EXHIBIT
"A"

# CITY OF ROUND ROCK, TEXAS ROADWAY IMPACT FEE STUDY (LAND USE AND CIP ONLY)



June 2018

# 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 2018 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.

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 2018 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 12.

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.

#### 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.

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 2018 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.



# 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 2018 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. 7)
- 2) Roadway Impact Fee Capital Improvements Plan (RIF CIP) (Pg. 13) 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. 21)
- 2) Roadway Impact Fee Calculation (Pg. 37)
- 3) Plan for Financing and the Ad Valorem Tax Credit (Pg. TBD)**Error! Bookmark not defined.**



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

- Service Areas (Pg. 22)
- Service Units (Pg. 22)
- Cost Per Service Unit (Pg. 24)
- RIF CIP Costing Methodology (Pg. 24)
- Summary of RIF CIP Costs (Pg. 28)
- Service Unit Calculation (Pg. 32)

The Roadway Impact Fee is then calculated as:

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

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 (to be provided at a later date), 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.



# 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:

- 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.

<u>Retail</u>: 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.

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

<u>Basic</u>: 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. **TBD**).



# **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**.



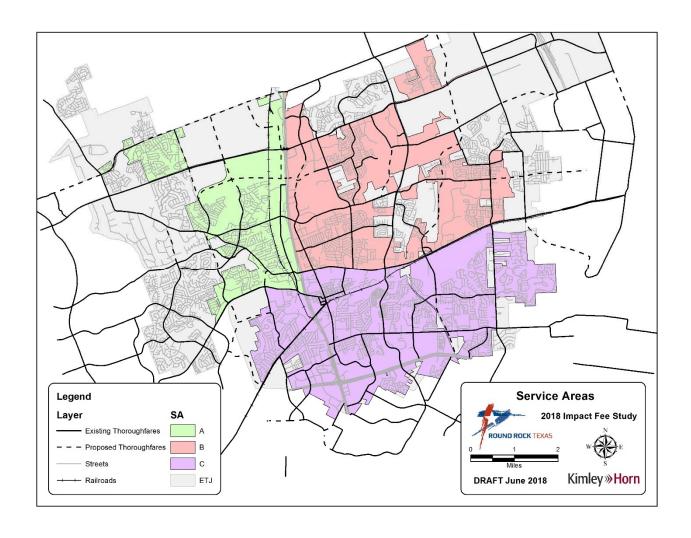
# C. Roadway Impact Fee Service Areas

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.



Exhibit 1 - Proposed Service Areas





# D. Land Use Assumptions Summary

**Table 1** summarizes the residential and employment 10-year growth projections.

Table 1. Residential and Employment 10-Year Projections

Service		Residential (Units)		Employment (Sq. Ft.)				
Area	Year	Single Family	Multi- Family	Basic	Service	Retail	Total	
Α	2018- 2028	621	932	1,300,000	600,000	500,000	2,400,000	
В		1,826	2,739	600,000	2,300,000	900,000	3,800,000	
С		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

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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 ASDG, 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.



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
	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		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 IH 35 SBFR	2.16	100%
	A-9	4 Lane - Proposed	Wyoming Springs Dr (3)	RM 1431 to 390' N of Goldenoak Cir	0.73	100%
	A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (4)	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%
V	A-20	6 Lane - Enhanced	Sam Bass Rd (2)	390' W of Wyoming Springs Dr to FM 3406	0.30	100%
$\mathbf{S}\mathbf{A}$	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 (5)	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%
		ıts	Location	Improve ment(s)		% In Service Area
	AI-1	fior	Sam Bass Rd and FM 3406	SIGNAL		100%
	AI-1	Intersection	Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		100%
	AI-3	ters pro	Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%
	AI-4, CI-1	i i	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%
	AI-5, CI-2	1	IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%
			Update ITS and Traffic Managmenet Infrastructure	TORIV LAIVLO		33%

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

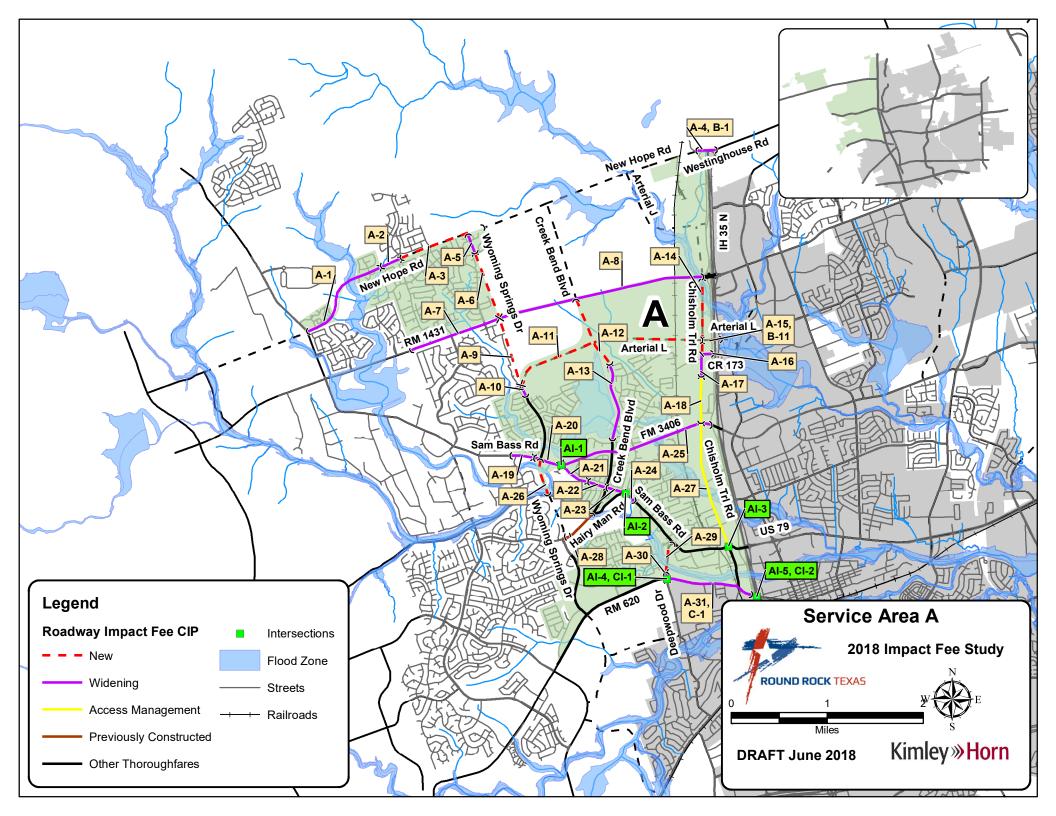




Table 2.B. 10-Year Roadway Impact Fee Capital Improvements Plan - Service Area B

Service Area	Proj. #	IF Class	Roadway	Limits	Length (mi)	% In Service Area
	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	Avery Nelson	Gulf Way to College Park	0.41	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%
SA B	B-28	4 Lane - Enhanced (1/2)	Red Bud Ln (1)	Guadalajara St to 160' N of Margarita Loop	0.35	100%
Š	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%
	D-4/	0 Lane - Elmaneed	03 17 (2)	200 E of Red Bud Ell to 1090 E of Red Bud Ell	0.20	% In
		u St	Location	Improve ment(s)		Service
		tio1				Area
	BI-1	Intersection	N Mays St and University Blvd	TURN LANES		100%
	BI-2	ro,	Sunrise Rd and University Blvd	TURN LANES		100%
	BI-3	Intersection	N Mays St and Steam Way	TURN LANES		100%
	BI-4, CI-8	ā	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.

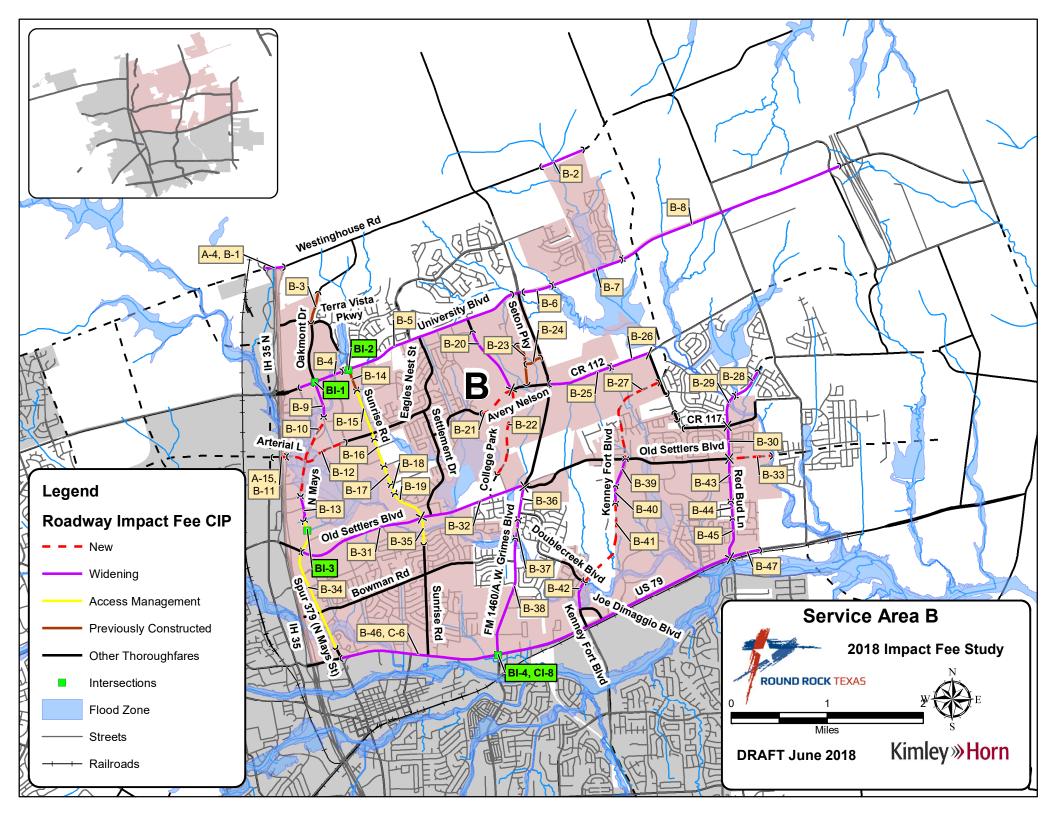
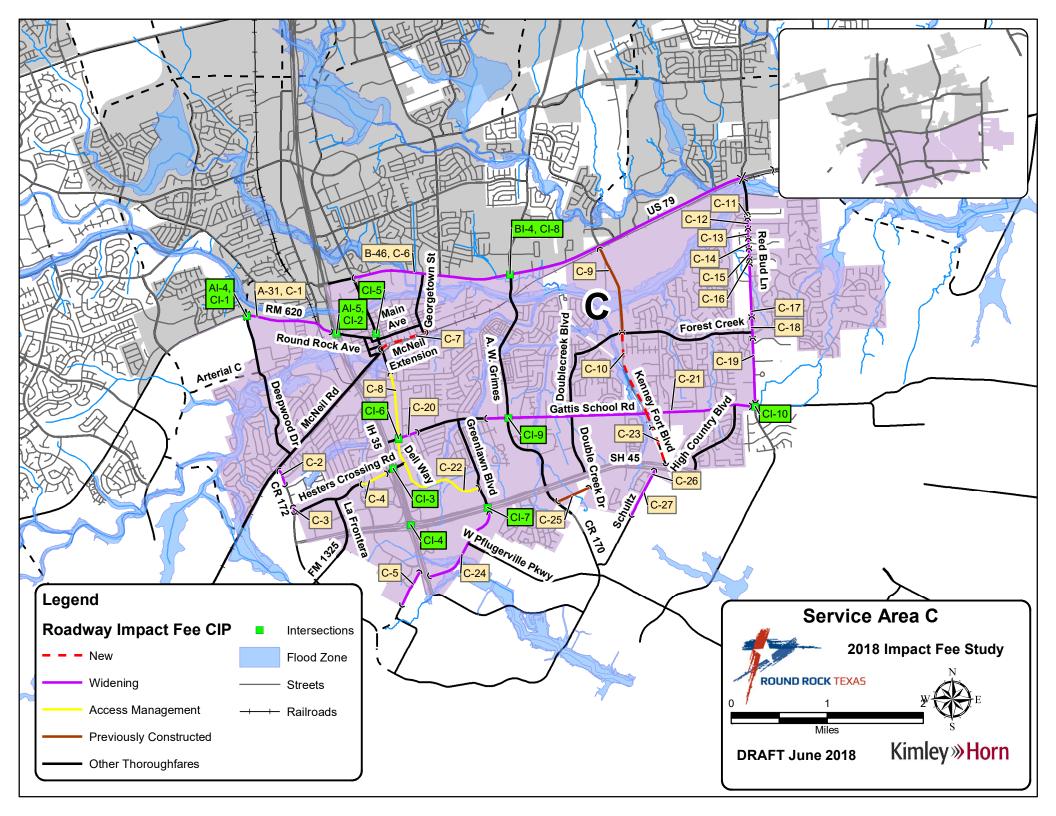




Table 2.C. 10-Year Roadway Impact Fee Capital Improvements Plan - Service Area C

Service Area	Proj. #	IF Class	Roadway	Limits		% In Service Area
	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	C-20	4 Lane - Enhanced	Gattis School Rd (1)	S Mays St to Surrey Dr	0.65	100%
SA	C-21	6 Lane - Enhanced	Gattis School Rd (2)	Windy Park Dr to Red Bud Ln	2.82	100%
S	C-22	4 Lane - Enhanced (AM)	S Mays St / Dell Way	Gattis School Rd to Greenlawn Blvd		100%
	C-23	6 Lane - Proposed	Kenney Fort Blvd (3)	830' S of Gattis School Rd to SH 45		50%
	C-24	6 Lane - Enhanced (1/3)	Greenlawn Blvd	IH 35 NBFR to SH 45 EBFR		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%
		ts	Location	Improve ment(s)		% In Service Area
	AI-4, CI-1	ıen	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%
	AI-5, CI-2	'en	IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%
	CI-3	ro	IH 35 and Hesters Crossing Rd	TURN LANES		100%
	CI-4	ďu	IH 35 and Louis Henna Blvd (SH 45 FR)	TURN LANES & SIGNAL		100%
	CI-5	ų u	Mays St and Liberty Ave	SIGNAL		100%
	CI-6	tio	Mays St and Gattis School Rd	TURN LANES		100%
	CI-7	Intersection Improvements	Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER		100%
	BI-4, CI-8	iter	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		50%
	CI-9	I.	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 Management Infrastructure	•		33%

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





#### A. Service Areas

The three (3) service areas used in the 2018 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). 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 2018 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.

<u>Vehicle-Mile</u>: 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.

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

<u>Total Vehicle-Miles of Demand</u>: Based on the 10-year growth projections (Pg. 36). The demand is equal to PM Trip Rate (trips) \* Trip Length (miles).

The capacity values used in the 2018 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	<i>7</i> 70
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	<i>7</i> 70
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."

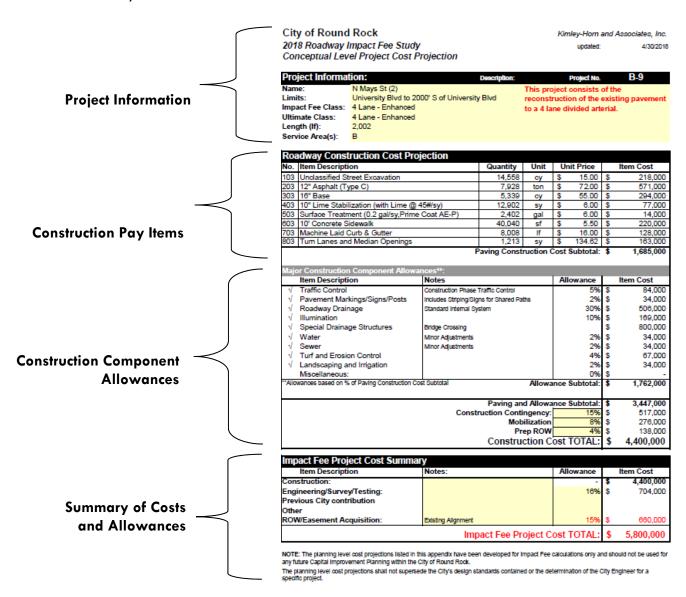
The engineer's opinion of the probable costs of the projects in the RIF CIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the 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





#### 2. Project Information

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

- <u>Project Number</u> 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 9<sup>th</sup> project on the list.
- Name A unique identifier for each project. In some cases, abbreviations are used for the project name.
- <u>Limits</u> Represents the beginning and ending location for each project.
- <u>Service Area(s)</u> 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
- <u>Ultimate Class</u> 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-ofway. 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.



