ten-year window, a comparison of the two values is performed. If the amount of vehicle-miles added by the Roadway Impact Fee CIP exceeds the growth projected to occur in the next ten years, the Roadway Impact Fee CIP cost is reduced accordingly.

11	*Cost of **Roadway** Impact Fee CIP Attributable to New Growth*	The result of multiplying the Cost of Net Capacity Added (**Line 6**) by the Percent of Capacity Added Attributable to New Growth, limited to 100% (**Line 10**).

This value is the total Roadway Impact Fee CIP project costs (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

12	*Total Cost of the **Intersection** Impact Fee CIP within the Service Area*	The total cost of the intersection projects within each service area (from **Table 4**: 10-Year Roadway Impact Fee Capacity Improvements Plan with Conceptual Level Cost Projections)

This line simply identifies the total cost of all the intersection projects identified in each service area.

13	*Percent of **Intersection** Capacity Added Attributable to New Growth*	The result of dividing Total Vehicle-Miles of New Demand (**Line 8**) by the vehicle-mile carrying capacity in each service area (**Table 6**).

In order to ensure that the capacity added by the Intersection Impact Fee CIP does not exceed the amount needed to accommodate growth beyond the ten-year window, the anticipated vehicle mile growth in each service area is calculated as a percentage of the vehicle-mile carrying capacity.

14	*Cost of **Intersection** Impact Fee CIP Attributable to New Growth*	The result of multiplying the Cost of Net Capacity Added (**Line 12**) by the Percent of Capacity Added Attributable to New Growth (**Line 13**). (**Line 12** * **Line 13**)

This value is the total Intersection Impact Fee CIP project cost (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

15	*Credit for Previous Contributions*	The total contributions by development toward the building of improvements in the Roadway Impact Fee CIP.

This value is the total of all exactions upon development that resulted in a financial contribution towards future improvements in the Roadway Impact Fee CIP. This line is intended as a credit to development so as not to double charge for previous contributions for roadway capacity improvements.

16	*Cost of **Total** Roadway Impact Fee CIP Attributable to New Growth*	The result of adding the Cost of the Roadway Impact Fee CIP Attributable to new growth (**Line 11**) to the Cost of the Intersection Impact Fee CIP Attributable to new growth (**Line 14**) less credits for previous contributions (**Line 11 + Line 14 – Line 15**).

This value is the Total Roadway Impact Fee CIP project cost (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

B. Plan for Financing and the Ad Valorem Tax Credit

Chapter 395 of the Texas Local Government Code requires the Roadway Impact Fee Capital Improvements Plan for Roadway Impact Fees to contain specific enumeration of a plan for awarding the impact fee credit. Section 395.014 of the Code requires:

(A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the transportation improvements plan; or

(B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the transportation improvements plan…"

The plan is summarized, as prepared by NewGen Strategies in **Appendix C** and **Appendix D,** Plan for Awarding the Roadway Impact Fee Credit. The following table summarizes the portions of **Table 8** that utilize this credit calculation.

Line	Title	Description
17	*Financing Costs*	(from **Appendix C** – Plan for Awarding the Roadway Impact Fee Credit)
18	*Interest Earnings*	(from **Appendix C** – Plan for Awarding the Roadway Impact Fee Credit)
19	*Cost of the Roadway Impact Fee CIP and Financing Attributable to New Growth*	The sum of the Cost of Capacity Added Attributable to New Growth, Financing Costs, and Interest Earnings. (**Line 16 + Line 17 + Line 18**)
20	*Pre-Credit Maximum Fee Per Service Unit*	Found by dividing the Cost of the CIP and Financing Attributable to New Growth (**Line 19**) by the Total Vehicle-Miles of New Demand Over Ten Years (**Line 8**). (**Line 19** / **Line 8**)
21	*Credit for Ad Valorem Taxes*	A credit for the portion of ad valorem taxes projected to be generated by the new service units, as per Section 395.014 of the Local Government Code. (from **Appendix D** – Plan for Awarding the Roadway Impact Fee Credit)
22	*Recoverable Cost of the Roadway Impact Fee CIP and Financing*	The difference between the Cost of the CIP and Financing Attributable to New Growth (**Line 19**) and the Credit for Ad Valorem Taxes (**Line 21**). (**Line 19 + Line 21**)
23	*Maximum Assessable Fee Per Service Unit*	Found by dividing the Recoverable Cost of the CIP and Financing (**Line 22**) by the Total Vehicle-Miles of New Demand Over Ten Years (**Line 8**). (**Line 22** / **Line 8**)

C. Maximum Assessable Impact Fee Determination

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

- Financing
  - Method of financing (i.e. cash or debt financing)
  - The level of financing (e.g. 50% debt / 50% cash)
  - Cost of financing
  - Debt repayment structure
- Timing and Level of Expenditures and Revenues
- Interest Earnings
- Annual Service Unit Growth
- Portion of Ad Valorem Tax Revenue Used to Fund Impact Fee Transportation Improvements

The assumptions employed in the maximum assessable impact fee determination provide a reasonable basis for forecasting, however, it must be emphasized that these assumptions may not necessarily reflect actual future conditions. To address this, Chapter 395 requires the monitoring of impact fees through the Impact Fee Advisory Committee, and allows for the option to update or revise impact fees to reflect the actual implementation of the impact fee program. Assumptions are unchanged in the 2021 Study Update.

Once the cost of capacity added that is attributable to growth (**Table 8 -** line 16) is determined, it must then be decided how the cost will be financed: cash and/or debt. For any previously funded projects, whether partially funded or in full, actual costs of capital have been included. Based on discussions with City staff, unless specific funding has already been determined, it is assumed that the City will debt finance 50% of the future project costs and cash finance 50%. For debt financing, the cost of financing is based on the City's Financial Advisor's estimates of future debt costs for bonds issued with 20-year terms, as shown in

Appendix E. Debt service payments for each future debt issue are assumed to remain constant over the issue's term.

Currently, the exact timing and annual level of capital expenditures over the 10-year forecast is indeterminate; therefore, it is assumed that capital expenditures will occur in equal amounts over the 10-year program period. It is also assumed that for debt financed capital projects, the City will expend debt proceeds over a 2-year timeframe. For the calculation of the maximum assessable impact fee, debt is assumed to be issued in equal amounts for each year. Because of the 10-year forecast limitation, and in order to recognize the full amount of debt to be issued for the cost of capacity added that is attributable to growth during the 10-year period, a portion of year 9 and all of year 10 bond proceeds are assumed to be spent fully in year 10.

Because debt is issued over 20-year terms and impact fees developed herein are to be charged over a10-year period, sufficient fund balance must be generated to meet the future debt service obligations. Because of the generation of the fund balance, excess monies will be available for interest earnings. Chapter 395 states that interest earnings are funds of the impact fee account and are to be held to the same restrictions as impact fee revenues. Therefore, in order to recognize that interest earnings are used to fund transportation improvements, interest earnings are credited against the costs recoverable through impact fees. It should be noted that Chapter 395 does not require the upfront recognition of interest earnings in the impact fee determination; however, in an effort to acknowledge the time value of the impact fee payers' monies, interest earnings have been credited. Interest is assumed to be earned at an annual rate of 1.71% based on the City's annual return on money market funds as of March 2018.

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

Chapter 395 requires a plan for awarding either a credit for the portion of ad valorem tax and/or utility service revenues generated by new service units during the program period that are used for payment of improvements that are included in the Transportation Impact Fee TIP. As an alternative, a credit equal to 50% of the total cost of implementing the Transportation Impact Fee TIP may be used. The City has elected to pursue the determination of a credit for the portion of ad valorem tax revenues generated by new service units during the program period that are used for payment of improvements that are included in the Transportation Impact Fee TIP. It should be noted that the credit is not a determination to recognize the total ad valorem tax revenue generated by new service units, but is only a credit for the portion of ad valorem tax revenue that is used for payment of improvements that are included in the Transportation Impact Fee TIP. Theoretically, the credit determination could be zero ($0) if the City does not utilize any of the new service unit ad valorem tax revenue to fund improvements that are included in the Transportation Impact Fee TIP. However, to be conservative and recognize potential cash flow issues that can occur with the funding of major capital improvement projects, it is assumed that the debt-funded projects (50% of the improvement costs included in the Transportation Impact Fee TIP) could potentially be funded by ad valorem tax revenue.

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

Table 8. Maximum Assessable Roadway Impact Fee

	SERVICE AREA:	A	B	C
1	TOTAL VEH-MI OF CAPACITY ADDED BY THE ROADWAY IMPACT FEE CIP (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, **APPENDIX B)**	70,654	104,987	72,412
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM ROADWAY IMPACT FEE CIP SERVICE UNITS OF SUPPLY, **APPENDIX B**)	18,407	32,160	23,729
3	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, **APPENDIX C**)	1,446	2,044	1,974
4	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	50,801	70,783	46,709
5	TOTAL COST OF THE ROADWAY IMPACT FEE CIP AND STUDY WITHIN SERVICE AREA (FROM **TABLES 5A TO 5C**)	$ 157,022,935	$ 271,332,729	$ 160,044,890
6	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	$ 112,901,210	$ 182,934,502	$ 103,236,159
7	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	$ 44,121,725	$ 88,398,227	$ 56,808,731
8	TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM **TABLE 7** AND **LAND USE ASSUMPTIONS**)	16,130	32,776	46,125
9	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO GROWTH (LINE 8 / LINE 4)	31.7%	46.3%	98.7%
10	IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	31.7%	46.3%	98.7%
11	COST OF ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 6 * LINE 10)	$ 35,789,684	$ 84,698,674	$ 101,894,089
12	TOTAL COST OF THE INTERSECTION IMPACT FEE CIP WITHIN SERVICE AREA (FROM **TABLES 4A TO 4C**)	$ 9,391,000	$ 10,004,402	$ 17,210,670
13	PERCENT OF INTERSECTION CAPACITY ADDED ATTRIBUTABLE TO GROWTH (FROM **TABLE 7** AND **LAND USE ASSUMPTIONS**)	22.9%	23.7%	20.9%
14	COST OF INTERSECTION IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 12 * LINE 13)	$ 2,150,539	$ 2,371,043	$ 3,597,030
15	CREDIT FOR PREVIOUS CONTRIBUTIONS	$ 784,298	$ 4,014,565	$ 3,103,136
16	COST OF TOTAL ROADWAY IMPACT FEE CIP ATTRIBUTABLE TO GROWTH (LINE 11 + LINE 14 - LINE 15)	$ 37,155,925	$ 83,055,152	$ 102,387,983
17	FINANCING COSTS (FROM **APPENDIX D)**	$ 10,434,486	$ 23,891,052	$ 24,921,243
18	INTEREST EARNINGS (FROM **APPENDIX D**)	$ (4,125,954)	$ (9,711,073)	$ (9,934,786)
19	COST OF THE ROADWAY IMPACT FEE CIP AND FINANCING ATTRIBUTABLE TO NEW GROWTH (LINE 16 + LINE 17 + LINE 18)	$ 43,464,456	$ 97,235,131	$ 117,374,440
20	PRE-CREDIT MAXIMUM FEE PER SERVICE UNIT (LINE 19 / LINE 8)	$ 2,695	$ 2,967	$ 2,545
21	CREDIT FOR AD VALOREM TAXES (FROM **APPENDIX D**)	$ (273,155)	$ (1,116,621)	$ (1,553,766)
22	RECOVERABLE COST OF ROADWAY IMPACT FEE CIP AND FINANCING (LINE 19 + LINE 21)	$ 43,191,301	$ 96,118,510	$ 115,820,674
23	MAXIMUM ASSESSABLE FEE PER SERVICE UNIT (LINE 22 / LINE 8)	$ 2,678	$ 2,933	$ 2,511

D. Service Unit Demand Per Unit of Development

The Roadway Impact Fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City will utilize the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in **Table 9**. This table lists the predominant land uses that may occur within the City of Round Rock. For each land use, the development unit that defines the development's magnitude with respect to transportation demand is shown. Although every possible use cannot be anticipated, the majority of local uses are found in this table. The descriptions for each land use are presented in **Table 10**. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories, such as residential, office, commercial, industrial, and institutional.

The trip rates presented for each land use is a fundamental component of the LUVMET. The trip rate is the average number of trips generated during the afternoon peak hour by each land use per development unit. The next column in **Table 9**, if applicable to the land use, presents the percentage of trips to and from certain land uses reduced by pass-by trips, as previously discussed.

The definitive source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 10th Edition*, the latest edition. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning. However, for land uses not contained within the 10th Edition of the *ITE Trip Generation Manual,* an alternative service unit demand could be calculated by completing a trip generation study based on the procedure identified in the *ITE Trip Generation Handbook*.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The trip length values are based on the CAMPO long range transportation model and supplemented by the *National Household Travel Survey* performed by the FHWA. The other adjustment to

trip length is the 50% origin-destination reduction to avoid double counting of trips. At this stage, another important aspect of the state law is applied – the limit on transportation service unit demand. If the adjusted trip length is above six (6) miles, the maximum trip length used for calculation is reduced to six (6) miles. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

The remaining column in the LUVMET shows the vehicle-miles per development unit. This number is the product of the trip rate and the maximum trip length. This number, previously referred to as the *Transportation Demand Factor*, is used in the impact fee to compute the number of service units attributed to each land use category. The number of service units is multiplied by the impact fee rate (established by City ordinance) in order to determine the impact fee for a development.

Table 9. Land Use / Vehicle-Mile Equivalency Table (LUVMET)

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
PORT AND TERMINAL											
Truck Terminal	030	1,000 SF GFA	1.87			1.87	10.70	50%	5.35	5.35	10.00
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.63			0.63	12.89	50%	6.45	6.00	3.78
Industrial Park	130	1,000 SF GFA	0.40			0.40	12.89	50%	6.45	6.00	2.40
Manufacturing	140	1,000 SF GFA	0.67			0.67	12.89	50%	6.45	6.00	4.02
Warehousing	150	1,000 SF GFA	0.19			0.19	12.89	50%	6.45	6.00	1.14
Mini-Warehouse	151	1,000 SF GFA	0.17			0.17	12.89	50%	6.45	6.00	1.02
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	0.99			0.99	8.59	50%	4.30	4.30	4.26
Multifamily Housing (Low-Rise)	220	Dwelling Unit	0.56			0.56	8.59	50%	4.30	4.30	2.41
Multifamily Housing (Mid-Rise)	221	Dwelling Unit	0.44			0.44	8.59	50%	4.30	4.30	1.89
Multifamily Housing (High-Rise)	222	Dwelling Unit	0.36			0.36	8.59	50%	4.30	4.30	1.55
Mobile Home Park / Manufactured Hom	240	Dwelling Unit	0.46			0.46	8.59	50%	4.30	4.30	1.98
Senior Adult Housing-Detached	251	Dwelling Unit	0.30			0.30	8.59	50%	4.30	4.30	1.29
Senior Adult Housing-Attached	252	Dwelling Unit	0.26			0.26	8.59	50%	4.30	4.30	1.12
Assisted Living	254	Beds	0.26			0.26	8.59	50%	4.30	4.30	1.12
LODGING											
Hotel	310	Room	0.60			0.60	5.41	50%	2.71	2.71	1.63
Motel / Other Lodging Facilities	320	Room	0.38			0.38	5.41	50%	2.71	2.71	1.03
RECREATIONAL											
Golf Driving Range	432	Tee	1.25			1.25	6.35	50%	3.18	3.18	3.98
Golf Course	430	Acre	0.28			0.28	6.35	50%	3.18	3.18	0.89
Recreational Community Center	495	1,000 SF GFA	2.31			2.31	6.35	50%	3.18	3.18	7.35
Ice Skating Rink	465	1,000 SF GFA	1.33			1.33	6.35	50%	3.18	3.18	4.23
Miniature Golf Course	431	Hole	0.33			0.33	6.35	50%	3.18	3.18	1.05
Multiplex Movie Theater	445	Screens	13.73			13.73	6.35	50%	3.18	3.18	43.66
Racquet / Tennis Club	491	Court	3.82			3.82	6.35	50%	3.18	3.18	12.15
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.49			0.49	6.30	50%	3.15	3.15	1.54
Day Care Center	565	1,000 SF GFA	11.12	44%	B	6.23	3.39	50%	1.70	1.70	10.59
Primary/Middle School (1-8)	522	Students	0.17			0.17	3.39	50%	1.70	1.70	0.29
High School	530	Students	0.14			0.14	3.39	50%	1.70	1.70	0.24
Junior / Community College	540	Students	0.11			0.11	3.39	50%	1.70	1.70	0.19
University / College	550	Students	0.15			0.15	3.39	50%	1.70	1.70	0.26
MEDICAL											
Clinic	630	1,000 SF GFA	3.28			3.28	6.76	50%	3.38	3.38	11.09
Hospital	610	1,000 SF GFA	0.97			0.97	6.76	50%	3.38	3.38	3.28
Nursing Home	620	Beds	0.22			0.22	6.76	50%	3.38	3.38	0.74
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	3.53	30%	B	2.47	6.76	50%	3.38	3.38	8.35

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 3rd Edition (August 2014)

B: Estimated by Kimley-Horn based on ITE rates for similar categories

C: ITE rate adjusted upward by KHA based on logical relationship to other categories

Table 9 (Cont'd). Land Use / Vehicle-Mile Equivalency Table (LUVMET)

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev-Unit
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	0.60			0.60	6.76	50%	3.38	3.38	2.03
General Office Building	710	1,000 SF GFA	1.15			1.15	6.76	50%	3.38	3.38	3.89
Medical-Dental Office Building	720	1,000 SF GFA	3.46			3.46	6.76	50%	3.38	3.38	11.69
Single Tenant Office Building	715	1,000 SF GFA	1.71			1.71	6.76	50%	3.38	3.38	5.78
Office Park	750	1,000 SF GFA	1.07			1.07	6.76	50%	3.38	3.38	3.62
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF GFA	3.11	40%	B	1.87	5.41	50%	2.71	2.71	5.07
Automobile Parts Sales	843	1,000 SF GFA	4.91	43%	A	2.80	5.41	50%	2.71	2.71	7.59
Gasoline/Service Station	944	Vehicle Fueling Position	14.03	42%	A	8.14	1.20	50%	0.60	0.60	4.88
Gasoline/Service Station w/ Conv Market and Car Wash	945	Vehicle Fueling Position	13.99	56%	B	6.16	1.20	50%	0.60	0.60	3.70
New Car Sales	841	1,000 SF GFA	2.43	20%	B	1.94	5.41	50%	2.71	2.71	5.26
Quick Lubrication Vehicle Shop	941	Servicing Positions	4.85	40%	B	2.91	5.41	50%	2.71	2.71	7.89
Self-Service Car Wash	947	Stall	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	3.98	28%	A	2.87	5.41	50%	2.71	2.71	7.78
Dining											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	32.67	50%	A	16.34	3.39	50%	1.70	1.70	27.78
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	28.34	50%	B	14.17	3.39	50%	1.70	1.70	24.09
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	9.77	43%	A	5.57	5.41	50%	2.71	2.71	15.09
Quality Restaurant	931	1,000 SF GFA	7.80	44%	A	4.37	5.41	50%	2.71	2.71	11.84
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	43.38	70%	A	13.01	1.20	50%	0.60	0.60	7.81
Other Retail											
Free-Standing Discount Store	815	1,000 SF GFA	4.83	30%	C	3.38	6.35	50%	3.18	3.18	10.75
Nursery (Garden Center)	817	1,000 SF GFA	6.94	30%	B	4.86	6.35	50%	3.18	3.18	15.45
Home Improvement Superstore	862	1,000 SF GFA	2.33	48%	A	1.21	6.35	50%	3.18	3.18	3.85
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.51	53%	A	4.00	6.35	50%	3.18	3.18	12.72
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.29	49%	A	5.25	6.35	50%	3.18	3.18	16.70
Shopping Center	820	1,000 SF GLA	3.81	34%	A	2.51	6.35	50%	3.18	3.18	7.98
Supermarket	850	1,000 SF GFA	9.24	36%	A	5.91	6.35	50%	3.18	3.18	18.79
Toy/Children's Superstore	864	1,000 SF GFA	5.00	30%	B	3.50	6.35	50%	3.18	3.18	11.13
Department Store	875	1,000 SF GFA	1.95	30%	B	1.37	6.35	50%	3.18	3.18	4.36
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Drive-In Bank	912	Drive-in Lanes	27.15	35%	A	17.65	3.39	50%	1.70	1.70	30.01
Hair Salon	918	1,000 SF GLA	1.45	30%	B	1.02	3.39	50%	1.70	1.70	1.73

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 3rd Edition (August 2014)

B: Estimated by Kimley-Horn based on ITE rates for similar categories

C: ITE rate adjusted upward by KHA based on logical relationship to other categories

Table 10. Land Use Descriptions

Land Use Category	ITE Land Use Code	Land Use Description
PORT AND TERMINAL		
Truck Terminal	030	Point of good transfer between trucks or between trucks and rail
INDUSTRIAL		
General Light Industrial	110	Emphasis on activities other than manufacturing; typically employing fewer than 500 workers
Industrial Park	130	Area containing a number of industries or related facilities
Manufacturing	140	
Warehousing	150	Devoted to storage of materials but may included office and maintenance areas
Mini-Warehouse	151	Facilities with a number of units rented to others for the storage of goods
RESIDENTIAL		
Single-Family Detached Housing	210	Single-family detached homes on individual lots
Multifamily Housing (Low-Rise)	220	At least 3 rental dwelling units and one or two levels (floors) per building
Multifamily Housing (Mid-Rise)	221	At least 3 rental dwelling units and between three and ten levels (floors) per building
Multifamily Housing (High-Rise)	222	At least 3 rental dwelling units and more than ten levels (floors) per building
Mobile Home Park / Manufactured Home	240	
Senior Adult Housing-Detached	251	Consists of detached independent living developments that include amenities such as golf courses and swimming pools
Senior Adult Housing-Attached	252	Consists of attached independent living developments that include limited social or recreation services
Assisted Living	254	Residential settings that provide either routine general protective oversight or assistance with activities.
LODGING		
Hotel	310	Lodging facilities that typically have on-site restaurants, lounges, meeting and/or banquet rooms, or other retail shops and services
Motel / Other Lodging Facilities	320	Lodging facilities that may have small on-site restaurant or buffet area but little or no meeting space
RECREATIONAL		
Golf Driving Range	432	Facilities with driving tees for practice; may provide individual or group lessons; may have prop shop and/or refreshment facilities
Golf Course	430	May include municipal courses and private country clubs; may have driving ranges, pro shops, and restaurant/banquet facilities
Recreational Community Center	495	Category includes racquet clubs, health/fitness clubs, can include facilities such as YMCA's
Ice Skating Rink	465	Rinks for ice skating and related sports; may contain spectator areas and refreshment facilities
Miniature Golf Course	431	One or more individual putting courses; category should not be used when part of a larger entertainment center(with batting cages, video game centers, etc)
Multiplex Movie Theater	445	Movie theater with audience seating, minimum of ten screens, lobby, and refreshment area.
Racquet / Tennis Club	491	Indoor or outdoor facilities specifically designed for playing tennis
INSTITUTIONAL		
Church	560	Churches and houses of worship
Day Care Center	565	Generally includes facilities for care of pre-school aged children, generally includes classrooms, offices, eating areas, and playgrounds
Primary/Middle School (1-8)	522	Serves students who have not yet entered high school
High School	530	Serves students who have completed middle or junior high school
Junior / Community College	540	Two-year junior, community, or technical colleges
University / College	550	Four-year universities or colleges that may or may not offer graduate programs
MEDICAL		
Clinic	630	Facilities with limited diagnostic and outpatient care
Hospital	610	Medical and surgical facilities with overnight accommodations
Nursing Home	620	Rest and convalescent homes with residents who do little or no driving
Animal Hospital/Veterinary Clinic	640	Rest and convalescent homes with residents who do little or no driving
OFFICE		
Corporate Headquarters Building	714	Office building housing corporate headquarters of a single company or organization
General Office Building	710	Office buildings which house multiple tenants
Medical-Dental Office Building	720	Multi-tenant building with offices for physicians and/or dentists
Single Tenant Office Building	715	Single tenant office buildings other than corporate headquarters
Office Park	750	Office buildings (typically low-rise) in a campus setting and served by a common roadway system

Table 10 (Cont'd). Land Use Descriptions

Land Use Category	ITE Land Use Code	Land Use Description
COMMERCIAL		
Automobile Related		
Automobile Care Center	942	Automobile repair and servicing including stereo installations and upholstering
Automobile Parts Sales	843	Retail sale of auto parts but no on-site vehicle repair
Gasoline/Service Station	944	Gasoline sales without convenience store or car wash; may include repair
Gasoline/Service Station w/ Conv Market and Car V	946	Gasoline sales with convenience store and car washes where the primary business is gasoline sales
New Car Sales	841	New car dealerships, typically with automobile servicing, part sales, and used car sales
Quick Lubrication Vehicle Shop	941	Primary business is to perform oil changes and fluid/filter changes with other repair services not provided
Self-Service Car Wash	947	Has stalls for driver to park and wash the vehicle
Tire Store	848	Primary business is sales and installation of tires; usually do not have large storage or warehouse area
Dining		
Fast Food Restaurant with Drive-Thru Window	934	High-turnover fast food restaurant for carry-out and eat-in customers with a drive-thru window
Fast Food Restaurant without Drive-Thru Window	933	High-turnover fast food restaurant for carry-out and eat-in customers, but without a drive-thru window
High Turnover (Sit-Down) Restaurant	932	Restaurants with turnover rates less than one hour; typically includes moderately-priced chain restaurants
Quality Restaurant	931	Restaurants with turnover rates of one hour or longer; typically require reservations
Coffee/Donut Shop with Drive-Thru Window	937	Coffee and Donut restaurants with drive-through windows, hold long store hours and have limited indoor seating
Other Retail		
Free-Standing Discount Store	815	Category includes free-standing stores with off-street parking; typically offer a variety of products and services with long store hours
Nursery (Garden Center)	817	Building with a yard of planting or landscape stock; may have office, storage, shipping or greenhouse facilities
Home Improvement Superstore	862	Warehouse-type facilities offering a large variety of products and services including lumber, tool, paint, lighting, and fixtures, among other items.
Pharmacy/Drugstore w/o Drive-Thru Window	880	Facilities that primarily sell prescription and non-prescription drugs without a drive-through window
Pharmacy/Drugstore w/ Drive-Thru Window	881	Facilities that primarily sell prescription and non-prescription drugs with a drive-through window
Shopping Center	820	Integrated group of commercial establishments; planning, owned, and managed as a unit
Supermarket	850	Primary business is sale of groceries, food, and household cleaning items; may include photo, pharmacy, video rental, and/or ATM
Toy/Children's Superstore	864	Businesses specializing in child-oriented merchandise
Department Store	875	Free-standing stores that specialize in the sale of apparel, footwear, bedding, home products, jewelry, etc.
SERVICES		
Walk-In Bank	911	Banks with their own parking lots, no drive-in lanes but contain non-drive-through ATMs
Drive-In Bank	912	Banking facilities to conduct financial transactions from the vehicle; also usually apart of walk-in bank
Hair Salon	918	Facilities that specialize in cosmetic and beauty services including hair cutting and styling

VI. SAMPLE CALCULATIONS

The following section details two (2) examples of maximum assessable Roadway Impact Fee calculations.

Example 1:

Development Type - One (1) Unit of Single-Family Housing in Service Area A

Roadway Impact Fee Calculation Steps – Example 1	
Step 1	**Determine Development Unit and Vehicle-Miles Per Development Unit**
	From Table 9 [Land Use – Vehicle-Mile Equivalency Table] Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 4.26
Step 2	**Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)**
	From Table 8, Line 19 [Maximum Assessable Fee Per Service Unit] Service Area A: $2,678
Step 3	**Determine Maximum Assessable Impact Fee**
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 1 * 4.26 * $2,678 Maximum Assessable Impact Fee = $11,408.28

Example 2:

Development Type – 100,000 square foot Home Improvement Superstore in Service Area C

Roadway Impact Fee Calculation Steps – Example 2	
Step 1	**Determine Development Unit and Vehicle-Miles Per Development Unit**
	From Table 9 [Land Use – Vehicle-Mile Equivalency Table] Development Type: 100,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 3.85
Step 2	**Determine Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile)**
	From Table 8, Line 19 [Maximum Assessable Fee Per Service Unit] Service Area C: $2,511
Step 3	**Determine Maximum Assessable Impact Fee**
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 100 * 3.85 * $2,511 Maximum Assessable Impact Fee = $966,735

VII. ADOPTION AND ADMINISTRATION OF ROADWAY IMPACT FEES

A. Adoption Process

Chapter 395 of the Texas Local Government Code stipulates a specific process for the adoption of Roadway Impact Fees. A Capital Improvements Advisory Committee (CIAC) is required to review the Land Use Assumptions and Roadway Impact Fees CIP used in calculating the maximum fee, and to provide the Committee's findings for consideration by the City Council. This CIAC also reviews the calculation and resulting maximum fees and provides its findings to the City Council. The composition of the CIAC is required to adequately represent the building and development communities. The City Council then conducts a first public hearing on the Roadway Impact Fee Assumptions (Land Use and Capital Improvements Plan) and a second public hearing on the Roadway Impact Fee Calculation and Roadway Impact Fee Ordinance.

Following policy adoption, the CIAC is tasked with advising the City Council of the need to update the Land Use Assumptions or the Roadway Impact Fees CIP at any time within five years of adoption. Finally, the CIAC oversees the proper administration of the Impact Fee, once in place, and advises the Council as necessary.

B. Collection and Use of Roadway Impact Fees

Roadway Impact Fees are assessed when a final plat is recorded. The assessment defines the impact of each unit at the time of platting, according to land use, and may not exceed the maximum impact fee allowed by law. Roadway Impact Fees are collected when a building permit is issued. Therefore, funds are not collected until development-impacts are introduced to the transportation system. Funds collected within a service area can be used only within the same service area. Finally, fees must be utilized within 10 years of collection, or must be refunded with interest.

VIII. CONCLUSIONS

The City of Round Rock has established a process to implement the assessment and collection of Roadway Impact Fees through the adoption of an impact fee ordinance that is consistent with Chapter 395 of the Texas Local Government Code.

This report establishes the maximum allowable Roadway Impact Fee that could be assessed by the City of Round Rock, as shown in the previously referenced **Table 8**.

This document serves as a guide to the assessment of Roadway Impact Fees pertaining to future development, and the City's need for transportation improvements to accommodate that growth. Following the public hearing process, the City Council may establish an impact fee amount to be collected, up to the calculated maximum and establish the Roadway Impact Fee Ordinance accordingly.

In conclusion, it is our opinion that the data and methodology used in this analysis are appropriate and consistent with Chapter 395 of the Texas Local Government Code. Furthermore, the Land Use Assumptions and the proposed Roadway Impact Fee Capital Improvements Plan are appropriately incorporated into the development of the maximum assessable Roadway Impact Fee.

Below is the listing of the 2021 Roadway Impact Fee Study's Maximum Assessable Impact Fee Per Service Unit (Vehicle-Mile), unchanged from the originally adopted study from March 2019:

Service Area	Maximum Fee Per Service Unit (per Vehicle-Mile)
A	$2,678
B	$2,933
C	$2,511

APPENDICES

A. Conceptual Level Project Cost Projections

SERVICE AREA A
SERVICE AREA B
SERVICE AREA C

B. Roadway Impact Fee CIP Service Units of Supply

C. Existing Roadway Facilities Inventory

D. Plan for Awarding the Roadway Impact Fee Credit Supporting Exhibits

E. Plan for Awarding the Roadway Impact Fee Credit Supporting Exhibits

Appendix A – Conceptual Level Project Cost Projections

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area A

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
A-1	4 Lane - Enhanced (1/2)	New Hope Rd (1)	(1/2) Widening	Sam Bass Rd	240' W of Lagoona Dr	100%	$ 7,800,000	$ 7,800,000
A-2	4 Lane - Enhanced (1/2)	New Hope Rd (2)	(1/2) Widening	240' W of Lagoona Dr	Mayfield Ranch Blvd	50%	$ 1,900,000	$ 950,000
A-3	4 Lane - Proposed	New Hope Rd (3)	New	Mayfield Ranch Blvd	1000' E of Wyoming Springs Dr	50%	$ 9,300,000	$ 4,650,000
A-4, B-1	6 Lane - Enhanced	Westinghouse Rd	Widening	IH 35 SBFR	IH 35 NBFR	50%	$ 9,031,296	$ 4,515,648
A-5	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (1)	(1/2) Widening	New Hope Dr (Future)	Blue Ridge Dr	100%	$ 1,700,000	$ 1,700,000
A-6	4 Lane - Proposed	Wyoming Springs Dr (2)	New	Blue Ridge Dr	RM 1431	100%	$ 9,100,000	$ 9,100,000
A-7	6 Lane - Enhanced	RM 1431 (1)	Widening	1100' W of Mayfield Ranch Blvd	850' E of Stone Oak Dr	50%	$ 2,880,000	$ 1,440,000
A-8	6 Lane - Enhanced	RM 1431 (2)	Widening	850' E of Stone Oak Dr	5195' E of Stone Oak St	100%	$ 3,020,000	$ 3,020,000
A-9	6 Lane - Enhanced	RM 1431 (3)	Widening	5195' E of Stone Oak St	IH 35 SBFR	100%	$ 3,840,000	$ 3,840,000
A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (3)	(1/2) Widening	390' N of Goldenoak Cir	Alondra Way	100%	$ 1,000,000	$ 1,000,000
A-11	4 Lane - Proposed	Arterial L (1)	New	Wyoming Springs Dr	Chisholm Trl Rd (Future)	100%	$ 27,400,000	$ 27,400,000
A-12	4 Lane - Proposed	Creek Bend Blvd (1)	New	RM 1431	West End Pl	100%	$ 10,500,000	$ 10,500,000
A-13	4 Lane - Enhanced (1/2)	Creek Bend Blvd (2)	(1/2) Widening	West End Pl	Camino Del Verdes Pl	100%	$ 5,900,000	$ 5,900,000
A-14	4 Lane - Proposed	Chisholm Trl Rd (1)	New	RM 1431	CR 173	100%	$ 11,200,000	$ 11,200,000
A-15, B-11	4 Lane - Proposed	Arterial L (2)	New	Chisholm Trl Rd (Future)	IH 35 NBFR	50%	$ 5,700,000	$ 2,850,000
A-16	4 Lane - Enhanced	CR 173	Widening	IH 35 SBFR	3250' N of Wolle Ln	100%	$ 1,300,000	$ 1,300,000
A-17	4 Lane - Enhanced	Chisholm Trl Rd (2)	Widening	3250' N of Wolle Ln	1980' N of Wolle Ln	100%	$ 2,900,000	$ 2,900,000
A-18	4 Lane - Enhanced (AM)	Chisholm Trl Rd (3)	Access Management	1980' N of Wolle Ln	FM 3406	100%	$ 900,000	$ 900,000
A-19	6 Lane - Enhanced	Sam Bass Rd (1)	Widening	230' W of Tonkawa Trl	390' W of Wyoming Springs Dr	50%	$ 3,500,000	$ 1,750,000
A-20	6 Lane - Enhanced	Sam Bass Rd (2)	Widening	390' W of Wyoming Springs Dr	FM 3406	100%	$ 4,500,000	$ 4,500,000
A-21	4 Lane - Enhanced	Sam Bass Rd (3)	Widening	FM 3406	Desert Willow Dr	50%	$ 4,200,000	$ 2,100,000
A-22	4 Lane - Enhanced	Sam Bass Rd (4)	Widening	Desert Willow Dr	Creek Bend Blvd	100%	$ 2,200,000	$ 2,200,000
A-23	4 Lane - Enhanced	Sam Bass Rd (5)	Widening	Creek Bend Blvd	Hairy Man Dr	100%	$ 2,500,000	$ 2,500,000
A-24	4 Lane - Enhanced	Sam Bass Rd (6)	Widening	Hairy Man Rd	700' E of Hairy Man Rd	50%	$ 1,600,000	$ 800,000
A-25	6 Lane - Enhanced	FM 3406	Widening	Sam Bass Rd	IH 35 SBFR	100%	$ 6,980,000	$ 6,980,000
A-26	4 Lane - Proposed	Wyoming Springs Dr (4)	New	Sam Bass Rd	Brushy Creek	100%	$ 8,500,000	$ 8,500,000
A-27	4 Lane - Enhanced (AM)	Chisholm Trl Rd (4)	Access Management	FM 3406	Sam Bass Rd	100%	$ 2,600,000	$ 2,600,000
A-28	4 Lane - Enhanced	Creek Bend Blvd (3)	Previously Constructed	Brushy Creek	Wyoming Springs Dr	100%	$ 11,012,302	$ 11,012,302
A-29	4 Lane - Proposed	Deepwood Dr (1)	New	Sam Bass Rd	345' N of RM 620	100%	$ 6,000,000	$ 6,000,000
A-30	4 Lane - Enhanced	Deepwood Dr (2)	Widening	345' N of RM 620	RM 620	100%	$ 800,000	$ 800,000
A-31, C-1	6 Lane - Enhanced	RM 620	Widening	Deepwood Dr	IH 35 SBFR	50%	$ 12,560,624	$ 6,280,312
						TOTAL	$ 182,324,222	$ 156,988,262

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Intersection Improvements - Service Area A

#	Project	Improvement		Percent in Service Area	Project Cost	Total Cost in Service Area
		Improvement 1	Improvement 2			
AI-1	Sam Bass Rd and FM 3406	SIGNAL		100%	$ 295,000	$ 295,000
AI-2	Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		75%	$ 2,000,000	$ 1,500,000
AI-3	Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%	$ 139,000	$ 139,000
AI-4, CI-1	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%	$ 392,000	$ 196,000
AI-5, CI-2	IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%	$ 588,000	$ 294,000
-	Update ITS and Traffic Managmenet Infrastructure			33%	$ 20,900,000	$ 6,967,000
				TOTAL	$ 24,314,000	$ 9,391,000

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **A-1**

Name:	New Hope Rd (1)
Limits:	Sam Bass Rd to 240' W of Lagoona Dr
Impact Fee Class:	4 Lane - Enhanced (1/2)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	5,816
Service Area(s):	A

This project consists of widening existing pavement with half of a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	21,146	cy	$ 15.00	$ 317,000
201	12" Asphalt (Type C)	11,516	ton	$ 72.00	$ 829,000
301	16" Base	7,755	cy	$ 55.00	$ 427,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	18,740	sy	$ 6.00	$ 112,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	3,490	gal	$ 6.00	$ 21,000
601	10' Concrete Sidewalk	116,320	sf	$ 5.50	$ 640,000
701	Machine Laid Curb & Gutter	11,632	lf	$ 16.00	$ 186,000
801	Turn Lanes and Median Openings	3,525	sy	$ 134.62	$ 475,000
				Paving Construction Cost Subtotal:	**$ 3,007,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 150,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 60,000
√	Roadway Drainage	Standard Internal System	30%	$ 902,000
√	Illumination		10%	$ 301,000
√	Special Drainage Structures	Bridge Crossing		$ 500,000
√	Water	Minor Adjustments	2%	$ 60,000
√	Sewer	Minor Adjustments	2%	$ 60,000
√	Turf and Erosion Control		2%	$ 60,000
√	Landscaping and Irrigation		4%	$ 120,000
	Miscellaneous:		0%	$ -
			Allowance Subtotal:	**$ 2,213,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 5,220,000**
Construction Contingency:	15%	$ 783,000
Mobilization	8%	$ 418,000
Prep ROW	4%	$ 209,000
Construction Cost TOTAL:		**$ 6,700,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,700,000**
Engineering/Survey/Testing:		16%	$ 1,072,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 7,800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **A-2**

Name:	New Hope Rd (2)
Limits:	240' W of Lagoona Dr to Mayfield Ranch Blvd
Impact Fee Class:	4 Lane - Enhanced (1/2)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	1,223
Service Area(s):	A,ETJ/Other

This project consists of widening existing pavement with half of a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,447	cy	$ 15.00	$ 67,000
201	12" Asphalt (Type C)	2,422	ton	$ 72.00	$ 174,000
301	16" Base	1,631	cy	$ 55.00	$ 90,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	3,941	sy	$ 6.00	$ 24,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	734	gal	$ 6.00	$ 4,000
601	10' Concrete Sidewalk	24,460	sf	$ 5.50	$ 135,000
701	Machine Laid Curb & Gutter	2,446	lf	$ 16.00	$ 39,000
801	Turn Lanes and Median Openings	741	sy	$ 134.62	$ 100,000
				Paving Construction Cost Subtotal:	**$ 633,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 32,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 13,000
√	Roadway Drainage	Standard Internal System	30%	$ 190,000
√	Illumination		10%	$ 63,000
√	Special Drainage Structures	Minor Stream Crossing		$ 200,000
√	Water	Minor Adjustments	2%	$ 13,000
√	Sewer	Minor Adjustments	2%	$ 13,000
√	Turf and Erosion Control		2%	$ 13,000
√	Landscaping and Irrigation		4%	$ 25,000
	Miscellaneous:		0%	$ -
			Allowance Subtotal:	**$ 562,000**

Paving and Allowance Subtotal: $ 1,195,000

Construction Contingency:	15%	$ 179,000
Mobilization	8%	$ 96,000
Prep ROW	4%	$ 48,000
Construction Cost TOTAL:		**$ 1,600,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,600,000**
Engineering/Survey/Testing:		16%	$ 256,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 1,900,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **A-3**

Name:	New Hope Rd (3)
Limits:	Mayfield Ranch Blvd to 1000' E of Wyoming Springs
Impact Fee Class:	4 Lane - Proposed
Ultimate Class:	4 Lane - Proposed
Length (lf):	4,893
Service Area(s):	A,ETJ/Other

This project consists of the construction of a new 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	35,580	cy	$ 15.00	$ 534,000
202	12" Asphalt (Type C)	19,376	ton	$ 72.00	$ 1,395,000
302	16" Base	13,048	cy	$ 55.00	$ 718,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	31,533	sy	$ 6.00	$ 189,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	5,872	gal	$ 6.00	$ 35,000
602	10' Concrete Sidewalk	97,860	sf	$ 5.50	$ 538,000
702	Machine Laid Curb & Gutter	19,572	lf	$ 16.00	$ 313,000
802	Turn Lanes and Median Openings	2,965	sy	$ 134.62	$ 399,000
				Paving Construction Cost Subtotal:	**$ 4,121,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 82,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,236,000
√	Illumination		10%	$ 412,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 82,000
√	Sewer	Minor Adjustments	2%	$ 82,000
√	Turf and Erosion Control		2%	$ 82,000
√	Landscaping and Irrigation		4%	$ 165,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,141,000**

Paving and Allowance Subtotal:		**$ 6,262,000**
Construction Contingency:	15%	$ 939,000
Mobilization	8%	$ 501,000
Prep ROW	4%	$ 250,000
Construction Cost TOTAL:		**$ 8,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 8,000,000**
Engineering/Survey/Testing:		16%	$ 1,280,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 9,300,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**A-4, B-1**
Name:	Westinghouse Rd (1)	**This project consists of the construction of a new 6 lane undivided bridge section, u-turn bridge and frontage road realignment.**		
Limits:	IH 35 SBFR to IH 35 NBFR			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,014			
Service Area(s):	A,B			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	**$ 38,928,000**