# 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	Tot	tal Project Cost	Cost in Service Area
	A-l	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 IH 35 SBFR	2.16	100%	\$	6,860,000	\$ 6,860,000
	A-9	4 Lane - Proposed	Wyoming Springs Dr (3)	RM 1431 to 390' N of Goldenoak Cir	0.73	100%	\$	9,200,000	\$ 9,200,000
	A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (4)	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-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
SAA	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
õ	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 (5)	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	Improve ment(s)		% In Service Area	Tot	tal Project Cost	Cost in Service Area
	AI-1	rov	Sam Bass Rd and FM 3406	SIGNAL		100%	\$	295,000	\$ 295,000
	AI-2	<u>m</u>	Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		100%	\$	2,000,000	\$ 2,000,000
	AI-3	no l	Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%	\$	139,000	\$ 139,000
	AI-4, CI-1	ecti	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%	\$	392,000	\$ 196,000
	AI-5, CI-2	ers	IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%	\$	588,000	\$ 294,000
	-	Ī	Update ITS and Traffic Managmenet Infrastructure	=		33%	\$	20,900,000	\$ 6,966,667
				Service A	Area Road	way Projec	et Cos	st Subtotal	\$ 166,188,262
Service Area Intersection Project Cost Su								st Subtotal	\$ 9,890,667
	2018 Roadway Impact Fee Study Cost Per Service Area 8								
				Tota	l Cost in	SERVI	CE A	AREA A	\$ 176,113,601

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
	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-20	3 Lane - Proposed	Avery Nelson	Gulf Way to College Park	0.41	100%	\$ 2,800,000	\$ 2,800,000
	B-21	4 Lane - Proposed	College Park (2)	Avery Nelson Rd to 1355' N of Old Settlers Blvd	0.41	100%	\$ 11,500,000	\$ 11,500,000
	B-22	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-23 B-24	4 Lane - Existing	Medical Center Pkwy	Seton Pkwy to A.W. Grimes Blvd	0.43	100%	\$ 2,043,320	\$ 2,043,320 \$ 810,679
	B-24 B-25	4 Lane - Existing  4 Lane - Enhanced	CR 112 (1)	A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd	0.18	100%	\$ 8,000,000	\$ 8,000,000
	B-25 B-26	4 Lane - Enhanced	CR 112 (1)	3580' E of A.W. Grimes Blvd to CR 117	0.68	50%	\$ 5,000,000	\$ 2,500,000
	B-26 B-27		- O		1.06	100%	\$ 3,000,000	\$ 2,500,000
		4 Lane - Proposed	Kenney Fort Blvd (1)	CR 117 to Old Settlers Blvd				
<u>m</u>	B-28 B-29	4 Lane - Enhanced (1/2) 4 Lane - Enhanced (1/2)	Red Bud Ln (1) Red Bud Ln (2)	Guadalajara St to 160' N of Margarita Loop	0.35	100%	\$ 2,600,000 \$ 3,000,000	\$ 2,600,000 \$ 1,500,000
¥s				160' N of Margarita Loop to CR 117				,,,,,,,,
	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
						% In	Total Project	Cost in Service
	Proj. #	£	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES		Service	Cost	Area
	D. I	Intersection	NAME OF TAXABLE PARTY.	TIMAL AND	-	Area		
	BI-1	sect ven	N Mays St and University Blvd	TURN LANES	-	100%	\$ 784,000	\$ 784,000
	BI-2	ters pro	Sunrise Rd and University Blvd	TURN LANES		100%	\$ 1,063,000	\$ 1,063,000
	BI-3	a ji	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
							ct Cost Subtotal	\$ 271,298,056
							ct Cost Subtotal	\$ 10,004,402
				2018 Roadway Impa				\$ 34,673
	Total Cost in SERVICE AREA B \$ 281,							

- 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
	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
SAC	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
S	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. #		Location	Improvement(s)		% In Service Area	Total Project Cost	Cost in Service Area
	AI-4, CI-1	ş	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES		50%	\$ 392,000	\$ 196,000
	AI-5, CI-2	Intersection Improvements	IH 35 Blvd and Round Rock Ave (RM 620)	TURN LANES		50%	\$ 588,000	\$ 294,000
	CI-3	ove [	IH 35 and Hesters Crossing Rd	TURN LANES		100%	\$ 196,000	\$ 196,000
	CI-4	ig [	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	Ē	Mays St and Gattis School Rd	TURN LANES		100%	\$ 1,847,503	\$ 1,847,503
	CI-7	38.	Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER		100%	\$ 784,000	\$ 784,000
	BI-4, CI-8	ig i	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 Road		ct Cost Subtotal	\$ 160,010,217
				Service Arc	a Intersec	tion Projec	ct Cost Subtotal	\$ 17,210,670
2018 Roadway Impact Fee Study Cost Per Service Area								
				Tota	l Cost in	SERVI	CE 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. 22). 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*, 10<sup>th</sup> 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:

$$TDF = T * (1 - P_b) * L_{max}$$
  
where...  $L_{max} = min(L * OD \text{ or } 6)$ 

TDF = Transportation Demand Factor,
T = Trip Rate (peak hour trips / unit),
Pb = Pass-By Discount (% of trips),
Lmax = 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
Т	0.99	0.56	0.63	1.15	3.81
P <sub>b</sub>	0%	0%	0%	0%	34%
L	8.59	8.59	12.89	6.76	6.35
L <sub>max</sub>	4.30	4.30	6.00	3.38	3.18
TDF	4.26	2.41	3.78	3.89	7.98

<sup>\*</sup>  $L_{max}$  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),
Pb = Pass-By Discount (% of trips),

L<sub>max</sub> = 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<sup>1</sup>

		RESIDENT	RESIDENTIAL VEHICLE-MILES	MILES		NON-RESID	NON-RESIDENTIAL SQUARE FEET <sup>5</sup>	RE FEET <sup>5</sup>	TRANS.	TRANS, DEMAND FACTOR <sup>®</sup>	ACTOR <sup>®</sup>	NON-RE	NON-RESIDENTIAL VEHICLE-MILES 10 TOTAL	VEHICLE-	MILES <sup>10</sup>	TOTAL
SERVICE	Single	Trip Rate N	Multi-Family Trip Rate	Trip Rate	VEHICLE				7	٥	d	0.0.1	- 0		: 10	VEHICLE
	Family Units	TDF <sup>2</sup>	Units	TDF³	MILES⁴	BASIC	SERVICE	RETAIL	BASIC	SERVICE RETAIL BASIC SERVICE RELAIL TOTAL	RETAIL®	BASIC	SERVICE	REI AL	101	MILES <sup>11</sup>
		0.99		0.56					0.63	1.15	2.51					
⋖	621		932		4,892	1,300,000	000,009	500,000				4,914	2,334	3,990	11,238	16,130
æ	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
ပ	1,720		3,485		15,725	2,200,000	2,600,000	1,500,000				8,316	10,114	11,970 30,400	30,400	46,125
Totale	4 167		7 156		34 997	4 100 000	4 100 000 5 500 000 2 900 000	2 900 000				15 498	15 498 21 395 23 142 GD 035	23 142	60.035	95 032

From City of Round Rock 2018 Land Use Assumptions for Roadway Impact Fees

Transportation Demand Factor for each Service Area (from LUVMET) using Single Family Detached Housing land use and trip generation rate

Transportation Demand Factor for each Service Area (from LUVMET) using Multifamily Housing (Low-Rise) land use and trip generation rate

<sup>†</sup> Calculated by multiplying TDF by the number of dwelling units

From City of Round Rock 2018 Land Use Assumptions for Roadway Impact Fees

<sup>3</sup> Trip generation rate and Transportation Demand Factors from LUVMET for each land use

'Basic' corresponds to General Light Industrial land use and trip generation rate

'Service' corresponds to General Office land use and trip generation rate

'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
Α	16,130
В	32,776
С	46,125

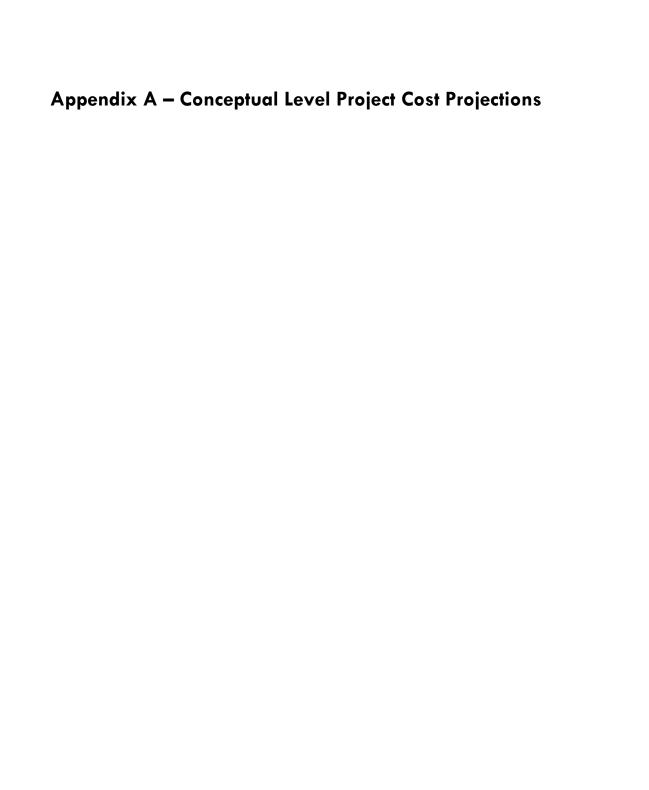


### **APPENDICES**

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



### 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

<u>#</u>	<u>IF Class</u>	<u>Project</u>	<u>Type</u>	<u>Li</u>	mits_	Percent in Service Area	Pro	ject Cost		al Cost in
				<u>From</u>	<u>To</u>	Gervice Area			<u>oerv</u>	rice Area
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	IH 35 SBFR	100%	\$	6,860,000	\$	6,860,000
A-9	4 Lane - Proposed	Wyoming Springs Dr (3)	New	RM 1431	390' N of Goldenoak Cir	100%	\$	9,200,000	\$	9,200,000
A-10	4 Lane - Enhanced (1/2)	Wyoming Springs Dr (4)	(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 PI	Camino Del Verdes PI	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 (5)	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		RM 620	Widening	Deepwood Dr	IH 35 SBFR	50%	\$	12,560,624	\$	6,280,312

TOTAL \$ 191,524,222 \$ 166,188,262

### 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

- 4	Drainot	Impro	vement	Percent in	Brainet Cont	Total Cost in
#	<u>Project</u>	Improvement 1	Improvement 2	Service Area	Project Cost	Service Area
Al-1	Sam Bass Rd and FM 3406	SIGNAL		100%	\$ 295,000	\$ 295,000
Al-2	Sam Bass Rd and Hairy Man Rd	INTERSECTION IMPROVEMENT		100%	\$ 2,000,000	\$ 2,000,000
AI-3	Sam Bass Rd and Chisholm Trl Rd	TURN LANES		100%	\$ 139,000	\$ 139,000
Al-4, Cl-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 \$ 9,891,000

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

Kimley-Horn and Associates, Inc. updated: 6/5/2018

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

Name: New Hope Rd (1) This project consists of widening Limits: Sam Bass Rd to 240' W of Lagoona Dr

Impact Fee Class: 4 Lane - Enhanced (1/2) **Ultimate Class:** 4 Lane - Enhanced

Length (If): 5,816 Service Area(s): Α

existing pavement with half of a 4 lane

divided arterial.

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
101	Unclassified Street Excavation	21,146	су	\$	15.00	\$ 317,000
201	12" Asphalt (Type C)	11,516	ton	\$	72.00	\$ 829,000
301	16" Base	7,755	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 3,007,000

Major Construction Component Allo	wances**:			
Item Description	Notes	Allowance	П	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
$\sqrt{}$ Illumination		10%	\$	301,000
√ Special Drainage Structures	Bridge Crossing		\$	500,000
√ Water	Minor Adjustments	2%	\$	60,000
√ Sewer	Minor Adjustments	2%	\$	60,000
$\sqrt{}$ Turf and Erosion Control		2%	\$	60,000
$\sqrt{}$ Landscaping and Irrigation		4%	\$	120,000
Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction	n Cost Subtotal Allowa	nce Subtotal:	\$	2,213,000
	Paving and Allowa			5,220,000
	Construction Contingency:			783,000
	Mobilization			418,000
	Prep ROW		,	209,000
	Construction C	ost TOTAL:	\$	6,700,000

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%	\$ -

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

 Project Information:
 Description:
 Project No.
 A-2

 Name:
 New Hope Rd (2)
 This project consists of widening

Limits: 240' W of Lagoona Dr to Mayfield Ranch Blvd

existing pavement with half of a 4 lane

Impact Fee Class: 4 Lane - Enhanced (1/2)
Ultimate Class: 4 Lane - Enhanced

divided arterial.

Length (If): 1,223
Service Area(s): A,ETJ/Other

	idway Construction Cost Proj	ection					
No.	Item Description		Quantity	Unit	Uı	nit Price	Item Cost
101	Unclassified Street Excavation		4,447	су	\$	15.00	\$ 67,000
201	12" Asphalt (Type C)		2,422	ton	\$	72.00	\$ 174,000
301	16" Base		1,631	су	\$	55.00	\$ 90,000
401	10" Lime Stabilization (with Lime @ 4	5#/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
		P	Paving Const	ruction (	Cost	Subtotal:	\$ 633,000
Majo	or Construction Component Allowar						
	Item Description	Notes			Al	lowance	Item Cost
$\sqrt{}$	Traffic Control	Construction Phase	Traffic Control			5%	\$ 32,000
	Pavement Markings/Signs/Posts	Includes Striping/Sigi	ns for Shared Pa	ths		2%	13,000
$\sqrt{}$	Roadway Drainage	Standard Internal System				30%	 190,000
	Illumination					10%	\$ 63,000
	Special Drainage Structures	Minor Stream Crossin	ng				\$ 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%	\$ -
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$ 562,000
			Paving an	d Allowa	nce	Subtotal:	\$ 1,195,000
		Constr	ruction Conti	ngency:		15%	\$ 179,000
I			Mob	ilization		8%	\$ 96,000

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%	\$ -

Prep ROW

**Construction Cost TOTAL:** 

**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.

48,000

1,600,000

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. A-3

Name: New Hope Rd (3)

This project consists of the construction

Limits: Mayfield Ranch Blvd to 1000' E of Wyoming Springs of a new 4 lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 4,893
Service Area(s): A,ETJ/Other

Roa	adway Construction Cost Pro	jection						
-	Item Description	•	Quantity	Unit	Ur	nit Price		Item Cost
102	Unclassified Street Excavation		35,580	су	\$	15.00	\$	534,000
202	12" Asphalt (Type C)		19,376	ton	\$	72.00	\$	1,395,000
302	16" Base		13,048	су	\$	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
		F	Paving Const	ruction (	Cost	Subtotal:	\$	4,121,000
Majo	or Construction Component Allowa	nces**:	_			_		
	Item Description	Notes			Al	lowance		Item Cost
	Traffic Control	None Anticipated	•			0%	\$	-
. /	Development Markingra/Ciaras/Deats				I	20/	Φ	00.000

Maj	or Construction Component Allowa	nces**:			
	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%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$	2,141,000
		Paving and Allowa	nce Subtotal:	\$	6,262,000
		Construction Contingency:	15%	\$	939,000
		Mobilization	_	,	501,000
		Prep ROW			250,000
		Construction C	ost TOTAL:	\$	8,000,000

Impact Fee Project Cost Sun	nmary		
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 Pro	oject Cost TOTAL:	\$ 9,300,000

**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.

### **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

Limits: IH 35 SBFR to IH 35 NBFR

Iane undivided bridge section, u-turn bridge and

Impact Fee Class: 6 Lane - Enhanced frontage road realignment.

Ultimate Class: 6 Lane - Enhanced

Length (If): 1,014
Service Area(s): A,B

# Roadway Construction Cost Projection Construction Cost TOTAL: \$ 38,928,000

Impact Fee Project Cost Sun	nmary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 38,928,000
Engineering/Survey/Testing:		-	\$ 6,228,480
ROW/Easement Acquisition:	TxDOT Roadway	-	\$ -
	Overall P	roject Cost Total:	\$ 45,156,480
		<b>City Contribution:</b>	\$ 9,031,296
Impact Fe	e Project Cost TOTAL (20%	City Contribution)	\$ 9,031,296

**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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Description: Project No. **A-5** Name: Wyoming Springs Dr (1) This project consists of widening

Limits: New Hope Dr (Future) to Blue Ridge Dr

Impact Fee Class: 4 Lane - Enhanced (1/2) **Ultimate Class:** 4 Lane - Enhanced

Poadway Construction Cost Projection

Length (If): 1,190 Service Area(s): Α

existing pavement with half of a 4 lane

divided arterial.

	loadway Construction Cost Projection							
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
101	Unclassified Street Excavation		4,327	су	\$	15.00	\$	65,000
201	12" Asphalt (Type C)		2,356	ton	\$	72.00	\$	170,000
301	16" Base		1,587	су	\$	55.00	\$	87,000
401	10" Lime Stabilization (with Lime @ 4	15#/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
		F	Paving Const	ruction (	Cost	Subtotal:	\$	615,000
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	31,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	12,000
	Roadway Drainage	Standard Internal Sy	stem			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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	351,000
	-							·
			Paving an	d Allowa	nce	Subtotal:	\$	966,000
		Consti	ruction Conti			15%	\$	145,000
				ilization		8%	\$	77,000

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

Prep ROW

**Construction Cost TOTAL:** 

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.

39,000

1,300,000

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:

Wyoming Springs Dr (2)

Blue Ridge Dr to RM 1431

Description:

Project No. A-6

This project consists of the construction of a new 4

lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 3,810 Service Area(s): A

Roa	adway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
102	Unclassified Street Excavation	27,705	су	\$	15.00	\$	416,000
202	12" Asphalt (Type C)	15,088	ton	\$	72.00	\$	1,086,000
302	16" Base	10,160	су	\$	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
		Daving Canat			Cbtatal.	•	2 200 000

Paving Construction Cost Subtotal: \$ 3,209,000

Majo	or Construction Component Allowa Item Description	nces**: 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%	\$ -
**Allo	wances based on % of Paving Construction C	ost Subtotal Allowa	ınce Subtotal:	\$ 1,668,000
		Paving and Allowa	nce Subtotal:	\$ 4,877,000
		Construction Contingency:	15%	\$ 732,000
		Mobilization	8%	\$ 390,000
		Prep ROW		195,000
		Construction C	ost TOTAL:	\$ 6,200,000

Impact Fee Project Cost Sum	mary		
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 C	ost TOTAL:	\$ 9,100,000

**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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Description: Project No. **A-7** RM 1431 (1) Name: This project consists of the

Limits: 1100' W of Mayfield Ranch Blvd to 850' E of Stone Creconstruction of existing pavement to a

Impact Fee Class: 6 Lane - Enhanced 6 lane divided arterial.

**Ultimate Class:** 6 Lane - Enhanced

Poadway Construction Cost Projection

Length (If): 5,137 Service Area(s): A,ETJ/Other

RO	idway Construction Cost Pro	ection									
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost			
105	Unclassified Street Excavation		50,609	су	\$	15.00	\$	759,000			
205	12" Asphalt (Type C)		28,630	ton	\$	72.00	\$	2,061,000			
305	16" Base		19,280	су	\$	55.00	\$	1,060,000			
405	10" Lime Stabilization (with Lime @ 4	15#/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			
	Machine Laid Curb & Gutter		20,548	lf	\$	16.00	\$	329,000			
805	Turn Lanes and Median Openings		3,113	sy	\$	134.62	\$	419,000			
		F	Paving Const	ruction (	Cost	Subtotal:	\$	5,519,000			
Majo	or Construction Component Allowa										
	Item Description	Notes			All	owance		Item Cost			
$\sqrt{}$	Traffic Control	Construction Phase	Traffic Control			5%		276,000			
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%		110,000			
$\sqrt{}$	Roadway Drainage	Standard Internal Sy	stem			30%	\$	1,656,000			
	Illumination					10%	\$	552,000			
	Special Drainage Structures	Minor Stream Crossi	ng				\$	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%	\$	-			
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	ınce	Subtotal:	\$	3,445,000			
			Paving an		nce		\$	8,964,000			
I		Consti	ruction Conti	-		15%	\$	1,345,000			
I				ilization		8%	\$	717,000			
				ep ROW		4%	\$	359,000 <b>11,400,000</b>			
			Constru	ction C	Construction Cost TOTAL:						

Impact Fee Project Cost Sur	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 F	ee Project Cost TOTAL (20% City Co	ontribution)	\$ 2,880,000

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. A-8

Name: RM 1431 (2) This project consists of the

Limits: 850' E of Stone Oak Dr to IH 35 SBFR reconstruction of existing pavement to a

Impact Fee Class: 6 Lane - Enhanced 6 lane divided arterial.