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:		-	**$ 38,928,000**
Engineering/Survey/Testing:		-	$ 6,228,480
ROW/Easement Acquisition:	TxDOT Roadway	-	$ -
		Overall Project Cost Total:	**$ 45,156,480**
		City Contribution:	**$ 9,031,296**
		Impact Fee Project Cost TOTAL (20% City Contribution)	**$ 9,031,296**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **A-5**

Name:	Wyoming Springs Dr (1)
Limits:	New Hope Dr (Future) to Blue Ridge Dr
Impact Fee Class:	4 Lane - Enhanced (1/2)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	1,190
Service Area(s):	A

This project consists of widening existing pavement with half of a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,327	cy	$ 15.00	$ 65,000
201	12" Asphalt (Type C)	2,356	ton	$ 72.00	$ 170,000
301	16" Base	1,587	cy	$ 55.00	$ 87,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	3,834	sy	$ 6.00	$ 23,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	714	gal	$ 6.00	$ 4,000
601	10' Concrete Sidewalk	23,800	sf	$ 5.50	$ 131,000
701	Machine Laid Curb & Gutter	2,380	lf	$ 16.00	$ 38,000
801	Turn Lanes and Median Openings	721	sy	$ 134.62	$ 97,000
				Paving Construction Cost Subtotal:	**$ 615,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 31,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 12,000
√	Roadway Drainage	Standard Internal System	30%	$ 185,000
√	Illumination		10%	$ 62,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 12,000
√	Sewer	Minor Adjustments	2%	$ 12,000
√	Turf and Erosion Control		2%	$ 12,000
√	Landscaping and Irrigation		4%	$ 25,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 351,000**

Paving and Allowance Subtotal:		**$ 966,000**
Construction Contingency:	15%	$ 145,000
Mobilization	8%	$ 77,000
Prep ROW	4%	$ 39,000
Construction Cost TOTAL:		**$ 1,300,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,300,000**
Engineering/Survey/Testing:		16%	$ 208,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 195,000
		Impact Fee Project Cost TOTAL:	**$ 1,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-6
Name:	Wyoming Springs Dr (2)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	Blue Ridge Dr to RM 1431			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	3,810			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	27,705	cy	$ 15.00	$ 416,000
202	12" Asphalt (Type C)	15,088	ton	$ 72.00	$ 1,086,000
302	16" Base	10,160	cy	$ 55.00	$ 559,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	24,553	sy	$ 6.00	$ 147,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	4,572	gal	$ 6.00	$ 27,000
602	10' Concrete Sidewalk	76,200	sf	$ 5.50	$ 419,000
702	Machine Laid Curb & Gutter	15,240	lf	$ 16.00	$ 244,000
802	Turn Lanes and Median Openings	2,309	sy	$ 134.62	$ 311,000
				Paving Construction Cost Subtotal:	**$ 3,209,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 64,000
√	Roadway Drainage	Standard Internal System	30%	$ 963,000
√	Illumination		10%	$ 321,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 64,000
√	Sewer	Minor Adjustments	2%	$ 64,000
√	Turf and Erosion Control		2%	$ 64,000
√	Landscaping and Irrigation		4%	$ 128,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,668,000**

Paving and Allowance Subtotal:		**$ 4,877,000**
Construction Contingency:	15%	$ 732,000
Mobilization	8%	$ 390,000
Prep ROW	4%	$ 195,000
Construction Cost TOTAL:		**$ 6,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,200,000**
Engineering/Survey/Testing:		16%	$ 992,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 1,860,000
		Impact Fee Project Cost TOTAL:	**$ 9,100,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No. A-7
Name:	RM 1431 (1)	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**	
Limits:	1100' W of Mayfield Ranch Blvd to 850' E of Stone C		
Impact Fee Class:	6 Lane - Enhanced		
Ultimate Class:	6 Lane - Enhanced		
Length (lf):	5,137		
Service Area(s):	A,ETJ/Other		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	50,609	cy	$ 15.00	$ 759,000
205	12" Asphalt (Type C)	28,630	ton	$ 72.00	$ 2,061,000
305	16" Base	19,280	cy	$ 55.00	$ 1,060,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	45,662	sy	$ 6.00	$ 274,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	8,676	gal	$ 6.00	$ 52,000
605	10' Concrete Sidewalk	102,740	sf	$ 5.50	$ 565,000
705	Machine Laid Curb & Gutter	20,548	lf	$ 16.00	$ 329,000
805	Turn Lanes and Median Openings	3,113	sy	$ 134.62	$ 419,000
				Paving Construction Cost Subtotal:	**$ 5,519,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 276,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 110,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,656,000
√	Illumination		10%	$ 552,000
√	Special Drainage Structures	Minor Stream Crossing		$ 300,000
√	Water	Minor Adjustments	2%	$ 110,000
√	Sewer	Minor Adjustments	2%	$ 110,000
√	Turf and Erosion Control		2%	$ 110,000
√	Landscaping and Irrigation		4%	$ 221,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 3,445,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 8,964,000**
Construction Contingency:	15%	$ 1,345,000
Mobilization	8%	$ 717,000
Prep ROW	4%	$ 359,000
Construction Cost TOTAL:		**$ 11,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 11,400,000**
Engineering/Survey/Testing:		16%	$ 1,824,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 1,140,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 2,880,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/19/2018

Project Information:

		Description:	Project No.	A-8
Name:	RM 1431 (2)	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**		
Limits:	850' E of Stone Oak Dr to 5195' E of Stone Oak St			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	4,343			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	42,787	cy	$ 15.00	$ 642,000
205	12" Asphalt (Type C)	24,205	ton	$ 72.00	$ 1,743,000
305	16" Base	16,300	cy	$ 55.00	$ 896,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	38,604	sy	$ 6.00	$ 232,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	7,335	gal	$ 6.00	$ 44,000
605	10' Concrete Sidewalk	86,860	sf	$ 5.50	$ 478,000
705	Machine Laid Curb & Gutter	17,372	lf	$ 16.00	$ 278,000
805	Turn Lanes and Median Openings	2,632	sy	$ 134.62	$ 354,000
				Paving Construction Cost Subtotal:	**$ 4,667,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 233,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 93,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,400,000
√	Illumination		10%	$ 467,000
√	Special Drainage Structures	Bridge Crossing		$ 2,100,000
√	Water	Minor Adjustments	2%	$ 93,000
√	Sewer	Minor Adjustments	2%	$ 93,000
√	Turf and Erosion Control		2%	$ 93,000
√	Landscaping and Irrigation		4%	$ 187,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 4,759,000**

Paving and Allowance Subtotal:		**$ 9,426,000**
Construction Contingency:	15%	$ 1,414,000
Mobilization	8%	$ 754,000
Prep ROW	4%	$ 377,000
Construction Cost TOTAL:		**$ 12,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 12,000,000**
Engineering/Survey/Testing:		16%	$ 1,920,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 1,200,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 3,020,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/19/2018

Project Information:

		Description:	Project No.	A-9
Name:	RM 1431 (3)	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**		
Limits:	5195' E of Stone Oak St to IH 35 SBFR			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	7,074			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	69,692	cy	$ 15.00	$ 1,045,000
205	12" Asphalt (Type C)	39,426	ton	$ 72.00	$ 2,839,000
305	16" Base	26,549	cy	$ 55.00	$ 1,460,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	62,880	sy	$ 6.00	$ 377,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	11,947	gal	$ 6.00	$ 72,000
605	10' Concrete Sidewalk	141,480	sf	$ 5.50	$ 778,000
705	Machine Laid Curb & Gutter	28,296	lf	$ 16.00	$ 453,000
805	Turn Lanes and Median Openings	4,287	sy	$ 134.62	$ 577,000
				Paving Construction Cost Subtotal:	**$ 7,601,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 380,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 152,000
√	Roadway Drainage	Standard Internal System	30%	$ 2,280,000
√	Illumination		10%	$ 760,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 152,000
√	Sewer	Minor Adjustments	2%	$ 152,000
√	Turf and Erosion Control		2%	$ 152,000
√	Landscaping and Irrigation		4%	$ 304,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 4,332,000**

Paving and Allowance Subtotal:		**$ 11,933,000**
Construction Contingency:	15%	$ 1,790,000
Mobilization	8%	$ 955,000
Prep ROW	4%	$ 477,000
Construction Cost TOTAL:		**$ 15,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 15,200,000**
Engineering/Survey/Testing:		16%	$ 2,432,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 1,520,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 3,840,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/19/2018

Project Information:

		Description:	Project No.	A-10
Name:	Wyoming Springs Dr (3)	**This project consists of widening existing pavement with half of a 4 lane divided arterial.**		
Limits:	390' N of Goldenoak Cir to Alondra Way			
Impact Fee Class:	4 Lane - Enhanced (1/2)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	703			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	2,556	cy	$ 15.00	$ 38,000
201	12" Asphalt (Type C)	1,392	ton	$ 72.00	$ 100,000
301	16" Base	937	cy	$ 55.00	$ 52,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	2,265	sy	$ 6.00	$ 14,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	422	gal	$ 6.00	$ 3,000
601	10' Concrete Sidewalk	14,060	sf	$ 5.50	$ 77,000
701	Machine Laid Curb & Gutter	1,406	lf	$ 16.00	$ 22,000
801	Turn Lanes and Median Openings	426	sy	$ 134.62	$ 57,000
				Paving Construction Cost Subtotal:	**$ 363,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 18,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 7,000
√	Roadway Drainage	Standard Internal System	30%	$ 109,000
√	Illumination		10%	$ 36,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 7,000
√	Sewer	Minor Adjustments	2%	$ 7,000
√	Turf and Erosion Control		2%	$ 7,000
√	Landscaping and Irrigation		4%	$ 15,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 206,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 569,000**
Construction Contingency:	15%	$ 85,000
Mobilization	8%	$ 46,000
Prep ROW	4%	$ 23,000
Construction Cost TOTAL:		**$ 800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 800,000**
Engineering/Survey/Testing:		16%	$ 128,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 120,000
		Impact Fee Project Cost TOTAL:	**$ 1,000,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:		**Description:**	**Project No.**	**A-11**
Name:	Arterial L (1)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	Wyoming Springs Dr to Chisholm Trl Rd (Future)			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	11,378			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	82,736	cy	$ 15.00	$ 1,241,000
202	12" Asphalt (Type C)	45,057	ton	$ 72.00	$ 3,244,000
302	16" Base	30,341	cy	$ 55.00	$ 1,669,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	73,325	sy	$ 6.00	$ 440,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	13,654	gal	$ 6.00	$ 82,000
602	10' Concrete Sidewalk	227,560	sf	$ 5.50	$ 1,252,000
702	Machine Laid Curb & Gutter	45,512	lf	$ 16.00	$ 728,000
802	Turn Lanes and Median Openings	6,896	sy	$ 134.62	$ 928,000
				Paving Construction Cost Subtotal:	**$ 9,584,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 192,000
√	Roadway Drainage	Standard Internal System	30%	$ 2,875,000
√	Illumination		10%	$ 958,000
√	Special Drainage Structures	Minor Stream Crossing		$ 200,000
√	Water	Minor Adjustments	2%	$ 192,000
√	Sewer	Minor Adjustments	2%	$ 192,000
√	Turf and Erosion Control		2%	$ 192,000
√	Landscaping and Irrigation		4%	$ 383,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 5,184,000**

Paving and Allowance Subtotal:		**$ 14,768,000**
Construction Contingency:	15%	$ 2,215,000
Mobilization	8%	$ 1,181,000
Prep ROW	4%	$ 591,000
Construction Cost TOTAL:		**$ 18,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 18,800,000**
Engineering/Survey/Testing:		16%	$ 3,008,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 5,640,000
		Impact Fee Project Cost TOTAL:	**$ 27,400,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-12
Name:	Creek Bend Blvd (1)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	RM 1431 to West End Pl			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	4,220			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	30,686	cy	$ 15.00	$ 460,000
202	12" Asphalt (Type C)	16,711	ton	$ 72.00	$ 1,203,000
302	16" Base	11,253	cy	$ 55.00	$ 619,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	27,196	sy	$ 6.00	$ 163,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	5,064	gal	$ 6.00	$ 30,000
602	10' Concrete Sidewalk	84,400	sf	$ 5.50	$ 464,000
702	Machine Laid Curb & Gutter	16,880	lf	$ 16.00	$ 270,000
802	Turn Lanes and Median Openings	2,558	sy	$ 134.62	$ 344,000
				Paving Construction Cost Subtotal:	**$ 3,553,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 71,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,066,000
√	Illumination		10%	$ 355,000
√	Special Drainage Structures	Minor Stream Crossing		$ 200,000
√	Water	Minor Adjustments	2%	$ 71,000
√	Sewer	Minor Adjustments	2%	$ 71,000
√	Turf and Erosion Control		2%	$ 71,000
√	Landscaping and Irrigation		4%	$ 142,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,047,000**

Paving and Allowance Subtotal:		**$ 5,600,000**
Construction Contingency:	15%	$ 840,000
Mobilization	8%	$ 448,000
Prep ROW	4%	$ 224,000
Construction Cost TOTAL:		**$ 7,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 7,200,000**
Engineering/Survey/Testing:		16%	$ 1,152,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 2,160,000
		Impact Fee Project Cost TOTAL:	**$ 10,500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-13
Name:	Creek Bend Blvd (2)	**This project consists of widening existing pavement with half of a 4 lane divided arterial.**		
Limits:	West End Pl to Camino Del Verdes Pl			
Impact Fee Class:	4 Lane - Enhanced (1/2)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	4,163			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	15,136	cy	$ 15.00	$ 227,000
201	12" Asphalt (Type C)	8,243	ton	$ 72.00	$ 593,000
301	16" Base	5,551	cy	$ 55.00	$ 305,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	13,414	sy	$ 6.00	$ 80,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,498	gal	$ 6.00	$ 15,000
601	10' Concrete Sidewalk	83,260	sf	$ 5.50	$ 458,000
701	Machine Laid Curb & Gutter	8,326	lf	$ 16.00	$ 133,000
801	Turn Lanes and Median Openings	2,523	sy	$ 134.62	$ 340,000
				Paving Construction Cost Subtotal:	**$ 2,151,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 108,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 43,000
√	Roadway Drainage	Standard Internal System	30%	$ 645,000
√	Illumination		10%	$ 215,000
√	Special Drainage Structures	Minor Stream Crossing		$ 100,000
√	Water	Minor Adjustments	2%	$ 43,000
√	Sewer	Minor Adjustments	2%	$ 43,000
√	Turf and Erosion Control		2%	$ 43,000
√	Landscaping and Irrigation		4%	$ 86,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,326,000**

Paving and Allowance Subtotal:		**$ 3,477,000**
Construction Contingency:	15%	$ 522,000
Mobilization	8%	$ 278,000
Prep ROW	4%	$ 139,000
Construction Cost TOTAL:		**$ 4,500,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,500,000**
Engineering/Survey/Testing:		16%	$ 720,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 675,000
		Impact Fee Project Cost TOTAL:	**$ 5,900,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-14
Name:	Chisholm Trl Rd (1)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	RM 1431 to CR 173			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	4,250			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	30,904	cy	$ 15.00	$ 464,000
202	12" Asphalt (Type C)	16,830	ton	$ 72.00	$ 1,212,000
302	16" Base	11,333	cy	$ 55.00	$ 623,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	27,389	sy	$ 6.00	$ 164,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	5,100	gal	$ 6.00	$ 31,000
602	10' Concrete Sidewalk	85,000	sf	$ 5.50	$ 468,000
702	Machine Laid Curb & Gutter	17,000	lf	$ 16.00	$ 272,000
802	Turn Lanes and Median Openings	2,576	sy	$ 134.62	$ 347,000
				Paving Construction Cost Subtotal:	**$ 3,581,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 72,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,074,000
√	Illumination		10%	$ 358,000
√	Special Drainage Structures	Bridge Crossing		$ 600,000
√	Water	Minor Adjustments	2%	$ 72,000
√	Sewer	Minor Adjustments	2%	$ 72,000
√	Turf and Erosion Control		2%	$ 72,000
√	Landscaping and Irrigation		4%	$ 143,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,463,000**

Paving and Allowance Subtotal:		**$ 6,044,000**
Construction Contingency:	15%	$ 907,000
Mobilization	8%	$ 484,000
Prep ROW	4%	$ 242,000
Construction Cost TOTAL:		**$ 7,700,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 7,700,000**
Engineering/Survey/Testing:		16%	$ 1,232,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 2,310,000
		Impact Fee Project Cost TOTAL:	**$ 11,200,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **A-15, B-11**

Name:	Arterial L (1)
Limits:	Chisholm Trl Rd (Future) to IH 35 NBFR
Impact Fee Class:	4 Lane - Proposed
Ultimate Class:	4 Lane - Proposed
Length (lf):	400
Service Area(s):	A,B

This project consists of the construction of a new 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	2,909	cy	$ 15.00	$ 44,000
202	12" Asphalt (Type C)	1,584	ton	$ 72.00	$ 114,000
302	16" Base	1,067	cy	$ 55.00	$ 59,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	2,578	sy	$ 6.00	$ 15,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	480	gal	$ 6.00	$ 3,000
602	10' Concrete Sidewalk	8,000	sf	$ 5.50	$ 44,000
702	Machine Laid Curb & Gutter	1,600	lf	$ 16.00	$ 26,000
802	Turn Lanes and Median Openings	242	sy	$ 134.62	$ 33,000
				Paving Construction Cost Subtotal:	**$ 338,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 7,000
√	Roadway Drainage	Standard Internal System	30%	$ 101,000
√	Illumination		10%	$ 34,000
	Special Drainage Structures	None Anticipated		
√	Water	Minor Adjustments	2%	$ 7,000
√	Sewer	Minor Adjustments	2%	$ 7,000
√	Turf and Erosion Control		4%	$ 14,000
√	Landscaping and Irrigation		2%	$ 7,000
√	Overpass?		0%	$ 2,500,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,677,000**

Paving and Allowance Subtotal:		**$ 3,015,000**
Construction Contingency:	15%	$ 452,000
Mobilization	8%	$ 241,000
Prep ROW	4%	$ 121,000
Construction Cost TOTAL:		**$ 3,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,900,000**
Engineering/Survey/Testing:		16%	$ 624,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 1,170,000
		Impact Fee Project Cost TOTAL:	**$ 5,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-16
Name:	CR 173	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	IH 35 SBFR to 3250' N of Wolle Ln			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	538			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,912	cy	$ 15.00	$ 59,000
203	12" Asphalt (Type C)	2,130	ton	$ 72.00	$ 153,000
303	16" Base	1,435	cy	$ 55.00	$ 79,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,467	sy	$ 6.00	$ 21,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	646	gal	$ 6.00	$ 4,000
603	10' Concrete Sidewalk	10,760	sf	$ 5.50	$ 59,000
703	Machine Laid Curb & Gutter	2,152	lf	$ 16.00	$ 34,000
803	Turn Lanes and Median Openings	326	sy	$ 134.62	$ 44,000
				Paving Construction Cost Subtotal:	**$ 453,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 23,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 9,000
√	Roadway Drainage	Standard Internal System	30%	$ 136,000
√	Illumination		10%	$ 45,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 9,000
√	Sewer	Minor Adjustments	2%	$ 9,000
√	Turf and Erosion Control		2%	$ 9,000
√	Landscaping and Irrigation		4%	$ 18,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 258,000**

Paving and Allowance Subtotal:		**$ 711,000**
Construction Contingency:	15%	$ 107,000
Mobilization	8%	$ 57,000
Prep ROW	4%	$ 28,000
Construction Cost TOTAL:		**$ 1,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,000,000**
Engineering/Survey/Testing:		16%	$ 160,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 150,000
		Impact Fee Project Cost TOTAL:	**$ 1,300,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **A-17**

Name:	Chisholm Trl Rd (2)
Limits:	3250' N of Wolle Ln to 1980' N of Wolle Ln
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	1,272
Service Area(s):	A

This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	9,249	cy	$ 15.00	$ 139,000
203	12" Asphalt (Type C)	5,037	ton	$ 72.00	$ 363,000
303	16" Base	3,392	cy	$ 55.00	$ 187,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	8,197	sy	$ 6.00	$ 49,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,526	gal	$ 6.00	$ 9,000
603	10' Concrete Sidewalk	25,440	sf	$ 5.50	$ 140,000
703	Machine Laid Curb & Gutter	5,088	lf	$ 16.00	$ 81,000
803	Turn Lanes and Median Openings	771	sy	$ 134.62	$ 104,000
				Paving Construction Cost Subtotal:	**$ 1,072,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 54,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 21,000
√	Roadway Drainage	Standard Internal System	30%	$ 322,000
√	Illumination		10%	$ 107,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 21,000
√	Sewer	Minor Adjustments	2%	$ 21,000
√	Turf and Erosion Control		2%	$ 21,000
√	Landscaping and Irrigation		4%	$ 43,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 610,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,682,000**
Construction Contingency:	15%	$ 252,000
Mobilization	8%	$ 135,000
Prep ROW	4%	$ 67,000
Construction Cost TOTAL:		**$ 2,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,200,000**
Engineering/Survey/Testing:		16%	$ 352,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 330,000
		Impact Fee Project Cost TOTAL:	**$ 2,900,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-18
Name:	Chisholm Trl Rd (3)	**This project consists of the construction of a median in the existing center turn lane.**		
Limits:	1980' N of Wolle Ln to FM 3406			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,552			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	4,789	cy	$ 15.00	$ 72,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	5,104	lf	$ 16.00	$ 82,000
804	Turn Lanes and Median Openings	1,547	sy	$ 134.62	$ 208,000
				Paving Construction Cost Subtotal:	**$ 362,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 10,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 110,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 5,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 37,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 121,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 298,000**

Paving and Allowance Subtotal:		**$ 660,000**
Construction Contingency:	15%	$ 99,000
Mobilization	5%	$ 33,000
Prep ROW	$3,000 / STA	$ 8,000
Construction Cost TOTAL:		**$ 800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 800,000**
Engineering/Survey/Testing:		16%	$ 128,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 900,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-19
Name:	Sam Bass Rd (1)	**This project consists of the reconstruction of**		
Limits:	230' W of Tonkawa Trl to 390' W of W	**existing pavement to a 6 lane divided arterial.**		
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,221			
Service Area(s):	A,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	12,029	cy	$ 15.00	$ 180,000
205	12" Asphalt (Type C)	6,805	ton	$ 72.00	$ 490,000
305	16" Base	4,583	cy	$ 55.00	$ 252,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	10,853	sy	$ 6.00	$ 65,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,062	gal	$ 6.00	$ 12,000
605	10' Concrete Sidewalk	24,420	sf	$ 5.50	$ 134,000
705	Machine Laid Curb & Gutter	4,884	lf	$ 16.00	$ 78,000
805	Turn Lanes and Median Openings	740	sy	$ 134.62	$ 100,000
				Paving Construction Cost Subtotal:	**$ 1,311,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 66,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 26,000
√	Roadway Drainage	Standard Internal System	30%	$ 393,000
√	Illumination		10%	$ 131,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 26,000
√	Sewer	Minor Adjustments	2%	$ 26,000
√	Turf and Erosion Control		2%	$ 26,000
√	Landscaping and Irrigation		4%	$ 52,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 746,000**

Paving and Allowance Subtotal:		**$ 2,057,000**
Construction Contingency:	15%	$ 309,000
Mobilization	8%	$ 165,000
Prep ROW	4%	$ 82,000
Construction Cost TOTAL:		**$ 2,700,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,700,000**
Engineering/Survey/Testing:		16%	$ 432,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 405,000
		Impact Fee Project Cost TOTAL:	**$ 3,500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-20
Name:	Sam Bass Rd (2)	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**		
Limits:	390' W of Wyoming Springs Dr to FM 3406			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,569			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	15,458	cy	$ 15.00	$ 232,000
205	12" Asphalt (Type C)	8,745	ton	$ 72.00	$ 630,000
305	16" Base	5,889	cy	$ 55.00	$ 324,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	13,947	sy	$ 6.00	$ 84,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,650	gal	$ 6.00	$ 16,000
605	10' Concrete Sidewalk	31,380	sf	$ 5.50	$ 173,000
705	Machine Laid Curb & Gutter	6,276	lf	$ 16.00	$ 100,000
805	Turn Lanes and Median Openings	951	sy	$ 134.62	$ 128,000
				Paving Construction Cost Subtotal:	**$ 1,687,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 84,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 34,000
√	Roadway Drainage	Standard Internal System	30%	$ 506,000
√	Illumination		10%	$ 169,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 34,000
√	Sewer	Minor Adjustments	2%	$ 34,000
√	Turf and Erosion Control		2%	$ 34,000
√	Landscaping and Irrigation		4%	$ 67,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 962,000**

Paving and Allowance Subtotal:		**$ 2,649,000**
Construction Contingency:	15%	$ 397,000
Mobilization	8%	$ 212,000
Prep ROW	4%	$ 106,000
Construction Cost TOTAL:		**$ 3,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,400,000**
Engineering/Survey/Testing:		16%	$ 544,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 510,000
		Impact Fee Project Cost TOTAL:	**$ 4,500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-21
Name:	Sam Bass Rd (3)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	FM 3406 to Desert Willow Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,853			
Service Area(s):	A,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	13,474	cy	$ 15.00	$ 202,000
203	12" Asphalt (Type C)	7,338	ton	$ 72.00	$ 528,000
303	16" Base	4,941	cy	$ 55.00	$ 272,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	11,942	sy	$ 6.00	$ 72,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,224	gal	$ 6.00	$ 13,000
603	10' Concrete Sidewalk	37,060	sf	$ 5.50	$ 204,000
703	Machine Laid Curb & Gutter	7,412	lf	$ 16.00	$ 119,000
803	Turn Lanes and Median Openings	1,123	sy	$ 134.62	$ 151,000
				Paving Construction Cost Subtotal:	**$ 1,561,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 78,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 31,000
√	Roadway Drainage	Standard Internal System	30%	$ 468,000
√	Illumination		10%	$ 156,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 31,000
√	Sewer	Minor Adjustments	2%	$ 31,000
√	Turf and Erosion Control		2%	$ 31,000
√	Landscaping and Irrigation		4%	$ 62,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 888,000**

Paving and Allowance Subtotal:		**$ 2,449,000**
Construction Contingency:	15%	$ 367,000
Mobilization	8%	$ 196,000
Prep ROW	4%	$ 98,000
Construction Cost TOTAL:		**$ 3,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,200,000**
Engineering/Survey/Testing:		16%	$ 512,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 480,000
		Impact Fee Project Cost TOTAL:	**$ 4,200,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-22
Name:	Sam Bass Rd (4)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	Desert Willow Dr to Creek Bend Blvd			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	991			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	7,206	cy	$ 15.00	$ 108,000
203	12" Asphalt (Type C)	3,924	ton	$ 72.00	$ 283,000
303	16" Base	2,643	cy	$ 55.00	$ 145,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	6,386	sy	$ 6.00	$ 38,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,189	gal	$ 6.00	$ 7,000
603	10' Concrete Sidewalk	19,820	sf	$ 5.50	$ 109,000
703	Machine Laid Curb & Gutter	3,964	lf	$ 16.00	$ 63,000
803	Turn Lanes and Median Openings	601	sy	$ 134.62	$ 81,000
				Paving Construction Cost Subtotal:	**$ 834,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 42,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 17,000
√	Roadway Drainage	Standard Internal System	30%	$ 250,000
√	Illumination		10%	$ 83,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 17,000
√	Sewer	Minor Adjustments	2%	$ 17,000
√	Turf and Erosion Control		2%	$ 17,000
√	Landscaping and Irrigation		4%	$ 33,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 476,000**

Paving and Allowance Subtotal:		**$ 1,310,000**
Construction Contingency:	15%	$ 197,000
Mobilization	8%	$ 105,000
Prep ROW	4%	$ 52,000
Construction Cost TOTAL:		**$ 1,700,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,700,000**
Engineering/Survey/Testing:		16%	$ 272,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 255,000
		Impact Fee Project Cost TOTAL:	**$ 2,200,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-23
Name:	Sam Bass Rd (5)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	Creek Bend Blvd to Hairy Man Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,121			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	8,151	cy	$ 15.00	$ 122,000
203	12" Asphalt (Type C)	4,439	ton	$ 72.00	$ 320,000
303	16" Base	2,989	cy	$ 55.00	$ 164,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	7,224	sy	$ 6.00	$ 43,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,345	gal	$ 6.00	$ 8,000
603	10' Concrete Sidewalk	22,420	sf	$ 5.50	$ 123,000
703	Machine Laid Curb & Gutter	4,484	lf	$ 16.00	$ 72,000
803	Turn Lanes and Median Openings	679	sy	$ 134.62	$ 91,000
				Paving Construction Cost Subtotal:	**$ 943,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 47,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 19,000
√	Roadway Drainage	Standard Internal System	30%	$ 283,000
√	Illumination		10%	$ 94,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 19,000
√	Sewer	Minor Adjustments	2%	$ 19,000
√	Turf and Erosion Control		2%	$ 19,000
√	Landscaping and Irrigation		4%	$ 38,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 538,000**

Paving and Allowance Subtotal:		**$ 1,481,000**
Construction Contingency:	15%	$ 222,000
Mobilization	8%	$ 118,000
Prep ROW	4%	$ 59,000
Construction Cost TOTAL:		**$ 1,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,900,000**
Engineering/Survey/Testing:		16%	$ 304,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 285,000
		Impact Fee Project Cost TOTAL:	**$ 2,500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **A-24**

Name:	Sam Bass Rd (6)
Limits:	Hairy Man Rd to 700' E of Hairy Man Rd
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	703
Service Area(s):	A,ETJ/Other

This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	5,112	cy	$ 15.00	$ 77,000
203	12" Asphalt (Type C)	2,784	ton	$ 72.00	$ 200,000
303	16" Base	1,875	cy	$ 55.00	$ 103,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	4,530	sy	$ 6.00	$ 27,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	844	gal	$ 6.00	$ 5,000
603	10' Concrete Sidewalk	14,060	sf	$ 5.50	$ 77,000
703	Machine Laid Curb & Gutter	2,812	lf	$ 16.00	$ 45,000
803	Turn Lanes and Median Openings	426	sy	$ 134.62	$ 57,000
				Paving Construction Cost Subtotal:	**$ 591,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 30,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 12,000
√	Roadway Drainage	Standard Internal System	30%	$ 177,000
√	Illumination		10%	$ 59,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 12,000
√	Sewer	Minor Adjustments	2%	$ 12,000
√	Turf and Erosion Control		2%	$ 12,000
√	Landscaping and Irrigation		4%	$ 24,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 338,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 929,000**
Construction Contingency:	15%	$ 139,000
Mobilization	8%	$ 74,000
Prep ROW	4%	$ 37,000
Construction Cost TOTAL:		**$ 1,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,200,000**
Engineering/Survey/Testing:		16%	$ 192,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 180,000
		Impact Fee Project Cost TOTAL:	**$ 1,600,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:

		Description:	Project No.	A-25
Name:	FM 3406	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**		
Limits:	Sam Bass Rd to IH 35 SBFR			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	8,690			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	85,613	cy	$ 15.00	$ 1,284,000
205	12" Asphalt (Type C)	48,432	ton	$ 72.00	$ 3,487,000
305	16" Base	32,614	cy	$ 55.00	$ 1,794,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	77,244	sy	$ 6.00	$ 463,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	14,676	gal	$ 6.00	$ 88,000
605	10' Concrete Sidewalk	173,800	sf	$ 5.50	$ 956,000
705	Machine Laid Curb & Gutter	34,760	lf	$ 16.00	$ 556,000
805	Turn Lanes and Median Openings	5,267	sy	$ 134.62	$ 709,000
				Paving Construction Cost Subtotal:	**$ 9,337,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 467,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 187,000
√	Roadway Drainage	Standard Internal System	30%	$ 2,801,000
√	Illumination		10%	$ 934,000
√	Special Drainage Structures	Bridge Crossing		$ 7,100,000
√	Water	Minor Adjustments	2%	$ 187,000
√	Sewer	Minor Adjustments	2%	$ 187,000
√	Turf and Erosion Control		2%	$ 187,000
√	Landscaping and Irrigation		4%	$ 373,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 12,423,000**

Paving and Allowance Subtotal:		**$ 21,760,000**
Construction Contingency:	15%	$ 3,264,000
Mobilization	8%	$ 1,741,000
Prep ROW	4%	$ 870,000
Construction Cost TOTAL:		**$ 27,700,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 27,700,000**
Engineering/Survey/Testing:		16%	$ 4,432,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 2,770,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 6,980,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 11/19/2018

Project Information:

		Description:	Project No.	A-26
Name:	Wyoming Springs Dr (4)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	Sam Bass Rd to Brushy Creek			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	2,057			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	14,958	cy	$ 15.00	$ 224,000
202	12" Asphalt (Type C)	8,146	ton	$ 72.00	$ 586,000
302	16" Base	5,485	cy	$ 55.00	$ 302,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	13,256	sy	$ 6.00	$ 80,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,468	gal	$ 6.00	$ 15,000
602	10' Concrete Sidewalk	41,140	sf	$ 5.50	$ 226,000
702	Machine Laid Curb & Gutter	8,228	lf	$ 16.00	$ 132,000
802	Turn Lanes and Median Openings	1,247	sy	$ 134.62	$ 168,000
				Paving Construction Cost Subtotal:	**$ 1,733,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 35,000
√	Roadway Drainage	Standard Internal System	30%	$ 520,000
√	Illumination		10%	$ 173,000
√	Special Drainage Structures	Bridge Crossing		$ 1,900,000
√	Water	Minor Adjustments	2%	$ 35,000
√	Sewer	Minor Adjustments	2%	$ 35,000
√	Turf and Erosion Control		2%	$ 35,000
√	Landscaping and Irrigation		4%	$ 69,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,802,000**

Paving and Allowance Subtotal:		**$ 4,535,000**
Construction Contingency:	15%	$ 680,000
Mobilization	8%	$ 363,000
Prep ROW	4%	$ 181,000
Construction Cost TOTAL:		**$ 5,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 5,800,000**
Engineering/Survey/Testing:		16%	$ 928,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 1,740,000
		Impact Fee Project Cost TOTAL:	**$ 8,500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-27
Name:	Chisholm Trl Rd (4)	**This project consists of the construction of a median in the existing center turn lane.**		
Limits:	FM 3406 to Sam Bass Rd			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	7,000			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	13,136	cy	$ 15.00	$ 197,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	14,000	lf	$ 16.00	$ 224,000
804	Turn Lanes and Median Openings	4,242	sy	$ 134.62	$ 571,000
				Paving Construction Cost Subtotal:	**$ 992,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 26,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 301,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 14,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 103,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 331,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 790,000**

Paving and Allowance Subtotal:		**$ 1,782,000**
Construction Contingency:	15%	$ 267,000
Mobilization	5%	$ 89,000
Prep ROW	$3,000 / STA	$ 21,000
Construction Cost TOTAL:		**$ 2,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,200,000**
Engineering/Survey/Testing:		16%	$ 352,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 2,600,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**A-28**
Name:	Creek Bend Blvd (3)	**This project consists of the previous construction of a 4 lane divided arterial.**		
Limits:	Brushy Creek to Wyoming Springs Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Existing			
Length (lf):	2,123			
Service Area(s):	A			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	**$ 8,245,045**

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:		-	**$ 8,245,045**
Engineering/Survey/Testing:		-	$ 1,964,288
ROW/Easement Acquisition:	Existing Alignment	-	$ 802,969
		Overall Project Cost Total:	**$ 11,012,302**
		City Contribution:	**$ 11,012,302**
		Impact Fee Project Cost (100%):	**$ 11,012,302**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-29
Name:	Deepwood Dr (1)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	Sam Bass Rd to 345' N of RM 620			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	1,769			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	12,863	cy	$ 15.00	$ 193,000
202	12" Asphalt (Type C)	7,005	ton	$ 72.00	$ 504,000
302	16" Base	4,717	cy	$ 55.00	$ 259,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	11,400	sy	$ 6.00	$ 68,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,123	gal	$ 6.00	$ 13,000
602	10' Concrete Sidewalk	35,380	sf	$ 5.50	$ 195,000
702	Machine Laid Curb & Gutter	7,076	lf	$ 16.00	$ 113,000
802	Turn Lanes and Median Openings	1,072	sy	$ 134.62	$ 144,000
				Paving Construction Cost Subtotal:	**$ 1,489,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 30,000
√	Roadway Drainage	Standard Internal System	30%	$ 447,000
√	Illumination		10%	$ 149,000
√	Special Drainage Structures	Bridge Crossing		$ 900,000
√	Water	Minor Adjustments	2%	$ 30,000
√	Sewer	Minor Adjustments	2%	$ 30,000
√	Turf and Erosion Control		2%	$ 30,000
√	Landscaping and Irrigation		4%	$ 60,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,676,000**

Paving and Allowance Subtotal:		**$ 3,165,000**
Construction Contingency:	15%	$ 475,000
Mobilization	8%	$ 253,000
Prep ROW	4%	$ 127,000
Construction Cost TOTAL:		**$ 4,100,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,100,000**
Engineering/Survey/Testing:		16%	$ 656,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 1,230,000
		Impact Fee Project Cost TOTAL:	**$ 6,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	A-30
Name:	Deepwood Dr (2)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	345' N of RM 620 to RM 620			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	346			
Service Area(s):	A			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	2,516	cy	$ 15.00	$ 38,000
203	12" Asphalt (Type C)	1,370	ton	$ 72.00	$ 99,000
303	16" Base	923	cy	$ 55.00	$ 51,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	2,230	sy	$ 6.00	$ 13,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	415	gal	$ 6.00	$ 2,000
603	10' Concrete Sidewalk	6,920	sf	$ 5.50	$ 38,000
703	Machine Laid Curb & Gutter	1,384	lf	$ 16.00	$ 22,000
803	Turn Lanes and Median Openings	210	sy	$ 134.62	$ 28,000
				Paving Construction Cost Subtotal:	**$ 291,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 15,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 6,000
√	Roadway Drainage	Standard Internal System	30%	$ 87,000
√	Illumination		10%	$ 29,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 6,000
√	Sewer	Minor Adjustments	2%	$ 6,000
√	Turf and Erosion Control		2%	$ 6,000
√	Landscaping and Irrigation		4%	$ 12,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 167,000**

Paving and Allowance Subtotal:		**$ 458,000**
Construction Contingency:	15%	$ 69,000
Mobilization	8%	$ 37,000
Prep ROW	4%	$ 18,000
Construction Cost TOTAL:		**$ 600,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 600,000**
Engineering/Survey/Testing:		16%	$ 96,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 90,000
		Impact Fee Project Cost TOTAL:	**$ 800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**A-31, C-1**
Name:	RM 620	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**		
Limits:	Deepwood Dr to IH 35 SBFR			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	4,922			
Service Area(s):	A,C			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	**$ 25,545,000**

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:		-	**$ 25,545,000**
Engineering/Survey/Testing:		-	$ 3,116,086
ROW/Easement Acquisition:	TxDOT Roadway	-	$ 14,629,808
		Overall Project Cost Total:	**$ 43,290,894**
		City Contribution:	**$ 12,560,624**
		Impact Fee Project Cost (29%):	**$ 12,560,624**

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City of Round Rock - 2018 Roadway Impact Fee Study (Updated 2021)

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area B

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
A-4, B-1	6 Lane - Enhanced	Westinghouse Rd (1)	Widening	IH 35 SBFR	IH 35 NBFR	50%	$ 9,031,296	$ 4,515,648
B-2	4 Lane - Enhanced	Westinghouse Rd (2)	Widening	3895' E of A.W. Grimes	6350' W of A.W. Grimes	50%	$ 5,500,000	$ 2,750,000
B-3	4 Lane - Existing	N Mays St (1)	Previously Constructed	1777' N of Teravista Pkwy	Teravista Pkwy	100%	$ 1,889,219	$ 1,889,219
B-4	6 Lane - Enhanced	University Blvd (1)	Widening	University Oaks Blvd	335' W of Sunrise Dr	100%	$ 8,900,000	$ 8,900,000
B-5	6 Lane - Enhanced	University Blvd (2)	Widening	335' W of Sunrise Dr	A.W. Grimes Blvd	50%	$ 30,700,000	$ 15,350,000
B-6	4 Lane - Enhanced	University Blvd (3)	Widening	A.W. Grimes Blvd	1830' E of A.W. Grimes Blvd	100%	$ 4,800,000	$ 4,800,000
B-7	4 Lane - Enhanced	University Blvd (4)	Widening	1830' E of A.W. Grimes Blvd	Lunata Way	50%	$ 9,700,000	$ 4,850,000
B-8	4 Lane - Enhanced	University Blvd (5)	Widening	Lunata Way	SH 130 SBFR	100%	$ 29,300,000	$ 29,300,000
B-9	4 Lane - Enhanced	N Mays St (2)	Widening	University Blvd	2000' S of University Blvd	100%	$ 5,800,000	$ 5,800,000
B-10	4 Lane - Proposed	N Mays St (3)	New	2000' S of University Blvd	Paloma Dr	100%	$ 24,800,000	$ 24,800,000
A-15, B-11	4 Lane - Proposed	Arterial L (1)	New	Chisholm Trl Rd (Future)	IH 35 NBFR	50%	$ 5,700,000	$ 2,850,000
B-12	4 Lane - Proposed	Arterial L (2)	New	IH 35 NBFR	Cypress Blvd	100%	$ 21,200,000	$ 21,200,000
B-13	4 Lane - Enhanced	N Mays St (4)	Widening	Paloma Dr	540' N of Steam Way	100%	$ 3,100,000	$ 3,100,000
B-14	4 Lane - Existing	Sunrise Rd (1)	Previously Constructed	University Blvd	Hidden Valley Dr	100%	$ 979,190	$ 979,190
B-15	4 Lane - Enhanced (AM)	Sunrise Rd (2)	Access Management	Hidden Valley Dr	325' S of Eagles Nest St	100%	$ 1,000,000	$ 1,000,000
B-16	4 Lane - Enhanced (AM)	Sunrise Rd (3)	Access Management	325' S of Eagles Nest St	Applegate Cir	50%	$ 600,000	$ 300,000
B-17	4 Lane - Enhanced (AM)	Sunrise Rd (4)	Access Management	Applegate Cir	Lake Dr	100%	$ 500,000	$ 500,000
B-18	4 Lane - Enhanced (AM)	Sunrise Rd (5)	Access Management	Lake Dr	545' S of Lake Dr	50%	$ 200,000	$ 100,000
B-19	4 Lane - Enhanced (AM)	Sunrise Rd (6)	Access Management	545' S of Lake Dr	Old Settlers Blvd	100%	$ 800,000	$ 800,000
B-20	4 Lane - Enhanced (1/2)	College Park (1)	(1/2) Widening	Satellite View	Avery Nelson Blvd	100%	$ 5,400,000	$ 5,400,000
B-21	3 Lane - Proposed	Wallin Bradley Drive	New	Gulf Way	A.W. Grimes Blvd	100%	$ 2,800,000	$ 2,800,000
B-22	4 Lane - Proposed	College Park (2)	New	Avery Nelson Rd	1355' N of Old Settlers Blvd	100%	$ 11,500,000	$ 11,500,000
B-23	3 Lane - Existing	Seton Pkwy	Previously Constructed	2400' N of Avery Nelson Blvd	Avery Nelson Blvd	100%	$ 2,043,320	$ 2,043,320
B-24	4 Lane - Existing	Medical Center Pkwy	Previously Constructed	Seton Pkwy	A.W. Grimes Blvd	100%	$ 810,679	$ 810,679
B-25	4 Lane - Enhanced	CR 112 (1)	Widening	A.W. Grimes Blvd	3580' E of A.W. Grimes Blvd	100%	$ 8,000,000	$ 8,000,000
B-26	4 Lane - Enhanced	CR 112 (2)	Widening	3580' E of A.W. Grimes Blvd	CR 117	50%	$ 5,000,000	$ 2,500,000
B-27	4 Lane - Proposed	Kenney Fort Blvd (1)	New	CR 117	Old Settlers Blvd	100%	$ 13,700,000	$ 13,700,000
B-28	4 Lane - Enhanced (1/2)	Red Bud Ln (1)	(1/2) Widening	Guadalajara St	160' N of Margarita Loop	100%	$ 2,600,000	$ 2,600,000
B-29	4 Lane - Enhanced (1/2)	Red Bud Ln (2)	(1/2) Widening	160' N of Margarita Loop	CR 117	50%	$ 3,000,000	$ 1,500,000
B-30	4 Lane - Enhanced	Red Bud Ln (3)	Widening	CR 117	Old Settlers Blvd	100%	$ 4,100,000	$ 4,100,000
B-31	6 Lane - Enhanced (1/3)	Old Settlers Blvd (1)	Widening	N Mays St	Sunrise Rd	100%	$ 6,800,000	$ 6,800,000
B-32	6 Lane - Enhanced	Old Settlers Blvd (2)	Widening	Sunrise Rd	A.W. Grimes Blvd	100%	$ 18,100,000	$ 18,100,000
B-33	4 Lane - Proposed	Old Settlers Blvd (3)	New	Red Bud Ln	CR 110	100%	$ 5,800,000	$ 5,800,000
B-34	4 Lane - Enhanced (AM)	Spur 379 (N Mays St)	Access Management	540' N of Steam Way	Northwest Dr	100%	$ 2,700,000	$ 2,700,000
B-35	4 Lane - Enhanced (AM)	Sunrise Rd (7)	Access Management	Old Settlers Blvd	Country Aire Dr	100%	$ 600,000	$ 600,000
B-36	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (1)	Widening	Old Settlers Blvd	375' S of Chandler Creek Blvd	100%	$ 1,000,000	$ 1,000,000
B-37	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (2)	Widening	375' S of Chandler Creek Blvd	1250' N of Tiger Trl	50%	$ 1,000,000	$ 500,000
B-38	6 Lane - Enhanced	FM 1460 (A.W. Grimes Blvd) (3)	Widening	1250' N of Tiger Trl	US 79	100%	$ 3,940,000	$ 3,940,000
B-39	6 Lane - Proposed (1/2)	Kenney Fort Blvd (2)	(1/2) Widening	Old Settler's Blvd	2540' S of Old Settler's Blvd	100%	$ 2,600,000	$ 2,600,000
B-40	6 Lane - Proposed	Kenney Fort Blvd (3)	Widening	Old Settler's Blvd	2540' S of Old Settler's Blvd	50%	$ 2,800,000	$ 1,400,000

City of Round Rock - 2018 Roadway Impact Fee Study (Updated 2021)

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area B

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
B-41	6 Lane - Proposed	Kenney Fort Blvd (4)	New	2540' S of Old Settlers Blvd	Chandler Creek Blvd	100%	$ 15,200,000	$ 15,200,000
B-42	6 Lane - Enhanced	Kenney Fort Blvd (5)	Widening	Chandler Creek Blvd	Joe DiMaggio Blvd	100%	$ 5,800,000	$ 5,800,000
B-43	4 Lane - Enhanced	Red Bud Ln (4)	Widening	Old Settlers Blvd	170' N of Joseph St	100%	$ 5,200,000	$ 5,200,000
B-44	4 Lane - Enhanced	Red Bud Ln (5)	Widening	170' N of Joseph St	160' S of Covered Wagon Trl	50%	$ 2,200,000	$ 1,100,000
B-45	4 Lane - Enhanced	Red Bud Ln (6)	Widening	160' S of Covered Wagon Trl	US 79	100%	$ 4,700,000	$ 4,700,000
B-46, C-6	6 Lane - Enhanced	US 79 (1)	Widening	N Mays St	200' E of Red Bud Ln	50%	$ 13,340,000	$ 6,670,000
B-47	6 Lane - Enhanced	US 79 (2)	Widening	200' E of Red Bud Ln	1690' E of Red Bud Ln	50%	$ 900,000	$ 450,000
						TOTAL	$ 316,133,704	$ 271,298,056

Intersection Improvements - Service Area B

#	Project	Improvement		Percent in Service Area	Project Cost	Total Cost in Service Area
		Improvement 1	Improvement 2			
BI-1	N Mays St and University Blvd	TURN LANES		100%	$ 784,000	$ 784,000
BI-2	Sunrise Rd and University Blvd	TURN LANES		100%	$ 1,063,000	$ 1,063,000
BI-3	N Mays St and Steam Way	TURN LANES		100%	$ 170,235	$ 170,235
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER	TURN LANES	50%	$ 2,041,000	$ 1,020,500
-	Update ITS and Traffic Managmenet Infrastructure			33%	$ 20,900,000	$ 6,966,667
				TOTAL	$ 24,958,235	$ 10,004,402

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**A-4, B-1**
Name:	Westinghouse Rd (1)	**This project consists of the construction of a new 6 lane undivided bridge section, u-turn bridge and frontage road realignment.**		
Limits:	IH 35 SBFR to IH 35 NBFR			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,014			
Service Area(s):	A,B			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	**$ 38,928,000**

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:		-	**$ 38,928,000**
Engineering/Survey/Testing:		-	$ 6,228,480
ROW/Easement Acquisition:	TxDOT Roadway	-	$ -
		Overall Project Cost Total:	**$ 45,156,480**
		City Contribution:	**$ 9,031,296**
		Impact Fee Project Cost TOTAL (20% City Contribution)	**$ 9,031,296**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-2
Name:	Westinghouse Rd (2)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	3895' E of A.W. Grimes to 6350' W of A.W. Grimes			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	2,456			
Service Area(s):	B,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	17,859	cy	$ 15.00	$ 268,000
203	12" Asphalt (Type C)	9,726	ton	$ 72.00	$ 700,000
303	16" Base	6,549	cy	$ 55.00	$ 360,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	15,828	sy	$ 6.00	$ 95,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,947	gal	$ 6.00	$ 18,000
603	10' Concrete Sidewalk	49,120	sf	$ 5.50	$ 270,000
703	Machine Laid Curb & Gutter	9,824	lf	$ 16.00	$ 157,000
803	Turn Lanes and Median Openings	1,488	sy	$ 134.62	$ 200,000
				Paving Construction Cost Subtotal:	**$ 2,068,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 103,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 41,000
√	Roadway Drainage	Standard Internal System	30%	$ 620,000
√	Illumination		10%	$ 207,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 41,000
√	Sewer	Minor Adjustments	2%	$ 41,000
√	Turf and Erosion Control		4%	$ 83,000
√	Landscaping and Irrigation		2%	$ 41,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,177,000**

Paving and Allowance Subtotal:		**$ 3,245,000**
Construction Contingency:	15%	$ 487,000
Mobilization	8%	$ 260,000
Prep ROW	4%	$ 130,000
Construction Cost TOTAL:		**$ 4,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,200,000**
Engineering/Survey/Testing:		16%	$ 672,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 630,000
		Impact Fee Project Cost TOTAL:	**$ 5,500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-3
Name:	N Mays St (1)	**This project consisted of the construction of a 4 lane divided arterial.**		
Limits:	1777' N of Teravista Pkwy to Teravista Pkwy			
Impact Fee Class:	4 Lane - Existing			
Ultimate Class:	4 Lane - Existing			
Length (lf):	1,777			
Service Area(s):	B			

Roadway Construction Cost Projection

Construction Cost TOTAL:	**$ 1,749,428**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,749,428**
Engineering/Survey/Testing:		-	$ 139,791
ROW/Easement Acquisition:	No ROW Costs Included	-	$ -
		Overall Project Cost Total:	**$ 1,889,219**
		City Contribution:	**$ 1,889,219**
		Impact Fee Project Cost (100%):	**$ 1,889,219**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-4
Name:	University Blvd (1)	**This project consists of the reconstruction of the exising pavement to a 6 lane divided arterial.**		
Limits:	University Oaks Blvd to 335' W of Sunrise Dr			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Existing			
Length (lf):	2,602			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	25,635	cy	$ 15.00	$ 385,000
205	12" Asphalt (Type C)	14,502	ton	$ 72.00	$ 1,044,000
305	16" Base	9,766	cy	$ 55.00	$ 537,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	23,129	sy	$ 6.00	$ 139,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	4,394	gal	$ 6.00	$ 26,000
605	10' Concrete Sidewalk	52,040	sf	$ 5.50	$ 286,000
705	Machine Laid Curb & Gutter	10,408	lf	$ 16.00	$ 167,000
805	Turn Lanes and Median Openings	1,577	sy	$ 134.62	$ 212,000
				Paving Construction Cost Subtotal:	**$ 2,796,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 140,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 56,000
√	Roadway Drainage	Standard Internal System	30%	$ 839,000
√	Illumination		10%	$ 280,000
√	Special Drainage Structures	Bridge Crossing		$ 900,000
√	Water	Minor Adjustments	2%	$ 56,000
√	Sewer	Minor Adjustments	2%	$ 56,000
√	Turf and Erosion Control		4%	$ 112,000
√	Landscaping and Irrigation		2%	$ 56,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,495,000**

Paving and Allowance Subtotal:		**$ 5,291,000**
Construction Contingency:	15%	$ 794,000
Mobilization	8%	$ 423,000
Prep ROW	4%	$ 212,000
Construction Cost TOTAL:		**$ 6,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,800,000**
Engineering/Survey/Testing:		16%	$ 1,088,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 1,020,000
		Impact Fee Project Cost TOTAL:	**$ 8,900,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:

		Description:	Project No.	B-5
Name:	University Blvd (2)	**This project consists of the reconstruction of**		
Limits:	335' W of Sunrise Dr to A.W. Grimes B	**existing pavement to a 6 lane divided arterial.**		
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	10,703			
Service Area(s):	B,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	105,444	cy	$ 15.00	$ 1,582,000
205	12" Asphalt (Type C)	59,651	ton	$ 72.00	$ 4,295,000
305	16" Base	40,169	cy	$ 55.00	$ 2,209,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	95,138	sy	$ 6.00	$ 571,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	18,076	gal	$ 6.00	$ 108,000
605	10' Concrete Sidewalk	214,060	sf	$ 5.50	$ 1,177,000
705	Machine Laid Curb & Gutter	42,812	lf	$ 16.00	$ 685,000
805	Turn Lanes and Median Openings	6,487	sy	$ 134.62	$ 873,000
				Paving Construction Cost Subtotal:	**$ 11,500,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 575,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 230,000
√	Roadway Drainage	Standard Internal System	30%	$ 3,450,000
√	Illumination		10%	$ 1,150,000
√	Special Drainage Structures	Minor Stream Crossing		$ 300,000
√	Water	Minor Adjustments	2%	$ 230,000
√	Sewer	Minor Adjustments	2%	$ 230,000
√	Turf and Erosion Control		4%	$ 460,000
√	Landscaping and Irrigation		2%	$ 230,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 6,855,000**

Paving and Allowance Subtotal:		**$ 18,355,000**
Construction Contingency:	15%	$ 2,753,000
Mobilization	8%	$ 1,468,000
Prep ROW	4%	$ 734,000
Construction Cost TOTAL:		**$ 23,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 23,400,000**
Engineering/Survey/Testing:		16%	$ 3,744,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 3,510,000
		Impact Fee Project Cost TOTAL:	**$ 30,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-6
Name:	University Blvd (3)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,922			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	13,976	cy	$ 15.00	$ 210,000
203	12" Asphalt (Type C)	7,611	ton	$ 72.00	$ 548,000
303	16" Base	5,125	cy	$ 55.00	$ 282,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	12,386	sy	$ 6.00	$ 74,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,306	gal	$ 6.00	$ 14,000
603	10' Concrete Sidewalk	38,440	sf	$ 5.50	$ 211,000
703	Machine Laid Curb & Gutter	7,688	lf	$ 16.00	$ 123,000
803	Turn Lanes and Median Openings	1,165	sy	$ 134.62	$ 157,000
				Paving Construction Cost Subtotal:	**$ 1,619,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 81,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 32,000
√	Roadway Drainage	Standard Internal System	30%	$ 486,000
√	Illumination		10%	$ 162,000
√	Special Drainage Structures	Minor Stream Crossing		$ 300,000
√	Water	Minor Adjustments	2%	$ 32,000
√	Sewer	Minor Adjustments	2%	$ 32,000
√	Turf and Erosion Control		4%	$ 65,000
√	Landscaping and Irrigation		2%	$ 32,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,222,000**

Paving and Allowance Subtotal:		**$ 2,841,000**
Construction Contingency:	15%	$ 426,000
Mobilization	8%	$ 227,000
Prep ROW	4%	$ 114,000
Construction Cost TOTAL:		**$ 3,700,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,700,000**
Engineering/Survey/Testing:		16%	$ 592,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 555,000
		Impact Fee Project Cost TOTAL:	**$ 4,800,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:		**Description:**	**Project No.**	**B-7**
Name:	University Blvd (4)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	1830' E of A.W. Grimes Blvd to Lunata Way			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	4,093			
Service Area(s):	B,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	29,763	cy	$ 15.00	$ 446,000
203	12" Asphalt (Type C)	16,208	ton	$ 72.00	$ 1,167,000
303	16" Base	10,915	cy	$ 55.00	$ 600,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	26,377	sy	$ 6.00	$ 158,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	4,912	gal	$ 6.00	$ 29,000
603	10' Concrete Sidewalk	81,860	sf	$ 5.50	$ 450,000
703	Machine Laid Curb & Gutter	16,372	lf	$ 16.00	$ 262,000
803	Turn Lanes and Median Openings	2,481	sy	$ 134.62	$ 334,000
				Paving Construction Cost Subtotal:	**$ 3,446,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 172,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 69,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,034,000
√	Illumination		10%	$ 345,000
√	Special Drainage Structures	Bridge Crossing		$ 400,000
√	Water	Minor Adjustments	2%	$ 69,000
√	Sewer	Minor Adjustments	2%	$ 69,000
√	Turf and Erosion Control		4%	$ 138,000
√	Landscaping and Irrigation		2%	$ 69,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 2,365,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 5,811,000**
Construction Contingency:	15%	$ 872,000
Mobilization	8%	$ 465,000
Prep ROW	4%	$ 232,000
Construction Cost TOTAL:		**$ 7,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 7,400,000**
Engineering/Survey/Testing:		16%	$ 1,184,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 1,110,000
		Impact Fee Project Cost TOTAL:	**$ 9,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-8
Name:	University Blvd (5)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	Lunata Way to SH 130 SBFR			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	13,032			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	94,764	cy	$ 15.00	$ 1,421,000
203	12" Asphalt (Type C)	51,607	ton	$ 72.00	$ 3,716,000
303	16" Base	34,752	cy	$ 55.00	$ 1,911,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	83,984	sy	$ 6.00	$ 504,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	15,638	gal	$ 6.00	$ 94,000
603	10' Concrete Sidewalk	260,640	sf	$ 5.50	$ 1,434,000
703	Machine Laid Curb & Gutter	52,128	lf	$ 16.00	$ 834,000
803	Turn Lanes and Median Openings	7,898	sy	$ 134.62	$ 1,063,000
				Paving Construction Cost Subtotal:	**$ 10,977,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 549,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 220,000
√	Roadway Drainage	Standard Internal System	30%	$ 3,293,000
√	Illumination		10%	$ 1,098,000
√	Special Drainage Structures	Minor Stream Crossing		$ 400,000
√	Water	Minor Adjustments	2%	$ 220,000
√	Sewer	Minor Adjustments	2%	$ 220,000
√	Turf and Erosion Control		4%	$ 439,000
√	Landscaping and Irrigation		2%	$ 220,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 6,659,000**

Paving and Allowance Subtotal:		**$ 17,636,000**
Construction Contingency:	15%	$ 2,645,000
Mobilization	8%	$ 1,411,000
Prep ROW	4%	$ 705,000
Construction Cost TOTAL:		**$ 22,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 22,400,000**
Engineering/Survey/Testing:		16%	$ 3,584,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 3,360,000
		Impact Fee Project Cost TOTAL:	**$ 29,300,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:		**Description:**	**Project No.**	**B-9**
Name:	N Mays St (2)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	University Blvd to 2000' S of University Blvd			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,002			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	14,558	cy	$ 15.00	$ 218,000
203	12" Asphalt (Type C)	7,928	ton	$ 72.00	$ 571,000
303	16" Base	5,339	cy	$ 55.00	$ 294,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	12,902	sy	$ 6.00	$ 77,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,402	gal	$ 6.00	$ 14,000
603	10' Concrete Sidewalk	40,040	sf	$ 5.50	$ 220,000
703	Machine Laid Curb & Gutter	8,008	lf	$ 16.00	$ 128,000
803	Turn Lanes and Median Openings	1,213	sy	$ 134.62	$ 163,000
				Paving Construction Cost Subtotal:	**$ 1,685,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 84,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 34,000
√	Roadway Drainage	Standard Internal System	30%	$ 506,000
√	Illumination		10%	$ 169,000
√	Special Drainage Structures	Bridge Crossing		$ 800,000
√	Water	Minor Adjustments	2%	$ 34,000
√	Sewer	Minor Adjustments	2%	$ 34,000
√	Turf and Erosion Control		4%	$ 67,000
√	Landscaping and Irrigation		2%	$ 34,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 1,762,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 3,447,000**
Construction Contingency:	15%	$ 517,000
Mobilization	8%	$ 276,000
Prep ROW	4%	$ 138,000
Construction Cost TOTAL:		**$ 4,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,400,000**
Engineering/Survey/Testing:		16%	$ 704,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 660,000
		Impact Fee Project Cost TOTAL:	**$ 5,800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **B-10**

Name:	N Mays St (3)
Limits:	2000' S of University Blvd to Paloma Dr
Impact Fee Class:	4 Lane - Proposed
Ultimate Class:	4 Lane - Proposed
Length (lf):	4,634
Service Area(s):	B

This project consists of the construction of a new 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	33,697	cy	$ 15.00	$ 505,000
202	12" Asphalt (Type C)	18,351	ton	$ 72.00	$ 1,321,000
302	16" Base	12,357	cy	$ 55.00	$ 680,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	29,864	sy	$ 6.00	$ 179,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	5,561	gal	$ 6.00	$ 33,000
602	10' Concrete Sidewalk	92,680	sf	$ 5.50	$ 510,000
702	Machine Laid Curb & Gutter	18,536	lf	$ 16.00	$ 297,000
802	Turn Lanes and Median Openings	2,808	sy	$ 134.62	$ 378,000
				Paving Construction Cost Subtotal:	**$ 3,903,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 78,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,171,000
√	Illumination		10%	$ 390,000
√	Special Drainage Structures	Bridge Crossing		$ 7,400,000
√	Water	Minor Adjustments	2%	$ 78,000
√	Sewer	Minor Adjustments	2%	$ 78,000
√	Turf and Erosion Control		4%	$ 156,000
√	Landscaping and Irrigation		2%	$ 78,000
			0%	$ -
	Allowance Subtotal:			**$ 9,429,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 13,332,000**
Construction Contingency:	15%	$ 2,000,000
Mobilization	8%	$ 1,067,000
Prep ROW	4%	$ 533,000
Construction Cost TOTAL:		**$ 17,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 17,000,000**
Engineering/Survey/Testing:		16%	$ 2,720,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 5,100,000
		Impact Fee Project Cost TOTAL:	**$ 24,800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **A-15, B-11**

Name:	Arterial L (1)
Limits:	Chisholm Trl Rd (Future) to IH 35 NBFR
Impact Fee Class:	4 Lane - Proposed
Ultimate Class:	4 Lane - Proposed
Length (lf):	400
Service Area(s):	A,B

This project consists of the construction of a new 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	2,909	cy	$ 15.00	$ 44,000
202	12" Asphalt (Type C)	1,584	ton	$ 72.00	$ 114,000
302	16" Base	1,067	cy	$ 55.00	$ 59,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	2,578	sy	$ 6.00	$ 15,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	480	gal	$ 6.00	$ 3,000
602	10' Concrete Sidewalk	8,000	sf	$ 5.50	$ 44,000
702	Machine Laid Curb & Gutter	1,600	lf	$ 16.00	$ 26,000
802	Turn Lanes and Median Openings	242	sy	$ 134.62	$ 33,000
				Paving Construction Cost Subtotal:	**$ 338,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 7,000
√	Roadway Drainage	Standard Internal System	30%	$ 101,000
√	Illumination		10%	$ 34,000
	Special Drainage Structures	None Anticipated		
√	Water	Minor Adjustments	2%	$ 7,000
√	Sewer	Minor Adjustments	2%	$ 7,000
√	Turf and Erosion Control		4%	$ 14,000
√	Landscaping and Irrigation		2%	$ 7,000
√	Overpass?		0%	$ 2,500,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,677,000**

Paving and Allowance Subtotal:		**$ 3,015,000**
Construction Contingency:	15%	$ 452,000
Mobilization	8%	$ 241,000
Prep ROW	4%	$ 121,000
Construction Cost TOTAL:		**$ 3,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,900,000**
Engineering/Survey/Testing:		16%	$ 624,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 1,170,000
		Impact Fee Project Cost TOTAL:	**$ 5,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-12
Name:	Arterial L (2)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	IH 35 NBFR to Cypress Blvd			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	3,644			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	26,498	cy	$ 15.00	$ 397,000
202	12" Asphalt (Type C)	14,430	ton	$ 72.00	$ 1,039,000
302	16" Base	9,717	cy	$ 55.00	$ 534,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	23,484	sy	$ 6.00	$ 141,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	4,373	gal	$ 6.00	$ 26,000
602	10' Concrete Sidewalk	72,880	sf	$ 5.50	$ 401,000
702	Machine Laid Curb & Gutter	14,576	lf	$ 16.00	$ 233,000
802	Turn Lanes and Median Openings	2,208	sy	$ 134.62	$ 297,000
				Paving Construction Cost Subtotal:	**$ 3,068,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 61,000
√	Roadway Drainage	Standard Internal System	30%	$ 920,000
√	Illumination		10%	$ 307,000
√	Special Drainage Structures	Bridge Crossing		$ 6,700,000
√	Water	Minor Adjustments	2%	$ 61,000
√	Sewer	Minor Adjustments	2%	$ 61,000
√	Turf and Erosion Control		4%	$ 123,000
√	Landscaping and Irrigation		2%	$ 61,000
			0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 8,294,000**

Paving and Allowance Subtotal:		**$ 11,362,000**
Construction Contingency:	15%	$ 1,704,000
Mobilization	8%	$ 909,000
Prep ROW	4%	$ 454,000
Construction Cost TOTAL:		**$ 14,500,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 14,500,000**
Engineering/Survey/Testing:		16%	$ 2,320,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 4,350,000
		Impact Fee Project Cost TOTAL:	**$ 21,200,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-13
Name:	N Mays St (4)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	Paloma Dr to 540' N of Steam Way			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,402			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	10,195	cy	$ 15.00	$ 153,000
203	12" Asphalt (Type C)	5,552	ton	$ 72.00	$ 400,000
303	16" Base	3,739	cy	$ 55.00	$ 206,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	9,035	sy	$ 6.00	$ 54,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,682	gal	$ 6.00	$ 10,000
603	10' Concrete Sidewalk	28,040	sf	$ 5.50	$ 154,000
703	Machine Laid Curb & Gutter	5,608	lf	$ 16.00	$ 90,000
803	Turn Lanes and Median Openings	850	sy	$ 134.62	$ 114,000
				Paving Construction Cost Subtotal:	**$ 1,181,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 59,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 24,000
√	Roadway Drainage	Standard Internal System	30%	$ 354,000
√	Illumination		10%	$ 118,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 24,000
√	Sewer	Minor Adjustments	2%	$ 24,000
√	Turf and Erosion Control		4%	$ 47,000
√	Landscaping and Irrigation		2%	$ 24,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 674,000**

Paving and Allowance Subtotal:		**$ 1,855,000**
Construction Contingency:	15%	$ 278,000
Mobilization	8%	$ 148,000
Prep ROW	4%	$ 74,000
Construction Cost TOTAL:		**$ 2,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,400,000**
Engineering/Survey/Testing:		16%	$ 384,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 360,000
		Impact Fee Project Cost TOTAL:	**$ 3,100,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-14
Name:	Sunrise Rd (1)	**This project consists of the reconstruction of existing pavement to include a median.**		
Limits:	University Blvd to Hidden Valley Dr			
Impact Fee Class:	4 Lane - Existing			
Ultimate Class:	4 Lane - Existing			
Length (lf):	1,231			
Service Area(s):	B			

Roadway Construction Cost Projection

Construction Cost TOTAL:	

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 804,190**
Engineering/Survey/Testing:		-	$ 175,000
ROW/Easement Acquisition:	Existing Alignment	-	$ -
		Overall Project Cost Total:	**$ 979,190**
		City Contribution:	**$ 979,190**
		Impact Fee Project Cost (100%):	**$ 979,190**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **B-15**

Name:	Sunrise Rd (2)
Limits:	Hidden Valley Dr to 325' S of Eagles Nest St
Impact Fee Class:	4 Lane - Enhanced (AM)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	2,858
Service Area(s):	B

This project consists of the reconstruction of existing pavement to include a median.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	5,363	cy	$ 15.00	$ 80,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	5,716	lf	$ 16.00	$ 91,000
804	Turn Lanes and Median Openings	1,732	sy	$ 134.62	$ 233,000
				Paving Construction Cost Subtotal:	**$ 404,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 11,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 123,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 6,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 42,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 135,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 332,000**

Paving and Allowance Subtotal:		**$ 736,000**
Construction Contingency:	15%	$ 110,000
Mobilization	5%	$ 37,000
Prep ROW	$3,000 / STA	$ 9,000
Construction Cost TOTAL:		**$ 900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 900,000**
Engineering/Survey/Testing:		16%	$ 144,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 1,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **B-16**

Name:	Sunrise Rd (3)
Limits:	325' S of Eagles Nest St to Applegate Cir
Impact Fee Class:	4 Lane - Enhanced (AM)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	1,576
Service Area(s):	B,ETJ/Other

This project consists of the reconstruction of existing pavement to include a median.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	2,957	cy	$ 15.00	$ 44,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	3,152	lf	$ 16.00	$ 50,000
804	Turn Lanes and Median Openings	955	sy	$ 134.62	$ 129,000
				Paving Construction Cost Subtotal:	**$ 223,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 6,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 68,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 3,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 23,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 74,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 189,000**

Paving and Allowance Subtotal:		**$ 412,000**
Construction Contingency:	15%	$ 62,000
Mobilization	5%	$ 21,000
Prep ROW	$3,000 / STA	$ 5,000
Construction Cost TOTAL:		**$ 500,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 500,000**
Engineering/Survey/Testing:		16%	$ 80,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 600,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: **Project No.** **B-17**

Name:	Sunrise Rd (4)
Limits:	Applegate Cir to Lake Dr
Impact Fee Class:	4 Lane - Enhanced (AM)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	1,075
Service Area(s):	B

This project consists of the reconstruction of existing pavement to include a median.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	2,017	cy	$ 15.00	$ 30,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	2,150	lf	$ 16.00	$ 34,000
804	Turn Lanes and Median Openings	652	sy	$ 134.62	$ 88,000
				Paving Construction Cost Subtotal:	**$ 152,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 4,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 46,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 2,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 16,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 51,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 134,000**

Paving and Allowance Subtotal:		**$ 286,000**
Construction Contingency:	15%	$ 43,000
Mobilization	5%	$ 14,000
Prep ROW	$3,000 / STA	$ 3,000
Construction Cost TOTAL:		**$ 400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 400,000**
Engineering/Survey/Testing:		16%	$ 64,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: **Project No.** **B-18**

Name:	Sunrise Rd (5)
Limits:	Lake Dr to 545' S of Lake Dr
Impact Fee Class:	4 Lane - Enhanced (AM)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	543
Service Area(s):	B,ETJ/Other

This project consists of the reconstruction of existing pavement to include a median.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	1,019	cy	$ 15.00	$ 15,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	1,086	lf	$ 16.00	$ 17,000
804	Turn Lanes and Median Openings	329	sy	$ 134.62	$ 44,000
				Paving Construction Cost Subtotal:	**$ 76,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 2,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 23,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 1,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 8,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 26,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 75,000**

Paving and Allowance Subtotal:		**$ 151,000**
Construction Contingency:	15%	$ 23,000
Mobilization	5%	$ 8,000
Prep ROW	$3,000 / STA	$ 2,000
Construction Cost TOTAL:		**$ 200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 200,000**
Engineering/Survey/Testing:		16%	$ 32,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 200,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:

Description: **Project No.** **B-19**

Name:	Sunrise Rd (6)
Limits:	545' S of Lake Dr to Old Settlers Blvd
Impact Fee Class:	4 Lane - Enhanced (AM)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	2,098
Service Area(s):	B

This project consists of the reconstruction of existing pavement to include a median.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	3,937	cy	$ 15.00	$ 59,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	4,196	lf	$ 16.00	$ 67,000
804	Turn Lanes and Median Openings	1,272	sy	$ 134.62	$ 171,000
				Paving Construction Cost Subtotal:	**$ 297,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 8,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 90,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 4,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 31,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 99,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 247,000**

Paving and Allowance Subtotal:		**$ 544,000**
Construction Contingency:	15%	$ 82,000
Mobilization	5%	$ 27,000
Prep ROW	$3,000 / STA	$ 6,000
Construction Cost TOTAL:		**$ 700,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 700,000**
Engineering/Survey/Testing:		16%	$ 112,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-20
Name:	College Park (1)	**This project consists of widening existing pavement with half of a 4 lane divided arterial.**		
Limits:	Satellite View to Avery Nelson Blvd			
Impact Fee Class:	4 Lane - Enhanced (1/2)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	3,948			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	14,354	cy	$ 15.00	$ 215,000
201	12" Asphalt (Type C)	7,817	ton	$ 72.00	$ 563,000
301	16" Base	5,264	cy	$ 55.00	$ 290,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	12,721	sy	$ 6.00	$ 76,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,369	gal	$ 6.00	$ 14,000
601	10' Concrete Sidewalk	78,960	sf	$ 5.50	$ 434,000
701	Machine Laid Curb & Gutter	7,896	lf	$ 16.00	$ 126,000
801	Turn Lanes and Median Openings	2,393	sy	$ 134.62	$ 322,000
				Paving Construction Cost Subtotal:	**$ 2,040,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 102,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 41,000
√	Roadway Drainage	Standard Internal System	30%	$ 612,000
√	Illumination		10%	$ 204,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 41,000
√	Sewer	Minor Adjustments	2%	$ 41,000
√	Turf and Erosion Control		4%	$ 82,000
√	Landscaping and Irrigation		2%	$ 41,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,164,000**

Paving and Allowance Subtotal:		**$ 3,204,000**
Construction Contingency:	15%	$ 481,000
Mobilization	8%	$ 256,000
Prep ROW	4%	$ 128,000
Construction Cost TOTAL:		**$ 4,100,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,100,000**
Engineering/Survey/Testing:		16%	$ 656,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 615,000
		Impact Fee Project Cost TOTAL:	**$ 5,400,000**

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City of Round Rock

2018 Roadway Impact Fee Study (Updated 2021)

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 10/25/2021

Project Information:

		Description:	Project No.	B-21
Name:	Wallin Bradley Drive	**This project consists of the construction of a new 3 lane undivided collector.**		
Limits:	Gulf Way to A.W. Grimes Blvd			
Impact Fee Class:	3 Lane - Proposed			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	3,636			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
109	Unclassified Street Excavation	6,373	cy	$ 15.00	$ 96,000
209	5" Asphalt (Type C)	3,474	ton	$ 72.00	$ 250,000
309	10" Base	3,509	cy	$ 55.00	$ 193,000
409	10" Lime Stabilization (with Lime @ 45#/sy)	13,108	sy	$ 6.00	$ 79,000
509	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,526	gal	$ 6.00	$ 15,000
609	10' Concrete Sidewalk	42,900	sf	$ 5.50	$ 236,000
709	Machine Laid Curb & Gutter	4,290	lf	$ 16.00	$ 69,000
809	Turn Lanes and Median Openings	0	sy	$ 134.62	$ -
				Paving Construction Cost Subtotal:	**$ 938,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 19,000
√	Roadway Drainage	Standard Internal System	30%	$ 281,000
√	Illumination		10%	$ 94,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 19,000
√	Sewer	Minor Adjustments	2%	$ 19,000
√	Turf and Erosion Control		4%	$ 38,000
√	Landscaping and Irrigation		2%	$ 19,000
			0%	$ -
	Allowance Subtotal:			**$ 489,000**

Paving and Allowance Subtotal:		**$ 1,427,000**
Construction Contingency:	15%	$ 214,000
Mobilization	8%	$ 114,000
Prep ROW	4%	$ 57,000
Construction Cost TOTAL:		**$ 1,900,000**

**Allowances based on % of Paving Construction Cost Subtotal

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,900,000**
Engineering/Survey/Testing:		16%	$ 304,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 570,000
		Impact Fee Project Cost TOTAL:	**$ 2,800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-22
Name:	College Park (2)	**This project consisted of the construction of a 4 lane divided arterial.**		
Limits:	Avery Nelson Rd to 1355' N of Old Settlers Blvd			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	4,800			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	34,904	cy	$ 15.00	$ 524,000
202	12" Asphalt (Type C)	19,008	ton	$ 72.00	$ 1,369,000
302	16" Base	12,800	cy	$ 55.00	$ 704,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	30,933	sy	$ 6.00	$ 186,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	5,760	gal	$ 6.00	$ 35,000
602	10' Concrete Sidewalk	96,000	sf	$ 5.50	$ 528,000
702	Machine Laid Curb & Gutter	19,200	lf	$ 16.00	$ 307,000
802	Turn Lanes and Median Openings	2,909	sy	$ 134.62	$ 392,000
				Paving Construction Cost Subtotal:	**$ 4,045,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 81,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,214,000
√	Illumination		10%	$ 405,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 81,000
√	Sewer	Minor Adjustments	2%	$ 81,000
√	Turf and Erosion Control		4%	$ 162,000
√	Landscaping and Irrigation		2%	$ 81,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,105,000**

Paving and Allowance Subtotal:		**$ 6,150,000**
Construction Contingency:	15%	$ 923,000
Mobilization	8%	$ 492,000
Prep ROW	4%	$ 246,000
Construction Cost TOTAL:		**$ 7,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 7,900,000**
Engineering/Survey/Testing:		16%	$ 1,264,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 2,370,000
		Impact Fee Project Cost TOTAL:	**$ 11,500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**B-23**
Name:	Seton Pkwy	**This project consists of the construction of a new 3 lane undivided collector.**		
Limits:	2400' N of Avery Nelson Blvd to Avery Nelson Blvd			
Impact Fee Class:	3 Lane - Existing			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	2,397			
Service Area(s):	B			

Roadway Construction Cost Projection		
	Construction Cost TOTAL:	**$ 2,113,056**

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:		-	**$ 2,113,056**
Engineering/Survey/Testing:		-	$ 269,931
ROW/Easement Acquisition:	Existing Alignment	-	$ -
		Overall Project Cost Total:	**$ 2,382,987**
		City Contribution:	**$ 2,043,320**
		Impact Fee Project Cost (86%):	**$ 2,043,320**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**B-24**
Name:	Medical Center Pkwy	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	Seton Pkwy to A.W. Grimes Blvd			
Impact Fee Class:	4 Lane - Existing			
Ultimate Class:	4 Lane - Existing			
Length (lf):	951			
Service Area(s):	B			

Roadway Construction Cost Projection		
Construction Cost TOTAL:	**$**	**838,347**

Impact Fee Project Cost Summary				
Item Description	**Notes:**	**Allowance**	**Item Cost**	
Construction:		-	**$**	**838,347**
Engineering/Survey/Testing:		-	$	107,094
ROW/Easement Acquisition:	Existing Alignment	-	$	-
		Overall Project Cost Total:	**$**	**945,441**
		City Contribution:	**$**	**810,679**
		Impact Fee Project Cost (86%):	**$**	**810,679**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-25
Name:	CR 112 (1)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	3,580			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	26,032	cy	$ 15.00	$ 390,000
203	12" Asphalt (Type C)	14,177	ton	$ 72.00	$ 1,021,000
303	16" Base	9,547	cy	$ 55.00	$ 525,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	23,071	sy	$ 6.00	$ 138,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	4,296	gal	$ 6.00	$ 26,000
603	10' Concrete Sidewalk	71,600	sf	$ 5.50	$ 394,000
703	Machine Laid Curb & Gutter	14,320	lf	$ 16.00	$ 229,000
803	Turn Lanes and Median Openings	2,170	sy	$ 134.62	$ 292,000
				Paving Construction Cost Subtotal:	**$ 3,015,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 151,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 60,000
√	Roadway Drainage	Standard Internal System	30%	$ 905,000
√	Illumination		10%	$ 302,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 60,000
√	Sewer	Minor Adjustments	2%	$ 60,000
√	Turf and Erosion Control		4%	$ 121,000
√	Landscaping and Irrigation		2%	$ 60,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,719,000**

Paving and Allowance Subtotal:		**$ 4,734,000**
Construction Contingency:	15%	$ 710,000
Mobilization	8%	$ 379,000
Prep ROW	4%	$ 189,000
Construction Cost TOTAL:		**$ 6,100,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,100,000**
Engineering/Survey/Testing:		16%	$ 976,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 915,000
		Impact Fee Project Cost TOTAL:	**$ 8,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-26
Name:	CR 112 (2)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	3580' E of A.W. Grimes Blvd to CR 117			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	2,244			
Service Area(s):	B,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	16,317	cy	$ 15.00	$ 245,000
203	12" Asphalt (Type C)	8,886	ton	$ 72.00	$ 640,000
303	16" Base	5,984	cy	$ 55.00	$ 329,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	14,461	sy	$ 6.00	$ 87,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,693	gal	$ 6.00	$ 16,000
603	10' Concrete Sidewalk	44,880	sf	$ 5.50	$ 247,000
703	Machine Laid Curb & Gutter	8,976	lf	$ 16.00	$ 144,000
803	Turn Lanes and Median Openings	1,360	sy	$ 134.62	$ 183,000
				Paving Construction Cost Subtotal:	**$ 1,891,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 95,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 38,000
√	Roadway Drainage	Standard Internal System	30%	$ 567,000
√	Illumination		10%	$ 189,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 38,000
√	Sewer	Minor Adjustments	2%	$ 38,000
√	Turf and Erosion Control		4%	$ 76,000
√	Landscaping and Irrigation		2%	$ 38,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,079,000**

Paving and Allowance Subtotal:		**$ 2,970,000**
Construction Contingency:	15%	$ 446,000
Mobilization	8%	$ 238,000
Prep ROW	4%	$ 119,000
Construction Cost TOTAL:		**$ 3,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,800,000**
Engineering/Survey/Testing:		16%	$ 608,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 570,000
		Impact Fee Project Cost TOTAL:	**$ 5,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-27
Name:	Kenney Fort Blvd (1)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	CR 117 to Old Settlers Blvd			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	5,598			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	40,706	cy	$ 15.00	$ 611,000
202	12" Asphalt (Type C)	22,168	ton	$ 72.00	$ 1,596,000
302	16" Base	14,928	cy	$ 55.00	$ 821,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	36,076	sy	$ 6.00	$ 216,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	6,718	gal	$ 6.00	$ 40,000
602	10' Concrete Sidewalk	111,960	sf	$ 5.50	$ 616,000
702	Machine Laid Curb & Gutter	22,392	lf	$ 16.00	$ 358,000
802	Turn Lanes and Median Openings	3,393	sy	$ 134.62	$ 457,000
				Paving Construction Cost Subtotal:	**$ 4,715,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 94,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,415,000
√	Illumination		10%	$ 472,000
√	Special Drainage Structures	Minor Stream Crossing		$ 200,000
√	Water	Minor Adjustments	2%	$ 94,000
√	Sewer	Minor Adjustments	2%	$ 94,000
√	Turf and Erosion Control		4%	$ 189,000
√	Landscaping and Irrigation		2%	$ 94,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,652,000**

Paving and Allowance Subtotal:		**$ 7,367,000**
Construction Contingency:	15%	$ 1,105,000
Mobilization	8%	$ 589,000
Prep ROW	4%	$ 295,000
Construction Cost TOTAL:		**$ 9,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 9,400,000**
Engineering/Survey/Testing:		16%	$ 1,504,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 2,820,000
		Impact Fee Project Cost TOTAL:	**$ 13,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **B-28**

Name:	Red Bud Ln (1)
Limits:	Guadalajara St to 160' N of Margarita Loop
Impact Fee Class:	4 Lane - Enhanced (1/2)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	1,867
Service Area(s):	B

This project consists of widening existing pavement with half of a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	6,788	cy	$ 15.00	$ 102,000
201	12" Asphalt (Type C)	3,697	ton	$ 72.00	$ 266,000
301	16" Base	2,489	cy	$ 55.00	$ 137,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	6,016	sy	$ 6.00	$ 36,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,120	gal	$ 6.00	$ 7,000
601	10' Concrete Sidewalk	37,340	sf	$ 5.50	$ 205,000
701	Machine Laid Curb & Gutter	3,734	lf	$ 16.00	$ 60,000
801	Turn Lanes and Median Openings	1,132	sy	$ 134.62	$ 152,000
				Paving Construction Cost Subtotal:	**$ 965,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 48,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 19,000
√	Roadway Drainage	Standard Internal System	30%	$ 290,000
√	Illumination		10%	$ 97,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 19,000
√	Sewer	Minor Adjustments	2%	$ 19,000
√	Turf and Erosion Control		4%	$ 39,000
√	Landscaping and Irrigation		2%	$ 19,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 550,000**