Ultimate Class: 6 Lane - Enhanced

Length (If): 11,417 Service Area(s): A

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
105	Unclassified Street Excavation	112,479	су	\$	15.00	\$	1,687,000
205	12" Asphalt (Type C)	63,631	ton	\$	72.00	\$	4,581,000
305	16" Base	42,849	су	\$	55.00	\$	2,357,000
405	10" Lime Stabilization (with Lime @ 45#/sy)	101,484	sy	\$	6.00	\$	609,000
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	19,282	gal	\$	6.00	\$	116,000
605	10' Concrete Sidewalk	228,340	sf	\$	5.50	\$	1,256,000
705	Machine Laid Curb & Gutter	45,668	lf	\$	16.00	\$	731,000
805	Turn Lanes and Median Openings	6,919	sy	\$	134.62	\$	932,000
		Daving Conet	ruction (	<b>Coct</b>	Subtotale	¢	12 269 000

Paving Construction Cost Subtotal: \$ 12,269,000

		. u.m.g semenusion		•	,,,
Majo	or Construction Component Allowa	nces**:			
	Item Description	Notes	Allowance		Item Cost
	Traffic Control	Construction Phase Traffic Control	5%	\$	613,000
	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	245,000
	Roadway Drainage	Standard Internal System	30%	\$	3,681,000
	Illumination		10%	\$	1,227,000
	Special Drainage Structures	Bridge Crossing		\$	2,100,000
	Water	Minor Adjustments	2%	\$	245,000
	Sewer	Minor Adjustments	2%	\$	245,000
	Turf and Erosion Control		2%	\$	245,000
	Landscaping and Irrigation		4%	\$	491,000
	Miscellaneous:		0%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	ance Subtotal:	\$	9,092,000
		Paving and Allowa			21,361,000
		Construction Contingency:			3,204,000
		Mobilization			1,709,000
		Prep ROW			854,000
		Construction C	ost TOTAL:	\$	27,200,000

Impact Fee Project Cost Sur	Notes:	Allowance	Item Cost
Construction:		-	\$ 27,200,000
Engineering/Survey/Testing:		16%	\$ 4,352,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	TxDOT Roadway	10%	\$ 2,720,000
Impact F	ee Project Cost TOTAL (20% City Co	ontribution)	\$ 6,860,000

**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.

\*Allowances based on % of Paving Construction Cost Subtotal

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. A-9

Name: Wyoming Springs Dr (3) This project consists of the construction of a new 4

Limits: RM 1431 to 390' N of Goldenoak Cir lane divided arterial.

Impact Fee Class: 4 Lane - Proposed Ultimate Class: 4 Lane - Proposed

Length (If): 3,861 Service Area(s): A

Roa	Roadway Construction Cost Projection							
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
102	Unclassified Street Excavation	28,076 cy				15.00	\$	421,000
202	12" Asphalt (Type C)	15,290 ton			\$	72.00	\$	1,101,000
302	16" Base		10,296	су	\$	55.00	\$	566,000
402	10" Lime Stabilization (with Lime @ 4		24,882	sy	\$	6.00	\$	149,000
502	Surface Treatment (0.2 gal/sy,Prime	Coat AE-P)	4,633	gal	\$	6.00	\$	28,000
602	10' Concrete Sidewalk		77,220	sf	\$	5.50	\$	425,000
702	Machine Laid Curb & Gutter		15,444	lf	\$	16.00	\$	247,000
802	Turn Lanes and Median Openings		2,340	sy	\$	134.62	\$	315,000
	Paving Construction Cost Subtotal:						\$	3,252,000
Majo	or Construction Component Allowar							
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	None Anticipated				0%	*	-
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	*	65,000
	Roadway Drainage	Standard Internal Sys	stem			30%		976,000
	Illumination					10%	\$	325,000
	Special Drainage Structures	None Anticipated					\$	-
	Water	A 12				2%	Φ	65,000
	Walei	Minor Adjustments				2 /0	φ	05,000
	Sewer	Minor Adjustments  Minor Adjustments				2%		65,000
√ √		1					\$	,
$\sqrt{}$	Sewer	1				2%	\$	65,000

6,300,000
1,008,000
1,890,000

**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.

\$

\$

8%

4% \$

1,691,000

4,943,000

741,000

395,000

198,000

6,300,000

Allowance Subtotal:

Paving and Allowance Subtotal:

**Construction Cost TOTAL:** 

Mobilization

Prep ROW

**Construction Contingency:** 

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**Project Information:** Description: Project No. A-10 Name: Wyoming Springs Dr (4) This project consists of widening existing pavement with half of a 4 lane

Limits: 390' N of Goldenoak Cir to Alondra Way Impact Fee Class: 4 Lane - Enhanced (1/2)

divided arterial.

**Ultimate Class:** 4 Lane - Enhanced

Length (If): 703 Service Area(s): Α

No.	Item Description	Quantity	Unit	Ur	nit Price		Item Cost
101	Unclassified Street Excavation	2,556	су	\$	15.00	\$	38,000
201	12" Asphalt (Type C)	1,392	ton	\$	72.00	\$	100,000
301	16" Base	937	су	\$	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		

		i aving construction (	Jost Gubtotai.	Ψ	303,000
Major Con	struction Component Allowa	inces**·	_		_
	Description	Notes	Allowance		Item Cost
√ Traffi	c Control	Construction Phase Traffic Control	5%	\$	18,000
√ Pave	ment Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	7,000
√ Road	way Drainage	Standard Internal System	30%	\$	109,000
√ Illumi	nation		10%	\$	36,000
Spec	al Drainage Structures	None Anticipated		\$	-
√ Wate	r	Minor Adjustments	2%	\$	7,000
√ Sewe	er	Minor Adjustments	2%	\$	7,000
√ Turfa	and Erosion Control		2%	\$	7,000
√ Land:	scaping and Irrigation		4%	\$	15,000
Misce	ellaneous:		0%	\$	-
**Allowances	based on % of Paving Construction C	ost Subtotal Allowa	ınce Subtotal:	\$	206,000
		Paving and Allowa	nce Subtotal:	\$	569,000
		Construction Contingency:	15%	\$	85,000
		Mobilization	8%	\$	46,000
		Prep ROW	4%	\$	23,000
		Construction C	ost TOTAL:	\$	800,000

Impact Fee Project Cost Sum	mary		
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 C	ost TOTAL:	\$ 1,000,000

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Arterial L (1)

Comparison:
Description:
Project No. A-11

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

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 11,378 Service Area(s): A

Roa	dway Construction Cost Proj	ection					
	Item Description	Collon	Quantity	Unit	Ur	it Price	Item Cost
102	Unclassified Street Excavation		82,736	су	\$	15.00	\$ 1,241,000
202	12" Asphalt (Type C)		45,057	ton	\$	72.00	\$ 3,244,000
302	16" Base		30,341	су	\$	55.00	\$ 1,669,000
402	10" Lime Stabilization (with Lime @ 4	5#/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
		P	Paving Const	ruction (	Cost	Subtotal:	\$ 9,584,000
Majo	or Construction Component Allowar	nces**:					
	Item Description	Notes			All	owance	Item Cost
	Traffic Control	None Anticipated				0%	\$ -
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns for Shared Pa	ths		2%	\$ 192,000
	Roadway Drainage	Standard Internal Sys	stem			30%	\$ 2,875,000
	Illumination					10%	\$ 958,000
	Special Drainage Structures	Minor Stream Crossi	ng				\$ 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%	\$ -
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$ 5,184,000
			Paving an				\$ 14,768,000
		Constr	ruction Conti			15%	\$ 2,215,000
				ilization		8%	\$ 1,181,000
i	Prep ROW 4%						\$ 591,000

Impact Fee Project Cost Sun 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 Projec	t Cost TOTAL:	\$ 27,400,000

**Construction Cost TOTAL:** 

**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.

18,800,000

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 PI

Impact Fee Class: 4 Lane - Proposed **Ultimate Class:** 4 Lane - Proposed

Length (If): 4,220 Service Area(s): Α

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
102	Unclassified Street Excavation	30,686	су	\$	15.00	\$	460,000
202	12" Asphalt (Type C)	16,711	ton	\$	72.00	\$	1,203,000
302	16" Base	11,253	су	\$	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
	_	D			0 1 1 1	_	0.550.000

Paving Construction Cost Subtotal: \$ 3,553,000

Majo	or Construction Component Allowa Item Description	nces**: 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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$ 2,047,000
		Paving and Allowa	nce Subtotal:	\$ 5,600,000
		Construction Contingency:	15%	\$ 840,000
		Mobilization	8%	\$ 448,000
		Prep ROW	4%	\$ 224,000
		Construction C	ost TOTAL:	\$ 7,200,000

Impact Fee Project Cost Sumn	nary		
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
	\$ 10,500,000		

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.

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 Limits: West End PI to Camino Del Verdes PI

Impact Fee Class: 4 Lane - Enhanced (1/2) **Ultimate Class:** 4 Lane - Enhanced

Length (If): 4,163 Service Area(s): Α

existing pavement with half of a 4 lane

divided arterial.

No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
101	Unclassified Street Excavation	15,136	су	\$	15.00	\$	227,000
201	12" Asphalt (Type C)	8,243	ton	\$	72.00	\$	593,000
301	16" Base	5,551	су	\$	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 Const	ruction (	Cost	Subtotal:	\$	2,151,000
Majo	or Construction Component Allowances**:		-				
	Item Description Notes			All	lowance		Item Cost
-	T ( 0 1 1		•			_	

Major Construction Component Allowa	nces**:			
Item Description	Notes	Allowance	П	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
$\sqrt{}$ 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 Co	ost Subtotal Allowa	ınce Subtotal:	\$	1,326,000
	Paving and Allowa	nce Subtotal:	\$	3,477,000
	Construction Contingency:		-	522,000
	Mobilization	8%	\$	278,000
	Prep ROW			139,000
	Construction C	ost TOTAL:	\$	4,500,000

Impact Fee Project Cost Sum 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
	\$ 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.

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

 Limits:
 RM 1431 to CR 173
 lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 4,250 Service Area(s): A

No.	Item Description	Quantity	Unit	Ur	nit Price		Item Cost		
102	Unclassified Street Excavation	30,904	су	\$	15.00	\$	464,000		
202	12" Asphalt (Type C)	16,830	ton	\$	72.00	\$	1,212,000		
302	16" Base	11,333	су	\$	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								

	A 11 dest		_						
Major Construction Component  Item Description	Major Construction Component Allowances**:  Item Description Notes Allowance								
Traffic Control	None Anticipated	0%	\$	-					
√ Pavement Markings/Signs/P	osts Includes Striping/Signs for Shared Paths	2%	\$	72,000					
√ Roadway Drainage	Standard Internal System	30%	\$	1,074,000					
$\sqrt{}$ Illumination		10%	\$	358,000					
√ Special Drainage Structures	Bridge Crossing		\$	600,000					
√ Water	Minor Adjustments	2%	\$	72,000					
√ Sewer	Minor Adjustments	2%	\$	72,000					
$\sqrt{}$ Turf and Erosion Control		2%	\$	72,000					
√ Landscaping and Irrigation		4%	\$	143,000					
Miscellaneous:		0%	\$	-					
**Allowances based on % of Paving Cons	ruction Cost Subtotal Allowa	ance Subtotal:	\$	2,463,000					
	Paving and Allowa	ance Subtotal:	\$	6,044,000					
	\$	907,000							
	\$	484,000							
	Prep ROW	4%	\$	242,000					
	Construction C	ost TOTAL:	\$	7,700,000					

Impact Fee Project Cost Sum 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
	\$ 11,200,000		

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. A-15, B-11

Name: Arterial L (1) This project consists of the construction

Limits: Chisholm Trl Rd (Future) to IH 35 NBFR of a new 4 lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 400 Service Area(s): A,B

Roa	Roadway Construction Cost Projection								
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost	
102	Unclassified Street Excavation		2,909	су	\$	15.00	\$	44,000	
202	12" Asphalt (Type C)		1,584	ton	\$	72.00	\$	114,000	
302	16" Base		1,067	су	\$	55.00	\$	59,000	
402	10" Lime Stabilization (with Lime @ 4	.5#/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	
		Р	aving Const	ruction (	Cost	Subtotal:	\$	338,000	
Majo	Major Construction Component Allowances**:								
	Item Description Notes Allowance							Item Cost	
	Traffic Control	None Anticipated				0%		-	
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns for Shared Pa	ths		2%		7,000	
	Roadway Drainage	Standard Internal Sys	stem			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	
**Allo	wances based on % of Paving Construction Co	st Subtotal	<del></del>	Allowa	ınce	Subtotal:	\$	2,677,000	
			Paving an		nce		\$	3,015,000	
		Constr	uction Conti			15%	\$	452,000	
				ilization		8%	\$	241,000	
				ep ROW		4%	\$	121,000	
			Constru	ction C	ost ˈ	TOTAL:	\$	3,900,000	

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
ROW/Easement Acquisition:	\$ 5,700,		

**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.

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 (If): 538 Service Area(s): Α

Roa	adway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Ur	Unit Price		Item Cost
103	Unclassified Street Excavation	3,912	су	\$	15.00	\$	59,000
203	12" Asphalt (Type C)	2,130	ton	\$	72.00	\$	153,000
303	16" Base	1,435	су	\$	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

<b>Paving Construction Cost Subtotal:</b>	\$	453,000
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Majo				
	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$ 258,000
		Paving and Allowa	nce Subtotal:	\$ 711,000
	\$ 107,000			
	\$ 57,000			
I		Prep ROW	4%	\$ 28,000
		Construction C	ost TOTAL:	\$ 1,000,000

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
	\$ 1,300,000		

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**Project Information:** Description: Project No. A-17 Chisholm Trl Rd (2) Name:

This project consists of the

Limits: 3250' N of Wolle Ln to 1980' N of Wolle Ln reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial. **Ultimate Class:** 4 Lane - Enhanced

Length (If): 1,272 Service Area(s): Α

Roa	dway Construction Cost Projection										
No.	Item Description	Quantity	Unit	Unit Price		Unit Price		Unit Unit Price			Item Cost
103	Unclassified Street Excavation	9,249	су	\$	15.00	\$	139,000				
203	12" Asphalt (Type C)	5,037	ton	\$	72.00	\$	363,000				
303	16" Base	3,392	су	\$	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											

Paving Construction Cost Subtotal: \$ 1,072,000

Maio	Major Construction Component Allowances**:									
maje	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%	\$	-					
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$	610,000					
		Paving and Allowa	nce Subtotal:	\$	1,682,000					
		Construction Contingency:	15%	\$	252,000					
	\$	135,000								
	Prep ROW 4%									
		Construction C	ost TOTAL:	\$	2,200,000					

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 C	ost TOTAL	2	2,900,000

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.

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

Limits: 1980' N of Wolle Ln to FM 3406 in the existing center turn lane.

Impact Fee Class: 4 Lane - Enhanced (AM)
Ultimate Class: 4 Lane - Enhanced

Length (If): 2,552 Service Area(s): A

No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
104	Unclassified Street Excavation	4,789	су	\$	15.00	\$ 72,000
204	Asphalt (Type C)	0	ton	\$	72.00	\$ -
304	Base	0	су	\$	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
		<b>Paving Consti</b>	ruction (	Cost	Subtotal:	\$ 362,000

	Ф	362,000			
Maio	or Construction Component Allowa				
	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
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	ince Subtotal:	\$	298,000
		Paving and Allowa	nce Subtotal:	\$	660,000
		Construction Contingency:	15%	\$	99,000
		Mobilization	5%	\$	33,000
		Prep ROW	\$3,000 / STA	\$	8,000
		Construction C	ost TOTAL:	\$	800,000

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%	\$ -

**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.

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 230' W of Tonkawa Trl to 390' W of Wyexisting pavement to a 6 lane divided arterial.

Impact Fee Class: 6 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 1,221
Service Area(s): A,ETJ/Other

	dway Construction Cost Pro	jection								
	Item Description		Quantity	Unit		nit Price		Item Cost		
105	Unclassified Street Excavation		12,029	су	\$	15.00	\$	180,000		
205	12" Asphalt (Type C)		6,805	ton	\$	72.00	\$	490,000		
305	16" Base		4,583	су	\$	55.00	\$	252,000		
	\			sy	\$	6.00	\$	65,000		
505	Surface Treatment (0.2 gal/sy,Prime Coat AE-P)			gal	\$	6.00	\$	12,000		
605	05 10' Concrete Sidewalk 24,420 sf			\$	5.50	\$	134,000			
705	Machine Laid Curb & Gutter	4,884 If			\$	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**:										
						owance		Item Cost		
	Traffic Control	Construction Phase Traffic Control				5%	\$	66,000		
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	26,000		
	Roadway Drainage	Standard Internal Sy	stem			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	Í				2%	\$	26,000		
	Landscaping and Irrigation					4%	\$	52,000		
	Miscellaneous:					0%	\$	-		
**Allo	wances based on % of Paving Construction C	ost Subtotal		Allowa	ince	Subtotal:	\$	746,000		
	•							,		
			Paving an	d Allowa	nce	Subtotal:	\$	2,057,000		
		Consti	ruction Conti			15%	\$	309,000		
			Mob	ilization		8%	\$	165,000		
			Pr	ep ROW		4%	\$	82,000		
			Construction Cost TOTAL:							

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

**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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Description: Project No. A-20

Name: Sam Bass Rd (2) This project consists of the

Limits: 390' W of Wyoming Springs Dr to FM 3406 reconstruction of existing pavement to a

Impact Fee Class: 6 Lane - Enhanced 6 lane divided arterial. **Ultimate Class:** 6 Lane - Enhanced

Length (If): 1,569 Service Area(s): Α

Roa	dway Construction Cost Pro	jection						
No.	Item Description	-	Quantity	Unit	Ur	nit Price		Item Cost
105	Unclassified Street Excavation		15,458	су	\$	15.00	\$	232,000
205	12" Asphalt (Type C)		8,745	ton	\$	72.00	\$	630,000
305	16" Base	5,889	су	\$	55.00	\$	324,000	
405	05 10" Lime Stabilization (with Lime @ 45#/sy)			sy	\$	6.00	\$	84,000
505	Surface Treatment (0.2 gal/sy,Prime	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 Const	ruction (	Cost	Subtotal:	\$	1,687,000
Maio	or Construction Component Allowa	nces**•						
Maje	Item Description	Notes			All	owance	П	Item Cost
	Traffic Control	Construction Phas	e Traffic Control			5%	\$	84,000
	Pavement Markings/Signs/Posts	Includes Striping/S	Signs for Shared Pa	ths		2%	\$	34,000
	Roadway Drainage	Standard Internal	System			30%	\$	506,000
- 1					I	400/	_	400.000

	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%	\$	-		
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	ınce Subtotal:	\$	962,000		
		Paving and Allowa	ince Subtotal:	\$	2,649,000		
		Construction Contingency:	15%	\$	397,000		
		Mobilization	8%	\$	212,000		
	Prep ROW 4%						

	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

**Construction Cost TOTAL:** 

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.