Paving and Allowance Subtotal:		**$ 1,515,000**
Construction Contingency:	15%	$ 227,000
Mobilization	8%	$ 121,000
Prep ROW	4%	$ 61,000
Construction Cost TOTAL:		**$ 2,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,000,000**
Engineering/Survey/Testing:		16%	$ 320,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 300,000
		Impact Fee Project Cost TOTAL:	**$ 2,600,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-29
Name:	Red Bud Ln (2)	**This project consists of widening existing pavement with half of a 4 lane divided arterial.**		
Limits:	160' N of Margarita Loop to CR 117			
Impact Fee Class:	4 Lane - Enhanced (1/2)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,845			
Service Area(s):	B,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	6,708	cy	$ 15.00	$ 101,000
201	12" Asphalt (Type C)	3,653	ton	$ 72.00	$ 263,000
301	16" Base	2,460	cy	$ 55.00	$ 135,000
401	10" Lime Stabilization (with Lime @ 45#/sy)	5,945	sy	$ 6.00	$ 36,000
501	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,107	gal	$ 6.00	$ 7,000
601	10' Concrete Sidewalk	36,900	sf	$ 5.50	$ 203,000
701	Machine Laid Curb & Gutter	3,690	lf	$ 16.00	$ 59,000
801	Turn Lanes and Median Openings	1,118	sy	$ 134.62	$ 151,000
				Paving Construction Cost Subtotal:	**$ 955,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 48,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 19,000
√	Roadway Drainage	Standard Internal System	30%	$ 287,000
√	Illumination		10%	$ 96,000
√	Special Drainage Structures	Bridge Crossing		$ 300,000
√	Water	Minor Adjustments	2%	$ 19,000
√	Sewer	Minor Adjustments	2%	$ 19,000
√	Turf and Erosion Control		4%	$ 38,000
√	Landscaping and Irrigation		2%	$ 19,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 845,000**

Paving and Allowance Subtotal:		**$ 1,800,000**
Construction Contingency:	15%	$ 270,000
Mobilization	8%	$ 144,000
Prep ROW	4%	$ 72,000
Construction Cost TOTAL:		**$ 2,300,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,300,000**
Engineering/Survey/Testing:		16%	$ 368,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 345,000
		Impact Fee Project Cost TOTAL:	**$ 3,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-30
Name:	Red Bud Ln (3)	**This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.**		
Limits:	CR 117 to Old Settlers Blvd			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,788			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	13,002	cy	$ 15.00	$ 195,000
203	12" Asphalt (Type C)	7,080	ton	$ 72.00	$ 510,000
303	16" Base	4,768	cy	$ 55.00	$ 262,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	11,523	sy	$ 6.00	$ 69,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,146	gal	$ 6.00	$ 13,000
603	10' Concrete Sidewalk	35,760	sf	$ 5.50	$ 197,000
703	Machine Laid Curb & Gutter	7,152	lf	$ 16.00	$ 114,000
803	Turn Lanes and Median Openings	1,084	sy	$ 134.62	$ 146,000
				Paving Construction Cost Subtotal:	**$ 1,506,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 75,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 30,000
√	Roadway Drainage	Standard Internal System	30%	$ 452,000
√	Illumination		10%	$ 151,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 30,000
√	Sewer	Minor Adjustments	2%	$ 30,000
√	Turf and Erosion Control		4%	$ 60,000
√	Landscaping and Irrigation		2%	$ 30,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 858,000**

Paving and Allowance Subtotal:		**$ 2,364,000**
Construction Contingency:	15%	$ 355,000
Mobilization	8%	$ 189,000
Prep ROW	4%	$ 95,000
Construction Cost TOTAL:		**$ 3,100,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,100,000**
Engineering/Survey/Testing:		16%	$ 496,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 465,000
		Impact Fee Project Cost TOTAL:	**$ 4,100,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-31
Name:	Old Settlers Blvd (1)	**This project consists of widening existing pavement to a 6 lane divided arterial.**		
Limits:	N Mays St to Sunrise Rd			
Impact Fee Class:	6 Lane - Enhanced (1/3)			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	7,045			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	26,440	cy	$ 15.00	$ 397,000
206	12" Asphalt (Type C)	6,027	ton	$ 72.00	$ 434,000
306	16" Base	9,741	cy	$ 55.00	$ 536,000
406	10" Lime Stabilization (with Lime @ 45#/sy)	25,049	sy	$ 6.00	$ 150,000
506	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	4,384	gal	$ 6.00	$ 26,000
606	10' Concrete Sidewalk	140,900	sf	$ 5.50	$ 775,000
706	Machine Laid Curb & Gutter	14,090	lf	$ 16.00	$ 225,000
806	Turn Lanes and Median Openings	0	sy	$ 134.62	$ -
				Paving Construction Cost Subtotal:	**$ 2,543,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 127,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 51,000
√	Roadway Drainage	Standard Internal System	30%	$ 763,000
√	Illumination		10%	$ 254,000
√	Special Drainage Structures	Minor Stream Crossing		$ 100,000
√	Water	Minor Adjustments	2%	$ 51,000
√	Sewer	Minor Adjustments	2%	$ 51,000
√	Turf and Erosion Control		4%	$ 102,000
√	Landscaping and Irrigation		2%	$ 51,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,550,000**

Paving and Allowance Subtotal:		**$ 4,093,000**
Construction Contingency:	15%	$ 614,000
Mobilization	8%	$ 327,000
Prep ROW	4%	$ 164,000
Construction Cost TOTAL:		**$ 5,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 5,200,000**
Engineering/Survey/Testing:		16%	$ 832,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 780,000
		Impact Fee Project Cost TOTAL:	**$ 6,800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-32
Name:	Old Settlers Blvd (2)	**This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial.**		
Limits:	Sunrise Rd to A.W. Grimes Blvd			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	5,955			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	58,668	cy	$ 15.00	$ 880,000
205	12" Asphalt (Type C)	33,189	ton	$ 72.00	$ 2,390,000
305	16" Base	22,350	cy	$ 55.00	$ 1,229,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	52,933	sy	$ 6.00	$ 318,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	10,057	gal	$ 6.00	$ 60,000
605	10' Concrete Sidewalk	119,100	sf	$ 5.50	$ 655,000
705	Machine Laid Curb & Gutter	23,820	lf	$ 16.00	$ 381,000
805	Turn Lanes and Median Openings	3,609	sy	$ 134.62	$ 486,000
				Paving Construction Cost Subtotal:	**$ 6,399,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 320,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 128,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,920,000
√	Illumination		10%	$ 640,000
√	Special Drainage Structures	Bridge Crossing		$ 800,000
√	Water	Minor Adjustments	2%	$ 128,000
√	Sewer	Minor Adjustments	2%	$ 128,000
√	Turf and Erosion Control		4%	$ 256,000
√	Landscaping and Irrigation		2%	$ 128,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 4,448,000**

Paving and Allowance Subtotal:		**$ 10,847,000**
Construction Contingency:	15%	$ 1,627,000
Mobilization	8%	$ 868,000
Prep ROW	4%	$ 434,000
Construction Cost TOTAL:		**$ 13,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 13,800,000**
Engineering/Survey/Testing:		16%	$ 2,208,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 2,070,000
		Impact Fee Project Cost TOTAL:	**$ 18,100,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-33
Name:	Old Settlers Blvd (3)	**This project consists of the construction of a new 4 lane divided arterial.**		
Limits:	Red Bud Ln to CR 110			
Impact Fee Class:	4 Lane - Proposed			
Ultimate Class:	4 Lane - Proposed			
Length (lf):	2,416			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	17,568	cy	$ 15.00	$ 264,000
202	12" Asphalt (Type C)	9,567	ton	$ 72.00	$ 689,000
302	16" Base	6,443	cy	$ 55.00	$ 354,000
402	10" Lime Stabilization (with Lime @ 45#/sy)	15,570	sy	$ 6.00	$ 93,000
502	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,899	gal	$ 6.00	$ 17,000
602	10' Concrete Sidewalk	48,320	sf	$ 5.50	$ 266,000
702	Machine Laid Curb & Gutter	9,664	lf	$ 16.00	$ 155,000
802	Turn Lanes and Median Openings	1,464	sy	$ 134.62	$ 197,000
				Paving Construction Cost Subtotal:	**$ 2,035,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 41,000
√	Roadway Drainage	Standard Internal System	30%	$ 611,000
√	Illumination		10%	$ 204,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 41,000
√	Sewer	Minor Adjustments	2%	$ 41,000
√	Turf and Erosion Control		4%	$ 81,000
√	Landscaping and Irrigation		2%	$ 41,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,060,000**

Paving and Allowance Subtotal:		**$ 3,095,000**
Construction Contingency:	15%	$ 464,000
Mobilization	8%	$ 248,000
Prep ROW	4%	$ 124,000
Construction Cost TOTAL:		**$ 4,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,000,000**
Engineering/Survey/Testing:		16%	$ 640,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 1,200,000
		Impact Fee Project Cost TOTAL:	**$ 5,800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-34
Name:	Spur 379 (N Mays St)	**This project consists of the reconstruction of existing pavement to include a median.**		
Limits:	540' N of Steam Way to Northwest Dr			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	7,524			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	14,119	cy	$ 15.00	$ 212,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	15,048	lf	$ 16.00	$ 241,000
804	Turn Lanes and Median Openings	4,560	sy	$ 134.62	$ 614,000
				Paving Construction Cost Subtotal:	**$ 1,067,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 28,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 324,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 15,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 110,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 305,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 797,000**

Paving and Allowance Subtotal:		**$ 1,864,000**
Construction Contingency:	15%	$ 280,000
Mobilization	5%	$ 93,000
Prep ROW	$3,000 / STA	$ 23,000
Construction Cost TOTAL:		**$ 2,300,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,300,000**
Engineering/Survey/Testing:		16%	$ 368,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 2,700,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:

Description: **Project No.** **B-35**

Name:	Sunrise Rd (7)
Limits:	Old Settlers Blvd to Country Aire Dr
Impact Fee Class:	4 Lane - Enhanced (AM)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	1,485
Service Area(s):	B

This project consists of the reconstruction of existing pavement to include a median.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	2,787	cy	$ 15.00	$ 42,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	2,970	lf	$ 16.00	$ 48,000
804	Turn Lanes and Median Openings	900	sy	$ 134.62	$ 121,000
				Paving Construction Cost Subtotal:	**$ 211,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 6,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 64,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 3,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 22,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 60,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 170,000**

Paving and Allowance Subtotal:		**$ 381,000**
Construction Contingency:	15%	$ 57,000
Mobilization	5%	$ 19,000
Prep ROW	$3,000 / STA	$ 4,000
Construction Cost TOTAL:		**$ 500,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 500,000**
Engineering/Survey/Testing:		16%	$ 80,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 600,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-36
Name:	FM 1460 (A.W. Grimes Blvd) (1)	**This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial.**		
Limits:	Old Settlers Blvd to 375' S of Chandler Creek Blvd			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,846			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	18,187	cy	$ 15.00	$ 273,000
205	12" Asphalt (Type C)	10,288	ton	$ 72.00	$ 741,000
305	16" Base	6,928	cy	$ 55.00	$ 381,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	16,409	sy	$ 6.00	$ 98,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	3,118	gal	$ 6.00	$ 19,000
605	10' Concrete Sidewalk	36,920	sf	$ 5.50	$ 203,000
705	Machine Laid Curb & Gutter	7,384	lf	$ 16.00	$ 118,000
805	Turn Lanes and Median Openings	1,119	sy	$ 134.62	$ 151,000
				Paving Construction Cost Subtotal:	**$ 1,984,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 99,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 40,000
√	Roadway Drainage	Standard Internal System	30%	$ 595,000
√	Illumination		10%	$ 198,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 40,000
√	Sewer	Minor Adjustments	2%	$ 40,000
√	Turf and Erosion Control		4%	$ 79,000
√	Landscaping and Irrigation		2%	$ 40,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,131,000**

Paving and Allowance Subtotal:		**$ 3,115,000**
Construction Contingency:	15%	$ 467,000
Mobilization	8%	$ 249,000
Prep ROW	4%	$ 125,000
Construction Cost TOTAL:		**$ 4,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,000,000**
Engineering/Survey/Testing:		16%	$ 640,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 400,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 1,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-37
Name:	FM 1460 (A.W. Grimes Blvd) (2)	**This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial.**		
Limits:	375' S of Chandler Creek Blvd to 1250' N of Tiger Tr			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,055			
Service Area(s):	B,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	10,394	cy	$ 15.00	$ 156,000
205	12" Asphalt (Type C)	5,880	ton	$ 72.00	$ 423,000
305	16" Base	3,960	cy	$ 55.00	$ 218,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	9,378	sy	$ 6.00	$ 56,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,782	gal	$ 6.00	$ 11,000
605	10' Concrete Sidewalk	21,100	sf	$ 5.50	$ 116,000
705	Machine Laid Curb & Gutter	4,220	lf	$ 16.00	$ 68,000
805	Turn Lanes and Median Openings	639	sy	$ 134.62	$ 86,000
				Paving Construction Cost Subtotal:	**$ 1,134,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 57,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 23,000
√	Roadway Drainage	Standard Internal System	30%	$ 340,000
√	Illumination		10%	$ 113,000
√	Special Drainage Structures	Bridge Crossing		$ 1,300,000
√	Water	Minor Adjustments	2%	$ 23,000
√	Sewer	Minor Adjustments	2%	$ 23,000
√	Turf and Erosion Control		4%	$ 45,000
√	Landscaping and Irrigation		2%	$ 23,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,947,000**

Paving and Allowance Subtotal:		**$ 3,081,000**
Construction Contingency:	15%	$ 462,000
Mobilization	8%	$ 246,000
Prep ROW	4%	$ 123,000
Construction Cost TOTAL:		**$ 4,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,000,000**
Engineering/Survey/Testing:		16%	$ 640,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 400,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 1,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-38
Name:	FM 1460 (A.W. Grimes Blvd) (3)	**This project consists of the reconstruction of the existing pavement to a 6 lane divided arterial.**		
Limits:	1250' N of Tiger Trl to US 79			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	6,601			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	65,032	cy	$ 15.00	$ 975,000
205	12" Asphalt (Type C)	36,790	ton	$ 72.00	$ 2,649,000
305	16" Base	24,774	cy	$ 55.00	$ 1,363,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	58,676	sy	$ 6.00	$ 352,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	11,148	gal	$ 6.00	$ 67,000
605	10' Concrete Sidewalk	132,020	sf	$ 5.50	$ 726,000
705	Machine Laid Curb & Gutter	26,404	lf	$ 16.00	$ 422,000
805	Turn Lanes and Median Openings	4,001	sy	$ 134.62	$ 539,000
				Paving Construction Cost Subtotal:	**$ 7,093,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 355,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 142,000
√	Roadway Drainage	Standard Internal System	30%	$ 2,128,000
√	Illumination		10%	$ 709,000
√	Special Drainage Structures	Bridge Crossing		$ 1,100,000
√	Water	Minor Adjustments	2%	$ 142,000
√	Sewer	Minor Adjustments	2%	$ 142,000
√	Turf and Erosion Control		4%	$ 284,000
√	Landscaping and Irrigation		2%	$ 142,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 5,144,000**

Paving and Allowance Subtotal:		**$ 12,237,000**
Construction Contingency:	15%	$ 1,836,000
Mobilization	8%	$ 979,000
Prep ROW	4%	$ 489,000
Construction Cost TOTAL:		**$ 15,600,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 15,600,000**
Engineering/Survey/Testing:		16%	$ 2,496,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 1,560,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 3,940,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-39
Name:	Kenney Fort Blvd (2)	**This project consists of widening existing pavement with half of a 6 lane divided arterial.**		
Limits:	Old Settler's Blvd to 2540' S of Old Settler's Blvd			
Impact Fee Class:	6 Lane - Proposed (1/2)			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	1,566			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
107	Unclassified Street Excavation	7,714	cy	$ 15.00	$ 116,000
207	12" Asphalt (Type C)	4,364	ton	$ 72.00	$ 314,000
307	16" Base	2,939	cy	$ 55.00	$ 162,000
407	10" Lime Stabilization (with Lime @ 45#/sy)	6,960	sy	$ 6.00	$ 42,000
507	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,645	gal	$ 6.00	$ 16,000
607	10' Concrete Sidewalk	31,320	sf	$ 5.50	$ 172,000
707	Machine Laid Curb & Gutter	3,132	lf	$ 16.00	$ 50,000
807	Turn Lanes and Median Openings	949	sy	$ 134.62	$ 128,000
				Paving Construction Cost Subtotal:	**$ 1,000,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 50,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 20,000
√	Roadway Drainage	Standard Internal System	30%	$ 300,000
√	Illumination		10%	$ 100,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 20,000
√	Sewer	Minor Adjustments	2%	$ 20,000
√	Turf and Erosion Control		4%	$ 40,000
√	Landscaping and Irrigation		2%	$ 20,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 570,000**

Paving and Allowance Subtotal:		**$ 1,570,000**
Construction Contingency:	15%	$ 236,000
Mobilization	8%	$ 126,000
Prep ROW	4%	$ 63,000
Construction Cost TOTAL:		**$ 2,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,000,000**
Engineering/Survey/Testing:		16%	$ 320,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 300,000
		Impact Fee Project Cost TOTAL:	**$ 2,600,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-40
Name:	Kenney Fort Blvd (3)	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**		
Limits:	Old Settler's Blvd to 2540' S of Old Settler's Blvd			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	970			
Service Area(s):	B,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	9,556	cy	$ 15.00	$ 143,000
208	5" Asphalt (Type C)	5,406	ton	$ 72.00	$ 389,000
308	10" Base	3,640	cy	$ 55.00	$ 200,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	8,622	sy	$ 6.00	$ 52,000
508	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,638	gal	$ 6.00	$ 10,000
608	10' Concrete Sidewalk	19,400	sf	$ 5.50	$ 107,000
708	Machine Laid Curb & Gutter	3,880	lf	$ 16.00	$ 62,000
808	Turn Lanes and Median Openings	588	sy	$ 134.62	$ 79,000
				Paving Construction Cost Subtotal:	**$ 1,042,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 52,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 21,000
√	Roadway Drainage	Standard Internal System	30%	$ 313,000
√	Illumination		10%	$ 104,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 21,000
√	Sewer	Minor Adjustments	2%	$ 21,000
√	Turf and Erosion Control		4%	$ 42,000
√	Landscaping and Irrigation		2%	$ 21,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 595,000**

Paving and Allowance Subtotal:		**$ 1,637,000**
Construction Contingency:	15%	$ 246,000
Mobilization	8%	$ 131,000
Prep ROW	4%	$ 65,000
Construction Cost TOTAL:		**$ 2,100,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,100,000**
Engineering/Survey/Testing:		16%	$ 336,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 315,000
		Impact Fee Project Cost TOTAL:	**$ 2,800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	B-41
Name:	Kenney Fort Blvd (4)	**This project consists of the construction of a new 6 lane divided arterial.**		
Limits:	2540' S of Old Settlers Blvd to Chandler Creek Blvd			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	5,010			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	49,358	cy	$ 15.00	$ 740,000
208	5" Asphalt (Type C)	27,922	ton	$ 72.00	$ 2,010,000
308	10" Base	18,803	cy	$ 55.00	$ 1,034,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	44,533	sy	$ 6.00	$ 267,000
508	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	8,461	gal	$ 6.00	$ 51,000
608	10' Concrete Sidewalk	100,200	sf	$ 5.50	$ 551,000
708	Machine Laid Curb & Gutter	20,040	lf	$ 16.00	$ 321,000
808	Turn Lanes and Median Openings	3,036	sy	$ 134.62	$ 409,000
				Paving Construction Cost Subtotal:	**$ 5,383,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 108,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,615,000
√	Illumination		10%	$ 538,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 108,000
√	Sewer	Minor Adjustments	2%	$ 108,000
√	Turf and Erosion Control		4%	$ 215,000
√	Landscaping and Irrigation		2%	$ 108,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 2,800,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 8,183,000**
Construction Contingency:	15%	$ 1,227,000
Mobilization	8%	$ 655,000
Prep ROW	4%	$ 327,000
Construction Cost TOTAL:		**$ 10,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 10,400,000**
Engineering/Survey/Testing:		16%	$ 1,664,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 3,120,000
		Impact Fee Project Cost TOTAL:	**$ 15,200,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:

		Description:	Project No.	B-42
Name:	Kenney Fort Blvd (5)	**This project consists of the reconstruction of**		
Limits:	Chandler Creek Blvd to Joe DiMaggio I	**existing pavement to a 6 lane divided arterial.**		
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	1,565			
Service Area(s):	B			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	15,418	cy	$ 15.00	$ 231,000
205	12" Asphalt (Type C)	8,722	ton	$ 72.00	$ 628,000
305	16" Base	5,874	cy	$ 55.00	$ 323,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	13,911	sy	$ 6.00	$ 83,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,643	gal	$ 6.00	$ 16,000
605	10' Concrete Sidewalk	31,300	sf	$ 5.50	$ 172,000
705	Machine Laid Curb & Gutter	6,260	lf	$ 16.00	$ 100,000
805	Turn Lanes and Median Openings	948	sy	$ 134.62	$ 128,000
				Paving Construction Cost Subtotal:	**$ 1,681,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 84,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 34,000
√	Roadway Drainage	Standard Internal System	30%	$ 504,000
√	Illumination		10%	$ 168,000
√	Special Drainage Structures	Bridge Crossing		$ 800,000
√	Water	Minor Adjustments	2%	$ 34,000
√	Sewer	Minor Adjustments	2%	$ 34,000
√	Turf and Erosion Control		4%	$ 67,000
√	Landscaping and Irrigation		2%	$ 34,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,759,000**

Paving and Allowance Subtotal:		**$ 3,440,000**
Construction Contingency:	15%	$ 516,000
Mobilization	8%	$ 275,000
Prep ROW	4%	$ 138,000
Construction Cost TOTAL:		**$ 4,400,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,400,000**
Engineering/Survey/Testing:		16%	$ 704,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 660,000
		Impact Fee Project Cost TOTAL:	**$ 5,800,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: Project No. **B-43**

Name:	Red Bud Ln (4)
Limits:	Old Settlers Blvd to 170' N of Joseph St
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	2,356
Service Area(s):	B

This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	17,132	cy	$ 15.00	$ 257,000
203	12" Asphalt (Type C)	9,330	ton	$ 72.00	$ 672,000
303	16" Base	6,283	cy	$ 55.00	$ 346,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	15,183	sy	$ 6.00	$ 91,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,827	gal	$ 6.00	$ 17,000
603	10' Concrete Sidewalk	47,120	sf	$ 5.50	$ 259,000
703	Machine Laid Curb & Gutter	9,424	lf	$ 16.00	$ 151,000
803	Turn Lanes and Median Openings	1,428	sy	$ 134.62	$ 192,000
				Paving Construction Cost Subtotal:	**$ 1,985,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 99,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 40,000
√	Roadway Drainage	Standard Internal System	30%	$ 596,000
√	Illumination		10%	$ 199,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 40,000
√	Sewer	Minor Adjustments	2%	$ 40,000
√	Turf and Erosion Control		4%	$ 79,000
√	Landscaping and Irrigation		2%	$ 40,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 1,133,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 3,118,000**
Construction Contingency:	15%	$ 468,000
Mobilization	8%	$ 249,000
Prep ROW	4%	$ 125,000
Construction Cost TOTAL:		**$ 4,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,000,000**
Engineering/Survey/Testing:		16%	$ 640,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 600,000
		Impact Fee Project Cost TOTAL:	**$ 5,200,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description:		**Project No.**	**B-44**
Name:	Red Bud Ln (5)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**	
Limits:	170' N of Joseph St to 160' S of Covered Wagon Trl		
Impact Fee Class:	4 Lane - Enhanced		
Ultimate Class:	4 Lane - Enhanced		
Length (lf):	957		
Service Area(s):	B,ETJ/Other		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	6,959	cy	$ 15.00	$ 104,000
203	12" Asphalt (Type C)	3,790	ton	$ 72.00	$ 273,000
303	16" Base	2,552	cy	$ 55.00	$ 140,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	6,167	sy	$ 6.00	$ 37,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,148	gal	$ 6.00	$ 7,000
603	10' Concrete Sidewalk	19,140	sf	$ 5.50	$ 105,000
703	Machine Laid Curb & Gutter	3,828	lf	$ 16.00	$ 61,000
803	Turn Lanes and Median Openings	580	sy	$ 134.62	$ 78,000
				Paving Construction Cost Subtotal:	**$ 805,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 40,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 16,000
√	Roadway Drainage	Standard Internal System	30%	$ 242,000
√	Illumination		10%	$ 81,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 16,000
√	Sewer	Minor Adjustments	2%	$ 16,000
√	Turf and Erosion Control		4%	$ 32,000
√	Landscaping and Irrigation		2%	$ 16,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 459,000**

Paving and Allowance Subtotal:		**$ 1,264,000**
Construction Contingency:	15%	$ 190,000
Mobilization	8%	$ 101,000
Prep ROW	4%	$ 51,000
Construction Cost TOTAL:		**$ 1,700,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,700,000**
Engineering/Survey/Testing:		16%	$ 272,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 255,000
		Impact Fee Project Cost TOTAL:	**$ 2,200,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **B-45**

Name:	Red Bud Ln (6)
Limits:	160' S of Covered Wagon Trl to US 79
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	2,141
Service Area(s):	B

This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	15,569	cy	$ 15.00	$ 234,000
203	12" Asphalt (Type C)	8,478	ton	$ 72.00	$ 610,000
303	16" Base	5,709	cy	$ 55.00	$ 314,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	13,798	sy	$ 6.00	$ 83,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,569	gal	$ 6.00	$ 15,000
603	10' Concrete Sidewalk	42,820	sf	$ 5.50	$ 236,000
703	Machine Laid Curb & Gutter	8,564	lf	$ 16.00	$ 137,000
803	Turn Lanes and Median Openings	1,298	sy	$ 134.62	$ 175,000
				Paving Construction Cost Subtotal:	**$ 1,804,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 90,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 36,000
√	Roadway Drainage	Standard Internal System	30%	$ 541,000
√	Illumination		10%	$ 180,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 36,000
√	Sewer	Minor Adjustments	2%	$ 36,000
√	Turf and Erosion Control		4%	$ 72,000
√	Landscaping and Irrigation		2%	$ 36,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,027,000**

Paving and Allowance Subtotal:		**$ 2,831,000**
Construction Contingency:	15%	$ 425,000
Mobilization	8%	$ 226,000
Prep ROW	4%	$ 113,000
Construction Cost TOTAL:		**$ 3,600,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,600,000**
Engineering/Survey/Testing:		16%	$ 576,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 540,000
		Impact Fee Project Cost TOTAL:	**$ 4,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description:		**Project No.**	**B-46, C-6**
Name:	US 79 (1)	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**	
Limits:	N Mays St to 200' E of Red Bud Ln		
Impact Fee Class:	6 Lane - Enhanced		
Ultimate Class:	6 Lane - Enhanced		
Length (lf):	22,817		
Service Area(s):	B,C		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	224,790	cy	$ 15.00	$ 3,372,000
205	12" Asphalt (Type C)	127,167	ton	$ 72.00	$ 9,156,000
305	16" Base	85,634	cy	$ 55.00	$ 4,710,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	202,818	sy	$ 6.00	$ 1,217,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	38,535	gal	$ 6.00	$ 231,000
605	10' Concrete Sidewalk	456,340	sf	$ 5.50	$ 2,510,000
705	Machine Laid Curb & Gutter	91,268	lf	$ 16.00	$ 1,460,000
805	Turn Lanes and Median Openings	13,828	sy	$ 134.62	$ 1,862,000
				Paving Construction Cost Subtotal:	**$ 24,518,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 1,226,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 490,000
√	Roadway Drainage	Standard Internal System	30%	$ 7,355,000
√	Illumination		10%	$ 2,452,000
√	Special Drainage Structures	Bridge Crossing		$ 3,100,000
√	Water	Minor Adjustments	2%	$ 490,000
√	Sewer	Minor Adjustments	2%	$ 490,000
√	Turf and Erosion Control		4%	$ 981,000
√	Landscaping and Irrigation		2%	$ 490,000
	Miscellaneous:		0%	$ -
			Allowance Subtotal:	**$ 17,074,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 41,592,000**
Construction Contingency:	15%	$ 6,239,000
Mobilization	8%	$ 3,327,000
Prep ROW	4%	$ 1,664,000
Construction Cost TOTAL:		**$ 52,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 52,900,000**
Engineering/Survey/Testing:		16%	$ 8,464,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 5,290,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 13,340,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **B-47**

Name:	US 79 (2)
Limits:	200' E of Red Bud Ln to 1690' E of Red Bud Ln
Impact Fee Class:	6 Lane - Enhanced
Ultimate Class:	6 Lane - Enhanced
Length (lf):	1,488
Service Area(s):	B,ETJ/Other

This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	14,660	cy	$ 15.00	$ 220,000
205	12" Asphalt (Type C)	8,293	ton	$ 72.00	$ 597,000
305	16" Base	5,585	cy	$ 55.00	$ 307,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	13,227	sy	$ 6.00	$ 79,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,513	gal	$ 6.00	$ 15,000
605	10' Concrete Sidewalk	29,760	sf	$ 5.50	$ 164,000
705	Machine Laid Curb & Gutter	5,952	lf	$ 16.00	$ 95,000
805	Turn Lanes and Median Openings	902	sy	$ 134.62	$ 121,000
				Paving Construction Cost Subtotal:	**$ 1,598,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 80,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 32,000
√	Roadway Drainage	Standard Internal System	30%	$ 479,000
√	Illumination		10%	$ 160,000
√	Special Drainage Structures	Minor Stream Crossing		$ 300,000
√	Water	Minor Adjustments	2%	$ 32,000
√	Sewer	Minor Adjustments	2%	$ 32,000
√	Turf and Erosion Control		4%	$ 64,000
√	Landscaping and Irrigation		2%	$ 32,000
	Miscellaneous:		0%	$ -
			Allowance Subtotal:	**$ 1,211,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 2,809,000**
Construction Contingency:	15%	$ 421,000
Mobilization	8%	$ 225,000
Prep ROW	4%	$ 112,000
Construction Cost TOTAL:		**$ 3,600,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,600,000**
Engineering/Survey/Testing:		16%	$ 576,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 360,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 900,000**

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City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area C

#	IF Class	Project	Type	Limits		Percent in Service Area	Project Cost	Total Cost in Service Area
				From	To			
A-31, C-1	6 Lane - Enhanced	RM 620	Widening	Deepwood Dr	IH 35 SBFR	50%	$ 12,560,624	$ 6,280,312
C-2	4 Lane - Enhanced	CR 172 (1)	Widening	McNeil Dr	Lynda Sue St	50%	$ 2,400,000	$ 1,200,000
C-3	4 Lane - Enhanced	CR 172 (2)	Widening	Hesters Crossing Rd	445' N of Hesters Crossing Rd	50%	$ 1,000,000	$ 500,000
C-4	4 Lane - Enhanced (AM)	Hesters Crossing Rd	Access Management	Dry Creek Dr	IH 35 SBFR	100%	$ 700,000	$ 700,000
C-5	4 Lane - Enhanced	Bratton Ln	Widening	IH 35 SBFR	1160' S of Michael Angelo Way	50%	$ 5,000,000	$ 2,500,000
B-46, C-6	6 Lane - Enhanced	US 79 (1)	Widening	N Mays St	200' E of Red Bud Ln	50%	$ 13,340,000	$ 6,670,000
C-7	3 Lane - Proposed	McNeil Extension	Under Construction	S Mays St	Georgetown St	100%	$ 4,799,620	$ 4,799,620
C-8	4 Lane - Enhanced (AM)	S Mays St	Access Management	Nash St	Gattis School Rd	100%	$ 1,400,000	$ 1,400,000
C-9	6 Lane - Existing	Kenney Fort Blvd (1)	Previously Constructed	US 79	Forest Creek Blvd	100%	$ 23,375,873	$ 23,375,873
C-10	6 Lane - Proposed	Kenney Fort Blvd (2)	New	Forest Creek Dr	830' S of Gattis School Rd	100%	$ 24,500,000	$ 24,500,000
C-11	4 Lane - Enhanced (AM)	Red Bud Ln (1)	Access Management	Forest Ridge Blvd	265' S of Forest Ridge Blvd	50%	$ 100,000	$ 50,000
C-12	4 Lane - Enhanced	Red Bud Ln (2)	Widening	265' S of Forest Ridge Blvd	280' S of Woodlawn Ln	100%	$ 1,300,000	$ 1,300,000
C-13	4 Lane - Enhanced	Red Bud Ln (3)	Widening	280' S of Woodlawn Ln	130' S of Old Oaks Dr	50%	$ 1,300,000	$ 650,000
C-14	4 Lane - Enhanced	Red Bud Ln (4)	Widening	130' S of Old Oaks Dr	315' S of Country Dr	100%	$ 1,300,000	$ 1,300,000
C-15	4 Lane - Enhanced	Red Bud Ln (5)	Widening	315' S of Country Dr	Wildflower Trl	50%	$ 1,300,000	$ 650,000
C-16	4 Lane - Enhanced	Red Bud Ln (6)	Widening	Wildflower Trl	295' S of Wildflower Trl	100%	$ 700,000	$ 700,000
C-17	4 Lane - Enhanced	Red Bud Ln (7)	Widening	295' S of Wildflower Trl	840' N of Forest Creek Dr	50%	$ 7,700,000	$ 3,850,000
C-18	4 Lane - Enhanced	Red Bud Ln (8)	Widening	840' N of Forest Creek Dr	340' S of Forest Creek Dr	100%	$ 2,600,000	$ 2,600,000
C-19	4 Lane - Enhanced	Red Bud Ln (9)	Widening	340' S of Forest Creek Dr	Gattis School Rd	50%	$ 8,300,000	$ 4,150,000
C-20	4 Lane - Enhanced	Gattis School Rd (1)	Widening	S Mays St	Surrey Dr	100%	$ 7,600,000	$ 7,600,000
C-21	6 Lane - Enhanced	Gattis School Rd (2)	Widening	Windy Park Dr	Red Bud Ln	100%	$ 48,300,000	$ 48,300,000
C-22	4 Lane - Enhanced (AM)	S Mays St / Dell Way	Access Management	Gattis School Rd	Greenlawn Blvd	100%	$ 2,400,000	$ 2,400,000
C-23	6 Lane - Proposed	Kenney Fort Blvd (3)	New	830' S of Gattis School Rd	SH 45	50%	$ 6,700,000	$ 3,350,000
C-24	6 Lane - Enhanced (1/3)	Greenlawn Blvd	Median Widening	IH 35 NBFR	SH 45 EBFR	100%	$ 6,400,000	$ 6,400,000
C-25	3 Lane - Proposed	Roundville Ln	Under Construction	A.W. Grimes Blvd	2060' W of A.W. Grimes Blvd	100%	$ 1,134,412	$ 1,134,412
C-26	4 Lane - Enhanced	Schultz (1)	Widening	SH 45 EBFR	290' S of SH 45 EBFR	100%	$ 700,000	$ 700,000
C-27	4 Lane - Enhanced	Schultz (2)	Widening	290' S of SH 45 EBFR	255' S of Autumn Sage Way	50%	$ 5,900,000	$ 2,950,000
						TOTAL	$ 192,810,529	$ 160,010,217

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Intersection Improvements - Service Area C

#	Project	Improvement		Percent in Service Area	Project Cost	Total Cost in Service Area
		Improvement 1	Improvement 2			
AI-4, CI-1	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%	$ 392,000	$ 196,000
AI-5, CI-2	IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%	$ 588,000	$ 294,000
CI-3	IH 35 and Hesters Crossing Rd	TURN LANES		100%	$ 196,000	$ 196,000
CI-4	IH 35 and Louis Henna Blvd (SH 45 FR)	TURN LANES	SIGNAL	100%	$ 2,037,000	$ 2,037,000
CI-5	Mays St and Liberty Ave	SIGNAL		100%	$ 353,000	$ 353,000
CI-6	Mays St and Gattis School Rd	TURN LANES		100%	$ 1,847,503	$ 1,847,503
CI-7	Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER		100%	$ 784,000	$ 784,000
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER	TURN LANES	50%	$ 2,041,000	$ 1,020,500
CI-9	A.W. Grimes Blvd and Gattis School Rd	TURN LANES		100%	$ 1,921,000	$ 1,921,000
CI-10	Red Bud Ln and Gattis School Rd	TURN LANES		100%	$ 1,595,000	$ 1,595,000
-	Update ITS and Traffic Managmenet Infrastructure			33%	$ 20,900,000	$ 6,966,667
				TOTAL	$ 32,654,503	$ 17,210,670

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**A-31, C-1**
Name:	RM 620	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**		
Limits:	Deepwood Dr to IH 35 SBFR			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	4,922			
Service Area(s):	A,C			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	**$ 25,545,000**

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:		-	**$ 25,545,000**
Engineering/Survey/Testing:		-	$ 3,116,086
ROW/Easement Acquisition:	TxDOT Roadway	-	$ 14,629,808
		Overall Project Cost Total:	**$ 43,290,894**
		City Contribution:	**$ 12,560,624**
		Impact Fee Project Cost (29%):	**$ 12,560,624**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-2
Name:	CR 172 (1)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	McNeil Dr to Lynda Sue St			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,053			
Service Area(s):	C,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	7,657	cy	$ 15.00	$ 115,000
203	12" Asphalt (Type C)	4,170	ton	$ 72.00	$ 300,000
303	16" Base	2,808	cy	$ 55.00	$ 154,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	6,786	sy	$ 6.00	$ 41,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,264	gal	$ 6.00	$ 8,000
603	10' Concrete Sidewalk	21,060	sf	$ 5.50	$ 116,000
703	Machine Laid Curb & Gutter	4,212	lf	$ 16.00	$ 67,000
803	Turn Lanes and Median Openings	638	sy	$ 134.62	$ 86,000
				Paving Construction Cost Subtotal:	**$ 887,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 44,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 18,000
√	Roadway Drainage	Standard Internal System	30%	$ 266,000
√	Illumination		10%	$ 89,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 18,000
√	Sewer	Minor Adjustments	2%	$ 18,000
√	Turf and Erosion Control		4%	$ 35,000
√	Landscaping and Irrigation		2%	$ 18,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 506,000**

Paving and Allowance Subtotal:		**$ 1,393,000**
Construction Contingency:	15%	$ 209,000
Mobilization	8%	$ 111,000
Prep ROW	4%	$ 56,000
Construction Cost TOTAL:		**$ 1,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,800,000**
Engineering/Survey/Testing:		16%	$ 288,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 270,000
		Impact Fee Project Cost TOTAL:	**$ 2,400,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. C-3

Name:	CR 172 (2)
Limits:	Hesters Crossing Rd to 445' N of Hesters Crossing R
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	445
Service Area(s):	C,ETJ/Other

This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,236	cy	$ 15.00	$ 49,000
203	12" Asphalt (Type C)	1,762	ton	$ 72.00	$ 127,000
303	16" Base	1,187	cy	$ 55.00	$ 65,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	2,868	sy	$ 6.00	$ 17,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	534	gal	$ 6.00	$ 3,000
603	10' Concrete Sidewalk	8,900	sf	$ 5.50	$ 49,000
703	Machine Laid Curb & Gutter	1,780	lf	$ 16.00	$ 28,000
803	Turn Lanes and Median Openings	270	sy	$ 134.62	$ 36,000
				Paving Construction Cost Subtotal:	**$ 374,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 19,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 7,000
√	Roadway Drainage	Standard Internal System	30%	$ 112,000
√	Illumination		10%	$ 37,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 7,000
√	Sewer	Minor Adjustments	2%	$ 7,000
√	Turf and Erosion Control		4%	$ 15,000
√	Landscaping and Irrigation		2%	$ 7,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 211,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 585,000**
Construction Contingency:	15%	$ 88,000
Mobilization	8%	$ 47,000
Prep ROW	4%	$ 23,000
Construction Cost TOTAL:		**$ 800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 800,000**
Engineering/Survey/Testing:		16%	$ 128,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 120,000
		Impact Fee Project Cost TOTAL:	**$ 1,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-4
Name:	Hesters Crossing Rd	**This project consists of the construction of a median in the existing center turn lane.**		
Limits:	Dry Creek Dr to IH 35 SBFR			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,691			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	3,173	cy	$ 15.00	$ 48,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	3,382	lf	$ 16.00	$ 54,000
804	Turn Lanes and Median Openings	1,025	sy	$ 134.62	$ 138,000
				Paving Construction Cost Subtotal:	**$ 240,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 6,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 73,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 3,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 25,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 80,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 202,000**

Paving and Allowance Subtotal:		**$ 442,000**
Construction Contingency:	15%	$ 66,000
Mobilization	5%	$ 22,000
Prep ROW	$3,000 / STA	$ 5,000
Construction Cost TOTAL:		**$ 600,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 600,000**
Engineering/Survey/Testing:		16%	$ 96,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-5
Name:	Bratton Ln	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	IH 35 SBFR to 1160' S of Michael Angelo Way			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,215			
Service Area(s):	C,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	16,107	cy	$ 15.00	$ 242,000
203	12" Asphalt (Type C)	8,771	ton	$ 72.00	$ 632,000
303	16" Base	5,907	cy	$ 55.00	$ 325,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	14,274	sy	$ 6.00	$ 86,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	2,658	gal	$ 6.00	$ 16,000
603	10' Concrete Sidewalk	44,300	sf	$ 5.50	$ 244,000
703	Machine Laid Curb & Gutter	8,860	lf	$ 16.00	$ 142,000
803	Turn Lanes and Median Openings	1,342	sy	$ 134.62	$ 181,000
				Paving Construction Cost Subtotal:	**$ 1,868,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 93,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 37,000
√	Roadway Drainage	Standard Internal System	30%	$ 560,000
√	Illumination		10%	$ 187,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 37,000
√	Sewer	Minor Adjustments	2%	$ 37,000
√	Turf and Erosion Control		4%	$ 75,000
√	Landscaping and Irrigation		2%	$ 37,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,063,000**

Paving and Allowance Subtotal:		**$ 2,931,000**
Construction Contingency:	15%	$ 440,000
Mobilization	8%	$ 234,000
Prep ROW	4%	$ 117,000
Construction Cost TOTAL:		**$ 3,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 3,800,000**
Engineering/Survey/Testing:		16%	$ 608,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 570,000
		Impact Fee Project Cost TOTAL:	**$ 5,000,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description:		**Project No.**	**B-46, C-6**
Name:	US 79 (1)	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**	
Limits:	N Mays St to 200' E of Red Bud Ln		
Impact Fee Class:	6 Lane - Enhanced		
Ultimate Class:	6 Lane - Enhanced		
Length (lf):	22,817		
Service Area(s):	B,C		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	224,790	cy	$ 15.00	$ 3,372,000
205	12" Asphalt (Type C)	127,167	ton	$ 72.00	$ 9,156,000
305	16" Base	85,634	cy	$ 55.00	$ 4,710,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	202,818	sy	$ 6.00	$ 1,217,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	38,535	gal	$ 6.00	$ 231,000
605	10' Concrete Sidewalk	456,340	sf	$ 5.50	$ 2,510,000
705	Machine Laid Curb & Gutter	91,268	lf	$ 16.00	$ 1,460,000
805	Turn Lanes and Median Openings	13,828	sy	$ 134.62	$ 1,862,000
				Paving Construction Cost Subtotal:	**$ 24,518,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 1,226,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 490,000
√	Roadway Drainage	Standard Internal System	30%	$ 7,355,000
√	Illumination		10%	$ 2,452,000
√	Special Drainage Structures	Bridge Crossing		$ 3,100,000
√	Water	Minor Adjustments	2%	$ 490,000
√	Sewer	Minor Adjustments	2%	$ 490,000
√	Turf and Erosion Control		4%	$ 981,000
√	Landscaping and Irrigation		2%	$ 490,000
	Miscellaneous:		0%	$ -
			Allowance Subtotal:	**$ 17,074,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 41,592,000**
Construction Contingency:	15%	$ 6,239,000
Mobilization	8%	$ 3,327,000
Prep ROW	4%	$ 1,664,000
Construction Cost TOTAL:		**$ 52,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 52,900,000**
Engineering/Survey/Testing:		16%	$ 8,464,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	$ 5,290,000
Impact Fee Project Cost TOTAL (20% City Contribution)			**$ 13,340,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:		**Description:**	**Project No.**	**C-7**
Name:	McNeil Extension	**This project consists of the construction of a new 3 lane collector.**		
Limits:	S Mays St to Georgetown St			
Impact Fee Class:	3 Lane - Proposed			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	2,731			
Service Area(s):	C			

Roadway Construction Cost Projection		
Construction Cost TOTAL:	**$**	**4,350,076**

Impact Fee Project Cost Summary				
Item Description	**Notes:**	**Allowance**		**Item Cost**
Construction:		-	**$**	**4,350,076**
Engineering/Survey/Testing:		-	$	716,019
ROW/Easement Acquisition:	New Roadway Alignment	-	$	-
		Overall Project Cost Total:	**$**	**5,066,094**
		City Contribution:	**$**	**4,799,620**
		Impact Fee Project Cost (95%):	**$**	**4,799,620**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-8
Name:	S Mays St	**This project consists of the construction of a median in the existing center turn lane.**		
Limits:	Nash St to Gattis School Rd			
Impact Fee Class:	4 Lane - Enhanced (AM)			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	3,656			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	6,861	cy	$ 15.00	$ 103,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	7,312	lf	$ 16.00	$ 117,000
804	Turn Lanes and Median Openings	2,216	sy	$ 134.62	$ 298,000
				Paving Construction Cost Subtotal:	**$ 518,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 14,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 157,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 7,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 54,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 173,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 420,000**

Paving and Allowance Subtotal:		**$ 938,000**
Construction Contingency:	15%	$ 141,000
Mobilization	5%	$ 47,000
Prep ROW	$3,000 / STA	$ 11,000
Construction Cost TOTAL:		**$ 1,200,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,200,000**
Engineering/Survey/Testing:		16%	$ 192,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 1,400,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**C-9**
Name:	Kenney Fort Blvd (1)	**This project consisted of the construction of a 6 lane divided arterial.**		
Limits:	US 79 to Forest Creek Blvd			
Impact Fee Class:	6 Lane - Existing			
Ultimate Class:	6 Lane - Existing			
Length (lf):	5,039			
Service Area(s):	C			

Roadway Construction Cost Projection	
Construction Cost TOTAL:	**$ 25,605,733**

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:		-	**$ 25,605,733**
Engineering/Survey/Testing:		-	$ 5,020,140
ROW/Easement Acquisition:	Existing Alignment	-	$ 750,000
		Overall Project Cost Total:	**$ 31,375,873**
		City Contribution:	**$ 23,375,873**
		Impact Fee Project Cost (75%):	**$ 23,375,873**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-10
Name:	Kenney Fort Blvd (2)	**This project consists of the construction of a new 6 lane divided arterial.**		
Limits:	Forest Creek Dr to 830' S of Gattis School Rd			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	5,514			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	54,323	cy	$ 15.00	$ 815,000
208	5" Asphalt (Type C)	30,731	ton	$ 72.00	$ 2,213,000
308	10" Base	20,695	cy	$ 55.00	$ 1,138,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	49,013	sy	$ 6.00	$ 294,000
508	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	9,313	gal	$ 6.00	$ 56,000
608	10' Concrete Sidewalk	110,280	sf	$ 5.50	$ 607,000
708	Machine Laid Curb & Gutter	22,056	lf	$ 16.00	$ 353,000
808	Turn Lanes and Median Openings	3,342	sy	$ 134.62	$ 450,000
				Paving Construction Cost Subtotal:	**$ 5,926,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 119,000
√	Roadway Drainage	Standard Internal System	30%	$ 1,778,000
√	Illumination		10%	$ 593,000
√	Special Drainage Structures	Bridge Crossing		$ 4,200,000
√	Water	Minor Adjustments	2%	$ 119,000
√	Sewer	Minor Adjustments	2%	$ 119,000
√	Turf and Erosion Control		4%	$ 237,000
√	Landscaping and Irrigation		2%	$ 119,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 7,284,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 13,210,000**
Construction Contingency:	15%	$ 1,982,000
Mobilization	8%	$ 1,057,000
Prep ROW	4%	$ 528,000
Construction Cost TOTAL:		**$ 16,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 16,800,000**
Engineering/Survey/Testing:		16%	$ 2,688,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 5,040,000
		Impact Fee Project Cost TOTAL:	**$ 24,500,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **C-11**

Name:	Red Bud Ln (1)
Limits:	Forest Ridge Blvd to 265' S of Forest Ridge Blvd
Impact Fee Class:	4 Lane - Enhanced (AM)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	265
Service Area(s):	C,ETJ/Other

This project consists of the construction of a median in the existing center turn lane.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	497	cy	$ 15.00	$ 7,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	530	lf	$ 16.00	$ 8,000
804	Turn Lanes and Median Openings	161	sy	$ 134.62	$ 22,000
				Paving Construction Cost Subtotal:	**$ 37,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 1,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 11,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 1,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 4,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 13,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 45,000**

Paving and Allowance Subtotal:		**$ 82,000**
Construction Contingency:	15%	$ 12,000
Mobilization	5%	$ 4,000
Prep ROW	$3,000 / STA	$ 1,000
Construction Cost TOTAL:		**$ 100,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 100,000**
Engineering/Survey/Testing:		16%	$ 16,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 100,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:

Description: **Project No.** **C-12**

Name:	Red Bud Ln (2)
Limits:	265' S of Forest Ridge Blvd to 280' S of Woodlawn L
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	565
Service Area(s):	C

This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	4,108	cy	$ 15.00	$ 62,000
203	12" Asphalt (Type C)	2,237	ton	$ 72.00	$ 161,000
303	16" Base	1,507	cy	$ 55.00	$ 83,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,641	sy	$ 6.00	$ 22,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	678	gal	$ 6.00	$ 4,000
603	10' Concrete Sidewalk	11,300	sf	$ 5.50	$ 62,000
703	Machine Laid Curb & Gutter	2,260	lf	$ 16.00	$ 36,000
803	Turn Lanes and Median Openings	342	sy	$ 134.62	$ 46,000
				Paving Construction Cost Subtotal:	**$ 476,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 24,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 10,000
√	Roadway Drainage	Standard Internal System	30%	$ 143,000
√	Illumination		10%	$ 48,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 10,000
√	Sewer	Minor Adjustments	2%	$ 10,000
√	Turf and Erosion Control		4%	$ 19,000
√	Landscaping and Irrigation		2%	$ 10,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 274,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 750,000**
Construction Contingency:	15%	$ 113,000
Mobilization	8%	$ 60,000
Prep ROW	4%	$ 30,000
Construction Cost TOTAL:		**$ 1,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,000,000**
Engineering/Survey/Testing:		16%	$ 160,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 150,000
		Impact Fee Project Cost TOTAL:	**$ 1,300,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:		**Description:**	**Project No.**	**C-13**
Name:	Red Bud Ln (3)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	280' S of Woodlawn Ln to 130' S of Old Oaks Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	554			
Service Area(s):	C,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	4,028	cy	$ 15.00	$ 60,000
203	12" Asphalt (Type C)	2,194	ton	$ 72.00	$ 158,000
303	16" Base	1,477	cy	$ 55.00	$ 81,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,570	sy	$ 6.00	$ 21,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	665	gal	$ 6.00	$ 4,000
603	10' Concrete Sidewalk	11,080	sf	$ 5.50	$ 61,000
703	Machine Laid Curb & Gutter	2,216	lf	$ 16.00	$ 35,000
803	Turn Lanes and Median Openings	336	sy	$ 134.62	$ 45,000
				Paving Construction Cost Subtotal:	**$ 465,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 23,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 9,000
√	Roadway Drainage	Standard Internal System	30%	$ 140,000
√	Illumination		10%	$ 47,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 9,000
√	Sewer	Minor Adjustments	2%	$ 9,000
√	Turf and Erosion Control		4%	$ 19,000
√	Landscaping and Irrigation		2%	$ 9,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 265,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 730,000**
Construction Contingency:	15%	$ 110,000
Mobilization	8%	$ 58,000
Prep ROW	4%	$ 29,000
Construction Cost TOTAL:		**$ 1,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,000,000**
Engineering/Survey/Testing:		16%	$ 160,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 150,000
		Impact Fee Project Cost TOTAL:	**$ 1,300,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: | Project No. **C-14**

Name:	Red Bud Ln (4)
Limits:	130' S of Old Oaks Dr to 315' S of Country Dr
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	561
Service Area(s):	C

This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	4,079	cy	$ 15.00	$ 61,000
203	12" Asphalt (Type C)	2,222	ton	$ 72.00	$ 160,000
303	16" Base	1,496	cy	$ 55.00	$ 82,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,615	sy	$ 6.00	$ 22,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	673	gal	$ 6.00	$ 4,000
603	10' Concrete Sidewalk	11,220	sf	$ 5.50	$ 62,000
703	Machine Laid Curb & Gutter	2,244	lf	$ 16.00	$ 36,000
803	Turn Lanes and Median Openings	340	sy	$ 134.62	$ 46,000
				Paving Construction Cost Subtotal:	**$ 473,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 24,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 9,000
√	Roadway Drainage	Standard Internal System	30%	$ 142,000
√	Illumination		10%	$ 47,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 9,000
√	Sewer	Minor Adjustments	2%	$ 9,000
√	Turf and Erosion Control		4%	$ 19,000
√	Landscaping and Irrigation		2%	$ 9,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 268,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 741,000**
Construction Contingency:	15%	$ 111,000
Mobilization	8%	$ 59,000
Prep ROW	4%	$ 30,000
Construction Cost TOTAL:		**$ 1,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,000,000**
Engineering/Survey/Testing:		16%	$ 160,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 150,000
		Impact Fee Project Cost TOTAL:	**$ 1,300,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description: Project No. **C-15**

Name:	Red Bud Ln (5)
Limits:	315' S of Country Dr to Wildflower Trl
Impact Fee Class:	4 Lane - Enhanced
Ultimate Class:	4 Lane - Enhanced
Length (lf):	551
Service Area(s):	C,ETJ/Other

This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	4,007	cy	$ 15.00	$ 60,000
203	12" Asphalt (Type C)	2,182	ton	$ 72.00	$ 157,000
303	16" Base	1,469	cy	$ 55.00	$ 81,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	3,551	sy	$ 6.00	$ 21,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	661	gal	$ 6.00	$ 4,000
603	10' Concrete Sidewalk	11,020	sf	$ 5.50	$ 61,000
703	Machine Laid Curb & Gutter	2,204	lf	$ 16.00	$ 35,000
803	Turn Lanes and Median Openings	334	sy	$ 134.62	$ 45,000
				Paving Construction Cost Subtotal:	**$ 464,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 23,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 9,000
√	Roadway Drainage	Standard Internal System	30%	$ 139,000
√	Illumination		10%	$ 46,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 9,000
√	Sewer	Minor Adjustments	2%	$ 9,000
√	Turf and Erosion Control		4%	$ 19,000
√	Landscaping and Irrigation		2%	$ 9,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 263,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 727,000**
Construction Contingency:	15%	$ 109,000
Mobilization	8%	$ 58,000
Prep ROW	4%	$ 29,000
Construction Cost TOTAL:		**$ 1,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 1,000,000**
Engineering/Survey/Testing:		16%	$ 160,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 150,000
		Impact Fee Project Cost TOTAL:	**$ 1,300,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:		**Description:**	**Project No.**	**C-16**
Name:	Red Bud Ln (6)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	Wildflower Trl to 295' S of Wildflower Trl			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	293			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	2,131	cy	$ 15.00	$ 32,000
203	12" Asphalt (Type C)	1,160	ton	$ 72.00	$ 84,000
303	16" Base	781	cy	$ 55.00	$ 43,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	1,888	sy	$ 6.00	$ 11,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	352	gal	$ 6.00	$ 2,000
603	10' Concrete Sidewalk	5,860	sf	$ 5.50	$ 32,000
703	Machine Laid Curb & Gutter	1,172	lf	$ 16.00	$ 19,000
803	Turn Lanes and Median Openings	178	sy	$ 134.62	$ 24,000
				Paving Construction Cost Subtotal:	**$ 247,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 12,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 5,000
√	Roadway Drainage	Standard Internal System	30%	$ 74,000
√	Illumination		10%	$ 25,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 5,000
√	Sewer	Minor Adjustments	2%	$ 5,000
√	Turf and Erosion Control		4%	$ 10,000
√	Landscaping and Irrigation		2%	$ 5,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 141,000**

Paving and Allowance Subtotal:		**$ 388,000**
Construction Contingency:	15%	$ 58,000
Mobilization	8%	$ 31,000
Prep ROW	4%	$ 16,000
Construction Cost TOTAL:		**$ 500,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 500,000**
Engineering/Survey/Testing:		16%	$ 80,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 75,000
		Impact Fee Project Cost TOTAL:	**$ 700,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:		**Description:**	**Project No.**	**C-17**
Name:	Red Bud Ln (7)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	295' S of Wildflower Trl to 840' N of Forest Creek Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	2,907			
Service Area(s):	C,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	21,139	cy	$ 15.00	$ 317,000
203	12" Asphalt (Type C)	11,512	ton	$ 72.00	$ 829,000
303	16" Base	7,752	cy	$ 55.00	$ 426,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	18,734	sy	$ 6.00	$ 112,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	3,488	gal	$ 6.00	$ 21,000
603	10' Concrete Sidewalk	58,140	sf	$ 5.50	$ 320,000
703	Machine Laid Curb & Gutter	11,628	lf	$ 16.00	$ 186,000
803	Turn Lanes and Median Openings	1,762	sy	$ 134.62	$ 237,000
				Paving Construction Cost Subtotal:	**$ 2,448,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 122,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 49,000
√	Roadway Drainage	Standard Internal System	30%	$ 734,000
√	Illumination		10%	$ 245,000
√	Special Drainage Structures	Bridge Crossing		$ 800,000
√	Water	Minor Adjustments	2%	$ 49,000
√	Sewer	Minor Adjustments	2%	$ 49,000
√	Turf and Erosion Control		4%	$ 98,000
√	Landscaping and Irrigation		2%	$ 49,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 2,195,000**

Paving and Allowance Subtotal:		**$ 4,643,000**
Construction Contingency:	15%	$ 696,000
Mobilization	8%	$ 371,000
Prep ROW	4%	$ 186,000
Construction Cost TOTAL:		**$ 5,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 5,900,000**
Engineering/Survey/Testing:		16%	$ 944,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 885,000
		Impact Fee Project Cost TOTAL:	**$ 7,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-18
Name:	Red Bud Ln (8)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	840' N of Forest Creek Dr to 340' S of Forest Creek			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	1,182			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	8,595	cy	$ 15.00	$ 129,000
203	12" Asphalt (Type C)	4,681	ton	$ 72.00	$ 337,000
303	16" Base	3,152	cy	$ 55.00	$ 173,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	7,617	sy	$ 6.00	$ 46,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,418	gal	$ 6.00	$ 9,000
603	10' Concrete Sidewalk	23,640	sf	$ 5.50	$ 130,000
703	Machine Laid Curb & Gutter	4,728	lf	$ 16.00	$ 76,000
803	Turn Lanes and Median Openings	716	sy	$ 134.62	$ 96,000
				Paving Construction Cost Subtotal:	**$ 996,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 50,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 20,000
√	Roadway Drainage	Standard Internal System	30%	$ 299,000
√	Illumination		10%	$ 100,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 20,000
√	Sewer	Minor Adjustments	2%	$ 20,000
√	Turf and Erosion Control		4%	$ 40,000
√	Landscaping and Irrigation		2%	$ 20,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 569,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 1,565,000**
Construction Contingency:	15%	$ 235,000
Mobilization	8%	$ 125,000
Prep ROW	4%	$ 63,000
Construction Cost TOTAL:		**$ 2,000,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,000,000**
Engineering/Survey/Testing:		16%	$ 320,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 300,000
		Impact Fee Project Cost TOTAL:	**$ 2,600,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-19
Name:	Red Bud Ln (9)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	340' S of Forest Creek Dr to Gattis School Rd			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	4 Lane - Enhanced			
Length (lf):	3,735			
Service Area(s):	C,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	27,159	cy	$ 15.00	$ 407,000
203	12" Asphalt (Type C)	14,791	ton	$ 72.00	$ 1,065,000
303	16" Base	9,960	cy	$ 55.00	$ 548,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	24,070	sy	$ 6.00	$ 144,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	4,482	gal	$ 6.00	$ 27,000
603	10' Concrete Sidewalk	74,700	sf	$ 5.50	$ 411,000
703	Machine Laid Curb & Gutter	14,940	lf	$ 16.00	$ 239,000
803	Turn Lanes and Median Openings	2,264	sy	$ 134.62	$ 305,000
				Paving Construction Cost Subtotal:	**$ 3,146,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 157,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 63,000
√	Roadway Drainage	Standard Internal System	30%	$ 944,000
√	Illumination		10%	$ 315,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 63,000
√	Sewer	Minor Adjustments	2%	$ 63,000
√	Turf and Erosion Control		4%	$ 126,000
√	Landscaping and Irrigation		2%	$ 63,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,794,000**

Paving and Allowance Subtotal:		**$ 4,940,000**
Construction Contingency:	15%	$ 741,000
Mobilization	8%	$ 395,000
Prep ROW	4%	$ 198,000
Construction Cost TOTAL:		**$ 6,300,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 6,300,000**
Engineering/Survey/Testing:		16%	$ 1,008,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 945,000
		Impact Fee Project Cost TOTAL:	**$ 8,300,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:

		Description:	Project No.	C-20
Name:	Gattis School Rd (1)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**		
Limits:	S Mays St to Surrey Dr			
Impact Fee Class:	4 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	3,446			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	25,058	cy	$ 15.00	$ 376,000
203	12" Asphalt (Type C)	13,646	ton	$ 72.00	$ 983,000
303	16" Base	9,189	cy	$ 55.00	$ 505,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	22,208	sy	$ 6.00	$ 133,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	4,135	gal	$ 6.00	$ 25,000
603	10' Concrete Sidewalk	68,920	sf	$ 5.50	$ 379,000
703	Machine Laid Curb & Gutter	13,784	lf	$ 16.00	$ 221,000
803	Turn Lanes and Median Openings	2,088	sy	$ 134.62	$ 281,000
				Paving Construction Cost Subtotal:	**$ 2,903,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 145,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 58,000
√	Roadway Drainage	Standard Internal System	30%	$ 871,000
√	Illumination		10%	$ 290,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 58,000
√	Sewer	Minor Adjustments	2%	$ 58,000
√	Turf and Erosion Control		4%	$ 116,000
√	Landscaping and Irrigation		2%	$ 58,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,654,000**

Paving and Allowance Subtotal:		**$ 4,557,000**
Construction Contingency:	15%	$ 684,000
Mobilization	8%	$ 365,000
Prep ROW	4%	$ 182,000
Construction Cost TOTAL:		**$ 5,800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 5,800,000**
Engineering/Survey/Testing:		16%	$ 928,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 870,000
		Impact Fee Project Cost TOTAL:	**$ 7,600,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-21
Name:	Gattis School Rd (2)	**This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.**		
Limits:	Windy Park Dr to Red Bud Ln			
Impact Fee Class:	6 Lane - Enhanced			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	14,903			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	146,822	cy	$ 15.00	$ 2,202,000
205	12" Asphalt (Type C)	83,059	ton	$ 72.00	$ 5,980,000
305	16" Base	55,932	cy	$ 55.00	$ 3,076,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	132,471	sy	$ 6.00	$ 795,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	25,170	gal	$ 6.00	$ 151,000
605	10' Concrete Sidewalk	298,060	sf	$ 5.50	$ 1,639,000
705	Machine Laid Curb & Gutter	59,612	lf	$ 16.00	$ 954,000
805	Turn Lanes and Median Openings	9,032	sy	$ 134.62	$ 1,216,000
				Paving Construction Cost Subtotal:	**$ 16,013,000**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 801,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 320,000
√	Roadway Drainage	Standard Internal System	30%	$ 4,804,000
√	Illumination		10%	$ 1,601,000
√	Special Drainage Structures	Bridge Crossing		$ 3,900,000
√	Water	Minor Adjustments	2%	$ 320,000
√	Sewer	Minor Adjustments	2%	$ 320,000
√	Turf and Erosion Control		4%	$ 641,000
√	Landscaping and Irrigation		2%	$ 320,000
	Miscellaneous:		0%	$ -
			Allowance Subtotal:	**$ 13,027,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 29,040,000**
Construction Contingency:	15%	$ 4,356,000
Mobilization	8%	$ 2,323,000
Prep ROW	4%	$ 1,162,000
Construction Cost TOTAL:		**$ 36,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 36,900,000**
Engineering/Survey/Testing:		16%	$ 5,904,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 5,535,000
		Impact Fee Project Cost TOTAL:	**$ 48,300,000**

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City of Round Rock

Kimley-Horn and Associates, Inc.

2018 Roadway Impact Fee Study

updated: 6/5/2018

Conceptual Level Project Cost Projection

Project Information:

Description: **Project No.** **C-22**

Name:	S Mays St / Dell Way
Limits:	Gattis School Rd to Greenlawn Blvd
Impact Fee Class:	4 Lane - Enhanced (AM)
Ultimate Class:	4 Lane - Enhanced
Length (lf):	6,565
Service Area(s):	C

This project consists of the construction of a median in the existing center turn lane.

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	12,320	cy	$ 15.00	$ 185,000
204	Asphalt (Type C)	0	ton	$ 72.00	$ -
304	Base	0	cy	$ 55.00	$ -
404	Lime Stabilization (with Lime @ 45#/sy)	0	sy	$ 6.00	$ -
504	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	0	gal	$ 6.00	$ -
604	Concrete Sidewalk	0	sf	$ 5.50	$ -
704	Machine Laid Curb & Gutter	13,130	lf	$ 16.00	$ 210,000
804	Turn Lanes and Median Openings	3,979	sy	$ 134.62	$ 536,000
				Paving Construction Cost Subtotal:	**$ 931,000**

Major Construction Component Allowances:**

	Item Description	Notes	Unit Price	Item Cost
√	Traffic Control	Assume 6 months to Construct	$2,500 / MO	$ 15,000
√	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 Length mrkgs ($1.50/LF)	$750	$ 25,000
	Roadway Drainage	None Anticipated	0%	$ -
√	Street Lighting	1 Assem / 100', $15/LF cond/cndr	$2,800	$ 282,000
	Special Drainage Structures	None Anticipated		$ -
√	Utilities	Minor Adjustments	$1,000 / STA	$ 13,000
√	ADA Ramps & Requirements	4 ramps / 600'	$2,200	$ 96,000
√	Landscaping and Irrigation	Grass, Trees, Restoration, E/S Controls	$10 / SY	$ 310,000
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 741,000**

Paving and Allowance Subtotal:		**$ 1,672,000**
Construction Contingency:	15%	$ 251,000
Mobilization	5%	$ 84,000
Prep ROW	$3,000 / STA	$ 20,000
Construction Cost TOTAL:		**$ 2,100,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 2,100,000**
Engineering/Survey/Testing:		16%	$ 336,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included	0%	$ -
		Impact Fee Project Cost TOTAL:	**$ 2,400,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-23
Name:	Kenney Fort Blvd (3)	**This project consists of the construction of a new 6 lane divided arterial.**		
Limits:	830' S of Gattis School Rd to SH 45			
Impact Fee Class:	6 Lane - Proposed			
Ultimate Class:	6 Lane - Proposed			
Length (lf):	2,178			
Service Area(s):	C,ETJ/Other			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
108	Unclassified Street Excavation	21,457	cy	$ 15.00	$ 322,000
208	5" Asphalt (Type C)	12,139	ton	$ 72.00	$ 874,000
308	10" Base	8,174	cy	$ 55.00	$ 450,000
408	10" Lime Stabilization (with Lime @ 45#/sy)	19,360	sy	$ 6.00	$ 116,000
508	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	3,678	gal	$ 6.00	$ 22,000
608	10' Concrete Sidewalk	43,560	sf	$ 5.50	$ 240,000
708	Machine Laid Curb & Gutter	8,712	lf	$ 16.00	$ 139,000
808	Turn Lanes and Median Openings	1,320	sy	$ 134.62	$ 178,000
				Paving Construction Cost Subtotal:	**$ 2,341,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 47,000
√	Roadway Drainage	Standard Internal System	30%	$ 702,000
√	Illumination		10%	$ 234,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 47,000
√	Sewer	Minor Adjustments	2%	$ 47,000
√	Turf and Erosion Control		4%	$ 94,000
√	Landscaping and Irrigation		2%	$ 47,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,218,000**

Paving and Allowance Subtotal:		**$ 3,559,000**
Construction Contingency:	15%	$ 534,000
Mobilization	8%	$ 285,000
Prep ROW	4%	$ 142,000
Construction Cost TOTAL:		**$ 4,600,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,600,000**
Engineering/Survey/Testing:		16%	$ 736,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	New Roadway Alignment	30%	$ 1,380,000
		Impact Fee Project Cost TOTAL:	**$ 6,700,000**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No.	C-24
Name:	Greenlawn Blvd	**This project consists of the reconstruction of existing pavement with one third of a 6 lane divided arterial.**		
Limits:	IH 35 NBFR to SH 45 EBFR			
Impact Fee Class:	6 Lane - Enhanced (1/3)			
Ultimate Class:	6 Lane - Enhanced			
Length (lf):	5,351			
Service Area(s):	C			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	20,083	cy	$ 15.00	$ 301,000
206	12" Asphalt (Type C)	4,578	ton	$ 72.00	$ 330,000
306	16" Base	7,399	cy	$ 55.00	$ 407,000
406	10" Lime Stabilization (with Lime @ 45#/sy)	19,026	sy	$ 6.00	$ 114,000
506	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	3,330	gal	$ 6.00	$ 20,000
606	10' Concrete Sidewalk	107,020	sf	$ 5.50	$ 589,000
706	Machine Laid Curb & Gutter	10,702	lf	$ 16.00	$ 171,000
806	Turn Lanes and Median Openings	0	sy	$ 134.62	$ -
				Paving Construction Cost Subtotal:	**$ 1,932,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 97,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 39,000
√	Roadway Drainage	Standard Internal System	60%	$ 1,159,000
√	Illumination		10%	$ 193,000
√	Special Drainage Structures	Minor Stream Crossing		$ 200,000
√	Water	Minor Adjustments	2%	$ 39,000
√	Sewer	Minor Adjustments	2%	$ 39,000
√	Turf and Erosion Control		4%	$ 77,000
√	Landscaping and Irrigation		2%	$ 39,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,882,000**

Paving and Allowance Subtotal:		**$ 3,814,000**
Construction Contingency:	15%	$ 572,000
Mobilization	8%	$ 305,000
Prep ROW	4%	$ 153,000
Construction Cost TOTAL:		**$ 4,900,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,900,000**
Engineering/Survey/Testing:		16%	$ 784,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 735,000
		Impact Fee Project Cost TOTAL:	**$ 6,400,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Round Rock.

The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:		**Description:**	**Project No.**	**C-25**
Name:	Roundville Ln	**This project consists of the reconstruction of existing pavement to a 3 lane collector.**		
Limits:	A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd			
Impact Fee Class:	3 Lane - Proposed			
Ultimate Class:	3 Lane - Proposed			
Length (lf):	2,058			
Service Area(s):	C			

Roadway Construction Cost Projection		
Construction Cost TOTAL:	**$**	**2,699,826**

Impact Fee Project Cost Summary				
Item Description	**Notes:**	**Allowance**		**Item Cost**
Construction:		-	**$**	**2,699,826**
Engineering/Survey/Testing:		-	$	493,431
Other		-	$	25,000
ROW/Easement Acquisition:	Existing Alignment	-	$	61,000
		Overall Project Cost Total:	**$**	**3,279,257**
		City Contribution:	**$**	**1,134,412**
		Impact Fee Project Cost (35%):	**$**	**1,134,412**

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City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

Description:		**Project No.**	**C-26**
Name:	Schultz (1)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**	
Limits:	SH 45 EBFR to 290' S of SH 45 EBFR		
Impact Fee Class:	4 Lane - Enhanced		
Ultimate Class:	4 Lane - Enhanced		
Length (lf):	291		
Service Area(s):	C		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	2,116	cy	$ 15.00	$ 32,000
203	12" Asphalt (Type C)	1,152	ton	$ 72.00	$ 83,000
303	16" Base	776	cy	$ 55.00	$ 43,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	1,875	sy	$ 6.00	$ 11,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	349	gal	$ 6.00	$ 2,000
603	10' Concrete Sidewalk	5,820	sf	$ 5.50	$ 32,000
703	Machine Laid Curb & Gutter	1,164	lf	$ 16.00	$ 19,000
803	Turn Lanes and Median Openings	176	sy	$ 134.62	$ 24,000
				Paving Construction Cost Subtotal:	**$ 246,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 12,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 5,000
√	Roadway Drainage	Standard Internal System	30%	$ 74,000
√	Illumination		10%	$ 25,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 5,000
√	Sewer	Minor Adjustments	2%	$ 5,000
√	Turf and Erosion Control		4%	$ 10,000
√	Landscaping and Irrigation		2%	$ 5,000
	Miscellaneous:		0%	$ -
	Allowance Subtotal:			**$ 141,000**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 387,000**
Construction Contingency:	15%	$ 58,000
Mobilization	8%	$ 31,000
Prep ROW	4%	$ 15,000
Construction Cost TOTAL:		**$ 500,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 500,000**
Engineering/Survey/Testing:		16%	$ 80,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 75,000
		Impact Fee Project Cost TOTAL:	**$ 700,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Round Rock.

The planning level cost projections shall not supersede the City's design standards contained or the determination of the City Engineer for a specific project.

City of Round Rock

2018 Roadway Impact Fee Study

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 6/5/2018

Project Information:

		Description:	Project No. C-27
Name:	Schultz (2)	**This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.**	
Limits:	290' S of SH 45 EBFR to 255' S of Autumn Sage Wa		
Impact Fee Class:	4 Lane - Enhanced		
Ultimate Class:	4 Lane - Enhanced		
Length (lf):	2,636		
Service Area(s):	C,ETJ/Other		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	19,168	cy	$ 15.00	$ 288,000
203	12" Asphalt (Type C)	10,439	ton	$ 72.00	$ 752,000
303	16" Base	7,029	cy	$ 55.00	$ 387,000
403	10" Lime Stabilization (with Lime @ 45#/sy)	16,988	sy	$ 6.00	$ 102,000
503	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	3,163	gal	$ 6.00	$ 19,000
603	10' Concrete Sidewalk	52,720	sf	$ 5.50	$ 290,000
703	Machine Laid Curb & Gutter	10,544	lf	$ 16.00	$ 169,000
803	Turn Lanes and Median Openings	1,598	sy	$ 134.62	$ 215,000
				Paving Construction Cost Subtotal:	**$ 2,222,000**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Traffic Control	Construction Phase Traffic Control	5%	$ 111,000
√	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	$ 44,000
√	Roadway Drainage	Standard Internal System	30%	$ 667,000
√	Illumination		10%	$ 222,000
	Special Drainage Structures	None Anticipated		$ -
√	Water	Minor Adjustments	2%	$ 44,000
√	Sewer	Minor Adjustments	2%	$ 44,000
√	Turf and Erosion Control		4%	$ 89,000
√	Landscaping and Irrigation		2%	$ 44,000
	Miscellaneous:		0%	$ -
	**Allowances based on % of Paving Construction Cost Subtotal		**Allowance Subtotal:**	**$ 1,265,000**

Paving and Allowance Subtotal:		**$ 3,487,000**
Construction Contingency:	15%	$ 523,000
Mobilization	8%	$ 279,000
Prep ROW	4%	$ 139,000
Construction Cost TOTAL:		**$ 4,500,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		-	**$ 4,500,000**
Engineering/Survey/Testing:		16%	$ 720,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	$ 675,000
		Impact Fee Project Cost TOTAL:	**$ 5,900,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Round Rock.

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Appendix B – Roadway Impact Fee CIP Service Units of Supply

City of Round Rock - 2018 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area A

11/19/2018

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL[1]	VEH-MI TOTAL DEMAND PK-HR[2]	EXCESS CAPACITY PK-HR VEH-MI[3]	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-1	New Hope Rd (1)	Sam Bass Rd to 240' W of Lagoona Dr	1.10	4	4 Lane - Enhanced (1/2)	129	100%	810	3569	142	3,427	$ 7,800,000	$ 7,800,000
A-2	New Hope Rd (2)	240' W of Lagoona Dr to Mayfield Ranch Blvd	0.23	4	4 Lane - Enhanced (1/2)	129	50%	810	375	15	360	$ 1,900,000	$ 950,000.00
A-3	New Hope Rd (3)	Mayfield Ranch Blvd to 1000' E of Wyoming Springs Dr	0.93	4	4 Lane - Proposed	New	50%	810	1501	0	1501	$ 9,300,000	$ 4,650,000
A-4, B-1	Westinghouse Rd	IH 35 SBFR to IH 35 NBFR	0.19	6	6 Lane - Enhanced	n/a	50%	900	519	0	519	$ 9,031,296	$ 4,515,648
A-5	Wyoming Springs Dr (1)	New Hope Dr (Future) to Blue Ridge Dr	0.23	4	4 Lane - Enhanced (1/2)	n/a	100%	810	730	0	730	$ 1,700,000	$ 1,700,000
A-6	Wyoming Springs Dr (2)	Blue Ridge Dr to RM 1431	0.72	4	4 Lane - Proposed	New	100%	810	2338	0	2,338	$ 9,100,000	$ 9,100,000
A-7	RM 1431 (1)	1100' W of Mayfield Ranch Blvd to 850' E of Stone Oak Dr	0.97	6	6 Lane - Enhanced	3177	50%	900	2627	1,545	1,082	$ 2,880,000	$ 1,440,000
A-8	RM 1431 (2)	850' E of Stone Oak Dr to 5195' E of Stone Oak St	0.82	6	6 Lane - Enhanced	3177	100%	900	4442	2,613	1,829	$ 3,020,000	$ 3,020,000
A-9	RM 1431 (3)	5195' E of Stone Oak St to IH 35 SBFR	1.34	6	6 Lane - Enhanced	3177	100%	900	7235	4,256	2,979	$ 3,840,000	$ 3,840,000
A-10	Wyoming Springs Dr (3)	390' N of Goldenoak Cir to Alondra Way	0.13	4	4 Lane - Enhanced (1/2)	505	100%	810	431	67	364	$ 1,000,000	$ 1,000,000
A-11	Arterial L (1)	Wyoming Springs Dr to Chisholm Trl Rd (Future)	2.15	4	4 Lane - Proposed	New	100%	810	6982	0	6,982	$ 27,400,000	$ 27,400,000
A-12	Creek Bend Blvd (1)	RM 1431 to West End Pl	0.80	4	4 Lane - Proposed	New	100%	810	2590	0	2,590	$ 10,500,000	$ 10,500,000
A-13	Creek Bend Blvd (2)	West End Pl to Camino Del Verdes Pl	0.79	4	4 Lane - Enhanced (1/2)	307	100%	810	2555	242	2,313	$ 5,900,000	$ 5,900,000
A-14	Chisholm Trl Rd (1)	RM 1431 to CR 173	0.80	4	4 Lane - Proposed	New	100%	810	2608	0	2,608	$ 11,200,000	$ 11,200,000
A-15, B-11	Arterial L (2)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	4	4 Lane - Proposed	New	50%	810	123	0	123	$ 5,700,000	$ 2,850,000
A-16	CR 173	IH 35 SBFR to 3250' N of Wolle Ln	0.10	4	4 Lane - Enhanced	242	100%	810	330	25	305	$ 1,300,000	$ 1,300,000
A-17	Chisholm Trl Rd (2)	3250' N of Wolle Ln to 1980' N of Wolle Ln	0.24	4	4 Lane - Enhanced	242	100%	810	781	58	723	$ 2,900,000	$ 2,900,000
A-18	Chisholm Trl Rd (3)	1980' N of Wolle Ln to FM 3406	0.48	4	4 Lane - Enhanced (AM)	536	100%	810	1566	259	1,307	$ 900,000	$ 900,000
A-19	Sam Bass Rd (1)	230' W of Tonkawa Trl to 390' W of Wyoming Springs Dr	0.23	6	6 Lane - Enhanced	1712	50%	900	624	198	426	$ 3,500,000	$ 1,750,000
A-20	Sam Bass Rd (2)	390' W of Wyoming Springs Dr to FM 3406	0.30	6	6 Lane - Enhanced	1712	100%	900	1605	509	1,096	$ 4,500,000	$ 4,500,000
A-21	Sam Bass Rd (3)	FM 3406 to Desert Willow Dr	0.35	4	4 Lane - Enhanced	447	50%	810	569	78	491	$ 4,200,000	$ 2,100,000
A-22	Sam Bass Rd (4)	Desert Willow Dr to Creek Bend Blvd	0.19	4	4 Lane - Enhanced	447	100%	810	608	84	524	$ 2,200,000	$ 2,200,000
A-23	Sam Bass Rd (5)	Creek Bend Blvd to Hairy Man Dr	1.86	4	4 Lane - Enhanced	1164	100%	810	6038	2,169	3,869	$ 2,500,000	$ 2,500,000
A-24	Sam Bass Rd (6)	Hairy Man Rd to 700' E of Hairy Man Rd	0.21	4	4 Lane - Enhanced	1164	50%	810	345	124	221	$ 1,600,000	$ 800,000
A-25	FM 3406	Sam Bass Rd to IH 35 SBFR	1.65	6	6 Lane - Enhanced	2025	100%	900	8888	3,333	5,555	$ 6,980,000	$ 6,980,000
A-26	Wyoming Springs Dr (4)	Sam Bass Rd to Brushy Creek	0.39	4	4 Lane - Proposed	New	100%	810	1262	0	1,262	$ 8,500,000	$ 8,500,000
A-27	Chisholm Trl Rd (4)	FM 3406 to Sam Bass Rd	1.33	4	4 Lane - Enhanced (AM)	649	100%	810	4295	860	3,435	$ 2,600,000	$ 2,600,000
A-28	Creek Bend Blvd (3)	Brushy Creek to Wyoming Springs Dr	0.40	4	4 Lane - Enhanced	1093	100%	810	1303	439	864	$ 11,012,302	$ 11,012,302
A-29	Deepwood Dr (1)	Sam Bass Rd to 345' N of RM 620	0.34	4	4 Lane - Proposed	New	100%	810	1086	0	1,086	$ 6,000,000	$ 6,000,000
A-30	Deepwood Dr (2)	345' N of RM 620 to RM 620	0.07	4	4 Lane - Enhanced	n/a	100%	810	212	0	212	$ 800,000	$ 800,000
A-31, C-1	RM 620	Deepwood Dr to IH 35 SBFR	0.93	6	6 Lane - Enhanced	2985	50%	900	2517	1,391	1,126	$ 12,560,624	$ 6,280,312
SUBTOTAL									**70,654**	**18,407**	**52,247**	**$ 182,324,222**	**$ 156,988,262**
AI-1	Sam Bass Rd and FM 3406	SIGNAL	-	-	**Intersection Improvements**		100%					$ 295,000	$ 295,000
AI-2	Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT	-	-			75%					$ 2,000,000	$ 1,500,000
AI-3	Sam Bass Rd and Chisholm Trl Rd	TURN LANES	-	-			100%					$ 139,000	$ 139,000
AI-4, CI-1	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES	-	-			50%					$ 392,000	$ 196,000
AI-5, CI-2	IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES	-	-			50%					$ 588,000	$ 294,000
-	Update ITS and Traffic Managmenet Infrastructure	-	-	-			33%					$ 20,900,000	$ 6,967,000
SUBTOTAL												**$ 24,314,000**	**$ 9,391,000**

2018 Roadway Impact Fee Study Cost Per Service Area $ 34,673

TOTAL COST IN SERVICE AREA A $ 166,413,935

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2018 Roadway Impact Fee Study (Updated 2021)