3,400,000

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Sam Bass Rd (3)
Limits:

Description:
Project No. A-21
This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 4 Lane - Enhanced

Length (If): 1,853
Service Area(s): A,ETJ/Other

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
103	Unclassified Street Excavation	13,474	су	\$	15.00	\$	202,000
203	12" Asphalt (Type C)	7,338	ton	\$	72.00	\$	528,000
303	16" Base	4,941	су	\$	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
		Davina Canat			C la4 = 4 = 1 .	•	4 EC4 000

Paving Construction Cost Subtotal: \$	1,561,000
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Mai	Major Construction Component Allowances**:									
IVIAJ	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					
$\checkmark$	Illumination		10%	\$	156,000					
	Special Drainage Structures	None Anticipated		\$	-					
$\checkmark$	Water	Minor Adjustments	2%	\$	31,000					
$\checkmark$	Sewer	Minor Adjustments	2%	\$	31,000					
	Turf and Erosion Control		2%	\$	31,000					
	Landscaping and Irrigation		4%	\$	62,000					
	Miscellaneous:		0%	\$	-					
**Allo	owances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$	888,000					
		Paving and Allowa	nce Subtotal:	\$	2,449,000					
		Construction Contingency:	15%	\$	367,000					
		Mobilization	8%	\$	196,000					
		Prep ROW			98,000					
		Construction C	ost TOTAL:	\$	3,200,000					

Impact Fee Project Cost Sum	mary		
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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Sam Bass Rd (4)
Description:
Project No.
This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 4 Lane - Enhanced

Length (If): 991 Service Area(s): A

Roa	dway Construction Cost Pro	ection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		7,206	су	\$	15.00	\$	108,000
203	12" Asphalt (Type C)		3,924	ton	\$	72.00	\$	283,000
303	16" Base		2,643	су	\$	55.00	\$	145,000
403	10" Lime Stabilization (with Lime @ 4	l5#/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:							
Major Construction Component Allowances**:								
	Item Description	Notes			All	lowance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	42,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	17,000
	Roadway Drainage	Standard Internal Sys	stem			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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	476,000
			Paving an	d Allowa	nce	Subtotal:	\$	1,310,000
		Consti	ruction Conti	ngency:		15%	\$	197,000
			Mob	ilization		8%	\$	105,000
			Pre	ep ROW		4%	\$	52,000
	Construction Cost TOTAL:							

- \$ 1,700,000			Item Description
Ţ :,: 00,000	-		Construction:
<b>16%</b> \$ 272,000	16%		Engineering/Survey/Testing:
			Previous City contribution
			Other
15% \$ 255,000	15%	Existing Alignment	ROW/Easement Acquisition:
		Existing Alignment  Impact Fee Project Co	

**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.

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 (If): 1,121 Service Area(s): Α

adway Construction Cost Projection						
Item Description	Quantity	Unit	Ur	nit Price		Item Cost
Unclassified Street Excavation	8,151	су	\$	15.00	\$	122,000
12" Asphalt (Type C)	4,439	ton	\$	72.00	\$	320,000
16" Base	2,989	су	\$	55.00	\$	164,000
10" Lime Stabilization (with Lime @ 45#/sy)	7,224	sy	\$	6.00	\$	43,000
Surface Treatment (0.2 gal/sy,Prime Coat AE-P)	1,345	gal	\$	6.00	\$	8,000
10' Concrete Sidewalk	22,420	sf	\$	5.50	\$	123,000
Machine Laid Curb & Gutter	4,484	lf	\$	16.00	\$	72,000
Turn Lanes and Median Openings	679	sy	\$	134.62	\$	91,000
	Item Description Unclassified Street Excavation 12" Asphalt (Type C) 16" Base 10" Lime Stabilization (with Lime @ 45#/sy) Surface Treatment (0.2 gal/sy,Prime Coat AE-P) 10' Concrete Sidewalk Machine Laid Curb & Gutter	Item DescriptionQuantityUnclassified Street Excavation8,15112" Asphalt (Type C)4,43916" Base2,98910" Lime Stabilization (with Lime @ 45#/sy)7,224Surface Treatment (0.2 gal/sy,Prime Coat AE-P)1,34510' Concrete Sidewalk22,420Machine Laid Curb & Gutter4,484	Item DescriptionQuantityUnitUnclassified Street Excavation8,151cy12" Asphalt (Type C)4,439ton16" Base2,989cy10" Lime Stabilization (with Lime @ 45#/sy)7,224sySurface Treatment (0.2 gal/sy,Prime Coat AE-P)1,345gal10' Concrete Sidewalk22,420sfMachine Laid Curb & Gutter4,484lf	Item Description         Quantity         Unit         Ur           Unclassified Street Excavation         8,151         cy         \$           12" Asphalt (Type C)         4,439         ton         \$           16" Base         2,989         cy         \$           10" Lime Stabilization (with Lime @ 45#/sy)         7,224         sy         \$           Surface Treatment (0.2 gal/sy,Prime Coat AE-P)         1,345         gal         \$           10' Concrete Sidewalk         22,420         sf         \$           Machine Laid Curb & Gutter         4,484         If         \$	Item Description         Quantity         Unit         Unit Price           Unclassified Street Excavation         8,151         cy         \$ 15.00           12" Asphalt (Type C)         4,439         ton         \$ 72.00           16" Base         2,989         cy         \$ 55.00           10" Lime Stabilization (with Lime @ 45#/sy)         7,224         sy         6.00           Surface Treatment (0.2 gal/sy,Prime Coat AE-P)         1,345         gal         \$ 6.00           10' Concrete Sidewalk         22,420         sf         \$ 5.50           Machine Laid Curb & Gutter         4,484         lf         \$ 16.00	Item Description         Quantity         Unit         Unit Price           Unclassified Street Excavation         8,151         cy         \$ 15.00         \$ 12" Asphalt (Type C)         4,439         ton         \$ 72.00         \$ 16" Base         2,989         cy         \$ 55.00         \$ 10" Lime Stabilization (with Lime @ 45#/sy)         7,224         sy         \$ 6.00         \$ 50.00

Paving Construction Cost Subtotal:	\$	943,000
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Majo	or Construction Component Allowa			
	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%	\$ -
**Allo	wances based on % of Paving Construction C	ost Subtotal Allowa	ince Subtotal:	\$ 538,000
		Paving and Allowa	nce Subtotal:	\$ 1,481,000
		Construction Contingency:	15%	\$ 222,000
		Mobilization	8%	\$ 118,000
		Prep ROW	4%	\$ 59,000
		Construction C	ost TOTAL:	\$ 1,900,000

Construction:			Item Cost
		-	\$ 1,900,000
Engineering/Survey/Testing:		16%	\$ 304,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	\$ 285,000

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. A-24

Name: Sam Bass Rd (6) This project consists of the

Limits: Hairy Man Rd to 700' E of Hairy Man Rd reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

Ultimate Class: 4 Lane - Enhanced

Length (If): 703

Service Area(s): A,ETJ/Other

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Ui	nit Price		Item Cost
103	Unclassified Street Excavation	5,112	су	\$	15.00	\$	77,000
203	12" Asphalt (Type C)	2,784	ton	\$	72.00	\$	200,000
303	16" Base	1,875	су	\$	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
		D i 0 4		_	0 1 1 1	_	E04 000

Paving Construction Cost Subtotal: \$ 591,000

Maio	or Construction Component Allowa	nces**:		
	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$ 338,000
		Paving and Allowa	nce Subtotal:	\$ 929,000
		Construction Contingency:	15%	\$ 139,000
		Mobilization		74,000
		Prep ROW	4%	\$ 37,000
		Construction C	ost TOTAL:	\$ 1,200,000

Construction: Engineering/Survey/Testing:		-	\$	
Engineering/Survey/Testing:			Ψ	1,200,000
Linging our vey resulty.		16%	\$	192,000
Previous City contribution				
Other				
ROW/Easement Acquisition:	xisting Alignment	15%	\$	180,000

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:Description:Project No.A-25Name:FM 3406This project consists of the reconstruction of

Limits: Sam Bass Rd to IH 35 SBFR

Impact Fee Class: 6 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 8,690 Service Area(s): A

Roa	Roadway Construction Cost Projection									
No.	Item Description	Quantity	Unit	Ur	nit Price		Item Cost			
105	Unclassified Street Excavation	85,613	су	\$	15.00	\$	1,284,000			
205	12" Asphalt (Type C)	48,432	ton	\$	72.00	\$	3,487,000			
305	16" Base	32,614	су	\$	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

existing pavement to a 6 lane divided arterial.

Major Construction Component Item Description	Allowances**:  Notes	Allowance	Item Cost
√ Traffic Control	Construction Phase Traffic Control	5%	\$ 467,000
√ Pavement Markings/Signs/P	osts Includes Striping/Signs for Shared Paths	2%	\$ 187,000
√ Roadway Drainage	Standard Internal System	30%	\$ 2,801,000
$\sqrt{}$ Illumination		10%	\$ 934,000
√ Special Drainage Structures	Bridge Crossing		\$ 7,100,000
√ Water	Minor Adjustments	2%	\$ 187,000
√ Sewer	Minor Adjustments	2%	\$ 187,000
$\sqrt{}$ Turf and Erosion Control		2%	\$ 187,000
√ Landscaping and Irrigation		4%	\$ 373,000
Miscellaneous:		0%	\$ 
**Allowances based on % of Paving Cons	ruction Cost Subtotal Allowa	ance Subtotal:	\$ 12,423,000
	Paving and Allowa		21,760,000
	Construction Contingency:		3,264,000
	Mobilization		1,741,000
	Prep ROW		870,000
	Construction C	ost TOTAL:	\$ 27,700,000

Impact Fee Project Cost Sum 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 F	\$ 6,980,000		

**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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Project No. A-26 Description: Name: Wyoming Springs Dr (5) This project consists of the construction of a new 4 Limits: Sam Bass Rd to Brushy Creek lane divided arterial.

Impact Fee Class: 4 Lane - Proposed **Ultimate Class:** 4 Lane - Proposed

Length (If): 2,057 Service Area(s): Α

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	U	nit Price		Item Cost
102	Unclassified Street Excavation	14,958	су	\$	15.00	\$	224,000
202	12" Asphalt (Type C)	8,146	ton	\$	72.00	\$	586,000
302	16" Base	5,485	су	\$	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
		Paying Construction Cost Subtotal: \$ 1.733.					

		Favilig Constituction C	Jost Subtotal.	φ	1,733,000
Majo					
	Item Description	Notes	Allowance		Item Cost
	Traffic Control	None Anticipated	0%	\$	-
$\checkmark$	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%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$	2,802,000
	\$	4,535,000			
	\$	680,000			
	\$	363,000			
	\$	181,000			
	\$	5,800,000			

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

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. A-27

Name: Chisholm Trl Rd (4)
Limits: This project consists of the construction of a median in the existing center turn lane.

Impact Fee Class: 4 Lane - Enhanced (AM)

Ultimate Class: 4 Lane - Enhanced Length (If): 7,000

Length (If): 7,000
Service Area(s): A

Roa	Roadway Construction Cost Projection							
	Item Description		Quantity	Unit	Un	it Price		Item Cost
104	104 Unclassified Street Excavation			су	\$	15.00	\$	197,000
204	204 Asphalt (Type C)			ton	\$	72.00	\$	-
304	304 Base			су	\$	55.00	\$	-
404	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	<b>\$</b>	-
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
Majo	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			\$1,0	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
**Allo	wances based on % of Paving Construction Cos	t Subtotal		Allowa	nce	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:						TOTAL:	\$	2,200,000

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%	\$ _
NOW/Lasement Acquisition.	\$ 2,600		

**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.

### **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

Limits: Brushy Creek to Wyoming Springs Dr a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 4 Lane - Existing

Length (If): 2,123
Service Area(s): A

Construction Cost TOTAL: \$ 8,245,045

Impact Fee Project Cost Sumr	nary		
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	<b>Cost Total:</b>	\$ 11,012,302
		ontribution:	11,012,302
	Impact Fee Project C	ost (100%):	\$ 11,012,302

**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.

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

Limits:
Sam Bass Rd to 345' N of RM 620
Iane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 1,769
Service Area(s): A

	dway Construction Cost Projection		11 14		L	
	Item Description	Quantity	Unit	U	nit Price	Item Cost
102	Unclassified Street Excavation	12,863	су	\$	15.00	\$ 193,000
202	12" Asphalt (Type C)	7,005	ton	\$	72.00	\$ 504,000
302	16" Base	4,717	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 1.489.000

i aving construction cost custotal.						
ajor Construction Component Allowan	ces**:					

Major Construction Component Allowances**:									
	Item Description Notes Allowance								
	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%	\$	-				
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$	1,676,000				
		Paving and Allowa	ince Subtotal:	\$	3,165,000				
		Construction Contingency:	15%	\$	475,000				
		Mobilization	8%	\$	253,000				
		Prep ROW	4%	\$	127,000				
		Construction C	ost 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:								

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Deepwood Dr (2)
Limits:
Deepwood Dr (2)
This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 4 Lane - Enhanced

Length (If): 346 Service Area(s): A

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
103	Unclassified Street Excavation	2,516	су	\$	15.00	\$ 38,000
203	12" Asphalt (Type C)	1,370	ton	\$	72.00	\$ 99,000
303	16" Base	923	су	\$	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
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Maio	Major Construction Component Allowances**:										
Maj	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	Minor Adjustments 2%								
	Turf and Erosion Control		2%								
	Landscaping and Irrigation		4%	\$	12,000						
	Miscellaneous:		0%	\$	-						
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$	167,000						
		Paving and Allowa	nce Subtotal:	\$	458,000						
		Construction Contingency:	15%	\$	69,000						
		Mobilization	8%	\$	37,000						
		Prep ROW	4%	\$	18,000						
		Construction C	ost TOTAL:	\$	600,000						

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

**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.

### **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.

Impact Fee Class: 6 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 4,922 Service Area(s): A,C

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

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

**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.

### 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 B

<u>#</u>	IF Class	<u>Project</u>	Type	<u>Limits</u>		Percent in Service Area	Project Cost	Total Cost in Service Area
			-	<u>From</u>	<u>To</u>	Service Area		Service Area
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	Avery Nelson	New	Gulf Way	College Park	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

Capital Improvement Plan for Roadway Impact Fees Summary of Conceptual Level Project Cost Projections

### Roadway Improvements - Service Area B

<u>#</u>	<u>IF Class</u>	<u>Project</u>	Type	<u>Li</u>	mits	Percent in Service Area	Project Cost	Total Cost in
				<u>From</u>	<u>To</u>	Service Area		Service Area
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	<u>Improvement</u>		Project Improvement Percent in		Project Cost	Total Cost in
#	<u>FTOJECL</u>	Improvement 1	Improvement 2	Service Area	Project Cost	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	\$ 6,967,000	

TOTAL \$ 24,958,235 \$ 10,004,735

**NOTE**: These 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. These planning level cost projections shall not supersede the City's design standards 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. A-4, B-1

Name: Westinghouse Rd (1)

This project consists of the construction of a new 6

Limits: IH 35 SBFR to IH 35 NBFR

Iane undivided bridge section, u-turn bridge and

Impact Fee Class: 6 Lane - Enhanced frontage road realignment.

Ultimate Class: 6 Lane - Enhanced

Length (If): 1,014
Service Area(s): A,B

# Roadway Construction Cost Projection Construction Cost TOTAL: \$ 38,928,000

Impact Fee Project Cost Sun	nmary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 38,928,000
Engineering/Survey/Testing:		-	\$ 6,228,480
ROW/Easement Acquisition:	TxDOT Roadway	-	\$ -
	Overall P	roject Cost Total:	\$ 45,156,480
		<b>City Contribution:</b>	\$ 9,031,296
Impact Fe	e Project Cost TOTAL (20%	City Contribution)	\$ 9,031,296

**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.

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

Limits: 3895' E of A.W. Grimes to 6350' W of A.W. Grimes reconstruction of the existing pavement

Impact Fee Class: 4 Lane - Enhanced to a 4 lane divided arterial.

Ultimate Class: 6 Lane - Enhanced

Length (If): 2,456
Service Area(s): B,ETJ/Other

Roa	adway Construction Cost Pro	iection						
	Item Description	,coon	Quantity	Unit	Un	it Price		Item Cost
103	Unclassified Street Excavation		17,859	су	\$	15.00	\$	268,000
203	12" Asphalt (Type C)		9,726	ton	\$	72.00	\$	700,000
303	16" Base		6,549	су	\$	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
		F	Paving Const	ruction (	Cost	Subtotal:	\$	2,068,000
Majo	or Construction Component Allowa							
	Item Description	Notes			Alle	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	103,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	41,000
	Roadway Drainage	Standard Internal Sy	stem			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%	\$	-
**Allo	wances based on % of Paving Construction C	ost Subtotal		Allowa	nce S	Subtotal:	\$	1,177,000
			Paving an				\$	3,245,000
		Const	ruction Conti			15%	\$	487,000
				ilization		8%	\$	260,000
				ep ROW		4%	\$	130,000 <b>4,200,000</b>
			Construction Cost TOTAL:					

Construction:		_	
		-	\$ 4,200,000
Engineering/Survey/Testing:		16%	\$ 672,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	\$ 630,000

**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.

### **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

Limits: 1777' N of Teravista Pkwy to Teravista Pkwy construction of a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Existing
Ultimate Class: 4 Lane - Existing

Length (If): 1,777
Service Area(s): B

# Roadway Construction Cost Projection Construction Cost TOTAL: \$ 1,749,428

Impact Fee Project Cost Sun	nmary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 1,749,428
Engineering/Survey/Testing:		-	\$ 139,791
ROW/Easement Acquisition:	No ROW Costs Included	-	\$ -
	Overall Pr	roject Cost Total:	\$ 1,889,219
	C	ity Contribution:	\$ 1,889,219
	Impact Fee Pro	ject Cost (100%):	\$ 1,889,219

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**Project Information:** Description: Project No. **B-4** 

University Blvd (1) Name: This project consists of the

Limits: University Oaks Blvd to 335' W of Sunrise Dr reconstruction of the exising pavement to a 6 lane divided arterial.

Impact Fee Class: 6 Lane - Enhanced **Ultimate Class:** 6 Lane - Existing

Length (If): 2,602 Service Area(s): В

No.	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
105	Unclassified Street Excavation	25,635	су	\$	15.00	\$ 385,000
205	12" Asphalt (Type C)	14,502	ton	\$	72.00	\$ 1,044,000
305	16" Base	9,766	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 2,796,000

Major Construction Compar	aont Allowanaoa**			_	
Major Construction Compor Item Description	Notes		Allowance		Item Cost
√ Traffic Control	Construction Phase Traffic	Control	5%	\$	140,000
√ Pavement Markings/Sigr	ns/Posts Includes Striping/Signs for S	Shared Paths	2%	\$	56,000
√ Roadway Drainage	Standard Internal System		30%	\$	839,000
$\sqrt{}$ Illumination			10%	\$	280,000
√ Special Drainage Structu	ures Bridge Crossing			\$	900,000
√ Water	√ Water Minor Adjustments 2%				56,000
√ Sewer	√ Sewer Minor Adjustments 2%				56,000
$\sqrt{}$ Turf and Erosion Contro			4%	\$	112,000
√ Landscaping and Irrigation  √ Landscaping  ✓	on		2%	\$	56,000
Miscellaneous:			0%	\$	-
**Allowances based on % of Paving 0	Construction Cost Subtotal	Allowa	nce Subtotal:	\$	2,495,000
	Pa	ving and Allowa	nce Subtotal:	\$	5,291,000
	Construction	n Contingency:	15%	\$	794,000
		Mobilization	8%	\$	423,000
		Prep ROW	4%	\$	212,000
	Co	onstruction C	ost TOTAL:	\$	6,800,000

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

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Description:

Project No.

B-5

Name:

University Blvd (2)

This project consists of the reconstruction of 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 (If): 10,703
Service Area(s): B,ETJ/Other

Doc	durar Canaturation Coat Bus	ination						
No.	Idway Construction Cost Pro	ection	Quantity	Unit	Ur	nit Price		Item Cost
105	Unclassified Street Excavation		105,444	СУ	\$	15.00	\$	1,582,000
205	12" Asphalt (Type C)		59,651	ton	\$	72.00	\$	4,295,000
305	16" Base		40,169	су	\$	55.00	\$	2,209,000
405	10" Lime Stabilization (with Lime @ 4	l5#/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 Su					Subtotal:	\$	11,500,000
Majo	or Construction Component Allowa							
	Item Description	Notes				owance		Item Cost
	Traffic Control	Construction Phase Traffic Control				5%	*	575,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	gns for Shared Pa	ths		2%	\$	230,000
	Roadway Drainage	Standard Internal Sy	/stem			30%		3,450,000
	Illumination					10%	\$	1,150,000
	Special Drainage Structures	Minor Stream Cross	ing				\$	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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal	<del></del>	Allowa	nce	Subtotal:	\$	6,855,000
			Paving an			Subtotal:	\$	18,355,000
		Const	ruction Conti			15%	\$	2,753,000
				ilization		8%	\$	1,468,000
				ep ROW		4%	\$	734,000
			Constru	ction C	ost	TOTAL:	\$	23,400,000

Impact Fee Project Cost Sum 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 C	ost TOTAL:	\$ 30,700,000

**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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Description: Project No. **B-6** University Blvd (3) Name: This project consists of the

Limits: A.W. Grimes Blvd to 1830' E of A.W. Grimes Blvd reconstruction of the existing pavement

Impact Fee Class: 4 Lane - Enhanced to a 4 lane divided arterial. **Ultimate Class:** 6 Lane - Enhanced

Length (If): 1,922 Service Area(s): В

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Ui	nit Price		Item Cost
103	Unclassified Street Excavation	13,976	су	\$	15.00	\$	210,000
203	12" Asphalt (Type C)	7,611	ton	\$	72.00	\$	548,000
303	16" Base	5,125	су	\$	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 Const	ruction (	`oet	Subtotal	¢	1 619 000

		 ,	1,010,000
ajor Construction Componer	nt Allowances**:		
Item Description	Notes	Allowance	Item Cost

	item bescription	Notes	Allowalice	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$ 1,222,000
		Paving and Allowa	nce Subtotal:	\$ 2,841,000
		Construction Contingency:	15%	\$ 426,000
		Mobilization	8%	\$ 227,000
		Prep ROW	4%	\$ 114,000

Item Description	Notes:	Allowance		Item Cost
Construction:		-	\$	3,700,000
Engineering/Survey/Testing:		16%	\$	592,000
Previous City contribution			l	
Other			l	
ROW/Easement Acquisition:	Existing Alignment	15%	\$	555,000

**Construction Cost TOTAL:** 

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.

3,700,000

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**Project Information:** Description: Project No. **B-7** 

University Blvd (4) Name: This project consists of the

Limits: 1830' E of A.W. Grimes Blvd to Lunata Way reconstruction of the existing pavement

Impact Fee Class: 4 Lane - Enhanced to a 4 lane divided arterial. **Ultimate Class:** 6 Lane - Enhanced

Length (If): 4,093 Service Area(s): B,ETJ/Other

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
103	Unclassified Street Excavation	29,763	су	\$	15.00	\$	446,000
203	12" Asphalt (Type C)	16,208	ton	\$	72.00	\$	1,167,000
303	16" Base	10,915	су	\$	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 Const	ruction (	net	Subtotal	¢	3 446 000

	Major Construction Component Allowanese**							
Мајо	or Construction Component Allowar Item Description	Notes	Allowance		Item Cost			
V	Traffic Control	Construction Phase Traffic Control	5%	\$	172.000			
V	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	,	69.000			
V	Roadway Drainage	Standard Internal System	30%	,	1,034,000			
V	Illumination	Standard internal System	10%		345,000			
1			\$	400,000				
N,	Special Drainage Structures	Bridge Crossing	00/		,			
ν,	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%	\$	-			
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$	2,365,000			
		Paving and Allowa	nce Subtotal:	\$	5,811,000			
		Construction Contingency:	15%	\$	872,000			
		Mobilization	8%	\$	465,000			
		Prep ROW	4%	\$	232,000			
		Construction C	ost TOTAL:	\$	7,400,000			

- <b>1</b> 6% 9		400,000
16%	¢ 1.	101000
	ψ ι,	184,000
nent 15% \$	\$ 1, <sup>2</sup>	110,000
r		ment 15% \$ 1,7  Impact Fee Project Cost TOTAL: \$ 9,70

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.

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 Limits: Lunata Way to SH 130 SBFR existing pavement to a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced **Ultimate Class:** 6 Lane - Enhanced

Length (If): 13,032 Service Area(s): В

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
103	Unclassified Street Excavation	94,764	су	\$	15.00	\$	1,421,000
203	12" Asphalt (Type C)	51,607	ton	\$	72.00	\$	3,716,000
303	16" Base	34,752	су	\$	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 Const	ruction (	net	Subtotal	¢	10 977 000

		Cost Subtotal:	\$	10,977,000			
Maio	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%	\$	-		
**Allo	wances based on % of Paving Construction C	ost Subtotal Allowa	ince Subtotal:	\$	6,659,000		
		Paving and Allowa		\$	17,636,000		
		Construction Contingency:	15%	\$	2,645,000		
		Mobilization	_		1,411,000		
		Prep ROW			705,000		
		Construction C	ost TOTAL:	\$	22,400,000		

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

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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Description: Project No. **B-9** N Mays St (2) Name: This project consists of the

Limits: University Blvd to 2000' S of University Blvd

reconstruction of the existing pavement

Impact Fee Class: 4 Lane - Enhanced

to a 4 lane divided arterial.

**Ultimate Class:** 4 Lane - Enhanced

Length (If): 2,002 Service Area(s): В

Roa	Roadway Construction Cost Projection							
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		14,558	су	\$	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	1 0 11			\$	6.00	\$	77,000	
503	O3 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			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	84,000
	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths				2%	\$	34,000
$\sqrt{}$	Roadway Drainage	Standard Internal Sys	stem			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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	1,762,000
			Paving an			Subtotal:	\$	3,447,000
		Constr	ruction Conti	ngency:		15%	\$	517,000
				ilization		8%	\$	276,000
			Pre	ep ROW		4%	\$	138,000
			Constru	ction C	ost	TOTAL:	\$	4,400,000

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 (		Ė	5,800,00

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:Description:Project No.B-10Name:N Mays St (3)This project consists of the constructionLimits:2000' S of University Blvd to Paloma Drof a new 4 lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 4,634
Service Area(s): B

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
102	Unclassified Street Excavation	33,697	су	\$	15.00	\$ 505,000
202	12" Asphalt (Type C)	18,351	ton	\$	72.00	\$ 1,321,000
302	16" Base	12,357	су	\$	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
	ı	Paving Const	ruction (	Cost	Subtotal:	\$ 3,903,000

		Paving Construction (	Cost Subtotal:	\$ 3,903,000
Maj	or Construction Component Allowa	nces**:	_	_
	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$ 9,429,000
		Paving and Allowa		13,332,000
		Construction Contingency:	15%	\$ 2,000,000
		Mobilization		\$ 1,067,000
		Prep ROW	4%	\$ 533,000
		Construction C	ost TOTAL:	\$ 17,000,000

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 Proje	ect Cost TOTAL:	\$ 24,800,000

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. A-15, B-11

Name: Arterial L (1) This project consists of the construction

Limits: Chisholm Trl Rd (Future) to IH 35 NBFR of a new 4 lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 400 Service Area(s): A,B

Roa	dway Construction Cost Proj	ection					
No.	Item Description		Quantity	Unit	Ur	nit Price	Item Cost
102	Unclassified Street Excavation		2,909	су	\$	15.00	\$ 44,000
202	12" Asphalt (Type C)		1,584	ton	\$	72.00	\$ 114,000
302	16" Base		1,067	су	\$	55.00	\$ 59,000
402	10" Lime Stabilization (with Lime @ 4	.5#/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
		Р	aving Const	ruction (	Cost	Subtotal:	\$ 338,000
Majo	or Construction Component Allowar						
	Item Description	Notes			All	owance	Item Cost
	Traffic Control	None Anticipated				0%	-
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns for Shared Pa	ths		2%	7,000
	Roadway Drainage	Standard Internal Sys	stem			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
**Allo	wances based on % of Paving Construction Co	st Subtotal	<del></del>	Allowa	ınce	Subtotal:	\$ 2,677,000
			Paving an		nce		\$ 3,015,000
		Constr	uction Conti			15%	\$ 452,000
				ilization		8%	\$ 241,000
				ep ROW		4%	\$ 121,000
			Constru	ction C	ost ˈ	TOTAL:	\$ 3,900,000

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
ROW/Easement Acquisition:	, ,	ect Cost TOTAL:	_	5,700,

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Arterial L (2)

Name:
Limits:
Description:
Project No.
B-12

This project consists of the construction of a new 4

lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 3,644
Service Area(s): B

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
102	Unclassified Street Excavation	26,498	су	\$	15.00	\$	397,000
202	12" Asphalt (Type C)	14,430	ton	\$	72.00	\$	1,039,000
302	16" Base	9,717	су	\$	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
	·	Boying Const		3004	Cubtotale	•	3 060 000

Paving Construction Cost Subtotal: \$ 3,068,000

		Turning Contention of	oot oubtotuii	•	0,000,000
Majo	or Construction Component Allowa	nces**:			
	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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	nce Subtotal:	\$	8,294,000
		Paving and Allowa			11,362,000
		Construction Contingency:			1,704,000
		Mobilization		,	909,000
		Prep ROW		,	454,000
		Construction C	ost TOTAL:	\$	14,500,000

Impact Fee Project Cost Sum 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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:

N Mays St (4)

Paloma Dr to 540' N of Steam Way

Description:

Project No.

B-13

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

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 4 Lane - Enhanced

Length (If): 1,402 Service Area(s): B

IXO	adway Construction Cost Proj	ection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		10,195	су	\$	15.00	\$	153,000
203	12" Asphalt (Type C)		5,552	ton	\$	72.00	\$	400,000
303	16" Base		3,739	су	\$	55.00	\$	206,000
403	10" Lime Stabilization (with Lime @ 4	l5#/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
		F	Paving Const	ruction (	Cost	Subtotal:	\$	1,181,000
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	59,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	24,000
	Roadway Drainage	Standard Internal Sys	stem			30%		354,000
	Illumination					10%	\$	118,000
	Special Drainage Structures	None Anticipated					\$	-
	Water	Minor Adjustments				2%	\$	24,000
	Sewer	Minor Adjustments				2%	\$	24,000
		I				4%	Φ	47,000
	Turf and Erosion Control					770	φ	47,000
$\sqrt{}$	Turf and Erosion Control Landscaping and Irrigation					2%		24,000
',							\$	

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

Paving and Allowance Subtotal:

**Construction Cost TOTAL:** 

Mobilization

Prep ROW

**Construction Contingency:** 

**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.

1,855,000

278,000

148,000

74,000

2,400,000

\$

\$

\$

8%

4%

### **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 Limits: University Blvd to Hidden Valley Dr existing pavement to include a median.

Impact Fee Class: 4 Lane - Existing
Ultimate Class: 4 Lane - Existing

Length (If): 1,231
Service Area(s): B

# Roadway Construction Cost Projection Construction Cost TOTAL:

Impact Fee Project Cost Sum	mary		
Item Description	Notes:	Allowance	Item Cost
Construction:		-	\$ 804,190
Engineering/Survey/Testing:		-	\$ 175,000
ROW/Easement Acquisition:	Existing Alignment	-	\$ -
	Overall Project	<b>Cost Total:</b>	\$ 979,190
	City Co	ontribution:	\$ 979,190
	Impact Fee Project C	ost (100%):	\$ 979,190

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

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

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 (If): 2.858 Service Area(s): В

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

Roa	adway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
104	Unclassified Street Excavation	5,363	су	\$	15.00	\$ 80,000
204	Asphalt (Type C)	0	ton	\$	72.00	\$ -
304	Base	0	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 404.000

		Paving Construction C	Jost Subtotal:	\$ 404,000
Majo	or Construction Component Allowa	nces**:	_	_
	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
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	ince Subtotal:	\$ 332,000
		Paving and Allowa	nce Subtotal:	\$ 736,000
		Construction Contingency:	15%	\$ 110,000
		Mobilization	5%	\$ 37,000
		Prep ROW	\$3,000 / STA	\$ 9,000
		Construction C	ost TOTAL:	\$ 900,000

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%	\$ _

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. B-16

Name: Sunrise Rd (3) This project consists of the

Limits: 325' S of Eagles Nest St to Applegate Cir reconstruction of existing pavement to

Impact Fee Class: 4 Lane - Enhanced (AM) include a median.
Ultimate Class: 4 Lane - Enhanced

Length (If): 1,576
Service Area(s): B,ETJ/Other

Landscaping and Irrigation

\*\*Allowances based on % of Paving Construction Cost Subtotal

Roa	adway Construction Cost Pro	iection						
	Item Description	jeouon	Quantity	Unit	Ur	it Price		Item Cost
104	Unclassified Street Excavation		2,957	су	\$	15.00	\$	44,000
204	Asphalt (Type C)		0	ton	\$	72.00	\$	-
304	Base		0	су	\$	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	804 Turn Lanes and Median Openings			sy	\$	134.62	\$	129,000
		I	Paving Const	ruction (	Cost	Subtotal:	\$	223,000
Majo	or Construction Component Allowa		Paving Const	ruction (	Cost	Subtotal:	\$	223,000
Majo	or Construction Component Allowa Item Description		Paving Const	ruction (		Subtotal:	<b>\$</b>	223,000 Item Cost
Majo	<u> </u>	ınces**:		ruction (	Ur			·
Majo	Item Description	nnces**: Notes	Construct		Ur	nit Price	\$	Item Cost
√ √	Item Description Traffic Control	Notes Assume 6 months to	Construct		Ur	nit Price ,500 / MO	\$	Item Cost
√ √	Item Description Traffic Control Pavement Markings/Signs/Posts	Notes Assume 6 months to 4 signs / 1000', 1/2 l	Construct ength mrkgs (\$1.		Ur	nit Price ,500 / MO \$750	\$ \$ \$	Item Cost
√ √	Item Description Traffic Control Pavement Markings/Signs/Posts Roadway Drainage	Notes Assume 6 months to 4 signs / 1000', 1/2 l None Anticipated	Construct ength mrkgs (\$1.		Ur	nit Price ,500 / MO \$750 0%	\$ \$ \$	15,000 6,000
√ √	Item Description Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Street Lighting	Assume 6 months to 4 signs / 1000', 1/2 l None Anticipated 1 Assem / 100', \$15,	Construct ength mrkgs (\$1.		<b>U</b> r \$2	nit Price ,500 / MO \$750 0%	\$ \$ \$ \$	15,000 6,000

	Prep ROW	\$3,000 / STA	\$ 5,000
	Construction C	ost TOTAL:	\$ 500,000
Impact Fee Project Cost Summary	1		
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%	\$ -

Grass, Trees, Restoration, E/S Controls

**Construction Contingency:** 

**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.

\$10 / SY

\$

\$

15%

**Allowance Subtotal:** 

Paving and Allowance Subtotal:

Impact Fee Project Cost TOTAL: \$

Mobilization

74,000

189,000

412,000

62,000

21,000

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

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

Name: Sunrise Rd (4) This project consists of the reconstruction of Limits: Applegate Cir to Lake Dr existing pavement to include a median.

Impact Fee Class: 4 Lane - Enhanced (AM) **Ultimate Class:** 4 Lane - Enhanced

Length (If): 1,075 Service Area(s): В

Roa	adway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
104	Unclassified Street Excavation	2,017	су	\$	15.00	\$ 30,000
204	Asphalt (Type C)	0	ton	\$	72.00	\$ -
304	Base	0	су	\$	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

		Cost Subtotal:	\$ 152,000	
Majo	or Construction Component Allowa	nces**:		
	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
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	ince Subtotal:	\$ 134,000
		Paving and Allowa	nce Subtotal:	\$ 286,000
		Construction Contingency:	15%	\$ 43,000
		Mobilization	5%	\$ 14,000
		Prep ROW	\$3,000 / STA	\$ 3,000
		Construction C	ost TOTAL:	\$ 400,000

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 Proje	ct Cost TOTAL:	\$ 500,000

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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

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

Name: Sunrise Rd (5) This project consists of the reconstruction of Limits: Lake Dr to 545' S of Lake Dr existing pavement to include a median.