CIP Service Units of Supply

Service Area B

10/25/2021

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL[1]	VEH-MI TOTAL DEMAND PK-HR[2]	EXCESS CAPACITY PK-HR VEH-MI[3]	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-4, B-1	Westinghouse Rd (1)	IH 35 SBFR to IH 35 NBFR	0.19	6	6 Lane - Enhanced	n/a	50%	900	519	0	519	$ 9,031,296	$ 4,515,648
B-2	Westinghouse Rd (2)	3895' E of A.W. Grimes to 6350' W of A.W. Grimes	0.47	4	4 Lane - Enhanced	477	50%	810	754	111	643	$ 5,500,000	$ 2,750,000
B-3	N Mays St (1)	1777' N of Teravista Pkwy to Teravista Pkwy	0.34	4	4 Lane - Existing	426	100%	810	1090	143	947	$ 1,889,219	$ 1,889,219
B-4	University Blvd (1)	University Oaks Blvd to 335' W of Sunrise Dr	0.49	6	6 Lane - Enhanced	2,626	100%	900	2661	1294	1367	$ 8,900,000	$ 8,900,000
B-5	University Blvd (2)	335' W of Sunrise Dr to A.W. Grimes Blvd	2.03	6	6 Lane - Enhanced	2,036	50%	900	5473	2064	3409	$ 30,700,000	$ 15,350,000
B-6	University Blvd (3)	A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd	0.36	4	4 Lane - Enhanced	1,350	100%	810	1179	491	688	$ 4,800,000	$ 4,800,000
B-7	University Blvd (4)	1830' E of A.W. Grimes Blvd to Lunata Way	0.78	4	4 Lane - Enhanced	1,350	50%	810	1256	523	733	$ 9,700,000	$ 4,850,000
B-8	University Blvd (5)	Lunata Way to SH 130 SBFR	2.47	4	4 Lane - Enhanced	1,350	100%	810	7997	3332	4665	$ 29,300,000	$ 29,300,000
B-9	N Mays St (2)	University Blvd to 2000' S of University Blvd	0.38	4	4 Lane - Enhanced	585	100%	810	1229	222	1007	$ 5,800,000	$ 5,800,000
B-10	N Mays St (3)	2000' S of University Blvd to Paloma Dr	0.88	4	4 Lane - Proposed	New	100%	810	2844	0	2844	$ 24,800,000	$ 24,800,000
A-15, B-11	Arterial L (1)	Chisholm Trl Rd (Future) to IH 35 NBFR	0.08	4	4 Lane - Proposed	New	50%	810	123	0	123	$ 5,700,000	$ 2,850,000
B-12	Arterial L (2)	IH 35 NBFR to Cypress Blvd	0.69	4	4 Lane - Proposed	New	100%	810	2236	0	2236	$ 21,200,000	$ 21,200,000
B-13	N Mays St (4)	Paloma Dr to 540' N of Steam Way	0.27	4	4 Lane - Enhanced	416	100%	810	860	110	750	$ 3,100,000	$ 3,100,000
B-14	Sunrise Rd (1)	University Blvd to Hidden Valley Dr	0.23	4	4 Lane - Existing	1,325	100%	810	755	309	446	$ 979,190	$ 979,190
B-15	Sunrise Rd (2)	Hidden Valley Dr to 325' S of Eagles Nest St	0.54	4	4 Lane - Enhanced (AM)	1,325	100%	810	1754	717	1037	$ 1,000,000	$ 1,000,000
B-16	Sunrise Rd (3)	325' S of Eagles Nest St to Applegate Cir	0.30	4	4 Lane - Enhanced (AM)	1,325	50%	810	484	198	286	$ 600,000	$ 300,000
B-17	Sunrise Rd (4)	Applegate Cir to Lake Dr	0.20	4	4 Lane - Enhanced (AM)	1,325	100%	810	660	270	390	$ 500,000	$ 500,000
B-18	Sunrise Rd (5)	Lake Dr to 545' S of Lake Dr	0.10	4	4 Lane - Enhanced (AM)	1,325	50%	810	167	68	99	$ 200,000	$ 100,000
B-19	Sunrise Rd (6)	545' S of Lake Dr to Old Settlers Blvd	0.40	4	4 Lane - Enhanced (AM)	1,325	100%	810	1287	526	761	$ 800,000	$ 800,000
B-20	College Park (1)	Satellite View to Avery Nelson Blvd	0.75	4	4 Lane - Enhanced (1/2)	448	100%	810	2423	335	2088	$ 5,400,000	$ 5,400,000
B-21	Wallin Bradley Drive	Gulf Way to A.W. Grimes Blvd	0.69	3	3 Lane - Proposed	New	100%	410	500	0	500	$ 2,800,000	$ 2,800,000
B-22	College Park (2)	Avery Nelson Rd to 1355' N of Old Settlers Blvd	0.91	4	4 Lane - Proposed	New	100%	810	2945	0	2945	$ 11,500,000	$ 11,500,000
B-23	Seton Pkwy	2400' N of Avery Nelson Blvd to Avery Nelson Blvd	0.45	3	3 Lane - Existing	n/a	100%	410	558	0	558	$ 2,043,320	$ 2,043,320
B-24	Medical Center Pkwy	Seton Pkwy to A.W. Grimes Blvd	0.18	4	4 Lane - Existing	n/a	100%	810	584	0	584	$ 810,679	$ 810,679
B-25	CR 112 (1)	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd	0.68	4	4 Lane - Enhanced	522	100%	810	2197	354	1843	$ 8,000,000	$ 8,000,000
B-26	CR 112 (2)	3580' E of A.W. Grimes Blvd to CR 117	0.43	4	4 Lane - Enhanced	522	50%	810	689	111	578	$ 5,000,000	$ 2,500,000
B-27	Kenney Fort Blvd (1)	CR 117 to Old Settlers Blvd	1.06	4	4 Lane - Proposed	New	100%	810	3435	0	3435	$ 13,700,000	$ 13,700,000
B-28	Red Bud Ln (1)	Guadalajara St to 160' N of Margarita Loop	0.35	4	4 Lane - Enhanced (1/2)	871	100%	810	1146	308	838	$ 2,600,000	$ 2,600,000
B-29	Red Bud Ln (2)	160' N of Margarita Loop to CR 117	0.35	4	4 Lane - Enhanced (1/2)	871	50%	810	566	152	414	$ 3,000,000	$ 1,500,000
B-30	Red Bud Ln (3)	CR 117 to Old Settlers Blvd	0.34	4	4 Lane - Enhanced	871	100%	810	1097	295	802	$ 4,100,000	$ 4,100,000
B-31	Old Settlers Blvd (1)	N Mays St to Sunrise Rd	1.33	6	6 Lane - Enhanced (1/3)	2,545	100%	900	7205	3396	3809	$ 6,800,000	$ 6,800,000
B-32	Old Settlers Blvd (2)	Sunrise Rd to A.W. Grimes Blvd	1.13	6	6 Lane - Enhanced	2,086	100%	900	6090	2353	3737	$ 18,100,000	$ 18,100,000
B-33	Old Settlers Blvd (3)	Red Bud Ln to CR 110	0.46	4	4 Lane - Proposed	New	100%	810	1483	0	1483	$ 5,800,000	$ 5,800,000
B-34	Spur 379 (N Mays St)	540' N of Steam Way to Northwest Dr	1.43	4	4 Lane - Enhanced (AM)	1,173	100%	810	4617	1672	2945	$ 2,700,000	$ 2,700,000
B-35	Sunrise Rd (7)	Old Settlers Blvd to Country Aire Dr	0.28	4	4 Lane - Enhanced (AM)	1,266	100%	810	911	356	555	$ 600,000	$ 600,000
B-36	FM 1460 (A.W. Grimes Blvd) (1)	Old Settlers Blvd to 375' S of Chandler Creek Blvd	0.35	6	6 Lane - Enhanced	2,045	100%	900	1888	715	1173	$ 1,000,000	$ 1,000,000
B-37	FM 1460 (A.W. Grimes Blvd) (2)	375' S of Chandler Creek Blvd to 1250' N of Tiger Trl	0.20	6	6 Lane - Enhanced	2,045	50%	900	539	204	335	$ 1,000,000	$ 500,000
B-38	FM 1460 (A.W. Grimes Blvd) (3)	1250' N of Tiger Trl to US 79	1.25	6	6 Lane - Enhanced	2,297	100%	900	6751	2872	3879	$ 3,940,000	$ 3,940,000
B-39	Kenney Fort Blvd (2)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.30	6	6 Lane - Proposed (1/2)	n/a	100%	900	1602	0	1602	$ 2,600,000	$ 2,600,000
B-40	Kenney Fort Blvd (3)	Old Settler's Blvd to 2540' S of Old Settler's Blvd	0.18	6	6 Lane - Proposed	n/a	50%	900	496	0	496	$ 2,800,000	$ 1,400,000
B-41	Kenney Fort Blvd (4)	2540' S of Old Settlers Blvd to Chandler Creek Blvd	0.95	6	6 Lane - Proposed	New	100%	900	5124	0	5124	$ 15,200,000	$ 15,200,000
B-42	Kenney Fort Blvd (5)	Chandler Creek Blvd to Joe DiMaggio Blvd	0.30	6	6 Lane - Enhanced	458	100%	900	1601	136	1465	$ 5,800,000	$ 5,800,000
B-43	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.45	4	4 Lane - Enhanced	1,400	100%	810	1446	625	821	$ 5,200,000	$ 5,200,000
B-44	Red Bud Ln (5)	170' N of Joseph St to 160' S of Covered Wagon Trl	0.18	4	4 Lane - Enhanced	1,400	50%	810	294	127	167	$ 2,200,000	$ 1,100,000
B-45	Red Bud Ln (6)	160' S of Covered Wagon Trl to US 79	0.41	4	4 Lane - Enhanced	1,400	100%	810	1314	568	746	$ 4,700,000	$ 4,700,000
B-46, C-6	US 79 (1)	N Mays St to 200' E of Red Bud Ln	4.32	6	6 Lane - Enhanced	3,142	50%	900	11668	6789	4879	$ 13,340,000	$ 6,670,000
B-47	US 79 (2)	200' E of Red Bud Ln to 1690' E of Red Bud Ln	0.28	6	6 Lane - Enhanced	2,936	50%	900	761	414	347	$ 900,000	$ 450,000
SUBTOTAL									**104,987**	**32,160**	**72,827**	**$ 316,133,704**	**$ 271,298,056**
BI-1	N Mays St and University Blvd	TURN LANES	-	-	**Intersection Improvements**		100%					$ 784,000	$ 784,000
BI-2	Sunrise Rd and University Blvd	TURN LANES	-	-			100%					$ 1,063,000	$ 1,063,000
BI-3	N Mays St and Steam Way	TURN LANES	-	-			100%					$ 170,235	$ 170,235
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES	-	-			50%					$ 2,041,000	$ 1,020,500
-	Update ITS and Traffic Managmenet Infrastructure	-	-	-			33%					$ 20,900,000	$ 6,966,667
SUBTOTAL												**$ 24,958,235**	**$ 10,004,402**

2018 Roadway Impact Fee Study Cost Per Service Area $ 34,673

TOTAL COST IN SERVICE AREA B $ 281,337,131

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]

City of Round Rock - 2018 Roadway Impact Fee Study

CIP Service Units of Supply

Service Area C

7/31/2018

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL[1]	VEH-MI TOTAL DEMAND PK-HR[2]	EXCESS CAPACITY PK-HR VEH-MI[3]	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
A-31, C-1	RM 620	Deepwood Dr to IH 35 SBFR	0.93	6	6 Lane - Enhanced	2985	50%	900	2517	1,391	1,126	$ 12,560,624	$ 6,280,312
C-2	CR 172 (1)	McNeil Dr to Lynda Sue St	0.20	4	4 Lane - Enhanced	1624	50%	810	323	162	161	$ 2,400,000	$ 1,200,000
C-3	CR 172 (2)	Hesters Crossing Rd to 445' N of Hesters Crossing Rd	0.08	4	4 Lane - Enhanced	1624	50%	810	137	68	69	$ 1,000,000	$ 500,000
C-4	Hesters Crossing Rd	Dry Creek Dr to IH 35 SBFR	0.32	4	4 Lane - Enhanced (AM)	1749	100%	810	1038	560	478	$ 700,000	$ 700,000
C-5	Bratton Ln	IH 35 SBFR to 1160' S of Michael Angelo Way	0.42	4	4 Lane - Enhanced	233	50%	810	680	49	631	$ 5,000,000	$ 2,500,000
B-46, C-6	US 79 (1)	N Mays St to 200' E of Red Bud Ln	4.32	6	6 Lane - Enhanced	3142	50%	900	11668	6789	4879	$ 13,340,000	$ 6,670,000
C-7	McNeil Extension	S Mays St to Georgetown St	0.52	3	3 Lane - Proposed	New	100%	410	636	0	636	$ 4,799,620	$ 4,799,620
C-8	S Mays St	Nash St to Gattis School Rd	0.69	4	4 Lane - Enhanced (AM)	1469	100%	810	2243	1017	1226	$ 1,400,000	$ 1,400,000
C-9	Kenney Fort Blvd (1)	US 79 to Forest Creek Blvd	0.95	6	6 Lane - Existing	613	100%	900	5154	585	4569	$ 23,375,873	$ 23,375,873
C-10	Kenney Fort Blvd (2)	Forest Creek Dr to 830' S of Gattis School Rd	1.04	6	6 Lane - Proposed	New	100%	900	5639	0	5639	$ 24,500,000	$ 24,500,000
C-11	Red Bud Ln (1)	Forest Ridge Blvd to 265' S of Forest Ridge Blvd	0.05	4	4 Lane - Enhanced (AM)	1478	50%	810	81	37	44	$ 100,000	$ 50,000
C-12	Red Bud Ln (2)	265' S of Forest Ridge Blvd to 280' S of Woodlawn Ln	0.11	4	4 Lane - Enhanced	1478	100%	810	347	158	189	$ 1,300,000	$ 1,300,000
C-13	Red Bud Ln (3)	280' S of Woodlawn Ln to 130' S of Old Oaks Dr	0.10	4	4 Lane - Enhanced	1478	50%	810	170	78	92	$ 1,300,000	$ 650,000
C-14	Red Bud Ln (4)	130' S of Old Oaks Dr to 315' S of Country Dr	0.11	4	4 Lane - Enhanced	1478	100%	810	344	157	187	$ 1,300,000	$ 1,300,000
C-15	Red Bud Ln (5)	315' S of Country Dr to Wildflower Trl	0.10	4	4 Lane - Enhanced	1478	50%	810	169	77	92	$ 1,300,000	$ 650,000
C-16	Red Bud Ln (6)	Wildflower Trl to 295' S of Wildflower Trl	0.06	4	4 Lane - Enhanced	1478	100%	810	180	82	98	$ 700,000	$ 700,000
C-17	Red Bud Ln (7)	295' S of Wildflower Trl to 840' N of Forest Creek Dr	0.55	4	4 Lane - Enhanced	1478	50%	810	892	407	485	$ 7,700,000	$ 3,850,000
C-18	Red Bud Ln (8)	840' N of Forest Creek Dr to 340' S of Forest Creek Dr	0.22	4	4 Lane - Enhanced	1478	100%	810	725	331	394	$ 2,600,000	$ 2,600,000
C-19	Red Bud Ln (9)	340' S of Forest Creek Dr to Gattis School Rd	0.71	4	4 Lane - Enhanced	1540	50%	810	1146	545	601	$ 8,300,000	$ 4,150,000
C-20	Gattis School Rd (1)	S Mays St to Surrey Dr	0.65	4	4 Lane - Enhanced	1888	100%	810	2115	1232	883	$ 7,600,000	$ 7,600,000
C-21	Gattis School Rd (2)	Windy Park Dr to Red Bud Ln	2.82	6	6 Lane - Enhanced	2037	100%	900	15242	5750	9492	$ 48,300,000	$ 48,300,000
C-22	S Mays St / Dell Way	Gattis School Rd to Greenlawn Blvd	1.24	4	4 Lane - Enhanced (AM)	1253	100%	810	4029	1558	2471	$ 2,400,000	$ 2,400,000
C-23	Kenney Fort Blvd (3)	830' S of Gattis School Rd to SH 45	0.41	6	6 Lane - Proposed	New	50%	900	1114	0	1114	$ 6,700,000	$ 3,350,000
C-24	Greenlawn Blvd	IH 35 NBFR to SH 45 EBFR	1.86	6	6 Lane - Enhanced (1/3)	1026	100%	900	10064	1912	8152	$ 6,400,000	$ 6,400,000
C-25	Roundville Ln	A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd	0.21	3	3 Lane - Proposed	n/a	100%	410	262	0	262	$ 1,134,412	$ 1,134,412
C-26	Schultz (1)	SH 45 EBFR to 290' S of SH 45 EBFR	1.45	4	4 Lane - Enhanced	462	100%	810	4688	669	4019	$ 700,000	$ 700,000
C-27	Schultz (2)	290' S of SH 45 EBFR to 255' S of Autumn Sage Way	0.50	4	4 Lane - Enhanced	462	50%	810	809	115	694	$ 5,900,000	$ 2,950,000
SUBTOTAL									**72,412**	**23,729**	**48,683**	**$ 192,810,529**	**$ 160,010,217**
AI-4, CI-1	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES	-	-	**Intersection Improvements**		50%					$ 392,000	$ 196,000
AI-5, CI-2	IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES	-	-			50%					$ 588,000	$ 294,000
CI-3	IH 35 and Hesters Crossing Rd	TURN LANES	-	-			100%					$ 196,000	$ 196,000
CI-4	IH 35 and Louis Henna Blvd (SH 45 FR)	TURN LANES & SIGNAL	-	-			100%					$ 2,037,000	$ 2,037,000
CI-5	Mays St and Liberty Ave	SIGNAL	-	-			100%					$ 353,000	$ 353,000
CI-6	Mays St and Gattis School Rd	TURN LANES	-	-			100%					$ 1,847,503	$ 1,847,503
CI-7	Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER	-	-			100%					$ 784,000	$ 784,000
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES	-	-			50%					$ 2,041,000	$ 1,020,500
CI-9	A.W. Grimes Blvd and Gattis School Rd	TURN LANES	-	-			100%					$ 1,921,000	$ 1,921,000
CI-10	Red Bud Ln and Gattis School Rd	TURN LANES	-	-			100%					$ 1,595,000	$ 1,595,000
-	Update ITS and Traffic Managmenet Infrastructure	-	-	-			33%					$ 20,900,000	$ 6,966,667
SUBTOTAL												**$ 32,654,503**	**$ 17,210,670**

2018 Roadway Impact Fee Study Cost Per Service Area $ 34,673

TOTAL COST IN SERVICE AREA C $ 177,255,560

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

Appendix C – Existing Facilities Inventory

City of Round Rock - 2018 Roadway Impact Fee Study

Existing Roadway Facilities Inventory

Service Area A

7/31/2018

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL[1]		VEH-MI DEMAND PK-HR TOTAL[2]		EXCESS CAPACITY PK-HR VEH-MI[3]		EXISTING DEFICIENCIES PK-HR VEH-MI[4]	
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Chisholm Trl Rd	3250' N of Wolle Ln	1980' N of Wolle Ln	1,272	0.24	1	1	2U	4 Lane - Enhanced	4D	27	215	100%	410	410	99	99	7	52	92	47		
Chisholm Trl Rd	1980' N of Wolle Ln	FM 3406	2,552	0.48	2	2	5U	4 Lane - Enhanced	4D	252	284	100%	770	770	744	744	122	137	623	607		
Chisholm Trl Rd	FM 3406	Sam Bass Rd	7,000	1.33	2	2	5U	4 Lane - Enhanced	4D	401	248	100%	770	770	2,042	2,042	532	329	1,510	1,713		
Chisholm Trl Rd	Sam Bass Rd	RM 620	2,364	0.45	1	1	2U	2 Lane - Existing	2U	536	408	100%	410	410	184	184	240	183	-56	1	56	
CR 173	IH 35 SBFR	3250' N of Wolle Ln	538	0.10	1	1	2U	4 Lane - Enhanced	4D	27	215	100%	410	410	42	42	3	22	39	20		
Creek Bend Blvd	West End Pl	Camino Del Verdes Pl	4,163	0.79	1	1	2U	4 Lane - Enhanced	4D	177	130	100%	410	410	323	323	140	102	184	221		
Creek Bend Blvd	Brushy Creek	Wyoming Springs Dr	2,123	0.40	0	0	4D	4 Lane - Existing	4D	717	376	100%	810	810	0	0	288	151	-288	-151	288	151
Creek Bend Blvd/Bright Wa	Camino Del Verdes Pl	FM 3406	688	0.13	2	2	4D	4 Lane - Existing	4D	177	130	100%	810	810	211	211	23	17	188	194		
Creek Bend Blvd/Bright Wa	FM 3406	Sam Bass Rd	1,997	0.38	2	2	4D	4 Lane - Existing	4D	244	319	100%	810	810	613	613	92	121	520	492		
Creek Bend Blvd/Bright Wa	Sam Bass Rd	Hairy Man Rd	1,719	0.33	2	2	4D	4 Lane - Existing	4D	717	376	100%	810	810	527	527	233	122	294	405		
Deepwood Dr	350' N of RM 620	RM 620	346	0.07	1	1	2U	4 Lane - Proposed	4D	n/a	n/a	100%	410	410	27	27						
FM 3406	Chisholm Trl	IH 35 SBFR	588	0.11	2	2	5U	6 Lane - Enhanced	6D	765	1,260	100%	770	770	172	172	85	140	86	31		
FM 3406	Creek Bend Dr	Chisholm Trl	5,165	0.98	2	2	5U	6 Lane - Enhanced	6D	765	1,260	100%	770	770	1,506	1,506	748	1,233	758	274		
FM 3406	IH 35 SBFR	IH 35 NBFR	661	0.13	2	2	5U	6 Lane - Enhanced	6D	n/a	n/a	50%	770	770	96	96						
FM 3406	Sam Bass Rd	Creek Bend Blvd	2,937	0.56	2	2	5U	6 Lane - Enhanced	6D	735	1,140	100%	770	770	857	857	409	634	448	223		
FM 620	Chisholm Trl	IH 35 SBFR	910	0.17	2	2	5U	6 Lane - Enhanced	6D	1,293	1,692	50%	770	770	133	133	111	146	21	-13		13
FM 620	IH 35 SBFR	IH 35 NBFR	416	0.08	3	3	6U	6 Lane - Existing	6U	n/a	n/a	100%	770	770	182	182						
FM 620	445' S of Smyers Ln	Wyoming Springs Dr	3,197	0.61	3	3	6D	6 Lane - Existing	6D	1,787	1,476	50%	900	900	817	817	541	447	276	371		
FM 620	Wyoming Springs Dr	Deepwood Dr	4,881	0.92	3	3	6D	6 Lane - Existing	6D	1,787	1,476	50%	900	900	1,248	1,248	826	682	422	566		
Hairy Man Rd	Creek Bend Blvd	Sam Bass Rd	2,281	0.43	1	1	2U	2 Lane - Existing	2U	n/a	n/a	50%	410	410	89	89						
New Hope Dr	Sam Bass Rd	240' W of Lagoona Dr	5,816	1.10	1	1	2U	4 Lane - Enhanced	4D	73	56	100%	410	410	452	452	80	62	371	390		
New Hope Dr	240' W of Lagoona Dr	Mayfield Ranch Blvd	1,223	0.23	1	1	2U	4 Lane - Enhanced	4D	73	56	50%	410	410	47	47	8	6	39	41		
RM 1431	1100' W of Mayfield Ranch	850' E of Stone Oak Dr	5,137	0.97	2	2	5U	6 Lane - Enhanced	6D	1,556	1,621	50%	770	770	749	749	757	789	-8	-39	8	39
RM 1431	850' E of Stone Oak Dr	5195' E of Stone Oak St	4,343	0.82	2	2	5U	6 Lane - Enhanced	6D	1,556	1,621	100%	770	770	1,267	1,267	1,280	1,333	-13	-67	13	67
RM 1431	5195' E of Stone Oak St	1470' W of IH 35 SBFR	5,605	1.06	2	2	4U	6 Lane - Enhanced	6D	1,556	1,621	50%	680	680	722	722	826	860	-104	-139	104	139
RM 1431	1470' W of IH 35 SBFR	IH 35 SBFR	1,469	0.28	2	2	5U	6 Lane - Enhanced	6D	1,556	1,621	100%	770	770	428	428	433	451	-4	-23	4	23
RM 620	Deepwood Dr	Chisholm Trl Rd	4,012	0.76	2	2	5U	6 Lane - Enhanced	6D	1,293	1,692	50%	770	770	585	585	491	643	94	-58		58
Sam Bass Rd	Chisholm Trl	IH 35 SBFR	609	0.12	2	2	5U	4 Lane - Existing	5U	637	527	100%	770	770	178	178	73	61	104	117		
Sam Bass Rd	Creek Bend Blvd	Hairy Man Rd	1,121	0.21	1	1	2U	4 Lane - Enhanced	4D	637	527	100%	410	410	87	87	135	112	-48	-25	48	25
Sam Bass Rd	700' E of Hairy Man Rd	Deepwood Dr (Future)	3,112	0.59	1	1	2U	4 Lane - Enhanced	2U	637	527	100%	410	410	242	242	375	311	-134	-69	134	69
Sam Bass Rd	Hairy Man Rd	700' E of Hairy Man Rd	703	0.13	1	1	2U	4 Lane - Enhanced	4D	637	527	50%	410	410	27	27	42	35	-15	-8	15	8
Sam Bass Rd	Deepwood Dr (Future)	Wonder Dr	2,608	0.49	1	1	2U	4 Lane - Enhanced	2U	637	527	100%	410	410	203	203	315	260	-112	-58	112	58
Sam Bass Rd	Wonder Dr	Chisholm Trl	597	0.11	1	2	3U	4 Lane - Enhanced	3U	637	527	100%	510	510	58	115	72	60	-14	56	14	
Sam Bass Rd	230' W of Tonkawa Trl	390' W of Wyoming Spring	1,221	0.23	2	2	4U	6 Lane - Enhanced	6D	694	1,018	50%	680	680	157	157	80	118	77	40		
Sam Bass Rd	390' W of Wyoming Spring	Wyoming Springs Dr	391	0.07	2	2	4U	6 Lane - Enhanced	6D	694	1,018	100%	680	680	101	101	51	75	49	25		
Sam Bass Rd	FM 3406	75' E of Desert Willow Dr	1,853	0.35	1	1	2U	4 Lane - Enhanced	4D	228	219	50%	410	410	72	72	40	38	32	34		
Sam Bass Rd	75' E of Desert Willow Dr	Creek Bend Blvd	991	0.19	1	1	2U	4 Lane - Enhanced	4D	228	219	100%	410	410	77	77	43	41	34	36		
Sam Bass Rd	Wyoming Springs Dr	Sam Bass Rd	1,178	0.22	2	2	4U	6 Lane - Enhanced	6D	694	1,018	100%	680	680	303	303	155	227	149	76		
US 79	IH 35 SBFR	IH 35 NBFR	541	0.10	2	4	6D	6 Lane - Existing	6D	n/a	n/a	50%	900	900	92	184						
Wyoming Springs Dr	300' S of Falcon Dr	RM 620	2,877	0.54	2	2	4D	4 Lane - Existing	4D	636	886	100%	810	810	883	883	347	483	536	400		
Wyoming Springs Dr	Cloud Peak Ln	300' S of Falcon Dr	776	0.15	2	2	4D	4 Lane - Existing	4D	636	886	50%	810	810	119	119	47	65	72	54		
Wyoming Springs Dr	390' N of Goldenoak Cir	Alondra Way	703	0.13	1	1	2U	4 Lane - Enhanced	4D	319	186	100%	410	410	55	55	42	25	12	30		
Wyoming Springs Dr	Goldenoak Cir	FM 3406	3,372	0.64	2	2	4D	4 Lane - Existing	4D	319	186	100%	810	810	1,035	1,035	204	119	831	916		
Wyoming Springs Dr	Goldenoak Cir	390' N of Goldenoak Cir	379	0.07	2	2	4D	4 Lane - Enhanced	4D	319	186	100%	810	810	116	116	23	13	93	103		
Wyoming Springs Dr	New Hope Dr	Blue Ridge Dr	1,190	0.23	0	0	2U	4 Lane - Enhanced	4D	n/a	n/a	100%	410	410	0	0						
SUBTOTAL			**97,625**	**18.49**											**17,965**	**18,115**	**10,321**	**10,705**	**7,158**	**6,832**	**796**	**650**
															36,080		**21,026**		**13,990**		**1,446**	

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]
4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2018 Roadway Impact Fee Study

Existing Roadway Facilities Inventory

Service Area B

7/31/2018

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL[1]		VEH-MI DEMAND PK-HR TOTAL[2]		EXCESS CAPACITY PK-HR VEH-MI[3]		EXISTING DEFICIENCIES PK-HR VEH-MI[4]	
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Arterial L	Cypress Blvd	Sunrise Rd	1,520	0.29	2	2	4D	4 Lane - Existing	4D	n/a	n/a	100%	810	810	466	466						
Avery Nelson	Settlement Dr	740' E of Cisco Trl	3,411	0.65	2	2	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	530	530						
Avery Nelson	College Park Dr	A.W. Grime Blvd	2,075	0.39	2	2	4D	4 Lane - Existing	4D	275	173	100%	810	810	637	637	108	68	529	569		
Bass Pro Dr	IH 35 NBFR	Oakmont Dr	1,800	0.34	2	2	4D	4 Lane - Existing	4D	448	399	100%	810	810	552	552	153	136	400	416		
Bowman Rd	Sunrise Rd	125' W of Buckeye Ln	2,749	0.52	2	2	4D	4 Lane - Existing	4D	520	388	100%	810	810	843	843	271	202	573	641		
Bowman Rd	IH 35 NBFR	Onion Creek Village Dr	582	0.11	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	45	45						
Bowman Rd	Onion Creek Village Dr	N Mays St	390	0.07	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	30	30						
Bowman Rd	N Mays St	Sunset Dr	6,159	1.17	1	1	3U	2 Lane - Existing	3U	598	440	100%	510	510	595	595	698	513	-103	82	103	
Chandler Creek Blvd	165' W of Renaissance Trl	Kenney Fort Blvd	1,776	0.34	1	1	3U	2 Lane - Existing	3U	222	236	100%	510	510	172	172	75	79	97	92		
College Park	Satellite View	Avery Nelson Blvd	3,948	0.75	1	1	2U	4 Lane - Enhanced	4D	173	275	100%	410	410	307	307	129	206	177	101		
College Park	University Blvd	Sattellite View	711	0.13	2	2	4D	4 Lane - Existing	4D	173	275	100%	810	810	218	218	23	37	195	181		
CR 111/Westinghouse Rd	3895' E of A.W. Grimes	6350' W of A.W. Grimes	2,456	0.47	1	1	2U	6 Lane - Enhanced	6D	234	243	50%	410	410	95	95	54	57	41	39		
CR 112	3580' E of A.W. Grimes Bl	CR 117	2,244	0.43	1	1	2U	6 Lane - Enhanced	6D	351	171	50%	410	410	87	87	75	36	13	51		
CR 112	A.W. Grimes Blvd	3580' E of A.W. Grimes Bl	3,580	0.68	1	1	2U	6 Lane - Enhanced	6D	351	171	100%	410	410	278	278	238	116	40	162		
CR 114/Chandler Rd	CR 110	CR 118	6,343	1.20	0	0	2U	6 Lane - Enhanced	6D	n/a	n/a	100%	410	410	0	0						
CR 114/Chandler Rd	CR 118	SH 130 SBFR	604	0.11	0	0	5U	6 Lane - Enhanced	6D	n/a	n/a	100%	770	770	0	0						
CR 114/Chandler Rd	IH 35 NBFR	University Oaks Blvd	578	0.11	2	2	5U	6 Lane - Existing	5U	1,163	1,051	100%	770	770	169	169	127	115	41	54		
CR 117	CR 112	Kenney Fort Blvd	1,624	0.31	1	1	2U	4 Lane - Enhanced	2U	79	94	50%	410	410	63	63	12	14	51	49		
CR 117	840' W of Marshall Trl	Red Bud Ln	2,498	0.47	1	1	2U	4 Lane - Enhanced	2U	79	94	50%	410	410	97	97	19	22	78	75		
CR 117	Kenney Fort Blvd	San Felipe St	912	0.17	1	1	2U	4 Lane - Enhanced	2U	79	94	50%	410	410	35	35	7	8	29	27		
CR 117	160' N of Bluffstone Dr	440' S of Bluffstone Dr	602	0.11	1	1	2U	4 Lane - Enhanced	2U	79	94	50%	410	410	23	23	5	5	19	18		
CR 117	1100' E of Athea Ln	1795' E of Athea Ln	694	0.13	1	1	2U	2 Lane - Existing	2U	n/a	n/a	50%	410	410	27	27						
CR 117	Red Bud Ln	1100' E of Athea Ln	1,767	0.33	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	137	137						
Eagles Nest St	Sunrise Rd	Settlement Dr	3,109	0.59	2	2	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	483	483						
Eagles Nest St	University Blvd	Settlement Dr	4,508	0.85	2	2	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	700	700						
FM 1460 (A.W. Grimes Blvd	175' S of Lantana Dr	US 79	3,966	0.75	2	2	5U	6 Lane - Enhanced	6D	1,150	1,147	100%	770	770	1,157	1,157	864	862	293	295		
FM 1460 (A.W. Grimes Blvd	Tiger Trl	175' S of Lantana Dr	1,382	0.26	2	2	5U	6 Lane - Enhanced	6D	1,150	1,147	100%	770	770	403	403	301	300	102	103		
FM 1460 (A.W. Grimes Blvd	1250' N of Tiger Trl	Tiger Trl	1,253	0.24	2	2	5U	6 Lane - Enhanced	6D	1,050	995	100%	770	770	365	365	249	236	116	129		
FM 1460 (A.W. Grimes Blvd	A.W. Grimes Blvd	Chandler Creek Blvd	1,471	0.28	2	2	5U	6 Lane - Enhanced	6D	1,050	995	100%	770	770	429	429	293	277	137	152		
FM 1460 (A.W. Grimes Blvd	Avery Nelson Pkwy	3030' S of Avery Nelson P	3,028	0.57	2	2	4D	6 Lane - Enhanced	6D	797	917	100%	810	810	929	929	457	526	472	403		
FM 1460 (A.W. Grimes Blvd	Chandler Creek Blvd	375' S of Chandler Creek	375	0.07	2	2	5U	6 Lane - Enhanced	6D	1,050	995	100%	770	770	109	109	75	71	35	39		
FM 1460 (A.W. Grimes Blvd	375' S of Chandler Creek	1250' N of Tiger Trl	1,055	0.20	2	2	5U	6 Lane - Enhanced	6D	1,050	995	50%	770	770	154	154	105	99	49	54		
FM 1460 (A.W. Grimes Blvd	440' N of Old Settlers Blvd	Old Settlers Blvd	437	0.08	2	2	4D	6 Lane - Enhanced	6D	797	917	100%	810	810	134	134	66	76	68	58		
FM 1460 (A.W. Grimes Blvd	3030' S of Avery Nelson P	440' N of Old Settlers Blvd	2,374	0.45	2	2	4D	6 Lane - Enhanced	6D	797	917	100%	810	810	728	728	358	412	370	316		
FM 1460 (A.W. Grimes Blvd	University Blvd	Avery Nelson Pkwy	5,309	1.01	2	2	4D	6 Lane - Enhanced	6D	797	917	100%	810	810	1,629	1,629	801	922	828	707		
FM 3406	IH 35 NBFR	N Mays St	682	0.13	2	2	4D	6 Lane - Enhanced	6D	1,525	1,020	100%	810	810	209	209	197	132	12	78		
FM 3406	N Mays St	Sunrise Rd	7,045	1.33	2	2	4D	6 Lane - Enhanced	6D	1,525	1,020	100%	810	810	2,162	2,162	2,035	1,361	127	801		
FM 3406	IH 35 SBFR	IH 35 NBFR	661	0.13	2	2	5U	6 Lane - Enhanced	6D	n/a	n/a	50%	770	770	96	96						
FM 3406	Sunrise Rd	Settlement Dr	558	0.11	2	2	5U	6 Lane - Enhanced	6D	1,212	874	100%	770	770	163	163	128	92	35	70		
FM 3406	Settlement Dr	1020' W of A.W. Grimes B	4,377	0.83	2	2	5U	6 Lane - Enhanced	6D	1,212	874	100%	770	770	1,277	1,277	1,005	725	272	552		
FM 3406	1020' W of A.W. Grimes B	A.W. Grimes Blvd	1,020	0.19	2	2	5U	6 Lane - Enhanced	6D	1,212	874	100%	770	770	298	298	234	169	63	129		
Joe Dimaggio Blvd	Kenney Fort Blvd	US 79	1,512	0.29	2	2	5U	4 Lane - Existing	5U	n/a	n/a	100%	770	770	441	441						
Kenney Fort Blvd	Chandler Creek Blvd	Joe DiMaggio Blvd	1,565	0.30	1	1	2U	6 Lane - Enhanced	6D	236	222	100%	410	410	122	122	70	66	52	56		
Kenney Fort Blvd	Old Settler's Blvd	2540' S of Old Settler's Bl	1,566	0.30	0	0	3U	6 Lane - Proposed	6D	n/a	n/a	100%	510	510	0	0						
Kenney Fort Blvd	Old Settler's Blvd	2540' S of Old Settler's Bl	970	0.18	0	0	3U	6 Lane - Proposed	6D	n/a	n/a	50%	510	510	0	0						
Kenney Fort Blvd	Joe DiMaggio Blvd	US 79	1,046	0.20	3	3	6D	6 Lane - Existing	6D	315	298	100%	900	900	535	535	62	59	472	476		
Medical Center Pkwy	Seton Pkwy	A.W. Grimes Blvd	951	0.18	0	0	4D	4 Lane - Existing	4D	n/a	n/a	100%	810	810	0	0						
N Mays St	University Blvd	2000' S of University Blvd	2,002	0.38	1	1	3U	4 Lane - Enhanced	4D	357	228	100%	510	510	193	193	135	86	58	107		
N Mays St	Paloma Dr	540' N of Steam Way	1,402	0.27	1	2	3U	4 Lane - Enhanced	4D	173	243	100%	510	510	135	271	46	65	89	206		
N Mays St	540' N of Steam Way	Old Settlers Blvd	1,823	0.35	2	2	5U	4 Lane - Enhanced	4D	173	243	100%	770	770	532	532	60	84	472	448		
N Mays St	Teravista Pkwy	University Blvd	3,301	0.63	2	2	4D	4 Lane - Existing	4D	368	346	100%	810	810	1,013	1,013	230	216	783	796		
N Mays St	1775' N of Teravista Pkwy	Teravista Pkwy	1,777	0.34	2	2	4D	4 Lane - Existing	4D	178	248	100%	810	810	545	545	60	83	485	462		
Old Settlers Blvd	Kenney Fort Blvd (Future)	Red Bud Ln	5,795	1.10	2	2	4D	4 Lane - Existing	4D	1,033	582	100%	810	810	1,778	1,778	1,134	639	644	1,139		
Old Settlers Blvd	A.W. Grimes Blvd	Kenney Fort Blvd (Future)	6,013	1.14	2	2	4D	6 Lane - Enhanced	4D	1,033	582	100%	810	810	1,845	1,845	1,176	663	668	1,182		
Red Bud Ln	Guadalajara St	160' N of Margarita Loop	1,867	0.35	1	1	2U	4 Lane - Enhanced	4D	532	339	100%	410	410	145	145	188	120	-43	25	43	
Red Bud Ln	160' N of Margarita Loop	CR 117	1,845	0.35	1	1	2U	4 Lane - Enhanced	4D	532	339	50%	410	410	72	72	93	59	-21	12	21	
Red Bud Ln	160' S of Covered Wagon	US 79	2,141	0.41	1	1	2U	4 Lane - Enhanced	4D	749	651	100%	410	410	166	166	304	264	-137	-98	137	98
Red Bud Ln	CR 117	Old Settlers Blvd	1,788	0.34	1	1	2U	4 Lane - Enhanced	4D	532	339	100%	410	410	139	139	180	115	-41	24	41	
Red Bud Ln	Old Settlers Blvd	170' N of Joseph St	2,356	0.45	1	1	3U	4 Lane - Enhanced	4D	749	651	100%	510	510	228	228	334	290	-107	-63	107	63
Red Bud Ln	170' N of Joseph St	160' S of Covered Wagon	957	0.18	1	1	2U	4 Lane - Enhanced	4D	749	651	50%	410	410	37	37	68	59	-31	-22	31	22
Seton Pkwy	2400' N of Avery Nelson B	Avery Nelson Blvd	2,397	0.45	0	0	3U	3 Lane - Proposed	3U	n/a	n/a	100%	510	510	0	0						
Settlement Dr	Gulf Way	Old Settlers Blvd	4,819	0.91	2	2	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	748	748						
Settlement Dr	Eagles Nest St	Gulf Way	1,438	0.27	2	2	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	223	223						
Spur 379 (N Mays St)	Northwest Dr	US 79	651	0.12	2	2	4D	2 Lane - Existing	4D	475	698	100%	810	810	200	200	59	86	141	114		
Spur 379 (N Mays St)	Bowman Rd	Northwest Dr	2,112	0.40	2	2	5U	4 Lane - Enhanced	4D	475	698	100%	770	770	616	616	190	279	426	337		
Spur 379 (N Mays St)	Old Settlers Blvd	Bowman Rd	3,589	0.68	2	2	5U	4 Lane - Enhanced	4D	475	698	100%	770	770	1,047	1,047	323	474	724	572		
Sunrise Rd	Bowman Rd	US 79	4,485	0.85	2	2	4U	4 Lane - Enhanced	4U	469	515	100%	680	680	1,155	1,155	398	437	757	718		

Sunrise Rd	545' S of Lake Dr	Old Settlers Blvd	2,098	0.40	2	2	5U	4 Lane - Enhanced	4D	630	695	100%	770	770	612	612	250	276	362	336		
Sunrise Rd	Hidden Valley Dr	Eagles Nest St	2,534	0.48	2	2	5U	4 Lane - Enhanced	4D	630	695	100%	770	770	739	739	302	334	437	406		
Sunrise Rd	Eagles Nest St	325' S of Eagles Nest St	324	0.06	2	2	5U	4 Lane - Enhanced	4D	630	695	100%	770	770	95	95	39	43	56	52		
Sunrise Rd	Applegate Cir	Lake Dr	1,075	0.20	2	2	5U	4 Lane - Enhanced	4D	630	695	100%	770	770	314	314	128	142	185	172		
Sunrise Rd	325' S of Eagles Nest St	Applegate Cir	1,576	0.30	2	2	5U	4 Lane - Enhanced	4D	630	695	50%	770	770	230	230	94	104	136	126		
Sunrise Rd	Lake Dr	545' S of Lake Dr	543	0.10	2	2	5U	4 Lane - Enhanced	4D	630	695	50%	770	770	79	79	32	36	47	43		
Sunrise Rd	University Blvd	Hidden Valley Dr	1,231	0.23	2	2	4D	4 Lane - Existing	4D	630	695	100%	810	810	378	378	147	162	231	216		
Sunrise Rd	Old Settlers Blvd	Country Aire Dr	1,485	0.28	2	2	5U	4 Lane - Enhanced	4D	592	674	100%	770	770	433	433	167	190	267	244		
Sunrise Rd	Country Aire Dr	Bowman Rd	1,661	0.31	2	2	4U	4 Lane - Existing	4U	592	674	100%	680	680	428	428	186	212	242	216		
Teravista Pkwy	Oakmont Dr	Centerbrook Pl	1,062	0.20	2	2	4D	4 Lane - Enhanced	4D	630	489	50%	810	810	163	163	63	49	100	114		
Terra Vista Pkwy	Centerbrook Pl	350' S of Aosta Ln	1,461	0.28	2	2	4U	4 Lane - Existing	4U	630	489	50%	680	680	188	188	87	68	101	121		
University Blvd	Kenney Fort Blvd (Future)	CR 110	5,246	0.99	1	1	2U	6 Lane - Enhanced	6D	731	619	100%	410	410	407	407	726	615	-319	-208	319	208
University Blvd	1830' E of A.W. Grimes Bl	Lunata Way	4,093	0.78	1	1	2U	6 Lane - Enhanced	6D	731	619	50%	410	410	159	159	283	240	-124	-81	124	81
University Blvd	A.W. Grimes Blvd	1830' E of A.W. Grimes Bl	1,922	0.36	1	1	2U	6 Lane - Enhanced	6D	731	619	100%	410	410	149	149	266	225	-117	-76	117	76
University Blvd	Lunata Way	Kenney Fort Blvd (Future)	839	0.16	1	1	2U	6 Lane - Enhanced	6D	731	619	100%	410	410	65	65	116	98	-51	-33	51	33
University Blvd	Oakmont Dr	335' W of Sunrise Dr	1,652	0.31	2	2	5U	6 Lane - Existing	6D	1,546	1,080	100%	770	770	482	482	484	338	-2	144	2	
University Blvd	IH 35 NBFR	Oakmont Dr	950	0.18	2	2	5U	6 Lane - Existing	5U	1,163	1,051	100%	770	770	277	277	209	189	68	88		
University Blvd	335' W of Sunrise Dr	Sunrise Dr	336	0.06	2	2	5U	6 Lane - Existing	6D	1,546	1,080	50%	770	770	49	49	49	34	0	15	0	
University Blvd	Eagles Nest St	College Park Dr	2,847	0.54	2	2	5U	6 Lane - Enhanced	6D	1,149	887	50%	770	770	415	415	310	239	105	176		
University Blvd	College Park Dr	A.W. Grimes Blvd	3,222	0.61	2	2	5U	6 Lane - Enhanced	6D	1,149	887	50%	770	770	470	470	351	271	119	199		
University Blvd	Sunrise Rd	Teravista Club Dr	3,784	0.72	2	2	5U	6 Lane - Enhanced	6D	1,021	1,328	50%	770	770	552	552	366	476	186	76		
University Blvd	Teravista Club Dr	Eagles Nest St	514	0.10	2	2	5U	6 Lane - Enhanced	6D	1,021	1,328	50%	770	770	75	75	50	65	25	10		
US 79	Joe DiMaggio Blvd	Red Bud Ln	7,831	1.48	2	2	4D	6 Lane - Enhanced	6D	1,717	1,219	50%	810	810	1,201	1,201	1,273	904	-72	297	72	
US 79	200' E of Red Bud Ln	1690' E of Red Bud Ln	1,488	0.28	2	2	4D	6 Lane - Enhanced	6D	1,717	1,219	50%	810	810	228	228	242	172	-14	57	14	
US 79	Red Bud Ln	200' E of Red Bud Ln	201	0.04	2	2	4D	6 Lane - Enhanced	6D	1,717	1,219	100%	810	810	62	62	65	46	-4	15	4	
US 79	1825' W of A.W. Grimes B	Joe DiMaggio Blvd	4,249	0.80	2	2	4D	6 Lane - Enhanced	6D	1,801	1,341	50%	810	810	652	652	725	540	-73	112	73	
US 79	A.W. Grimes Blvd	1825' W of A.W. Grimes B	1,824	0.35	2	2	4D	6 Lane - Enhanced	6D	1,801	1,341	50%	810	810	280	280	311	232	-31	48	31	
US 79	IH 35 NBFR	N Mays St	1,409	0.27	2	2	6D	6 Lane - Existing	6D	1,330	1,348	100%	900	900	480	480	355	360	125	121		
US 79	N Mays St	Georgetown St	3,883	0.74	2	2	5U	6 Lane - Enhanced	6D	1,617	1,405	50%	770	770	566	566	595	517	-28	50	28	
US 79	Georgetown St	Sunrise Rd	953	0.18	2	2	5U	6 Lane - Enhanced	6D	1,885	1,462	50%	770	770	139	139	170	132	-31	7	31	
US 79	IH 35 SBFR	IH 35 NBFR	541	0.10	2	4	6D	6 Lane - Existing	6D	n/a	n/a	50%	900	900	92	184						
US 79	Sunrise Rd	1685' W of A.W. Grimes B	2,193	0.42	2	2	5U	6 Lane - Enhanced	6D	1,885	1,462	50%	770	770	320	320	391	304	-72	16	72	
US 79	1685' W of A.W. Grimes B	A.W. Grimes Blvd	1,685	0.32	2	2	4D	6 Lane - Enhanced	6D	1,885	1,462	50%	810	810	258	258	301	233	-42	25	42	
SUBTOTAL			**218,513**	**41.39**											**39,784**	**40,012**	**23,405**	**19,863**	**12,359**	**16,036**	**1,463**	**581**
															79,796		**43,268**		**28,395**		**2,044**	