Impact Fee Class: 4 Lane - Enhanced (AM) **Ultimate Class:** 4 Lane - Enhanced

Length (If): 543 Service Area(s): B,ETJ/Other

Roa	adway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Ur	nit Price		Item Cost
104	Unclassified Street Excavation	1,019	су	\$	15.00	\$	15,000
204	Asphalt (Type C)	0	ton	\$	72.00	\$	<u> </u>
304	Base	0	су	\$	55.00	\$	<u> </u>
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	\$	<u> </u>
604	Concrete Sidewalk	0	sf	\$	5.50	\$	<u> </u>
704	Machine Laid Curb & Gutter	1,086	lf	\$	16.00	\$	17,000
804	Turn Lanes and Median Openings	329	sy	\$	134.62	\$	44,000
	·		41 6	$\overline{}$	0 14 4 1	_	=0.000

	\$ 76,000			
Majo	or Construction Component Allowa	nces**:	_	_
	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
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	ince Subtotal:	\$ 75,000
		Paving and Allowa	nce Subtotal:	\$ 151,000
		Construction Contingency:	15%	\$ 23,000
		Mobilization	5%	\$ 8,000
		Prep ROW	\$3,000 / STA	\$ 2,000
		Construction C	ost TOTAL:	\$ 200,000

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%	\$ _

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. B-19

Name: Sunrise Rd (6) This project consists of the reconstruction of

Limits: 545' S of Lake Dr to Old Settlers Blvd existing pavement to include a median.

Impact Fee Class: 4 Lane - Enhanced (AM)
Ultimate Class: 4 Lane - Enhanced

Length (If): 2,098 Service Area(s): B

Roa	adway Construction Cost Proj	ection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
104	04 Unclassified Street Excavation 3,937 cy \$ 15.00						\$	59,000
204	Asphalt (Type C)		0	ton	\$	72.00	\$	-
304								-
404								-
504						6.00	\$	-
604						5.50	\$	-
704	Machine Laid Curb & Gutter		4,196	lf	\$	16.00	\$	67,000
804	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
1	Traffic Control	Assume 6 months to	Construct		\$2	,500 / MO	\$	15,000
	Pavement Markings/Signs/Posts	4 signs / 1000', 1/2 L	ength mrkgs (\$1.	50/LF)		\$750	\$	8,000
	Roadway Drainage	None Anticipated				0%	\$	-
	Street Lighting	1 Assem / 100', \$15/I	LF cond/cndr			\$2,800	\$	90,000
	Special Drainage Structures	None Anticipated					\$	-
$\sqrt{}$	Utilities	Minor Adjustments			\$1,	000 / STA	\$	4,000
$\sqrt{}$	ADA Ramps & Requirements	4 ramps / 600'				\$2,200	\$	31,000
	Landscaping and Irrigation	Grass, Trees, Restor	ation, E/S Contro	ls		\$10 / SY	\$	99,000
**Allo	wances based on % of Paving Construction Cos	st Subtotal		Allowa	nce	Subtotal:	\$	247,000
			Paving an			Subtotal:	\$	544,000
		Consti	ruction Conti	ngency:		15%	\$	82,000
				ilization		5%	\$	27,000
			Pr	ep ROW	\$3,	000 / STA	\$	6,000
			Constru	ction C	ost	TOTAL:	\$	700,000

	- : 16%	•	<b>00,000</b> 12,000
Engineering/Survey/Testing: Previous City contribution	16%	\$ 11	12.000
Provious City contribution			_,_,
Frevious City Contribution			
Other			
ROW/Easement Acquisition: No ROW A	Acquisition Costs included 0%	\$	-

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
College Park (1)
Satellite View to Avery Nelson Blvd

Description:
Project No.
B-20
This project consists of widening existing pavement with half of a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced (1/2)
Ultimate Class: 4 Lane - Enhanced

Length (If): 3,948 Service Area(s): B

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
101	Unclassified Street Excavation	14,354	су	\$	15.00	\$	215,000
201	12" Asphalt (Type C)	7,817	ton	\$	72.00	\$	563,000
301	16" Base	5,264	су	\$	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 Const	ruction (	`net	Subtotal:	4	2 040 000

Paving Construction Co	ost Subtotal: \$	2,040,000

Mari	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			_	
Majo	or Construction Component Allowa Item Description	Notes	Allowance	П	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%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ince Subtotal:	\$	1,164,000
		Paving and Allowa	nce Subtotal:	\$	3,204,000
		Construction Contingency:	15%	\$	481,000
		Mobilization	8%	\$	256,000
		Prep ROW		,	128,000
		Construction C	ost TOTAL:	\$	4,100,000

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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:

Avery Nelson

Culf Way to College Park

Description:

Project No.

B-21

This project consists of the construction of a new 3

Limits:

Limits:

Limits:

Description:

Project No.

B-21

This project consists of the construction of a new 3

Limits:

Limits:

Limits:

Description:

Project No.

B-21

Impact Fee Class: 3 Lane - Proposed
Ultimate Class: 3 Lane - Proposed

Length (If): 2,145 Service Area(s): B

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
109	Unclassified Street Excavation	6,373	су	\$	15.00	\$ 96,000
209	5" Asphalt (Type C)	3,474	ton	\$	72.00	\$ 250,000
309	10" Base	3,509	су	\$	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
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		<b>G</b>		·	, , , , , , , , , , , , , , , , , , , ,
Majo					
	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
$\sqrt{}$	Turf and Erosion Control		4%	\$	38,000
	Landscaping and Irrigation		2%	,	19,000
			0%	_	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ince Subtotal:	\$	489,000
		Paving and Allowa			1,427,000
		Construction Contingency:		-	214,000
		Mobilization			114,000
		Prep ROW			57,000
		Construction C	ost TOTAL:	\$	1,900,000

<b>Impact Fee Project Cost Sum</b>	mary		
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 C	ost TOTAL:	\$ 2,800,000

**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.

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 Limits: Avery Nelson Rd to 1355' N of Old Settlers Blvd construction of a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 4,800 Service Area(s): B

Roa	adway Construction Cost Pro	iection						
	Item Description		Quantity	Unit	Ur	it Price		Item Cost
102	Unclassified Street Excavation		34,904	су	\$	15.00	\$	524,000
202	12" Asphalt (Type C)		19,008	ton	\$	72.00	\$	1,369,000
302	16" Base		12,800	су	\$	55.00	\$	704,000
402	10" Lime Stabilization (with Lime @ 4	15#/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
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			All	owance		Item Cost
	Item Description Traffic Control	Notes None Anticipated			All	owance 0%	\$	Item Cost
<b>√</b>	·		ns for Shared Pa	ths	All		-	- 81,000
√ √	Traffic Control	None Anticipated		ths	All	0%	\$	-
1	Traffic Control Pavement Markings/Signs/Posts	None Anticipated Includes Striping/Sig		ths	All	0% 2%	\$	81,000
$\sqrt{}$	Traffic Control Pavement Markings/Signs/Posts Roadway Drainage	None Anticipated Includes Striping/Sig		ths	All	0% 2% 30%	\$	81,000 1,214,000
$\sqrt{}$	Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination	None Anticipated Includes Striping/Sig Standard Internal Sy		ths	All	0% 2% 30%	\$ \$ \$ \$	81,000 1,214,000
1	Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures	None Anticipated Includes Striping/Sig Standard Internal Sy None Anticipated		ths	All	0% 2% 30% 10%	\$ \$ \$ \$ \$	81,000 1,214,000 405,000
\frac{1}{\sqrt{1}}	Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water	None Anticipated Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments		ths	All	0% 2% 30% 10%	\$ \$ \$ \$ \$ \$ \$	81,000 1,214,000 405,000 - 81,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer	None Anticipated Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments		ths	All	0% 2% 30% 10% 2% 2%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	81,000 1,214,000 405,000 - 81,000 81,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Traffic Control Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control	None Anticipated Includes Striping/Sig Standard Internal Sy None Anticipated Minor Adjustments		ths	All	0% 2% 30% 10% 2% 2% 4%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	81,000 1,214,000 405,000 - 81,000 81,000 162,000

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

Paving and Allowance Subtotal:

**Construction Cost TOTAL:** 

Mobilization

Prep ROW

**Construction Contingency:** 

**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.

6,150,000

923,000

492,000

246,000

7,900,000

\$

\$

\$

8%

4%

### **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

Limits: 2400' N of Avery Nelson Blvd to Avery Nelson Blvd construction of a new 3 lane undivided

Impact Fee Class: 3 Lane - Existing collector.

Ultimate Class: 3 Lane - Proposed

Length (If): 2,397 Service Area(s): B

# Roadway Construction Cost Projection Construction Cost TOTAL: \$ 2,113,056

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

**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.

### **City of Round Rock**

## 2018 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**B-24** 

**Project Information:** Description: Project No.

Medical Center Pkwy Name: 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 (If): 951 Service Area(s): В

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

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

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.

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

Limits: A.W. Grimes Blvd to 3580' E of A.W. Grimes Blvd reconstruction of the existing pavement

Impact Fee Class: 4 Lane - Enhanced to a 4 lane divided arterial.

Ultimate Class: 6 Lane - Enhanced

Ultimate Class: 6 Lane
Length (If): 3,580
Service Area(s): B

	dway Construction Cost Projection					
	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
103	Unclassified Street Excavation	26,032	су	\$	15.00	\$ 390,000
203	12" Asphalt (Type C)	14,177	ton	\$	72.00	\$ 1,021,000
303	16" Base	9,547	су	\$	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 Const	ruction (	:nst	Subtotal:	\$ 3 015 000

Paving Construction Cost Subtotal:	\$ 3,015,000	
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Maio	or Construction Component Allowa	nces**:					
	Item Description Notes Allowance						
	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%	\$	-		
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$	1,719,000		
		Paving and Allowa			4,734,000		
	Construction Contingency: 15%						
	Mobilization 8%						
		Prep ROW	4%	\$	189,000		
		Construction C	ost TOTAL:	\$	6,100,000		

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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**Project Information: B-26** Description: Project No.

Name: CR 112 (2) This project consists of the

Limits: 3580' E of A.W. Grimes Blvd to CR 117 reconstruction of the existing pavement

Impact Fee Class: 4 Lane - Enhanced to a 4 lane divided arterial. **Ultimate Class:** 6 Lane - Enhanced

Length (If): 2,244 Service Area(s): B,ETJ/Other

Roa	dway Construction Cost Projection												
No.	Item Description	Quantity	Unit Unit Price		Unit Price		Unit Price		Unit Price		Unit Price		Item Cost
103	Unclassified Street Excavation	16,317	су	\$	15.00	\$	245,000						
203	12" Asphalt (Type C)	8,886	ton	\$	72.00	\$	640,000						
303	16" Base	5,984	су	\$	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						

Paving Construction Cost Subtotal:	\$	1,891,000
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Maio	Major Construction Component Allowances**:								
Maje	Item Description	Notes	Allowance	П	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%	\$	-				
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$	1,079,000				
		Paving and Allowa			2,970,000				
		Construction Contingency:	15%	\$	446,000				
	Mobilization 8%								
		Prep ROW		,	119,000				
		Construction C	ost TOTAL:	\$	3,800,000				

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

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:

Kenney Fort Blvd (1)

CR 117 to Old Settlers Blvd

Description:

Project No.

B-27

This project consists of the construction of a new 4

lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 5,598 Service Area(s): B

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
102	Unclassified Street Excavation	40,706	су	\$	15.00	\$	611,000
202	12" Asphalt (Type C)	22,168	ton	\$	72.00	\$	1,596,000
302	16" Base	14,928	су	\$	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
Design Construction Contacts & A745							

Paving Construction Cost Subtotal: \$ 4,715,000

Maj	or Construction Component Allowa	nces**:							
	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%	\$	-				
**Allo	owances based on % of Paving Construction Co	ost Subtotal Allowa	ince Subtotal:	\$	2,652,000				
		Paving and Allowa	nce Subtotal:	\$	7,367,000				
		Construction Contingency:	15%	\$	1,105,000				
	Mobilization 8%								
		Prep ROW	4%	\$	295,000				
		Construction C	ost TOTAL:	\$	9,400,000				

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
	\$ 13,700,000		

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**Project Information:** Description: Project No. **B-28** Red Bud Ln (1) Name: This project consists of widening existing pavement with half of a 4 lane

Limits: Guadalajara St to 160' N of Margarita Loop

Impact Fee Class: 4 Lane - Enhanced (1/2) divided arterial. **Ultimate Class:** 4 Lane - Enhanced

Length (If): 1,867 Service Area(s): В

Roa	adway Construction Cost Projection												
No.	Item Description	Quantity	Quantity Unit		Unit Price		Unit Price		Unit Price		Unit Price		Item Cost
101	Unclassified Street Excavation	6,788	су	\$	15.00	\$	102,000						
201	12" Asphalt (Type C)	3,697	ton	\$	72.00	\$	266,000						
301	16" Base	2,489	су	\$	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						
Paying Construction Cost Subtotal: \$													

Paving Construction Cost Subtotal: \$ 965,000

	Maior Construction Commons to November 14.								
Majo	or Construction Component Allowar Item Description	Notes	Allowance		Item Cost				
- 1	Traffic Control		5%	\$	48.000				
V,		Construction Phase Traffic Control	_		-,				
V,	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%	\$	-				
**Allo	wances based on % of Paving Construction Co	est Subtotal Allowa	nce Subtotal:	\$	550,000				
		Paving and Allowa	nce Subtotal:	\$	1,515,000				
	\$	227,000							
	Mobilization 8%								
		Prep ROW	4%	\$	61,000				
		Construction C	ost TOTAL:	\$	2,000,000				

Impact Fee Project Cost Sum 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

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Red Bud Ln (2)

Red Bud Ln (2)

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

Impact Fee Class: 4 Lane - Enhanced (1/2)
Ultimate Class: 4 Lane - Enhanced

Length (If): 1,845
Service Area(s): B,ETJ/Other

Roa	adway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
101	Unclassified Street Excavation	6,708	су	\$	15.00	\$ 101,000
201	12" Asphalt (Type C)	3,653	ton	\$	72.00	\$ 263,000
301	16" Base	2,460	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 955,000

ltem	Description	Notes	Allowance		Item Cost
√ Traffi	ic Control	Construction Phase Traffic Control	5%	\$	48,000
√ Pave	ment Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	19,000
√ Road	lway Drainage	Standard Internal System	30%	\$	287,000
√ Illumi	ination		10%	\$	96,000
√ Spec	ial Drainage Structures	Bridge Crossing		\$	300,000
√ Wate	er	Minor Adjustments	2%	\$	19,000
√ Sewe	er	Minor Adjustments	2%	\$	19,000
√ Turf a	and Erosion Control		4%	\$	38,000
√ Land	scaping and Irrigation		2%	\$	19,000
Misce	ellaneous:		0%	\$	-
**Allowances based on % of Paving Construction Cost Subtotal Allowance Subtotal:					845,000
		Paving and Allowa			1,800,000
		Construction Contingency:	15%	Φ	270.000

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

Mobilization

Prep ROW

**Construction Cost TOTAL:** 

**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.

\$

8%

4%

144,000

72,000

2,300,000

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Red Bud Ln (3)
CR 117 to Old Settlers Blvd

Description:
Project No.
B-30
This project consists of the reconstruction of the existing pavement to a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 4 Lane - Enhanced

Length (If): 1,788
Service Area(s): B

	adway Construction Cost Pro Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		13,002	су	\$	15.00	\$	195,000
203	12" Asphalt (Type C)		7,080	ton	\$	72.00	\$	510,000
303	303 16" Base			су	\$	55.00	\$	262,000
403				sy	\$	6.00	\$	69,000
503				gal	\$	6.00	\$	13,000
603	, , , , , , , , , , , , , , , , , , , ,			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
Majo	or Construction Component Allowa	ances**:						
	Item Description	Notes			All	owance		Item Cost
V	Traffic Control	Construction Phase	Traffic Control			5%	\$	75,000
$\sqrt{}$	Traffic Control Pavement Markings/Signs/Posts	Construction Phase Includes Striping/Sig		ths		5% 2%		75,000 30,000
,			gns for Shared Pa	ths		-	\$	,
V	Pavement Markings/Signs/Posts	Includes Striping/Sig	gns for Shared Pa	ths		2%	\$ \$	30,000
1	Pavement Markings/Signs/Posts Roadway Drainage	Includes Striping/Sig	gns for Shared Pa	ths		2% 30%	\$ \$	30,000 452,000
1	Pavement Markings/Signs/Posts Roadway Drainage Illumination	Includes Striping/Sig Standard Internal S	gns for Shared Pa	ths		2% 30%	\$ \$ \$ \$ \$	30,000 452,000
7 7 7	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures	Includes Striping/Sig Standard Internal Sig None Anticipated	gns for Shared Pa	ths		2% 30% 10%	·	30,000 452,000 151,000
777 7	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water	Includes Striping/Sig Standard Internal St None Anticipated Minor Adjustments	gns for Shared Pa	ths		2% 30% 10% 2%	\$ \$ \$ \$ \$ \$ \$ \$	30,000 452,000 151,000 - 30,000
	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer	Includes Striping/Sig Standard Internal St None Anticipated Minor Adjustments	gns for Shared Pa	ths		2% 30% 10% 2% 2%	·	30,000 452,000 151,000 - 30,000 30,000
	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control	Includes Striping/Sig Standard Internal St None Anticipated Minor Adjustments	gns for Shared Pa	ths		2% 30% 10% 2% 2% 4%	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	30,000 452,000 151,000 - 30,000 30,000 60,000
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation	Includes Striping/Sig Standard Internal Sig None Anticipated Minor Adjustments Minor Adjustments	gns for Shared Pa		ance	2% 30% 10% 2% 4% 2%	• • • • • • • • • •	30,000 452,000 151,000 - 30,000 30,000 60,000
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sig None Anticipated Minor Adjustments Minor Adjustments	gns for Shared Pa		ance	2% 30% 10% 2% 4% 2% 0%	• • • • • • • • • •	30,000 452,000 151,000 - 30,000 30,000 60,000 30,000
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sig None Anticipated Minor Adjustments Minor Adjustments	gns for Shared Pa	Allowa		2% 30% 10% 2% 2% 4% 2% 0% Subtotal:	• • • • • • • • • • • • • • • • • • • •	30,000 452,000 151,000 - 30,000 30,000 60,000 30,000

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
·	\$ 4,100,000		

Mobilization

Prep ROW

**Construction Cost TOTAL:** 

**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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\$

189,000

95,000

3,100,000

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Old Settlers Blvd (1)
Limits:
N Mays St to Sunrise Rd

Description:
Project No.
B-31

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

Impact Fee Class: 6 Lane - Enhanced (1/3)
Ultimate Class: 6 Lane - Enhanced

Length (If): 7,045 Service Area(s): B

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
106	Unclassified Street Excavation	26,440	су	\$	15.00	\$ 397,000
206	12" Asphalt (Type C)	6,027	ton	\$	72.00	\$ 434,000
306	16" Base	9,741	су	\$	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	\$ -

_								
Maj	or Construction Component Allowar	nces**:						
	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			
$\checkmark$	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%	\$				
**Allo	**Allowances based on % of Paving Construction Cost Subtotal Allowance Subtotal:							
		Paving and Allowa		\$	4,093,000			
	Construction Contingency: 15%							
	Mobilization 8%							
		Prep ROW	4%	\$	164,000			
		Construction C	ost TOTAL:	\$	5,200,000			

Impact Fee Project Cost Sum	mary			
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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Description:

Project No.