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]
4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

City of Round Rock - 2018 Roadway Impact Fee Study

Existing Roadway Facilities Inventory

Service Area C

7/31/2018

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL[1]		VEH-MI DEMAND PK-HR TOTAL[2]		EXCESS CAPACITY PK-HR VEH-MI[3]		EXISTING DEFICIENCIES PK-HR VEH-MI[4]	
					NB/EB	SB/WB				NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
A. W. Grimes	Gattis School Rd	SH 45 WBFR	4,834	0.92	3	3	6D	6 Lane - Existing	6D	1,794	862	100%	900	900	2,472	2,472	1,642	789	829	1,683		
A. W. Grimes	US 79	Gattis School Rd	8,204	1.55	3	3	6D	6 Lane - Existing	6D	1,636	1,158	100%	900	900	4,195	4,195	2,542	1,799	1,653	2,396		
Bratton Ln	IH 35 SBFR	1160' S of Michael Angelo	2,215	0.42	1	1	2U	4 Lane - Enhanced	4D	103	130	50%	410	410	86	86	22	27	64	59		
Brown St	Round Rock Ave	McNeil Dr	1,558	0.30	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	121	121						
CR 168/Gattis School Rd	South Crossing Dr	Doublecreek Dr	2,090	0.40	2	2	4U	6 Lane - Enhanced	6D	1,207	830	100%	680	680	538	538	478	329	61	210		
CR 168/Gattis School Rd	A.W. Grimes Blvd	South Crossing Dr	1,414	0.27	2	2	4D	6 Lane - Enhanced	6D	1,207	830	100%	810	810	434	434	323	222	111	212		
CR 168/Gattis School Rd	Kenney Fort Blvd	Via Sonoma Trl	2,747	0.52	2	2	5U	6 Lane - Enhanced	6D	1,256	812	100%	770	770	801	801	653	422	148	379		
CR 168/Gattis School Rd	Via Sonoma Trl	High Country Rd	2,108	0.40	2	2	4U	6 Lane - Enhanced	6D	1,256	812	100%	680	680	543	543	501	324	42	219		
CR 168/Gattis School Rd	Short Trl	S Mays St	354	0.07	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	27	27						
CR 168/Gattis School Rd	S Mays St	Greenlawn Blvd	3,446	0.65	2	2	4U	6 Lane - Enhanced	6D	978	910	100%	680	680	888	888	638	594	249	294		
CR 168/Gattis School Rd	IH 35 NBFR	Short Trl	240	0.05	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	19	19						
CR 168/Gattis School Rd	S Mays St	Greenlawn Blvd	3,446	0.65	2	2	4U	6 Lane - Enhanced	6D	978	910	100%	680	680	888	888	638	594	249	294		
CR 168/Gattis School Rd	Doublecreek Dr	Kenney Fort Blvd	4,140	0.78	2	2	4U	6 Lane - Enhanced	6D	1,256	812	100%	680	680	1,066	1,066	985	637	82	430		
CR 168/Gattis School Rd	Greenlawn Dr	Windy Park Dr	1,489	0.28	2	2	4U	6 Lane - Enhanced	6D	1,093	870	100%	680	680	384	384	308	245	75	138		
CR 168/Gattis School Rd	Windy Park Dr	A.W. Grimes Blvd	1,256	0.24	2	2	4D	6 Lane - Enhanced	6D	1,093	870	100%	810	810	385	385	260	207	125	178		
CR 168/Gattis School Rd	High Country Rd	Red Bud Ln	1,148	0.22	0	0	5U	6 Lane - Enhanced	6D	1,198	865	100%	770	770	0	0	260	188	-260	-188	260	188
CR 170	SH 45 EBFR	430' S of Glenn Dr	1,848	0.35	2	2	4D	4 Lane - Existing	4D	913	894	100%	810	810	567	567	320	313	247	254		
CR 172	McNeil Dr	Lynda Sue St	1,053	0.20	2	2	4U	4 Lane - Enhanced	4D	1,056	568	50%	680	680	136	136	105	57	30	79		
CR 172	Hesters Crossing Rd	445' N of Hesters Crossing	445	0.08	2	2	4U	4 Lane - Enhanced	4D	1,056	568	50%	680	680	57	57	45	24	13	33		
Deepwood Dr	175' N of Dragon Dr	McNeil Dr	5,178	0.98	1	1	2U	2 Lane - Existing	2U	334	293	100%	410	410	402	402	328	287	75	115		
Deepwood Dr	RM 620	960' N of Dragon Dr	2,414	0.46	2	2	4D	4 Lane - Existing	4D	334	293	50%	810	810	370	370	76	67	294	303		
Deepwood Dr	960' N of Dragon Dr	175' N of Dragon Dr	783	0.15	2	2	4D	4 Lane - Existing	4D	334	293	100%	810	810	240	240	50	43	191	197		
Dell Way	S Mays St	Greenlawn Blvd	3,957	0.75	2	2	5U	4 Lane - Enhanced	4D	835	418	100%	770	770	1,154	1,154	626	313	528	841		
Double Creek Dr	Gattis School Rd	SH 45 WBFR	3,225	0.61	2	2	4D	4 Lane - Existing	4D	260	264	100%	810	810	989	989	159	161	831	828		
Doublecreek Blvd	Forest Creek Dr	Gattis School Rd	3,477	0.66	2	2	4D	4 Lane - Existing	4D	536	282	100%	810	810	1,067	1,067	353	186	714	881		
FM 1325	SH 45 EBFR	810' S of SH 45 EBFR	811	0.15	2	2	4D	4 Lane - Existing	4D	1,086	761	100%	810	810	249	249	167	117	82	132		
FM 1325	SH 45 WBFR	SH 45 EBFR	328	0.06	2	2	6U	4 Lane - Existing	6U	n/a	n/a	100%	770	770	96	96						
FM 620	Chisholm Trl	IH 35 SBFR	910	0.17	2	2	5U	6 Lane - Enhanced	6D	1,293	1,692	50%	770	770	133	133	111	146	21	-13		13
FM 620	IH 35 SBFR	IH 35 NBFR	416	0.08	3	3	6U	6 Lane - Existing	6U	n/a	n/a	100%	770	770	182	182						
Forest Creek	Doublecreek Dr	Kenny Fort Blvd	2,870	0.54	2	2	4D	4 Lane - Existing	4D	256	384	100%	810	810	881	881	139	209	741	672		
Forest Creek	Kenney Fort Blvd	Red Bud Ln	7,323	1.39	2	2	4D	4 Lane - Existing	4D	473	328	100%	810	810	2,247	2,247	656	455	1,591	1,792		
Georgetown St	Main St	McNeil Extension (Future)	442	0.08	1	1	2U	2 Lane - Existing	2U	604	322	100%	410	410	34	34	51	27	-16	7	16	
Georgetown St	575' S of US 79	Main St	2,315	0.44	1	1	3U	2 Lane - Existing	3U	604	322	100%	510	510	224	224	265	141	-41	82	41	
Georgetown St	US 79	575' S of US 79	574	0.11	2	2	4U	4 Lane - Existing	4U	604	322	100%	680	680	148	148	66	35	82	113		
Greenlawn Blvd	Gattis School Rd	Dell Way	3,977	0.75	2	2	4D	4 Lane - Existing	4D	823	225	100%	810	810	1,220	1,220	620	169	600	1,051		
Greenlawn Blvd	Dell Way	SH 45 WBFR	1,020	0.19	2	2	4D	4 Lane - Existing	4D	823	225	100%	810	810	313	313	159	43	154	269		
Greenlawn Blvd	Pflugerville Pkwy	SH 45 EBFR	2,260	0.43	2	2	4D	6 Lane - Enhanced	6D	837	189	100%	810	810	693	693	358	81	335	613		
Greenlawn Blvd	SH 45 WBFR	SH 45 EBFR	329	0.06	4	3	7U	6 Lane - Existing	8U	n/a	n/a	100%	860	860	214	161						
Greenlawn Blvd	IH 35 NBFR	Pflugerville Pkwy	3,091	0.59	2	2	4D	6 Lane - Enhanced	6D	837	189	100%	810	810	948	948	490	111	458	838		
Hesters Crossing	IH 35 NBFR	IH 35 SBFR	577	0.11	3	3	7U	4 Lane - Existing	7U	n/a	n/a	100%	860	860	282	282						
Hesters Crossing	IH 35 NBFR	S Mays St	484	0.09	2	2	4D	4 Lane - Existing	4D	1,324	1,255	100%	810	810	149	149	121	115	27	33		
Hesters Crossing Rd	Dry Creek Dr	IH 35 SBFR	1,691	0.32	2	2	5U	4 Lane - Enhanced	4D	934	815	100%	770	770	493	493	299	261	194	232		
Hesters Crossing Rd	La Frontera Blvd	Dry Creek Dr	2,459	0.47	2	2	4D	4 Lane - Existing	4D	934	815	100%	810	810	754	754	435	380	319	375		
Hesters Crossing Rd	CR 172	La Frontera Blvd	1,605	0.30	2	2	4D	4 Lane - Existing	4D	n/a	n/a	100%	810	810	492	492						
High Country Blvd	Roundabout Ln	SH 45 WBFR	4,037	0.76	1	1	3U	2 Lane - Existing	3U	838	238	100%	510	510	390	390	641	182	-251	208	251	
High Country Blvd	Gattis School Rd	Roundabout Ln	779	0.15	2	2	4D	2 Lane - Existing	4D	838	238	100%	810	810	239	239	124	35	115	204		
Kenney Fort Blvd	US 79	Forest Creek Blvd	5,039	0.95	3	3	6D	6 Lane - Existing	6D	315	298	100%	900	900	2,577	2,577	301	284	2,276	2,292		
La Frontera	Hesters Crossing Rd	SH 45 WBFR	1,845	0.35	2	2	4D	4 Lane - Existing	4D	703	436	100%	810	810	566	566	246	152	320	414		
Main St	Mays St	Georgetown St	2,442	0.46	1	1	2U	2 Lane - Existing	2U	539	294	100%	410	410	190	190	249	136	-60	54	60	
Main St	Brown St	Mays St	935	0.18	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	73	73						
McNeil Rd	1275' S of W Messick Loo	CR 172	3,777	0.72	2	2	4U	6 Lane - Enhanced	6D	894	660	50%	680	680	486	486	320	236	167	250		
McNeil Rd	W Bagdad Ave	E Bagdad Ave	95	0.02	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	7	7						
McNeil Rd	E Bagdad Ave	Blair St	360	0.07	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	28	28						
McNeil Rd	IH 35 NBFR	Blair St	1,782	0.34	2	2	4U	4 Lane - Existing	4U	175	340	100%	680	680	459	459	59	115	400	344		
McNeil Rd	CR 172	Deepwood Dr	1,102	0.21	2	2	4U	6 Lane - Enhanced	6D	860	591	100%	680	680	284	284	179	123	104	160		
McNeil Rd	Deepwood Dr	IH 35 SBFR	5,193	0.98	2	2	4U	6 Lane - Enhanced	6D	825	521	100%	680	680	1,338	1,338	811	512	526	825		
McNeil Rd	IH 35 NBFR	IH 35 SBFR	355	0.07	2	2	5U	4 Lane - Existing	5U	n/a	n/a	100%	770	770	104	104						
N Mays St	US 79	Main St	3,661	0.69	2	2	5U	4 Lane - Existing	5U	698	527	100%	770	770	1,068	1,068	484	365	584	702		
N Mays St	Main St	McNeil Rd	491	0.09	2	2	5U	4 Lane - Existing	5U	698	527	100%	770	770	143	143	65	49	78	94		
Red Bud Ln	340' S of Forest Creek Dr	Gattis School Rd	3,735	0.71	1	1	2U	4 Lane - Enhanced	4D	859	681	50%	410	410	145	145	304	241	-159	-96	159	96
Red Bud Ln	Forest Creek Dr	340' S of Forest Creek Dr	342	0.06	1	1	2U	4 Lane - Enhanced	4D	859	681	100%	410	410	27	27	56	44	-29	-18	29	18
Red Bud Ln	295' S of Wildflower Trl	840' N of Forest Creek Dr	2,907	0.55	1	1	2U	4 Lane - Enhanced	4D	740	738	50%	410	410	113	113	204	203	-91	-90	91	90
Red Bud Ln	CR 123	270' N of Forest Ridge Blv	848	0.16	2	2	4D	4 Lane - Existing	4D	740	738	100%	810	810	260	260	119	119	141	142		
Red Bud Ln	US 70	CR 123	863	0.16	2	2	4D	4 Lane - Existing	4D	740	738	50%	810	810	132	132	60	60	72	72		
Red Bud Ln	270' N of Forest Ridge Blv	Forest Ridge Blvd	272	0.05	2	2	4D	4 Lane - Existing	4D	740	738	50%	810	810	42	42	19	19	23	23		
Red Bud Ln	Forest Ridge Blvd	265' S of Forest Ridge Blv	265	0.05	1	1	2U	4 Lane - Enhanced	4D	740	738	50%	410	410	10	10	19	19	-8	-8	8	8
Red Bud Ln	265' S of Forest Ridge Blv	280' S of Woodlawn Ln	565	0.11	1	1	2U	4 Lane - Enhanced	4D	740	738	100%	410	410	44	44	79	79	-35	-35	35	35

Red Bud Ln	280' S of Woodlawn Ln	130' S of Old Oaks Dr	554	0.10	1	1	2U	4 Lane - Enhanced	4D	740	738	50%	410	410	22	22	39	39	-17	-17	17	17
Red Bud Ln	130' S of Old Oaks Dr	315' S of Country Dr	561	0.11	1	1	2U	4 Lane - Enhanced	4D	740	738	100%	410	410	44	44	79	78	-35	-35	35	35
Red Bud Ln	315' S of Country Dr	Wildflower Trl	551	0.10	1	1	2U	4 Lane - Enhanced	4D	740	738	50%	410	410	21	21	39	39	-17	-17	17	17
Red Bud Ln	Wildflower Trl	295' S of Wildflower Trl	293	0.06	1	1	2U	4 Lane - Enhanced	4D	740	738	100%	410	410	23	23	41	41	-18	-18	18	18
Red Bud Ln	840' N of Forest Creek Dr	Forest Creek Dr	840	0.16	1	1	2U	4 Lane - Enhanced	4D	740	738	100%	410	410	65	65	118	117	-53	-52	53	52
RM 620	Deepwood Dr	Chisholm Trl Rd	4,012	0.76	2	2	5U	6 Lane - Enhanced	6D	1,293	1,692	50%	770	770	585	585	491	643	94	-58		58
Round Rock Ave	IH 35 NBFR	N Brown St	1,326	0.25	2	2	4U	4 Lane - Existing	4U	393	404	100%	680	680	342	342	99	101	243	240		
Roundville Ln	A.W. Grimes Blvd	2060' W of A.W. Grimes B	2,058	0.39	0	0	2U	3 Lane - Proposed	4D	n/a	n/a	100%	410	410	0	0						
S Mays St	Gattis School Rd	Hesters Crossing Rd	1,403	0.27	2	2	5U	4 Lane - Enhanced	4D	1,536	1,049	100%	770	770	409	409	408	279	1	130		
S Mays St	Hesters Crossing Rd	Dell Way	1,205	0.23	2	2	5U	4 Lane - Enhanced	4D	835	418	100%	770	770	351	351	191	95	161	256		
S Mays St	Nash St	Gattis School Rd	3,656	0.69	2	2	5U	4 Lane - Enhanced	4D	752	717	100%	770	770	1,066	1,066	521	496	546	570		
S Mays St	McNeil Rd	Nash St	1,450	0.27	2	2	4U	4 Lane - Enhanced	4U	752	717	100%	680	680	373	373	207	197	167	177		
Schultz	290' S of SH 45 EBFR	255' S of Autumn Sage W	2,636	0.50	1	1	2U	4 Lane - Enhanced	2U	276	186	50%	410	410	102	102	69	46	33	56		
Schultz	SH 45 EBFR	290' S of SH 45 EBFR	291	0.06	1	1	2U	4 Lane - Enhanced	2U	276	186	100%	410	410	23	23	15	10	7	12		
US 79	Joe DiMaggio Blvd	Red Bud Ln	7,831	1.48	2	2	4D	6 Lane - Enhanced	6D	1,717	1,219	50%	810	810	1,201	1,201	1,273	904	-72	297	72	
US 79	Red Bud Ln	200' E of Red Bud Ln	201	0.04	2	2	4D	6 Lane - Enhanced	6D	1,717	1,219	100%	810	810	62	62	65	46	-4	15	4	
US 79	1825' W of A.W. Grimes B	Joe DiMaggio Blvd	4,249	0.80	2	2	4D	6 Lane - Enhanced	6D	1,801	1,341	50%	810	810	652	652	725	540	-73	112	73	
US 79	A.W. Grimes Blvd	1825' W of A.W. Grimes B	1,824	0.35	2	2	4D	6 Lane - Enhanced	6D	1,801	1,341	50%	810	810	280	280	311	232	-31	48	31	
US 79	IH 35 NBFR	N Mays St	1,409	0.27	2	2	6D	6 Lane - Existing	6D	1,330	1,348	100%	900	900	480	480	355	360	125	121		
US 79	N Mays St	Georgetown St	3,883	0.74	2	2	5U	6 Lane - Enhanced	6D	1,617	1,405	50%	770	770	566	566	595	517	-28	50	28	
US 79	Georgetown St	Sunrise Rd	953	0.18	2	2	5U	6 Lane - Enhanced	6D	1,885	1,462	50%	770	770	139	139	170	132	-31	7	31	
US 79	Sunrise Rd	1685' W of A.W. Grimes B	2,193	0.42	2	2	5U	6 Lane - Enhanced	6D	1,885	1,462	50%										
US 79	1685' W of A.W. Grimes B	A.W. Grimes Blvd	1,685	0.32	2	2	4D	6 Lane - Enhanced	6D	1,885	1,462	50%										
W Bagdad Ave	Brown St	Mays St	698	0.13	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%										
W Pflugerville PKWY	Greenlawn Blvd	1050' E of Greenlawn Blvd	1,047	0.20	2	2	4D	4 Lane - Existing	4D	n/a	n/a	100%	810	810	321	321						
SUBTOTAL			**185,050**	**35.05**											**43,434**	**43,380**	**25,396**	**18,006**	**16,072**	**23,462**	**1,329**	**645**
															86,814		**43,402**		**39,534**		**1,974**	

1. Veh-Mi Supply Pk-Hr Total = [Length (mi)] * [Exist Lanes] * [Veh-Mi Capacity Pk-Hr Per Ln] * [% in Service Area]
2. Veh-Mi Demand Pk-Hr Total = [Length (mi)] * [PM Peak Hour Vol] * [% In Service Area]
3. Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]
4. Existing Deficiencies Pk-Hr Veh-Mi = [Veh-Mi Demand Pk-Hr Total] - [Veh-Mi Supply Pk-Hr Total]

Note: Mileage lengths are shown as rounded to the nearest 0.01. Actual calculations were performed using exact mileage length [Length (ft) / 5,280]. "n/a" are roadways that were not analyzed. Most of these roadways were 2 Lane Collectors or bridges over I-35 included as intersection projects.

Appendix D – Plan for Awarding the Roadway Impact Fee Credit Summary

(as prepared by NewGen Strategies.)

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area A

Recoverable Impact Fee CIP Costs	$	37,155,848	Line 16, Maximum Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs		(290,195)	Page 4 of Appendix E - Service Area A
Financing Costs		10,724,680	See Detail Below
Existing Fund Balance		-	Page 1 of Appendix E - Service Area A
Interest Earnings		(4,125,954)	Page 5 of Appendix E - Service Area A
Pre Credit Recoverable Cost for Impact Fee	$	43,464,380	Sum of Above
Credit for Ad Valorem Revenues		(273,155)	Page 8 of Appendix E - Service Area A
Maximum Recoverable Cost for Impact Fee	**$**	**43,191,225**	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area A column, line 16 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs as provided by the City.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (Page 7 of Appendix E - Service Area A). Interest costs are derived from forecasted debt issues.

New Annual Debt Service	$	26,003,735	(Page 3 of Appendix E - Service Area A)
Existing Annual Debt Service		3,015,472	(Page 3 of Appendix E - Service Area A)
Principal Component		(18,294,527)	(Page 4 of Appendix E - Service Area A)
Financing Costs	$	10,724,680	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 1.71% annual interest rate based on the City's current annual return as of 03/14/2018. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area A.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 8 of Appendix E - Service Area A.

Maximum Recoverable Cost for Impact Fee:

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

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area B

Recoverable Impact Fee CIP Costs	$	83,055,152	Line 16, Maximum Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs		(125,808)	Page 4 of Appendix E - Service Area B
Financing Costs		24,016,860	See Detail Below
Existing Fund Balance		-	Page 1 of Appendix E - Service Area B
Interest Earnings		(9,711,073)	Page 5 of Appendix E - Service Area B
Pre Credit Recoverable Cost for Impact Fee	$	97,235,131	Sum of Above
Credit for Ad Valorem Revenues		(1,116,621)	Page 8 of Appendix E - Service Area E
Maximum Recoverable Cost for Impact Fee	**$**	**96,118,510**	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area B column, line 16 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Represents the portion of principal paid for existing debt funded project costs as provided by the City.

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (Page 7 of Appendix E - Service Area B). Interest costs are derived from forecasted debt issues.

New Annual Debt Service	$	64,493,561	(Page 3 of Appendix E - Service Area B)
Existing Annual Debt Service		-	(Page 3 of Appendix E - Service Area B)
Principal Component		(40,476,701)	(Page 4 of Appendix E - Service Area B)
Financing Costs	$	24,016,860	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 1.71% annual interest rate based on the City's current annual return as of 03/14/2018. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area B.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 8 of Appendix E - Service Area B.

Maximum Recoverable Cost for Impact Fee:

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

SUMMARY OF ROADWAY IMPACT FEE DETERMINATION

Service Area C

Recoverable Impact Fee CIP Costs	$	102,387,983	Line 16, Maximum Fee Calculation Table
Principal Paid on Existing Debt Funded Project Costs		-	Page 4 of Appendix E - Service Area C
Financing Costs		24,921,243	See Detail Below
Existing Fund Balance		-	Page 1 of Appendix E - Service Area C
Interest Earnings		(9,934,786)	Page 5 of Appendix E - Service Area C
Pre Credit Recoverable Cost for Impact Fee	$	117,374,440	Sum of Above
Credit for Ad Valorem Revenues		(1,553,766)	Page 8 of Appendix E - Service Area C
Maximum Recoverable Cost for Impact Fee	**$**	**115,820,674**	

Recoverable Impact Fee CIP Costs:

Represents the portion of capital improvement costs that are eligible for funding through impact fees. Reference is Service Area C column, line 16 on the Max Fee Calculation Table.

Principal Paid on Existing Debt Funded Project Costs:

Not Applicable to Service Area C

Financing Costs:

Represents the interest costs associated with debt financing the new impact fee project costs. It is assumed one-half of the new impact fee project costs will be funded through new debt issues (Page 7 of Appendix E - Service Area C). Interest costs are derived from forecasted debt issues.

New Annual Debt Service	$	65,618,253	(Page 3 of Appendix E - Service Area C)
Existing Annual Debt Service		-	(Page 3 of Appendix E - Service Area C)
Principal Component		(40,697,010)	(Page 4 of Appendix E - Service Area C)
Financing Costs	$	24,921,243	

Interest Earnings:

Represents the interest earned on cash flows. Assumes a 1.71% annual interest rate based on the City's current annual return as of 03/14/2018. The Impact Fee Statute states that interest earnings are funds of the impact fee account and are held to the same restrictions as impact fee revenues. Therefore in order to recognize that interest earnings are used to fund capital improvements, interest earnings are credited against the recoverable costs. Reference is the sum of Accumulated Interest on page 5 of Appendix E - Service Area C.

Pre Credit Recoverable Cost for Impact Fee

Represents Recoverable Impact Fee CIP Costs plus Financing Costs less Interest Earnings.

Credit for Ad Valorem Revenues:

In 2001, the Impact Fee Statute was amended to include a credit for ad valorem and utility revenues generated by new service units during the ten-year timeframe that are used to fund impact fee eligible projects for which the new service units were charged an impact fee. The intent of this amendment is to avoid double-charging the new service units for impact fee capital improvements. The credit recognizes ad valorem revenues used to fund the debt service of debt financed impact fee eligible projects and assumes that all non-debt funded impact fee eligible project costs will be funded solely through impact fee revenues or non-ad valorem revenue sources. Reference is page 8 of Appendix E - Service Area C.

Maximum Recoverable Cost for Impact Fee:

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

Appendix E – Plan for Awarding the Roadway Impact Fee Credit Supporting Exhibits

(as prepared by NewGen Strategies.)

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

I. General Assumptions

Annual Interest Rate on Deposits[1]	1.71%
Annual Service Unit Growth[2]	1,613
Existing Fund Balance[3]	-

Portion of Projects Funded by Existing Debt[4]	$ 2,456,979
Non-debt Funded New Project Cost[5]	18,571,126
New Project Cost Funded Through New Debt[6]	16,127,743
Total Recoverable Project Cost[7]	$ 37,155,848

II. New Debt Issues Assumptions

Year	Principal[8]	Interest[9]	Term
1	$ 1,612,774	4.00%	20
2	1,612,774	4.50%	20
3	1,612,774	4.75%	20
4	1,612,774	5.00%	20
5	1,612,774	5.00%	20
6	1,612,774	5.25%	20
7	1,612,774	5.25%	20
8	1,612,774	5.50%	20
9	1,612,774	5.50%	20
10	1,612,774	5.75%	20
Total	$ 16,127,743		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures[10]
1	$ 2,602,415
2	3,469,887
3	3,469,887
4	3,469,887
5	3,469,887
6	3,469,887
7	3,469,887
8	3,469,887
9	3,469,887
10	4,337,359
Total	$ 34,698,869

(1) Money Market Earnings per City Staff As of March 2018
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) New Impact Fee, Balance Not Applicable
(4) Provided by City Staff
(5) Assumes 50% of new project costs funded through sources other than debt
(6) Assumes 50% of new project costs funded through new debt issues
(7) Line 16 of the Max Fee Table Report
(8) Assumes new debt issued in equal annual amounts
(9) Estimated interest cost provided by City's Financial Advisor
(10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 118,671	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 118,671
2	118,671	123,984	-	-	-	-	-	-	-	-	242,655
3	118,671	123,984	126,684	-	-	-	-	-	-	-	369,339
4	118,671	123,984	126,684	129,413	-	-	-	-	-	-	498,752
5	118,671	123,984	126,684	129,413	129,413	-	-	-	-	-	628,165
6	118,671	123,984	126,684	129,413	129,413	132,171	-	-	-	-	760,336
7	118,671	123,984	126,684	129,413	129,413	132,171	132,171	-	-	-	892,506
8	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	-	-	1,027,462
9	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	-	1,162,418
10	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
11	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
12	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
13	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
14	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
15	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
16	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
17	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
18	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
19	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
20	118,671	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,300,187
21	-	123,984	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,181,516
22	-	-	126,684	129,413	129,413	132,171	132,171	134,956	134,956	137,769	1,057,532
23	-	-	-	129,413	129,413	132,171	132,171	134,956	134,956	137,769	930,848
24	-	-	-	-	129,413	132,171	132,171	134,956	134,956	137,769	801,435
25	-	-	-	-	-	132,171	132,171	134,956	134,956	137,769	672,022
26	-	-	-	-	-	-	132,171	134,956	134,956	137,769	539,851
27	-	-	-	-	-	-	-	134,956	134,956	137,769	407,681
28	-	-	-	-	-	-	-	-	134,956	137,769	272,725
29	-	-	-	-	-	-	-	-	-	137,769	137,769
	$ 2,373,415	$ 2,479,677	$ 2,533,683	$ 2,588,264	$ 2,588,264	$ 2,643,411	$ 2,643,411	$ 2,699,117	$ 2,699,117	$ 2,755,376	$ 26,003,735

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

II. Summary of Annual Expenses

Year	New Annual Debt Service[1]	Annual Capital Expenditures[2]	Annual Bond Proceeds[2]	Existing Annual Debt Service[3]	Annual Credit[4]	Total Expense
1	$ 118,671	$ 2,602,415	$ (1,612,774)	$ 165,309	$ (1,367)	$ 1,272,253
2	242,655	3,469,887	(1,612,774)	166,149	(3,917)	2,262,000
3	369,339	3,469,887	(1,612,774)	167,058	(7,672)	2,385,837
4	498,752	3,469,887	(1,612,774)	168,225	(12,660)	2,511,430
5	628,165	3,469,887	(1,612,774)	169,452	(18,835)	2,635,895
6	760,336	3,469,887	(1,612,774)	170,490	(26,253)	2,761,685
7	892,506	3,469,887	(1,612,774)	172,606	(34,883)	2,887,342
8	1,027,462	3,469,887	(1,612,774)	165,070	(44,428)	3,005,217
9	1,162,418	3,469,887	(1,612,774)	166,055	(55,420)	3,130,166
10	1,300,187	4,337,359	(1,612,774)	167,574	(67,721)	4,124,624
11	1,300,187	-	-	153,844	-	1,454,031
12	1,300,187	-	-	154,678	-	1,454,864
13	1,300,187	-	-	156,153	-	1,456,340
14	1,300,187	-	-	157,212	-	1,457,398
15	1,300,187	-	-	158,865	-	1,459,052
16	1,300,187	-	-	136,539	-	1,436,726
17	1,300,187	-	-	138,370	-	1,438,557
18	1,300,187	-	-	139,974	-	1,440,160
19	1,300,187	-	-	141,849	-	1,442,035
20	1,300,187	-	-	-	-	1,300,187
21	1,181,516	-	-	-	-	1,181,516
22	1,057,532	-	-	-	-	1,057,532
23	930,848	-	-	-	-	930,848
24	801,435	-	-	-	-	801,435
25	672,022	-	-	-	-	672,022
26	539,851	-	-	-	-	539,851
27	407,681	-	-	-	-	407,681
28	272,725	-	-	-	-	272,725
29	137,769	-	-	-	-	137,769
	$ 26,003,735	$ 34,698,869	$ (16,127,743)	$ 3,015,472	$ (273,155)	$ 47,317,179

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

III. Summary of Principal Paid to Date for Existing Debt[3]

	GO 2002	GO 2004	GO 2007	CO 2014	TOTAL
2002					-
2003	-				-
2004	619	-			619
2005	1,688	759			2,446
2006	7,454	4,525			11,978
2007	9,704	-			9,704
2008	3,797	7,207	-		11,004
2009	4,022	4,091	8,148		16,262
2010	4,135	4,227	8,496		16,858
2011	6,132	4,443	8,894		19,469
2012	6,469	4,606	9,341		20,416
2013	6,835	4,850	9,738		21,423
2014	7,201	5,094	10,235		22,529
2015	7,594	5,283	10,682	-	23,560
2016	8,016	5,500	11,179	11,609	36,304
2017	8,438	5,717	11,726	51,742	77,622
	$ 82,104	$ 56,301	$ 88,439	$ 63,350	$ 290,195

IV. Summary of Debt Financing

Existing Debt Funded Project Costs[5]	2,456,979
-Less Principal PTD	290,195
Outstanding Debt Principal	2,166,785
New Project Costs Debt Principal[5]	16,127,743
Principal Component	**$ 18,294,527**

(1) Appendix E - Service Area A, Page 2
(2) Appendix E - Service Area A, Page 1
(3) Existing debt funded project costs from details provided by staff.
(4) Appendix E - Service Area A, Page 8
(5) Appendix E - Service Area A, Page 1

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

Year	Impact Fee	Service Units	Impact Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ -
1	$ 2,678	1,613	$ 4,319,122	$ 1,272,253	$ 3,046,869	26,051	3,072,920
2	2,678	1,613	4,319,122	2,262,000	2,057,123	70,135	5,200,178
3	2,678	1,613	4,319,122	2,385,837	1,933,285	105,453	7,238,916
4	2,678	1,613	4,319,122	2,511,430	1,807,693	139,241	9,185,850
5	2,678	1,613	4,319,122	2,635,895	1,683,227	171,470	11,040,547
6	2,678	1,613	4,319,122	2,761,685	1,557,437	202,109	12,800,093
7	2,678	1,613	4,319,122	2,887,342	1,431,781	231,123	14,462,997
8	2,678	1,613	4,319,122	3,005,217	1,313,905	258,551	16,035,453
9	2,678	1,613	4,319,122	3,130,166	1,188,957	284,372	17,508,782
10	2,678	1,613	4,319,122	4,124,624	194,498	301,063	18,004,344
11	-	-	-	1,454,031	(1,454,031)	295,442	16,845,755
12	-	-	-	1,454,864	(1,454,864)	275,623	15,666,514
13	-	-	-	1,456,340	(1,456,340)	255,446	14,465,620
14	-	-	-	1,457,398	(1,457,398)	234,901	13,243,123
15	-	-	-	1,459,052	(1,459,052)	213,983	11,998,053
16	-	-	-	1,436,726	(1,436,726)	192,883	10,754,210
17	-	-	-	1,438,557	(1,438,557)	171,597	9,487,250
18	-	-	-	1,440,160	(1,440,160)	149,919	8,197,008
19	-	-	-	1,442,035	(1,442,035)	127,839	6,882,812
20	-	-	-	1,300,187	(1,300,187)	106,579	5,689,205
21	-	-	-	1,181,516	(1,181,516)	87,183	4,594,873
22	-	-	-	1,057,532	(1,057,532)	69,530	3,606,871
23	-	-	-	930,848	(930,848)	53,719	2,729,742
24	-	-	-	801,435	(801,435)	39,826	1,968,133
25	-	-	-	672,022	(672,022)	27,909	1,324,021
26	-	-	-	539,851	(539,851)	18,025	802,195
27	-	-	-	407,681	(407,681)	10,232	404,746
28	-	-	-	272,725	(272,725)	4,589	136,611
29	-	-	-	137,769	(137,769)	1,158	-
			43,191,225	47,317,179		4,125,954	

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

Year	Number of Years to End of Period	Future Value Interest Rate Factor	Escalation Recovery Fee Factor	Annual Service Units Actual	Annual Service Units Escalated	Annual Expense Actual	Annual Expense Escalated
1	29	1.6214	1.0000	1,613	2,615	$ 1,272,253	$ 2,062,782
2	28	1.5941	1.0000	1,613	2,571	2,262,000	3,605,858
3	27	1.5673	1.0000	1,613	2,528	2,385,837	3,739,326
4	26	1.5410	1.0000	1,613	2,486	2,511,430	3,869,990
5	25	1.5150	1.0000	1,613	2,444	2,635,895	3,993,496
6	24	1.4896	1.0000	1,613	2,403	2,761,685	4,113,729
7	23	1.4645	1.0000	1,613	2,362	2,887,342	4,228,594
8	22	1.4399	1.0000	1,613	2,323	3,005,217	4,327,231
9	21	1.4157	1.0000	1,613	2,284	3,130,166	4,431,368
10	20	1.3919	1.0000	1,613	2,245	4,124,624	5,741,049
11	19	1.3685	1.0000	-	-	1,454,031	1,989,834
12	18	1.3455	1.0000	-	-	1,454,864	1,957,501
13	17	1.3229	1.0000	-	-	1,456,340	1,926,543
14	16	1.3006	1.0000	-	-	1,457,398	1,895,529
15	15	1.2788	1.0000	-	-	1,459,052	1,865,776
16	14	1.2573	1.0000	-	-	1,436,726	1,806,338
17	13	1.2361	1.0000	-	-	1,438,557	1,778,232
18	12	1.2153	1.0000	-	-	1,440,160	1,750,284
19	11	1.1949	1.0000	-	-	1,442,035	1,723,098
20	10	1.1748	1.0000	-	-	1,300,187	1,527,482
21	9	1.1551	1.0000	-	-	1,181,516	1,364,729
22	8	1.1356	1.0000	-	-	1,057,532	1,200,982
23	7	1.1166	1.0000	-	-	930,848	1,039,341
24	6	1.0978	1.0000	-	-	801,435	879,800
25	5	1.0793	1.0000	-	-	672,022	725,329
26	4	1.0612	1.0000	-	-	539,851	572,878
27	3	1.0433	1.0000	-	-	407,681	425,348
28	2	1.0258	1.0000	-	-	272,725	279,760
29	1	1.0086	1.0000	-	-	137,769	138,947
					24,260	47,317,179	64,961,153

Total Escalated Expense for Entire Period	$	64,961,153
Less Future Value of Initial Fund Balance		-
Net Escalated Expense for Entire Period	$	64,961,153
Total Escalated Service Units		24,260
Impact Fee for Service Area A	**$**	**2,678**

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

Impact Fee Project Name[1]	Impact Fee Project No.[1]	Total Project Cost [1]	Percent in Service Area [1]	Cost in Service Area[1]	Impact Fee Recoverable Cost[2]	Debt Funded[3] Existing	Debt Funded[3] Proposed	Non-Debt Funded[3]	Impact Fee Recoverable Cost
New Hope Rd (1)	A-1	$ 7,800,000	100%	$ 7,800,000	$ 1,740,275	$ -	$ 870,138	$ 870,138	$ 1,740,275
New Hope Rd (2)	A-2	1,900,000	50%	950,000	211,957	-	105,978	105,978	211,957
New Hope Rd (3)	A-3	9,300,000	50%	4,650,000	1,037,472	-	518,736	518,736	1,037,472
Westinghouse Rd	A-4, B-1	9,031,296	50%	4,515,648	1,007,496	-	-	1,007,496	1,007,496
Wyoming Springs Dr (1)	A-5	1,700,000	100%	1,700,000	379,291	-	189,645	189,645	379,291
Wyoming Springs Dr (2)	A-6	9,100,000	100%	9,100,000	2,030,321	-	1,015,161	1,015,161	2,030,321
RM 1431 (1)	A-7	2,880,000	50%	1,440,000	321,282	-	160,641	160,641	321,282
RM 1431 (2)	A-8	3,020,000	100%	3,020,000	673,799	-	336,899	336,899	673,799
RM 1431 (3)	A-9	3,840,000	100%	3,840,000	856,751	-	428,375	428,375	856,751
Wyoming Springs Dr (3)	A-10	1,000,000	100%	1,000,000	223,112	-	111,556	111,556	223,112
Arterial L (1)	A-11	27,400,000	100%	27,400,000	6,113,275	-	3,056,638	3,056,638	6,113,275
Creek Bend Blvd (1)	A-12	10,500,000	100%	10,500,000	2,342,679	-	1,171,339	1,171,339	2,342,679
Creek Bend Blvd (2)	A-13	5,900,000	100%	5,900,000	1,316,362	-	658,181	658,181	1,316,362
Chisholm Trl Rd (1)	A-14	11,200,000	100%	11,200,000	2,498,857	-	1,249,429	1,249,429	2,498,857
Arterial L (2)	A-15, B-11	5,700,000	50%	2,850,000	635,870	-	317,935	317,935	635,870
CR 173	A-16	1,300,000	100%	1,300,000	290,046	-	145,023	145,023	290,046
Chisholm Trl Rd (2)	A-17	2,900,000	100%	2,900,000	647,025	-	323,513	323,513	647,025
Chisholm Trl Rd (3)	A-18	900,000	100%	900,000	200,801	-	100,401	100,401	200,801
Sam Bass Rd (1)	A-19	3,500,000	50%	1,750,000	390,446	-	195,223	195,223	390,446
Sam Bass Rd (2)	A-20	4,500,000	100%	4,500,000	1,004,005	-	502,003	502,003	1,004,005
Sam Bass Rd (3)	A-21	4,200,000	50%	2,100,000	468,536	-	234,268	234,268	468,536
Sam Bass Rd (4)	A-22	2,200,000	100%	2,200,000	490,847	-	245,423	245,423	490,847
Sam Bass Rd (5)	A-23	2,500,000	100%	2,500,000	557,781	-	278,890	278,890	557,781
Sam Bass Rd (6)	A-24	1,600,000	50%	800,000	178,490	-	89,245	89,245	178,490
FM 3406	A-25	6,980,000	100%	6,980,000	1,557,323	-	778,662	778,662	1,557,323
Wyoming Springs Dr (5)	A-26	8,500,000	100%	8,500,000	1,896,454	-	948,227	948,227	1,896,454
Chisholm Trl Rd (4)	A-27	2,600,000	100%	2,600,000	580,092	-	290,046	290,046	580,092
Creek Bend Blvd (3)	A-28	11,012,302	100%	11,012,302	2,456,979	2,456,979	-	-	2,456,979
Deepwood Dr (1)	A-29	6,000,000	100%	6,000,000	1,338,673	-	669,337	669,337	1,338,673
Deepwood Dr (2)	A-30	800,000	100%	800,000	178,490	-	89,245	89,245	178,490
RM 620	A-31, C-1	12,560,624	50%	6,280,312	1,401,214	-	-	1,401,214	1,401,214
Sam Bass Rd and FM 3406	AI-1	295,000	100%	295,000	65,818	-	32,909	32,909	65,818
Sam Bass Rd and Hairy Man Rd	AI-2	2,000,000	75%	1,500,000	334,668	-	167,334	167,334	334,668
Sam Bass Rd and Chisholm Trl Rd	AI-3	139,000	100%	139,000	31,013	-	15,506	15,506	31,013
Deepwood Dr and Round Rock Ave (RM 620)	AI-4, CI-1	392,000	50%	196,000	43,730	-	21,865	21,865	43,730
IH 35 Blvd and Round Rock Ave (RM 620)	AI-5, CI-2	588,000	50%	294,000	65,595	-	32,797	32,797	65,595
Update ITS and Traffic Managmenet Infrastructure	-	20,900,000	33%	6,966,667	1,554,349	-	777,174	777,174	1,554,349
Roadway Impact Fee Project		34,673	100%	34,673	34,673	-	-	34,673	34,673
Total		$ 206,672,895		$ 166,413,602	$ 37,155,848	$ 2,456,979	$ 16,127,743	$ 18,571,126	$ 37,155,848

(1) 2018 Transportation Impact Fee Study, Appendix A

(2) Line 16 of the Max Fee Table Report

(3) Based on Contributions by Project and Planned Future Debt Financing

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area A

2018 Vehicle Miles (All Service Areas)	333,473	
Ten Year Growth in Vehicle Miles (Service Area A) (1)	16,130	
	10	years
Annual Growth in Vehicle Miles	1,613	

	1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees	$ 283,979	$ 408,804	$ 536,397	$ 666,977	$ 797,617	$ 930,826	$ 1,065,112	$ 1,192,532	$ 1,328,473	$ 1,467,760	$ 8,678,479
2018 Vehicle Miles plus Service Area A Growth	335,086	336,699	338,312	339,925	341,538	343,151	344,764	346,377	347,990	349,603	
Total Debt Service Eligible for Impact Fees per Vehicle Mile	$ 0.85	$ 1.21	$ 1.59	$ 1.96	$ 2.34	$ 2.71	$ 3.09	$ 3.44	$ 3.82	$ 4.20	
Annual Growth in Service Area A Vehicle Miles (Cumulative)	1,613	3,226	4,839	6,452	8,065	9,678	11,291	12,904	14,517	16,130	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees	$ 1,367	$ 3,917	$ 7,672	$ 12,660	$ 18,835	$ 26,253	$ 34,883	$ 44,428	$ 55,420	$ 67,721	$ 273,155

Credit Amount **$ 273,155**

(1) Line 8 of the Max Fee Table Report

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

I. General Assumptions

Annual Interest Rate on Deposits[1]	1.71%
Annual Service Unit Growth[2]	3,278
Existing Fund Balance[3]	-

Portion of Projects Funded by Existing Debt[4]	$ 603,043
Non-debt Funded New Project Cost[5]	42,452,643
New Project Cost Funded Through New Debt[6]	39,999,467
Total Recoverable Project Cost[7]	$ 83,055,152

II. New Debt Issues Assumptions

Year	Principal[8]	Interest[9]	Term
1	$ 3,999,947	4.00%	20
2	3,999,947	4.50%	20
3	3,999,947	4.75%	20
4	3,999,947	5.00%	20
5	3,999,947	5.00%	20
6	3,999,947	5.25%	20
7	3,999,947	5.25%	20
8	3,999,947	5.50%	20
9	3,999,947	5.50%	20
10	3,999,947	5.75%	20
Total	$ 39,999,467		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures[10]
1	$ 6,183,908
2	8,245,211
3	8,245,211
4	8,245,211
5	8,245,211
6	8,245,211
7	8,245,211
8	8,245,211
9	8,245,211
10	10,306,514
Total	$ 82,452,109

(1) Money Market Earnings per City Staff As of March 2018
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) New Impact Fee, Balance Not Applicable
(4) Provided by City Staff
(5) Assumes 50% of new project costs funded through sources other than debt
(6) Assumes 50% of new project costs funded through new debt issues
(7) Line 16 of the Max Fee Table Report
(8) Assumes new debt issued in equal annual amounts
(9) Estimated interest cost provided by City's Financial Advisor
(10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 294,323	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 294,323
2	294,323	307,500	-	-	-	-	-	-	-	-	601,824
3	294,323	307,500	314,198	-	-	-	-	-	-	-	916,021
4	294,323	307,500	314,198	320,966	-	-	-	-	-	-	1,236,987
5	294,323	307,500	314,198	320,966	320,966	-	-	-	-	-	1,557,953
6	294,323	307,500	314,198	320,966	320,966	327,805	-	-	-	-	1,885,758
7	294,323	307,500	314,198	320,966	320,966	327,805	327,805	-	-	-	2,213,563
8	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	-	-	2,548,276
9	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	-	2,882,989
10	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
11	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
12	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
13	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
14	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
15	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
16	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
17	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
18	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
19	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
20	294,323	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	3,224,678
21	-	307,500	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	2,930,355
22	-	-	314,198	320,966	320,966	327,805	327,805	334,713	334,713	341,689	2,622,854
23	-	-	-	320,966	320,966	327,805	327,805	334,713	334,713	341,689	2,308,657
24	-	-	-	-	320,966	327,805	327,805	334,713	334,713	341,689	1,987,691
25	-	-	-	-	-	327,805	327,805	334,713	334,713	341,689	1,666,725
26	-	-	-	-	-	-	327,805	334,713	334,713	341,689	1,338,920
27	-	-	-	-	-	-	-	334,713	334,713	341,689	1,011,115
28	-	-	-	-	-	-	-	-	334,713	341,689	676,402
29	-	-	-	-	-	-	-	-	-	341,689	341,689
	$ 5,886,462	$ 6,150,010	$ 6,283,954	$ 6,419,321	$ 6,419,321	$ 6,556,095	$ 6,556,095	$ 6,694,257	$ 6,694,257	$ 6,833,789	$ 64,493,561

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

II. Summary of Annual Expenses

Year	New Annual Debt Service[1]	Annual Capital Expenditures[2]	Annual Bond Proceeds[2]	Existing Annual Debt Service[3]	Annual Credit[4]	Total Expense
1	$ 294,323	$ 6,183,908	$ (3,999,947)	$ -	$ (2,865)	$ 2,475,420
2	601,824	8,245,211	(3,999,947)	-	(11,602)	4,835,486
3	916,021	8,245,211	(3,999,947)	-	(26,236)	5,135,049
4	1,236,987	8,245,211	(3,999,947)	-	(46,792)	5,435,459
5	1,557,953	8,245,211	(3,999,947)	-	(72,977)	5,730,241
6	1,885,758	8,245,211	(3,999,947)	-	(105,014)	6,026,008
7	2,213,563	8,245,211	(3,999,947)	-	(142,492)	6,316,336
8	2,548,276	8,245,211	(3,999,947)	-	(185,764)	6,607,777
9	2,882,989	8,245,211	(3,999,947)	-	(234,299)	6,893,954
10	3,224,678	10,306,514	(3,999,947)	-	(288,580)	9,242,665
11	3,224,678	-	-	-	-	3,224,678
12	3,224,678	-	-	-	-	3,224,678
13	3,224,678	-	-	-	-	3,224,678
14	3,224,678	-	-	-	-	3,224,678
15	3,224,678	-	-	-	-	3,224,678
16	3,224,678	-	-	-	-	3,224,678
17	3,224,678	-	-	-	-	3,224,678
18	3,224,678	-	-	-	-	3,224,678
19	3,224,678	-	-	-	-	3,224,678
20	3,224,678	-	-	-	-	3,224,678
21	2,930,355	-	-	-	-	2,930,355
22	2,622,854	-	-	-	-	2,622,854
23	2,308,657	-	-	-	-	2,308,657
24	1,987,691	-	-	-	-	1,987,691
25	1,666,725	-	-	-	-	1,666,725
26	1,338,920	-	-	-	-	1,338,920
27	1,011,115	-	-	-	-	1,011,115
28	676,402	-	-	-	-	676,402
29	341,689	-	-	-	-	341,689
	$ 64,493,561	$ 82,452,109	$ (39,999,467)	$ -	$ (1,116,621)	$ 105,829,583

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

III. Summary of Principal Paid to Date for Existing Debt[3]

	GO 2002	CO 2014	TOTAL
2002			-
2003	-		-
2004	861		861
2005	2,349		2,349
2006	10,376		10,376
2007	13,508		13,508
2008	5,286		5,286
2009	5,599		5,599
2010	5,755		5,755
2011	8,535		8,535
2012	9,005		9,005
2013	9,514		9,514
2014	10,023		10,023
2015	10,571	-	10,571
2016	11,159	2,111	13,270
2017	11,746	9,410	21,155
	$ 114,287	$ 11,521	$ 125,808

IV. Summary of Debt Financing

Existing Debt Funded Project Costs[5]		603,043
-Less Principal PTD		125,808
Outstanding Debt Principal		477,235
New Project Costs Debt Principal[5]		39,999,467
Principal Component	**$**	**40,476,701**

(1) Appendix E - Service Area B, Page 2
(2) Appendix E - Service Area B, Page 1
(3) Existing debt funded project costs from details provided by staff.
(4) Appendix E - Service Area B, Page 8
(5) Appendix E - Service Area B, Page 1

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

Year	Impact Fee	Service Units	Impact Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ -
1	$ 2,933	3,278	$ 9,611,851	$ 2,475,420	$ 7,136,431	61,016	7,197,447
2	2,933	3,278	9,611,851	4,835,486	4,776,365	163,914	12,137,727
3	2,933	3,278	9,611,851	5,135,049	4,476,802	245,832	16,860,361
4	2,933	3,278	9,611,851	5,435,459	4,176,392	324,020	21,360,773
5	2,933	3,278	9,611,851	5,730,241	3,881,610	398,457	25,640,840
6	2,933	3,278	9,611,851	6,026,008	3,585,843	469,117	29,695,800
7	2,933	3,278	9,611,851	6,316,336	3,295,515	535,975	33,527,290
8	2,933	3,278	9,611,851	6,607,777	3,004,074	599,002	37,130,366
9	2,933	3,278	9,611,851	6,893,954	2,717,897	658,167	40,506,430
10	2,933	3,278	9,611,851	9,242,665	369,186	695,817	41,571,433
11	-	-	-	3,224,678	(3,224,678)	683,301	39,030,056
12	-	-	-	3,224,678	(3,224,678)	639,843	36,445,221
13	-	-	-	3,224,678	(3,224,678)	595,642	33,816,185
14	-	-	-	3,224,678	(3,224,678)	550,686	31,142,193
15	-	-	-	3,224,678	(3,224,678)	504,960	28,422,475
16	-	-	-	3,224,678	(3,224,678)	458,453	25,656,250
17	-	-	-	3,224,678	(3,224,678)	411,151	22,842,723
18	-	-	-	3,224,678	(3,224,678)	363,040	19,981,085
19	-	-	-	3,224,678	(3,224,678)	314,106	17,070,512
20	-	-	-	3,224,678	(3,224,678)	264,335	14,110,169
21	-	-	-	2,930,355	(2,930,355)	216,229	11,396,043
22	-	-	-	2,622,854	(2,622,854)	172,447	8,945,636
23	-	-	-	2,308,657	(2,308,657)	133,231	6,770,210
24	-	-	-	1,987,691	(1,987,691)	98,776	4,881,295
25	-	-	-	1,666,725	(1,666,725)	69,220	3,283,790
26	-	-	-	1,338,920	(1,338,920)	44,705	1,989,575
27	-	-	-	1,011,115	(1,011,115)	25,377	1,003,837
28	-	-	-	676,402	(676,402)	11,382	338,817
29	-	-	-	341,689	(341,689)	2,872	-
			96,118,510	105,829,583		9,711,073	

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

Year	Number of Years to End of Period	Future Value Interest Rate Factor	Escalation Recovery Fee Factor	Annual Service Units Actual	Annual Service Units Escalated	Annual Expense Actual	Annual Expense Escalated
1	29	1.6214	1.0000	3,278	5,314	$ 2,475,420	$ 4,013,550
2	28	1.5941	1.0000	3,278	5,225	4,835,486	7,708,257
3	27	1.5673	1.0000	3,278	5,137	5,135,049	8,048,168
4	26	1.5410	1.0000	3,278	5,051	5,435,459	8,375,776
5	25	1.5150	1.0000	3,278	4,966	5,730,241	8,681,565
6	24	1.4896	1.0000	3,278	4,882	6,026,008	8,976,172
7	23	1.4645	1.0000	3,278	4,800	6,316,336	9,250,453
8	22	1.4399	1.0000	3,278	4,719	6,607,777	9,514,578
9	21	1.4157	1.0000	3,278	4,640	6,893,954	9,759,755
10	20	1.3919	1.0000	3,278	4,562	9,242,665	12,864,830
11	19	1.3685	1.0000	-	-	3,224,678	4,412,956
12	18	1.3455	1.0000	-	-	3,224,678	4,338,763
13	17	1.3229	1.0000	-	-	3,224,678	4,265,817
14	16	1.3006	1.0000	-	-	3,224,678	4,194,098
15	15	1.2788	1.0000	-	-	3,224,678	4,123,585
16	14	1.2573	1.0000	-	-	3,224,678	4,054,257
17	13	1.2361	1.0000	-	-	3,224,678	3,986,095
18	12	1.2153	1.0000	-	-	3,224,678	3,919,079
19	11	1.1949	1.0000	-	-	3,224,678	3,853,189
20	10	1.1748	1.0000	-	-	3,224,678	3,788,407
21	9	1.1551	1.0000	-	-	2,930,355	3,384,752
22	8	1.1356	1.0000	-	-	2,622,854	2,978,634
23	7	1.1166	1.0000	-	-	2,308,657	2,577,738
24	6	1.0978	1.0000	-	-	1,987,691	2,182,049
25	5	1.0793	1.0000	-	-	1,666,725	1,798,937
26	4	1.0612	1.0000	-	-	1,338,920	1,420,833
27	3	1.0433	1.0000	-	-	1,011,115	1,054,934
28	2	1.0258	1.0000	-	-	676,402	693,851
29	1	1.0086	1.0000	-	-	341,689	344,611
					49,296	105,829,583	144,565,691

Total Escalated Expense for Entire Period	$	144,565,691
Less Future Value of Initial Fund Balance		-
Net Escalated Expense for Entire Period	$	144,565,691
Total Escalated Service Units		49,296
Impact Fee for Service Area B	**$**	**2,933**

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

Impact Fee Project Name[1]	Impact Fee Project No.[1]	Total Project Cost [1]	Percent in Service Area [1]	Cost in Service Area[1]	Impact Fee Recoverable Cost[2]	Debt Funded[3] Existing	Debt Funded[3] Proposed	Non-Debt Funded[3]	Impact Fee Recoverable Cost
Westinghouse Rd (1)	A-4, B-1	$ 9,031,296	50%	$ 4,515,648	$ 1,332,698	$ -	$ -	$ 1,332,698	$ 1,332,698
Westinghouse Rd (2)	B-2	5,500,000	50%	2,750,000	811,604	-	405,802	405,802	811,604
N Mays St (1)	B-3	1,889,219	100%	1,889,219	557,563	-	-	557,563	557,563
University Blvd (1)	B-4	8,900,000	100%	8,900,000	2,626,647	-	1,313,324	1,313,324	2,626,647
University Blvd (2)	B-5	30,700,000	50%	15,350,000	4,530,228	-	2,265,114	2,265,114	4,530,228
University Blvd (3)	B-6	4,800,000	100%	4,800,000	1,416,619	-	708,309	708,309	1,416,619
University Blvd (4)	B-7	9,700,000	50%	4,850,000	1,431,375	-	715,688	715,688	1,431,375
University Blvd (5)	B-8	29,300,000	100%	29,300,000	8,647,276	-	4,323,638	4,323,638	8,647,276
N Mays St (2)	B-9	5,800,000	100%	5,800,000	1,711,748	-	855,874	855,874	1,711,748
N Mays St (3)	B-10	24,800,000	100%	24,800,000	7,319,196	-	3,659,598	3,659,598	7,319,196
Arterial L (1)	A-15, B-11	5,700,000	50%	2,850,000	841,117	-	420,559	420,559	841,117
Arterial L (2)	B-12	21,200,000	100%	21,200,000	6,256,732	-	3,128,366	3,128,366	6,256,732
N Mays St (4)	B-13	3,100,000	100%	3,100,000	914,900	-	457,450	457,450	914,900
Sunrise Rd (1)	B-14	979,190	100%	979,190	288,987	-	-	288,987	288,987
Sunrise Rd (2)	B-15	1,000,000	100%	1,000,000	295,129	-	147,564	147,564	295,129
Sunrise Rd (3)	B-16	600,000	50%	300,000	88,539	-	44,269	44,269	88,539
Sunrise Rd (4)	B-17	500,000	100%	500,000	147,564	-	73,782	73,782	147,564
Sunrise Rd (5)	B-18	200,000	50%	100,000	29,513	-	14,756	14,756	29,513
Sunrise Rd (6)	B-19	800,000	100%	800,000	236,103	-	118,052	118,052	236,103
College Park (1)	B-20	5,400,000	100%	5,400,000	1,593,696	-	796,848	796,848	1,593,696
Avery Nelson	B-21	2,800,000	100%	2,800,000	826,361	-	413,180	413,180	826,361
College Park (2)	B-22	11,500,000	100%	11,500,000	3,393,982	-	1,696,991	1,696,991	3,393,982
Seton Pkwy	B-23	2,043,320	100%	2,043,320	603,043	603,043	-	-	603,043
Medical Center Pkwy	B-24	810,679	100%	810,679	239,255	-	-	239,255	239,255
CR 112 (1)	B-25	8,000,000	100%	8,000,000	2,361,031	-	1,180,516	1,180,516	2,361,031
CR 112 (2)	B-26	5,000,000	50%	2,500,000	737,822	-	368,911	368,911	737,822
Kenney Fort Blvd (1)	B-27	13,700,000	100%	13,700,000	4,043,266	-	2,021,633	2,021,633	4,043,266
Red Bud Ln (1)	B-28	2,600,000	100%	2,600,000	767,335	-	383,668	383,668	767,335
Red Bud Ln (2)	B-29	3,000,000	50%	1,500,000	442,693	-	221,347	221,347	442,693
Red Bud Ln (3)	B-30	4,100,000	100%	4,100,000	1,210,028	-	605,014	605,014	1,210,028
Old Settlers Blvd (1)	B-31	6,800,000	100%	6,800,000	2,006,876	-	1,003,438	1,003,438	2,006,876
Old Settlers Blvd (2)	B-32	18,100,000	100%	18,100,000	5,341,833	-	2,670,916	2,670,916	5,341,833
Old Settlers Blvd (3)	B-33	5,800,000	100%	5,800,000	1,711,748	-	855,874	855,874	1,711,748
Spur 379 (N Mays St)	B-34	2,700,000	100%	2,700,000	796,848	-	398,424	398,424	796,848
Sunrise Rd (7)	B-35	600,000	100%	600,000	177,077	-	88,539	88,539	177,077
FM 1460 (A.W. Grimes Blvd) (1)	B-36	1,000,000	100%	1,000,000	295,129	-	147,564	147,564	295,129
FM 1460 (A.W. Grimes Blvd) (2)	B-37	1,000,000	50%	500,000	147,564	-	73,782	73,782	147,564
FM 1460 (A.W. Grimes Blvd) (3)	B-38	3,940,000	100%	3,940,000	1,162,808	-	581,404	581,404	1,162,808
Kenney Fort Blvd (2)	B-39	2,600,000	100%	2,600,000	767,335	-	383,668	383,668	767,335
Kenney Fort Blvd (3)	B-40	2,800,000	50%	1,400,000	413,180	-	206,590	206,590	413,180
Kenney Fort Blvd (4)	B-41	15,200,000	100%	15,200,000	4,485,959	-	2,242,979	2,242,979	4,485,959
Kenney Fort Blvd (5)	B-42	5,800,000	100%	5,800,000	1,711,748	-	855,874	855,874	1,711,748
Red Bud Ln (4)	B-43	5,200,000	100%	5,200,000	1,534,670	-	767,335	767,335	1,534,670
Red Bud Ln (5)	B-44	2,200,000	50%	1,100,000	324,642	-	162,321	162,321	324,642
Red Bud Ln (6)	B-45	4,700,000	100%	4,700,000	1,387,106	-	693,553	693,553	1,387,106
US 79 (1)	B-46, C-6	13,340,000	50%	6,670,000	1,968,510	-	984,255	984,255	1,968,510
US 79 (2)	B-47	900,000	50%	450,000	132,808	-	66,404	66,404	132,808
N Mays St and University Blvd	BI-1	784,000	100%	784,000	231,381	-	115,691	115,691	231,381
Sunrise Rd and University Blvd	BI-2	1,063,000	100%	1,063,000	313,722	-	156,861	156,861	313,722
N Mays St and Steam Way	BI-3	170,235	100%	170,235	50,241	-	25,121	25,121	50,241
A.W. Grimes Blvd and Palm Valley Blvd	BI-4, CI-8	2,041,000	50%	1,020,500	301,179	-	150,590	150,590	301,179
Update ITS and Traffic Managmenet Infrastructure	-	20,900,000	33%	6,966,667	2,056,065	-	1,028,032	1,028,032	2,056,065
Roadway Impact Fee Project		34,673	100%	34,673	34,673	-	-	34,673	34,673
Total		$ 341,126,612		$ 281,337,131	$ 83,055,152	$ 603,043	$ 39,999,467	$ 42,452,643	$ 83,055,152

(1) 2018 Roadway Impact Fee Study, Appendix A
(2) Line 16 of the Max Fee Table Report

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area B

2018 Vehicle Miles (All Service Areas)	333,473	
Ten Year Growth in Vehicle Miles (Service Area B) (1)	32,776	
	10	years
Annual Growth in Vehicle Miles	3,278	

		1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees		$ 294,323	$ 601,824	$ 916,021	$ 1,236,987	$ 1,557,953	$ 1,885,758	$ 2,213,563	$ 2,548,276	$ 2,882,989	$ 3,224,678	$ 17,362,372
2018 Vehicle Miles plus Service Area B Growth		336,751	340,028	343,306	346,583	349,861	353,139	356,416	359,694	362,971	366,249	
Total Debt Service Eligible for Impact Fees per Vehicle Mile		$ 0.87	$ 1.77	$ 2.67	$ 3.57	$ 4.45	$ 5.34	$ 6.21	$ 7.08	$ 7.94	$ 8.80	
Annual Growth in Service Area B Vehicle Miles (Cumulative)		3,278	6,555	9,833	13,110	16,388	19,666	22,943	26,221	29,498	32,776	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees		$ 2,865	$ 11,602	$ 26,236	$ 46,792	$ 72,977	$ 105,014	$ 142,492	$ 185,764	$ 234,299	$ 288,580	$ 1,116,621
Credit Amount	**$ 1,116,621**											

(1) Line 8 of the Max Fee Table Report

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

I. General Assumptions

Annual Interest Rate on Deposits[1]	1.71%
Annual Service Unit Growth[2]	4,613
Existing Fund Balance[3]	-

Portion of Projects Funded by Existing Debt[4]	$ -
Non-debt Funded New Project Cost[5]	61,690,973
New Project Cost Funded Through New Debt[6]	40,697,010
Total Recoverable Project Cost[7]	$ 102,387,983

II. New Debt Issues Assumptions

Year	Principal[8]	Interest[9]	Term
1	$ 4,069,701	4.00%	20
2	4,069,701	4.50%	20
3	4,069,701	4.75%	20
4	4,069,701	5.00%	20
5	4,069,701	5.00%	20
6	4,069,701	5.25%	20
7	4,069,701	5.25%	20
8	4,069,701	5.50%	20
9	4,069,701	5.50%	20
10	4,069,701	5.75%	20
Total	$ 40,697,010		

III. Capital Expenditure Assumptions

Year	Annual Capital Expenditures[10]
1	$ 7,679,099
2	10,238,798
3	10,238,798
4	10,238,798
5	10,238,798
6	10,238,798
7	10,238,798
8	10,238,798
9	10,238,798
10	12,798,498
Total	$ 102,387,983

(1) Money Market Earnings per City Staff As of March 2018
(2) Derived from the 10-year Growth Projections Report, Table 7
(3) New Impact Fee, Balance Not Applicable
(4) Provided by City Staff
(5) Assumes 50% of new project costs funded through sources other than debt
(6) Assumes 50% of new project costs funded through new debt issues
(7) Line 16 of the Max Fee Table Report
(8) Assumes new debt issued in equal annual amounts
(9) Estimated interest cost provided by City's Financial Advisor
(10) Assumes new debt proceeds expended over a 2-year timeframe with Year 10 bond proceeds spent in one year; Non-debt funded capital expenditures made in equal annual amounts

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

I. New Debt Service Detail

Year	Series 1	Series 2	Series 3	Series 4	Series 5	Series 6	Series 7	Series 8	Series 9	Series 10	Total Annual New Debt Service
1	$ 299,456	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 299,456
2	299,456	312,863	-	-	-	-	-	-	-	-	612,319
3	299,456	312,863	319,677	-	-	-	-	-	-	-	931,996
4	299,456	312,863	319,677	326,563	-	-	-	-	-	-	1,258,559
5	299,456	312,863	319,677	326,563	326,563	-	-	-	-	-	1,585,122
6	299,456	312,863	319,677	326,563	326,563	333,521	-	-	-	-	1,918,644
7	299,456	312,863	319,677	326,563	326,563	333,521	333,521	-	-	-	2,252,165
8	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	-	-	2,592,715
9	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	-	2,933,265
10	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
11	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
12	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
13	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
14	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
15	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
16	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
17	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
18	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
19	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
20	299,456	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	3,280,913
21	-	312,863	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	2,981,457
22	-	-	319,677	326,563	326,563	333,521	333,521	340,550	340,550	347,648	2,668,594
23	-	-	-	326,563	326,563	333,521	333,521	340,550	340,550	347,648	2,348,917
24	-	-	-	-	326,563	333,521	333,521	340,550	340,550	347,648	2,022,354
25	-	-	-	-	-	333,521	333,521	340,550	340,550	347,648	1,695,790
26	-	-	-	-	-	-	333,521	340,550	340,550	347,648	1,362,269
27	-	-	-	-	-	-	-	340,550	340,550	347,648	1,028,748
28	-	-	-	-	-	-	-	-	340,550	347,648	688,198
29	-	-	-	-	-	-	-	-	-	347,648	347,648
	$ 5,989,115	$ 6,257,259	$ 6,393,538	$ 6,531,267	$ 6,531,267	$ 6,670,426	$ 6,670,426	$ 6,810,997	$ 6,810,997	$ 6,952,962	$ 65,618,253

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

II. Summary of Annual Expenses

Year	New Annual Debt Service[1]	Annual Capital Expenditures[2]	Annual Bond Proceeds[2]	Existing Annual Debt Service[3]	Annual Credit[4]	Total Expense
1	$ 299,456	$ 7,679,099	$ (4,069,701)	$ -	$ (4,086)	$ 3,904,768
2	612,319	10,238,798	(4,069,701)	-	(16,483)	6,764,933
3	931,996	10,238,798	(4,069,701)	-	(37,133)	7,063,960
4	1,258,559	10,238,798	(4,069,701)	-	(65,982)	7,361,674
5	1,585,122	10,238,798	(4,069,701)	-	(102,535)	7,651,685
6	1,918,644	10,238,798	(4,069,701)	-	(147,028)	7,940,713
7	2,252,165	10,238,798	(4,069,701)	-	(198,812)	8,222,450
8	2,592,715	10,238,798	(4,069,701)	-	(258,313)	8,503,499
9	2,933,265	10,238,798	(4,069,701)	-	(324,728)	8,777,634
10	3,280,913	12,798,498	(4,069,701)	-	(398,668)	11,611,042
11	3,280,913	-	-	-	-	3,280,913
12	3,280,913	-	-	-	-	3,280,913
13	3,280,913	-	-	-	-	3,280,913
14	3,280,913	-	-	-	-	3,280,913
15	3,280,913	-	-	-	-	3,280,913
16	3,280,913	-	-	-	-	3,280,913
17	3,280,913	-	-	-	-	3,280,913
18	3,280,913	-	-	-	-	3,280,913
19	3,280,913	-	-	-	-	3,280,913
20	3,280,913	-	-	-	-	3,280,913
21	2,981,457	-	-	-	-	2,981,457
22	2,668,594	-	-	-	-	2,668,594
23	2,348,917	-	-	-	-	2,348,917
24	2,022,354	-	-	-	-	2,022,354
25	1,695,790	-	-	-	-	1,695,790
26	1,362,269	-	-	-	-	1,362,269
27	1,028,748	-	-	-	-	1,028,748
28	688,198	-	-	-	-	688,198
29	347,648	-	-	-	-	347,648
	$ 65,618,253	$ 102,387,983	$ (40,697,010)	$ -	$ (1,553,766)	$ 125,755,460

III. Summary of Principal Paid to Date for Existing Debt[3]

The projects related to this area have not been previously funded with debt.

IV. Summary of Debt Financing

Existing Debt Funded Project Costs [5]		-
-Less Principal PTD		-
Outstanding Debt Principal		-
New Project Costs Debt Principal [5]		40,697,010
Principal Component	**$**	**40,697,010**

(1) Appendix E - Service Area C, Page 2
(2) Appendix E - Service Area C, Page 1
(3) Existing debt funded project costs from details provided by staff.
(4) Appendix E - Service Area C, Page 8
(5) Appendix E - Service Area C, Page 1

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

Year	Impact Fee	Service Units	Impact Fee Revenue	Annual Expenses	Sub-Total	Accumulated Interest	Estimated Fund Balance
Initial							$ -
1	$ 2,511	4,613	$ 11,582,067	$ 3,904,768	$ 7,677,299	65,641	7,742,940
2	2,511	4,613	11,582,067	6,764,933	4,817,134	173,591	12,733,666
3	2,511	4,613	11,582,067	7,063,960	4,518,107	256,376	17,508,148
4	2,511	4,613	11,582,067	7,361,674	4,220,393	335,474	22,064,016
5	2,511	4,613	11,582,067	7,651,685	3,930,382	410,899	26,405,297
6	2,511	4,613	11,582,067	7,940,713	3,641,355	482,664	30,529,316
7	2,511	4,613	11,582,067	8,222,450	3,359,617	550,776	34,439,709
8	2,511	4,613	11,582,067	8,503,499	3,078,568	615,241	38,133,518
9	2,511	4,613	11,582,067	8,777,634	2,804,433	676,061	41,614,013
10	2,511	4,613	11,582,067	11,611,042	(28,974)	711,352	42,296,390
11	-	-	-	3,280,913	(3,280,913)	695,216	39,710,694
12	-	-	-	3,280,913	(3,280,913)	651,001	37,080,783
13	-	-	-	3,280,913	(3,280,913)	606,030	34,405,900
14	-	-	-	3,280,913	(3,280,913)	560,289	31,685,276
15	-	-	-	3,280,913	(3,280,913)	513,766	28,918,130
16	-	-	-	3,280,913	(3,280,913)	466,448	26,103,665
17	-	-	-	3,280,913	(3,280,913)	418,321	23,241,073
18	-	-	-	3,280,913	(3,280,913)	369,371	20,329,531
19	-	-	-	3,280,913	(3,280,913)	319,583	17,368,202
20	-	-	-	3,280,913	(3,280,913)	268,944	14,356,234
21	-	-	-	2,981,457	(2,981,457)	220,000	11,594,777
22	-	-	-	2,668,594	(2,668,594)	175,454	9,101,637
23	-	-	-	2,348,917	(2,348,917)	135,555	6,888,275
24	-	-	-	2,022,354	(2,022,354)	100,498	4,966,419
25	-	-	-	1,695,790	(1,695,790)	70,427	3,341,056
26	-	-	-	1,362,269	(1,362,269)	45,485	2,024,271
27	-	-	-	1,028,748	(1,028,748)	25,819	1,021,343
28	-	-	-	688,198	(688,198)	11,581	344,726
29	-	-	-	347,648	(347,648)	2,922	-
			115,820,674	125,755,460		9,934,786	

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

Year	Number of Years to End of Period	Future Value Interest Rate Factor	Escalation Recovery Fee Factor	Annual Service Units Actual	Annual Service Units Escalated	Annual Expense Actual	Annual Expense Escalated
1	29	1.6214	1.0000	4,613	7,479	$ 3,904,768	$ 6,331,039
2	28	1.5941	1.0000	4,613	7,353	6,764,933	10,783,993
3	27	1.5673	1.0000	4,613	7,229	7,063,960	11,071,353
4	26	1.5410	1.0000	4,613	7,108	7,361,674	11,343,978
5	25	1.5150	1.0000	4,613	6,988	7,651,685	11,592,636
6	24	1.4896	1.0000	4,613	6,871	7,940,713	11,828,263
7	23	1.4645	1.0000	4,613	6,755	8,222,450	12,042,013
8	22	1.4399	1.0000	4,613	6,642	8,503,499	12,244,241
9	21	1.4157	1.0000	4,613	6,530	8,777,634	12,426,476
10	20	1.3919	1.0000	4,613	6,420	11,611,042	16,161,366
11	19	1.3685	1.0000	-	-	3,280,913	4,489,913
12	18	1.3455	1.0000	-	-	3,280,913	4,414,426
13	17	1.3229	1.0000	-	-	3,280,913	4,340,208
14	16	1.3006	1.0000	-	-	3,280,913	4,267,239
15	15	1.2788	1.0000	-	-	3,280,913	4,195,496
16	14	1.2573	1.0000	-	-	3,280,913	4,124,959
17	13	1.2361	1.0000	-	-	3,280,913	4,055,608
18	12	1.2153	1.0000	-	-	3,280,913	3,987,423
19	11	1.1949	1.0000	-	-	3,280,913	3,920,384
20	10	1.1748	1.0000	-	-	3,280,913	3,854,473
21	9	1.1551	1.0000	-	-	2,981,457	3,443,778
22	8	1.1356	1.0000	-	-	2,668,594	3,030,578
23	7	1.1166	1.0000	-	-	2,348,917	2,622,691
24	6	1.0978	1.0000	-	-	2,022,354	2,220,101
25	5	1.0793	1.0000	-	-	1,695,790	1,830,308
26	4	1.0612	1.0000	-	-	1,362,269	1,445,611
27	3	1.0433	1.0000	-	-	1,028,748	1,073,331
28	2	1.0258	1.0000	-	-	688,198	705,951
29	1	1.0086	1.0000	-	-	347,648	350,620
					69,374	125,755,460	174,198,454

Total Escalated Expense for Entire Period	$	174,198,454
Less Future Value of Initial Fund Balance		-
Net Escalated Expense for Entire Period	$	174,198,454
Total Escalated Service Units		69,374
Impact Fee for Service Area C	**$**	**2,511**

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

Impact Fee Project Name[1]	Impact Fee Project No.[1]	Total Project Cost [1]	Percent in Service Area [1]	Cost in Service Area[1]	Impact Fee Recoverable Cost[2]	Debt Funded[3] Existing	Debt Funded[3] Proposed	Non-Debt Funded[3]	Impact Fee Recoverable Cost
RM 620	A-31, C-1	$ 12,560,624	50%	$ 6,280,312	$ 3,627,172	$ -	$ -	$ 3,627,172	$ 3,627,172
CR 172 (1)	C-2	2,400,000	50%	1,200,000	693,056	-	346,528	346,528	693,056
CR 172 (2)	C-3	1,000,000	50%	500,000	288,773	-	144,387	144,387	288,773
Hesters Crossing Rd	C-4	700,000	100%	700,000	404,283	-		404,283	404,283
Bratton Ln	C-5	5,000,000	50%	2,500,000	1,443,866	-	721,933	721,933	1,443,866
US 79 (1)	B-46, C-6	13,340,000	50%	6,670,000	3,852,235	-	1,926,118	1,926,118	3,852,235
McNeil Extension	C-7	4,799,620	100%	4,799,620	2,772,004	-	-	2,772,004	2,772,004
S Mays St	C-8	1,400,000	100%	1,400,000	808,565	-	404,283	404,283	808,565
Kenney Fort Blvd (1)	C-9	23,375,873	100%	23,375,873	13,500,655	-	-	13,500,655	13,500,655
Kenney Fort Blvd (2)	C-10	24,500,000	100%	24,500,000	14,149,890	-	7,074,945	7,074,945	14,149,890
Red Bud Ln (1)	C-11	100,000	50%	50,000	28,877	-	14,439	14,439	28,877
Red Bud Ln (2)	C-12	1,300,000	100%	1,300,000	750,811	-	375,405	375,405	750,811
Red Bud Ln (3)	C-13	1,300,000	50%	650,000	375,405	-	187,703	187,703	375,405
Red Bud Ln (4)	C-14	1,300,000	100%	1,300,000	750,811	-	375,405	375,405	750,811
Red Bud Ln (5)	C-15	1,300,000	50%	650,000	375,405	-	187,703	187,703	375,405
Red Bud Ln (6)	C-16	700,000	100%	700,000	404,283	-	202,141	202,141	404,283
Red Bud Ln (7)	C-17	7,700,000	50%	3,850,000	2,223,554	-	1,111,777	1,111,777	2,223,554
Red Bud Ln (8)	C-18	2,600,000	100%	2,600,000	1,501,621	-	750,811	750,811	1,501,621
Red Bud Ln (9)	C-19	8,300,000	50%	4,150,000	2,396,818	-	1,198,409	1,198,409	2,396,818
Gattis School Rd (1)	C-20	7,600,000	100%	7,600,000	4,389,354	-	2,194,677	2,194,677	4,389,354
Gattis School Rd (2)	C-21	48,300,000	100%	48,300,000	27,895,498	-	13,947,749	13,947,749	27,895,498
S Mays St / Dell Way	C-22	2,400,000	100%	2,400,000	1,386,112	-	693,056	693,056	1,386,112
Kenney Fort Blvd (3)	C-23	6,700,000	50%	3,350,000	1,934,781	-	967,390	967,390	1,934,781
Greenlawn Blvd	C-24	6,400,000	100%	6,400,000	3,696,298	-	1,848,149	1,848,149	3,696,298
Roundville Ln	C-25	1,134,412	100%	1,134,412	655,176	-	-	655,176	655,176
Schultz (1)	C-26	700,000	100%	700,000	404,283	-	202,141	202,141	404,283
Schultz (2)	C-27	5,900,000	50%	2,950,000	1,703,762	-	851,881	851,881	1,703,762
Deepwood Dr and Round Rock Ave (RM 620)	AI-4, CI-1	392,000	50%	196,000	113,199	-	56,600	56,600	113,199
IH 35 Blvd and Round Rock Ave (RM 620)	AI-5, CI-2	588,000	50%	294,000	169,799	-	84,899	84,899	169,799
IH 35 and Hesters Crossing Rd	CI-3	196,000	100%	196,000	113,199	-	56,600	56,600	113,199
IH 35 and Louis Henna Blvd (SH 45 FR)	CI-4	2,037,000	100%	2,037,000	1,176,462	-	588,231	588,231	1,176,462
Mays St and Liberty Ave	CI-5	353,000	100%	353,000	203,874	-	101,937	101,937	203,874
Mays St and Gattis School Rd	CI-6	1,847,503	100%	1,847,503	1,067,019	-	533,509	533,509	1,067,019
Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	CI-7	784,000	100%	784,000	452,796	-	226,398	226,398	452,796
A.W. Grimes Blvd and Palm Valley Blvd	BI-4, CI-8	2,041,000	50%	1,020,500	589,386	-	294,693	294,693	589,386
A.W. Grimes Blvd and Gattis School Rd	CI-9	1,921,000	100%	1,921,000	1,109,467	-	554,733	554,733	1,109,467
Red Bud Ln and Gattis School Rd	CI-10	1,595,000	100%	1,595,000	921,187	-	460,593	460,593	921,187
Update ITS and Traffic Management Infrastructure	-	20,900,000	33%	6,966,667	4,023,574	-	2,011,787	2,011,787	4,023,574
Roadway Impact Fee Project		34,673	100%	34,673	34,673	-	-	34,673	34,673
Total		$ 225,499,705		$ 177,255,560	$ 102,387,983	$ -	$ 40,697,010	$ 61,690,973	$ 102,387,983

(1) 2018 Roadway Impact Fee Study, Appendix A
(2) Line 16 of the Max Fee Table Report
(3) Based on Contributions by Project and Planned Future Debt Financing

City of Round Rock - 2018 Roadway Impact Fee Study

Capital Improvement Plan for Impact Fees

Appendix E - Impact Fee Calculation Assumptions

Service Area C

2018 Vehicle Miles (All Service Areas)	333,473	
Ten Year Growth in Vehicle Miles (Service Area C) [1]	46,125	
	10	years
Annual Growth in Vehicle Miles	4,613	

		1	2	3	4	5	6	7	8	9	10	Total
Total Debt Service Eligible for Impact Fees		$ 299,456	$ 612,319	$ 931,996	$ 1,258,559	$ 1,585,122	$ 1,918,644	$ 2,252,165	$ 2,592,715	$ 2,933,265	$ 3,280,913	$ 17,665,151
2018 Vehicle Miles plus Service Area C Growth		338,086	342,698	347,311	351,923	356,536	361,148	365,761	370,373	374,986	379,598	
Total Debt Service Eligible for Impact Fees per Vehicle Mile		$ 0.89	$ 1.79	$ 2.68	$ 3.58	$ 4.45	$ 5.31	$ 6.16	$ 7.00	$ 7.82	$ 8.64	
Annual Growth in Service Area C Vehicle Miles (Cumulative)		4,613	9,225	13,838	18,450	23,063	27,675	32,288	36,900	41,513	46,125	
Annual Ad Valorem Revenue Generated by Vehicle Miles for Debt Service Eligible for Impact Fees		$ 4,086	$ 16,483	$ 37,133	$ 65,982	$ 102,535	$ 147,028	$ 198,812	$ 258,313	$ 324,728	$ 398,668	$ 1,553,766
Credit Amount	**$ 1,553,766**											

(1) Line 8 of the Max Fee Table Report