B-32

Name:
Old Settlers Blvd (2)

Limits:

Description:
Project No.

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

Impact Fee Class: 6 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 5,955 Service Area(s): B

Roa	dway Construction Cost Pro	iection						
No.	Item Description	,	Quantity	Unit	Un	it Price		Item Cost
105	Unclassified Street Excavation		58,668	су	\$	15.00	\$	880,000
205	12" Asphalt (Type C)		33,189	ton	\$	72.00	\$	2,390,000
305	16" Base		22,350	су	\$	55.00	\$	1,229,000
405	10" Lime Stabilization (with Lime @ 4	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
		F	Paving Const	ruction (	Cost 9	Subtotal:	\$	6,399,000
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			Alle	owance		Item Cost
	Traffic Control							
٧.	Tranic Control	Construction Phase	Traffic Control			5%	\$	320,000
V	Pavement Markings/Signs/Posts	Construction Phase Includes Striping/Sig		ths		5% 2%	-	320,000 128,000
',	Pavement Markings/Signs/Posts Roadway Drainage		ns for Shared Pa	ths		2% 30%	\$	
V	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	128,000
\[  \]	Pavement Markings/Signs/Posts Roadway Drainage	Includes Striping/Sig	ns for Shared Pa	ths		2% 30%	\$	128,000 1,920,000
\[  \]	Pavement Markings/Signs/Posts Roadway Drainage Illumination	Includes Striping/Sig Standard Internal Sy	ns for Shared Pa	ths		2% 30%	\$ \$ \$	128,000 1,920,000 640,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures	Includes Striping/Sig Standard Internal Sy Bridge Crossing	ns for Shared Pa	ths		2% 30% 10%	\$ \$ \$ \$	128,000 1,920,000 640,000 800,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments	ns for Shared Pa	ths		2% 30% 10% 2%	\$ \$ \$ \$ \$ \$	128,000 1,920,000 640,000 800,000 128,000
	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments	ns for Shared Pa	ths		2% 30% 10% 2% 2%	\$ \$ \$ \$ \$ \$	128,000 1,920,000 640,000 800,000 128,000 128,000
~~~~~	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments	ns for Shared Pa	ths		2% 30% 10% 2% 2% 4%	\$ \$ \$ \$ \$ \$ \$ \$ \$	128,000 1,920,000 640,000 800,000 128,000 128,000 256,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments Minor Adjustments	ns for Shared Pa		ance \$	2% 30% 10% 2% 2% 4% 2%	\$ \$ \$ \$ \$ \$ \$ \$ \$	128,000 1,920,000 640,000 800,000 128,000 128,000 256,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments Minor Adjustments	ns for Shared Pa		ance \$	2% 30% 10% 2% 2% 4% 2% 0%	* \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	128,000 1,920,000 640,000 800,000 128,000 128,000 256,000 128,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments Minor Adjustments	ns for Shared Pa	Allowa		2% 30% 10% 2% 2% 4% 2% 0% Subtotal:	* \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	128,000 1,920,000 640,000 800,000 128,000 128,000 256,000 128,000
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Pavement Markings/Signs/Posts Roadway Drainage Illumination Special Drainage Structures Water Sewer Turf and Erosion Control Landscaping and Irrigation Miscellaneous:	Includes Striping/Sig Standard Internal Sy Bridge Crossing Minor Adjustments Minor Adjustments	ns for Shared Pa stem	Allowa d Allowa	nce s	2% 30% 10% 2% 2% 4% 2% 0% Subtotal:	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	128,000 1,920,000 640,000 800,000 128,000 128,000 256,000 128,000

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 C	ost TOTAL:	\$ 18,100,000

Prep ROW

**Construction Cost TOTAL:** 

**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.

434,000

13,800,000

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

Limits:
Red Bud Ln to CR 110

lane divided arterial.

Impact Fee Class: 4 Lane - Proposed
Ultimate Class: 4 Lane - Proposed

Length (If): 2,416
Service Area(s): B

Roa	adway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
102	Unclassified Street Excavation	17,568	су	\$	15.00	\$ 264,000
202	12" Asphalt (Type C)	9,567	ton	\$	72.00	\$ 689,000
302	16" Base	6,443	су	\$	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
	F	Paving Const	ruction (	Cost	Subtotal:	\$ 2,035,000

		Paving Construction (	Cost Subtotal:	\$ 2,035,000
Majo	or Construction Component Allowa	nces**:		
	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ince Subtotal:	\$ 1,060,000
		Paving and Allowa	ince Subtotal:	\$ 3,095,000
		Construction Contingency:	15%	\$ 464,000
		Mobilization	8%	\$ 248,000
		Prep ROW		124,000
		Construction C	ost TOTAL:	\$ 4,000,000

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
NOW/Lasement Acquisition.	, ,	ect Cost TOTAL:	Ė	5,800,0

**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.

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

Limits: 540' N of Steam Way to Northwest Dr existing pavement to include a median.

Impact Fee Class: 4 Lane - Enhanced (AM)
Ultimate Class: 4 Lane - Enhanced

Roadway Construction Cost Projection

Length (If): 7,524
Service Area(s): B

	Item Description	Jection	Quantity	Unit	Un	it Price	Item Cost
104	Unclassified Street Excavation		14,119	су	\$	15.00	\$ 212,000
	Asphalt (Type C)		0	ton	\$	72.00	\$ -
304	Base		0	cy	\$	55.00	\$ -
	Lime Stabilization (with Lime @ 45#	:/sv)	0	sy	\$	6.00	\$ _
504	Surface Treatment (0.2 gal/sy,Prime		0	gal	\$	6.00	\$ -
604	Concrete Sidewalk	- /	0	sf	\$	5.50	\$ -
704	Machine Laid Curb & Gutter		15,048	lf	\$	16.00	\$ 241,000
	Turn Lanes and Median Openings		4,560	sy	\$	134.62	\$ 614,000
		F	aving Const	ruction (	Cost	Subtotal:	\$ 1,067,000
	Taring conduction cook custokan						, ,
Majo	or Construction Component Allowa	ances**:					
	Item Description	Notes			Un	it Price	Item Cost
	Traffic Control	Assume 6 months to	Construct		\$2,	,500 / MO	\$ 15,000
	Pavement Markings/Signs/Posts					\$750	\$ 28,000
	Roadway Drainage	None Anticipated				0%	\$ -
	Street Lighting	1 Assem / 100', \$15/I	LF cond/cndr			\$2,800	\$ 324,000
	Special Drainage Structures	None Anticipated					\$ -
	Utilities	Minor Adjustments			\$1,0	000 / STA	\$ 15,000
	ADA Ramps & Requirements	4 ramps / 600'				\$2,200	\$ 110,000
	Landscaping and Irrigation	Grass, Trees, Restor	ation, E/S Contro	ls		\$10 / SY	\$ 305,000
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$ 797,000
			Paving an				\$ 1,864,000
		Consti	ruction Conti	-		15%	\$ 280,000
				ilization		5%	\$ 93,000
				-		000 / STA	23,000
			Constru	ction C	ost ˈ	TOTAL:	\$ 2,300,000

Construction: - Engineering/Survey/Testing: 16% Previous City contribution Other	<b>\$</b>	<b>2,300,000</b> 368,000
Previous City contribution	\$	368,000
Othor		
Other		
ROW/Easement Acquisition: No ROW Acquisition Costs included 0%	\$	-

**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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

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

Name: Sunrise Rd (7) This project consists of the reconstruction of Limits: Old Settlers Blvd to Country Aire Dr existing pavement to include a median.

Impact Fee Class: 4 Lane - Enhanced (AM) **Ultimate Class:** 4 Lane - Enhanced

Length (If): 1.485 Service Area(s): В

Roa	adway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
104	Unclassified Street Excavation	2,787	су	\$	15.00	\$ 42,000
204	Asphalt (Type C)	0	ton	\$	72.00	\$ -
304	Base	0	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 211,000

		Paving Construction (	Cost Subtotal:	\$ 211,000
Majo	or Construction Component Allowa	nces**:		
	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
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	ince Subtotal:	\$ 170,000
		Paving and Allowa	nce Subtotal:	\$ 381,000
		Construction Contingency:	15%	\$ 57,000
		Mobilization	5%	\$ 19,000
		Prep ROW	\$3,000 / STA	\$ 4,000
		Construction C	ost TOTAL:	\$ 500,000

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%	\$ _

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.

**Roadway Construction Cost Projection** 

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Item Cost** 

**Project Information:** Description: B-36 Project No.

Name: FM 1460 (A.W. Grimes Blvd) (1) This project consists of the

Limits: Old Settlers Blvd to 375' S of Chandler Creek Blvd reconstruction of the existing pavement

Quantity Unit Unit Price

Impact Fee Class: 6 Lane - Enhanced to a 6 lane divided arterial. **Ultimate Class:** 6 Lane - Enhanced

Length (If): 1,846

Service Area(s): В

No. Item Description

	itom Boodinption		Qualitity	Oilit			
105	Unclassified Street Excavation		18,187	су	\$	15.00	\$ 273,000
205	12" Asphalt (Type C)		10,288	ton	\$	72.00	\$ 741,000
305	16" Base		6,928	су	\$	55.00	\$ 381,000
405	10" Lime Stabilization (with Lime @ 4	5#/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
			7,384	lf	\$	16.00	\$ 118,000
805	Turn Lanes and Median Openings		1,119	sy	\$	134.62	\$ 151,000
	Paving Construction Cost Subtotal				Subtotal:	\$ 1,984,000	
Majo	r Construction Component Allowar						
	Item Description	Notes			All	owance	Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	99,000
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	40,000
$\sqrt{}$	Roadway Drainage	Standard Internal Sys	stem			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%	\$ -
**Allov	vances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$ 1,131,000
			Paving an				\$ 3,115,000
		Consti	ruction Conti			15%	\$ 467,000
				ilization		8%	\$ 249,000
				ep ROW		4%	\$ 125,000
			Constru	ction C	ost	TOTAL:	\$ 4,000,000

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 F	ee Project Cost TOTAL (20% City C	ontribution)	\$ 1,000,000

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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**B-37 Project Information:** Description: Project No. Name:

FM 1460 (A.W. Grimes Blvd) (2) This project consists of the

Limits: 375' S of Chandler Creek Blvd to 1250' N of Tiger Tr reconstruction of the existing pavement

Impact Fee Class: 6 Lane - Enhanced to a 6 lane divided arterial.

**Ultimate Class:** 6 Lane - Enhanced

Poadway Construction Cost Projection

Length (If): 1,055 Service Area(s): B,ETJ/Other

KU	Roadway Construction Cost Projection						
No.	Item Description		Quantity	Unit	Un	nit Price	Item Cost
105	Unclassified Street Excavation		10,394	су	\$	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 @ 4	l5#/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
		P	Paving Const	ruction (	Cost	Subtotal:	\$ 1,134,000
Majo	or Construction Component Allowa	nces**:					
	Item Description	Notes Allo				owance	Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$ 57,000
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns for Shared Pa	ths		2%	\$ 23,000
$\sqrt{}$	Roadway Drainage	Standard Internal Sys	stem			30%	\$ 340,000
$\sqrt{}$	Illumination					10%	\$ 113,000
$\sqrt{}$	Special Drainage Structures	Bridge Crossing					\$ 1,300,000
$\sqrt{}$	Water	Minor Adjustments				2%	\$ 23,000
$\sqrt{}$	Sewer	Minor Adjustments				2%	\$ 23,000
$\sqrt{}$	Turf and Erosion Control					4%	\$ 45,000
$\sqrt{}$	Landscaping and Irrigation					2%	\$ 23,000
	Miscellaneous:					0%	\$ -
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$ 1,947,000
	-						
			Paving an	d Allowa	nce	Subtotal:	\$ 3,081,000
		Constr	ruction Conti	ngency:		15%	\$ 462,000
			Mob	ilization		8%	\$ 246,000
			Pro	ep ROW		4%	\$ 123,000
			Constru	ction C	ost	TOTAL:	\$ 4,000,000

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

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
FM 1460 (A.W. Grimes Blvd) (3)
Limits:

Project No.

B-38

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

Impact Fee Class: 6 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 6,601
Service Area(s): B

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
105	Unclassified Street Excavation	65,032	су	\$	15.00	\$ 975,000
205	12" Asphalt (Type C)	36,790	ton	\$	72.00	\$ 2,649,000
305	16" Base	24,774	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 7,093,000

	Taving Construction	Sost Subtotal.	Ψ	7,055,000		
Major Construction Component Allo	wances**:					
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	n Cost Subtotal Allowa	ance Subtotal:	\$	5,144,000		
	Paving and Allowa	nce Subtotal:	\$	12,237,000		
	Construction Contingency:	15%	\$	1,836,000		
	Mobilization 8%					
	Prep ROW	4%	\$	489,000		
	Construction C	ost TOTAL:	\$	15,600,000		

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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

existing pavement with half of a 6 lane

Project Information: Description: Project No. B-39
Name: Kenney Fort Blvd (2) This project consists of widening

Limits: Old Settler's Blvd to 2540' S of Old Settler's Blvd

divided arterial.

Impact Fee Class: 6 Lane - Proposed (1/2)
Ultimate Class: 6 Lane - Proposed

Length (If): 1,566
Service Area(s): B

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
107	Unclassified Street Excavation	7,714	су	\$	15.00	\$ 116,000
207	12" Asphalt (Type C)	4,364	ton	\$	72.00	\$ 314,000
307	16" Base	2,939	су	\$	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 Allows	ances**			
Item Description	Notes	Allowance	П	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
$\sqrt{}$ Illumination		10%	\$	100,000
Special Drainage Structures	None Anticipated		\$	-
√ Water	Minor Adjustments	2%	\$	20,000
√ Sewer	Minor Adjustments	2%	\$	20,000
$\sqrt{}$ Turf and Erosion Control		4%	\$	40,000
$\sqrt{}$ Landscaping and Irrigation		2%	\$	20,000
Miscellaneous:		0%	\$	-
**Allowances based on % of Paving Construction 0	cost Subtotal Allowa	nce Subtotal:	\$	570,000
	Paving and Allowa	nce Subtotal:	\$	1,570,000
	Construction Contingency:			236,000
	Mobilization	8%	\$	126,000
	Prep ROW			63,000
	Construction C	ost TOTAL:	\$	2,000,000

Impact Fee Project Cost Sum 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 C	ost TOTAL:	\$ 2,600,000

**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.

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

Limits: Old Settler's Blvd to 2540' S of Old Settler's Blvd reconstruction of existing pavement to a Impact Fee Class: 6 Lane - Proposed reconstruction of existing pavement to a 6 lane divided arterial.

Ultimate Class: 6 Lane - Proposed

Length (If): 970

Service Area(s): B,ETJ/Other

Roa	adway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
108	Unclassified Street Excavation	9,556	су	\$	15.00	\$ 143,000
208	5" Asphalt (Type C)	5,406	ton	\$	72.00	\$ 389,000
308	10" Base	3,640	су	\$	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

Maj	or Construction Component Allowar	nces**:		
	Item Description	Notes	Allowance	Item Cost
	Traffic Control	Construction Phase Traffic Control	5%	\$ 52,000
$\checkmark$	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$ 21,000
$\checkmark$	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
$\checkmark$	Turf and Erosion Control		4%	\$ 42,000
	Landscaping and Irrigation		2%	\$ 21,000
	Miscellaneous:		0%	\$ -
**Allo	owances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$ 595,000
		Paving and Allowa	ince Subtotal:	\$ 1,637,000
		Construction Contingency:	15%	\$ 246,000
		Mobilization	8%	\$ 131,000
		Prep ROW	4%	\$ 65,000
		Construction C	ost TOTAL:	\$ 2,100,000

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 C	ost TOTAL:	\$ 2,800,000

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:

Kenney Fort Blvd (4)

Construction

Limits:

Description:

Project No.

B-41

This project consists of the construction of a new 6 lane divided arterial.

Impact Fee Class: 6 Lane - Proposed
Ultimate Class: 6 Lane - Proposed

Length (If): 5,010 Service Area(s): B

Roa	dway Construction Cost Pro	ection						
No.	Item Description		Quantity	Unit	Uı	nit Price		Item Cost
108	Unclassified Street Excavation		49,358	су	\$	15.00	\$	740,000
208	5" Asphalt (Type C)		27,922	ton	\$	72.00	\$	2,010,000
308	10" Base		18,803	су	\$	55.00	\$	1,034,000
408	10" Lime Stabilization (with Lime @ 4	l5#/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			All	lowance		Item Cost
	Traffic Control	None Anticipated				0%	\$	-
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	108,000
	Roadway Drainage	Standard Internal Sys	stem			30%	\$	1,615,000
	Illumination					10%	\$	538,000
	Special Drainage Structures	None Anticipated					\$	- 1
	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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	2,800,000
			Paving an	d Allowa	nce	Subtotal:	\$	8,183,000
		Consti	ruction Conti	ngency:		15%	\$	1,227,000
			Mob	ilization		8%	\$	655,000
			Pro	ep ROW		4%	\$	327,000
			Constru	ction C	ost	TOTAL:	\$	10,400,000

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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:

Kenney Fort Blvd (5)

Chandler Creek Blvd to Joe DiMaggio existing pavement to a 6 lane divided arterial.

Impact Fee Class: 6 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 1,565 Service Area(s): B

Roa	adway Construction Cost Pro	jection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
105	Unclassified Street Excavation		15,418	су	\$	15.00	\$	231,000
205	12" Asphalt (Type C)		8,722	ton	\$	72.00	\$	628,000
305	16" Base		5,874	су	\$	55.00	\$	323,000
405	05 10" Lime Stabilization (with Lime @ 45#/sy)			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
	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			All	lowance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	84,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%		34,000
	Roadway Drainage	Standard Internal Sys	stem			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%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal		Allowa	nce	Subtotal:	\$	1,759,000
			Paving an	d Allowa	nce	Subtotal:	\$	3,440,000
		Consti	ruction Conti	ngency:		15%	\$	516,000
				ilization		8%	\$	275,000
			Pre	ep ROW		4%	\$	138,000
			Constru	ction C	ost	TOTAL:	\$	4,400,000

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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. B-43

Name: Red Bud Ln (4) This project consists of the

Limits: Old Settlers Blvd to 170' N of Joseph St reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

Ultimate Class: 4 Lane - Enhanced

Length (If): 2,356 Service Area(s): B

Roa	Roadway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Ui	nit Price		Item Cost
103	Unclassified Street Excavation	17,132	су	\$	15.00	\$	257,000
203	12" Asphalt (Type C)	9,330	ton	\$	72.00	\$	672,000
303	16" Base	6,283	су	\$	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 Const	ruction (	:nst	Subtotal:	\$	1 985 000

Paving Construction Cost Subtotal: \$ 1,985,000

Maio	or Construction Component Allowa	nces**:			
	Item Description	Notes	Allowance	П	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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal Allowa	nce Subtotal:	\$	1,133,000
		Paving and Allowa	nce Subtotal:	\$	3,118,000
		Construction Contingency:	15%	\$	468,000
		Mobilization			249,000
		Prep ROW		,	125,000
		Construction C	ost TOTAL:	\$	4,000,000

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 C	ost TOTAL:	\$ 5,200,000

**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.

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

Limits: 170' N of Joseph St to 160' S of Covered Wagon Trl reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

Ultimate Class: 4 Lane - Enhanced 4 lane divided arterial

Length (If): 957

Service Area(s): B,ETJ/Other

No.	Item Description	Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation	6,959	су	\$	15.00	\$	104,000
203	12" Asphalt (Type C)	3,790	ton	\$	72.00	\$	273,000
303	16" Base	2,552	су	\$	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:						

Majo	or Construction Component Allowa	nces**:			
	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
$\sqrt{}$	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%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$	459,000
		Paving and Allowa			1,264,000
		Construction Contingency:			190,000
		Mobilization			101,000
		Prep ROW		,	51,000
		Construction C	ost TOTAL:	\$	1,700,000

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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. B-45

Name: Red Bud Ln (6) This project consists of the

Limits: 160' S of Covered Wagon Trl to US 79 reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

Ultimate Class: 4 Lane - Enhanced Length (If): 2,141

Length (If): 2,141
Service Area(s): B

Roa	adway Construction Cost Proj	ection					
	Item Description		Quantity	Unit	Ur	nit Price	Item Cost
103	Unclassified Street Excavation		15,569	су	\$	15.00	\$ 234,000
203	12" Asphalt (Type C)		8,478	ton	\$	72.00	\$ 610,000
303	303   16" Base			су	\$	55.00	\$ 314,000
403	403 10" Lime Stabilization (with Lime @ 45#/sy)			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
		F	Paving Const	ruction (	Cost	Subtotal:	\$ 1,804,000
Major Construction Component Allowances**:							
	Item Description	Notes			All	owance	Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$ 90,000
$\checkmark$	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$ 36,000
$\checkmark$	Roadway Drainage	Standard Internal Sy	stem			30%	\$ 541,000
	Illumination					10%	\$ 180,000
	Special Drainage Structures	None Anticipated					\$ -
$\checkmark$	Water	Minor Adjustments				2%	\$ 36,000
$\checkmark$	Sewer	Minor Adjustments				2%	\$ 36,000
$\checkmark$	Turf and Erosion Control					4%	\$ 72,000
$\checkmark$	Landscaping and Irrigation					2%	\$ 36,000
	Miscellaneous:					0%	\$ -
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$ 1,027,000
			Paving an	d Allowa	nce	Subtotal:	\$ 2,831,000
		Consti	ruction Conti	ngency:		15%	\$ 425,000
			Mob	ilization		8%	\$ 226,000
			Pro	ep ROW		4%	\$ 113,000
ľ							

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 C	ost TOTAL:	\$ 4,700,000

**Construction Cost TOTAL:** 

**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.

3,600,000

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

B-46, C-6 **Project Information:** Description: Project No.

US 79 (1) Name: This project consists of the reconstruction of Limits: N Mays St to 200' E of Red Bud Ln existing pavement to a 6 lane divided arterial.

Impact Fee Class: 6 Lane - Enhanced **Ultimate Class:** 6 Lane - Enhanced

Length (If): 22,817 Service Area(s): B,C

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
105	Unclassified Street Excavation	224,790	су	\$	15.00	\$	3,372,000
205	12" Asphalt (Type C)	127,167	ton	\$	72.00	\$	9,156,000
305	16" Base	85,634	су	\$	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
					0 1 4 4 1	$\overline{}$	04 540 000

		Paving Construction (	Jost Subtotal:	\$ 24,518,000
Maio	or Construction Component Allowa	nces**:		
11163	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
$\checkmark$	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$ 17,074,000
		Paving and Allowa	nce Subtotal:	\$ 41,592,000
		Construction Contingency:	15%	\$ 6,239,000
		Mobilization	8%	\$ 3,327,000
		Prep ROW	4%	\$ 1,664,000
		Construction C	ost TOTAL:	\$ 52,900,000

Impact Fee Project Cost Sur	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 F	ee Project Cost TOTAL (20% City Co	ontribution)	\$ 13,340,000

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**Project Information:** Description: Project No. **B-47** Name: US 79 (2)

This project consists of the

Limits: 200' E of Red Bud Ln to 1690' E of Red Bud Ln reconstruction of existing pavement to a

Impact Fee Class: 6 Lane - Enhanced 6 lane divided arterial. **Ultimate Class:** 6 Lane - Enhanced

Length (If): 1,488 Service Area(s): B,ETJ/Other

Roa	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Uı	nit Price	Item Cost
105	Unclassified Street Excavation	14,660	су	\$	15.00	\$ 220,000
205	12" Asphalt (Type C)	8,293	ton	\$	72.00	\$ 597,000
305	16" Base	5,585	су	\$	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
	F	Paving Const	ruction (	Cost	Subtotal:	\$ 1,598,000

		r aving construction (	Jost Jubiotai.	Ψ	1,550,000
Major Construction Comp	onent Allowances**:				
Item Description	Notes		Allowance		Item Cost
√ Traffic Control	Construction P	hase Traffic Control	5%	\$	80,000
√ Pavement Markings/S	igns/Posts Includes Stripir	ng/Signs for Shared Paths	2%	\$	32,000
√ Roadway Drainage	Standard Intern	nal System	30%	\$	479,000
$\sqrt{}$ Illumination			10%	\$	160,000
√ Special Drainage Stru	ctures Minor Stream (	Crossing		\$	300,000
√ Water	Minor Adjustme	ents	2%	\$	32,000
√ Sewer	Minor Adjustme	ents	2%	\$	32,000
$\sqrt{}$ Turf and Erosion Cont	trol		4%	\$	64,000
√ Landscaping and Irrigation  √ Landscaping  ✓	ation		2%	\$	32,000
Miscellaneous:			0%	\$	-
**Allowances based on % of Pavir	ng Construction Cost Subtotal	Allowa	ınce Subtotal:	\$	1,211,000
		Paving and Allowa	nce Subtotal:	\$	2,809,000
	Co	onstruction Contingency:	15%	\$	421,000
		Mobilization	8%	\$	225,000
		Prep ROW	4%	\$	112,000
		Construction C	ost TOTAL:	\$	3,600,000

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 F	ee Project Cost TOTAL (20% City C	ontribution)	\$ 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.

#### 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	<u>Project</u>	Type	<u>Limits</u>		Percent in Service Area	Project Cost	Total Cost in Service Area
				<u>From</u>	<u>To</u>	Service Area		Service Area
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)	<b>Previously Constructed</b>	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

	Discipat	Impro	vement	Percent in	Droinet Coat	Total Cost in
<u>#</u>	<u>Project</u>	Improvement 1	Improvement 2	Service Area	Project Cost	Service Area
Al-4, Cl-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	\$ 6,967,000

TOTAL \$ 32,654,503 \$ 17,211,003

**NOTE**: These 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. These planning level cost projections shall not supersede the City's design standards 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. A-31, C-1

Name: RM 620 This project consists of the reconstruction of Existing pavement to a 6 lane divided arterial.

Impact Fee Class: 6 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 4,922 Service Area(s): A,C

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

Impact Fee Project Cost Sun	nmary		
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 P	roject Cost Total:	\$ 43,290,894
		City Contribution:	\$ 12,560,624
	Impact Fee Pr	oject Cost (29%):	\$ 12,560,624

**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.

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 Limits: McNeil Dr to Lynda Sue St

Impact Fee Class: 4 Lane - Enhanced **Ultimate Class:** 4 Lane - Enhanced

Length (If): 1,053 Service Area(s): C,ETJ/Other existing pavement to a 4 lane divided arterial.

Pos	ndway Construction Cost Pro	ication					
_	Item Description	ection	Quantity	Unit	Ur	nit Price	Item Cost
103	Unclassified Street Excavation		7,657	су	\$	15.00	\$ 115,000
203	12" Asphalt (Type C)		4,170	ton	\$	72.00	\$ 300,000
303	16" Base		2,808	су	\$	55.00	\$ 154,000
403	10" Lime Stabilization (with Lime @ 4	15#/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
			<b>Paving Const</b>	ruction (	Cost	Subtotal:	\$ 887,000
Majo	or Construction Component Allowa	nces**:					
	Item Description	Notes			All	owance	Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$ 44,000
	Pavement Markings/Signs/Posts	Includes Striping/Si	gns for Shared Pa	ths		2%	\$ 18,000
	Roadway Drainage	Standard Internal S	ystem			30%	\$ 266,000
	Illumination					10%	\$ 89,000

	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ince Subtotal:	\$ 506,000
		Paving and Allowa	nce Subtotal:	\$ 1,393,000
		Construction Contingency:	15%	\$ 209,000
		Mobilization	8%	\$ 111,000
		Prep ROW	4%	\$ 56,000
		Construction C	ost TOTAL:	\$ 1,800,000

	Notes:	Allowance	<u> </u>	Item Cost
Construction:		-	\$	1,800,000
Engineering/Survey/Testing:		16%	\$	288,000
Previous City contribution			l	
Other			l	
ROW/Easement Acquisition:	Existing Alignment	15%	\$	270,000

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

C-3 **Project Information:** Description: Project No. Name:

CR 172 (2) This project consists of the

Limits: Hesters Crossing Rd to 445' N of Hesters Crossing Freconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

**Ultimate Class:** 4 Lane - Enhanced

Length (If): 445

Service Area(s): C,ETJ/Other

No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		3,236	су	\$	15.00	\$	49,000
203	12" Asphalt (Type C)		1,762	ton	\$	72.00	\$	127,000
303	16" Base		1,187	су	\$	55.00	\$	65,000
403	10" Lime Stabilization (with Lime @ 45	5#/sy)	2,868	sy	\$	6.00	\$	17,000
503	Surface Treatment (0.2 gal/sy,Prime C	oat 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
		l	Paving Const	ruction (	Cost	Subtotal:	\$	374,000
Majo	or Construction Component Allowan	ces**:	_			_		
	Item Description	Notes			All	owance		Item Cost
2	Troffic Control	Construction Dhace	Troffic Control	•		E 0/	Ф	10 000

Maj	Major Construction Component Allowances**:							
	Item Description	Notes	Allowance		Item Cost			
	Traffic Control	Construction Phase Traffic Control	5%	\$	19,000			
$\checkmark$	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths	2%	\$	7,000			
$\checkmark$	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%	\$	-			
**Allo	wances based on % of Paving Construction C	ost Subtotal Allowa	nce Subtotal:	\$	211,000			
		Paving and Allowa	nce Subtotal:	\$	585,000			
		Construction Contingency:	15%	\$	88,000			
		Mobilization	8%	\$	47,000			
		Prep ROW	4%	\$	23,000			
		Construction C	ost TOTAL:	\$	800,000			

Impact Fee Project Cost Sum 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 C	ost TOTAL:	\$ 1,000,000

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.

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

Limits: Dry Creek Dr to IH 35 SBFR in the existing center turn lane.
Impact Fee Class: 4 Lane - Enhanced (AM)

Ultimate Class: 4 Lane - Enhanced

Length (If): 1,691 Service Area(s): C

No.	Item Description	Quantity	Unit	Ur	nit Price	l	Item Cost
104	Unclassified Street Excavation	3,173	су	\$	15.00	\$	48,000
204	Asphalt (Type C)	0	ton	\$	72.00	\$	
304	Base	0	су	\$	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 Constr	ruction (	Cost	Subtotal:	\$	240,000

		3		·	,
Majo	or Construction Component Allowa	nces**:			
	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
**Allo	**Allowances based on % of Paving Construction Cost Subtotal Allowance Subtotal:				
		Paving and Allowa		\$	442,000
		Construction Contingency:	15%	\$	66,000
		Mobilization			22,000
		-	\$3,000 / STA		5,000
		Construction C	ost TOTAL:	\$	600,000

- <mark>16%</mark>	<b>\$</b> \$	<b>600,000</b> 96.000
16%	\$	96.000
0%	\$	-
_		0% \$ TAL: <b>\$</b>

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

**Project Information:** Description: Project No. **C-5** Name:

Bratton Ln This project consists of the

Limits: IH 35 SBFR to 1160' S of Michael Angelo Way reconstruction of existing pavement to a Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

**Ultimate Class:** 4 Lane - Enhanced

Length (If): 2,215 Service Area(s): C,ETJ/Other

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
103	Unclassified Street Excavation	16,107	су	\$	15.00	\$	242,000
203	12" Asphalt (Type C)	8,771	ton	\$	72.00	\$	632,000
303	16" Base	5,907	су	\$	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
		Davina Conet	ruction (	Coct	Subtotal	¢	1 868 000

Paving Construction Cost Subtotal: \$ 1,868,000

Majo	or Construction Component Allowa		I AU	lt O t
	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$ 1,063,000
		Paving and Allowa	nce Subtotal:	\$ 2,931,000
		Construction Contingency:	15%	\$ 440,000
		Mobilization	8%	\$ 234,000
		Prep ROW	4%	\$ 117,000
		Construction C	ost TOTAL:	\$ 3,800,000

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

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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

B-46, C-6 **Project Information:** Description: Project No.

US 79 (1) Name: This project consists of the reconstruction of Limits: N Mays St to 200' E of Red Bud Ln existing pavement to a 6 lane divided arterial.

Impact Fee Class: 6 Lane - Enhanced **Ultimate Class:** 6 Lane - Enhanced

Length (If): 22,817 Service Area(s): B,C

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
105	Unclassified Street Excavation	224,790	су	\$	15.00	\$	3,372,000
205	12" Asphalt (Type C)	127,167	ton	\$	72.00	\$	9,156,000
305	16" Base	85,634	су	\$	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
					0 1 4 4 1	$\overline{}$	04 540 000

		Cost Subtotal:	\$ 24,518,000	
Maio	or Construction Component Allowa	nces**:		
11123	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
$\checkmark$	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%	\$ -
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$ 17,074,000
		Paving and Allowa	nce Subtotal:	\$ 41,592,000
		Construction Contingency:	15%	\$ 6,239,000
		Mobilization	8%	\$ 3,327,000
		Prep ROW	4%	\$ 1,664,000
		Construction C	ost TOTAL:	\$ 52,900,000

Impact Fee Project Cost Sur	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 F	ee Project Cost TOTAL (20% City Co	ontribution)	\$ 13,340,000

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.

# **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-7

Name: McNeil Extension This project consists of the construction of a new 3

Limits: S Mays St to Georgetown St lane collector.

Impact Fee Class: 3 Lane - Proposed
Ultimate Class: 3 Lane - Proposed

Length (If): 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	-	\$	-		
	\$	5,066,094				
	\$	4,799,620				
	Impact Fee Pro	ject Cost (95%):	\$	4,799,620		

**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.

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

Limits: Nash St to Gattis School Rd in the existing center turn lane.

Impact Fee Class: 4 Lane - Enhanced (AM)
Ultimate Class: 4 Lane - Enhanced

Length (If): 3,656 Service Area(s): C

	dway Construction Cost Pro	ection	Overetite	Unit	11	nit Price		Item Cost
	Item Description Unclassified Street Excavation		Quantity				r.	
104			6,861	cy	\$	15.00	\$ 6	103,000
	Asphalt (Type C)		0	ton	\$	72.00	\$	-
304	Base		0	су	\$	55.00	\$	-
	Lime Stabilization (with Lime @ 45#/		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
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			Ur	nit 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			\$1.0	000 / STA	\$	7,000
	ADA Ramps & Requirements	4 ramps / 600'			. ,	\$2,200	\$	54.000
	Landscaping and Irrigation	Grass, Trees, Restor	ration. E/S Contro	ls		\$10 / SY	\$	173,000
**Allo	wances based on % of Paving Construction Co		, , , , , , , , , , , , , , , , , , , ,		nce	Subtotal:	\$	420,000
	3						•	1_2,000
			Paving an	d Allowa	nce	Subtotal:	\$	938,000
		Consti	ruction Conti			15%	\$	141,000
				ilization		5%	\$	47,000
			Pro	ep ROW	\$3.0			11,000
	Prep ROW \$3,000 / STA Construction Cost TOTAL:						\$	1,200,000

Construction:  Engineering/Survey/Testing:  Previous City contribution  Other	<b>1,200,000</b> 192,000
Previous City contribution	192,000
Other	
Outer Control of the	
ROW/Easement Acquisition: No ROW Acquisition Costs included 0% \$	-

**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.

# **City of Round Rock**

# 2018 Roadway Impact Fee Study Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc. updated: 6/5/2018

C-9

Project Information: Description: Project No.

Name: Kenney Fort Blvd (1) This project consisted of the construction of a 6

Limits: US 79 to Forest Creek Blvd lane divided arterial.

Impact Fee Class: 6 Lane - Existing
Ultimate Class: 6 Lane - Existing

Length (If): 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			
	\$	31,375,873					
	City Contribution:						
	Impact Fee Pr	oject Cost (75%):	\$	23,375,873			

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

C-10 **Project Information:** Description: Project No. 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 (If): 5,514 Service Area(s): С

Roa	adway Construction Cost Pro	ection					
_	Item Description		Quantity	Unit	Ur	nit Price	Item Cost
108	Unclassified Street Excavation		54,323	су	\$	15.00	\$ 815,000
208	5" Asphalt (Type C)		30,731	ton	\$	72.00	\$ 2,213,000
308	308 10" Base		20,695	су	\$	55.00	\$ 1,138,000
408	408 10" Lime Stabilization (with Lime @ 45#/sy)		49,013	sy	\$	6.00	\$ 294,000
508	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 Const	ruction (	Cost	Subtotal:	\$ 5,926,000
Majo	or Construction Component Allowa	nces**:					
	Item Description	Notes			Al	lowance	Item Cost
	Traffic Control	None Anticipated				0%	\$ _

Major Construction Component Allowa	nces**:		
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%	\$ -
**Allowances based on % of Paving Construction Co	st Subtotal Allowa	ınce Subtotal:	\$ 7,284,000
	Paving and Allowa		13,210,000
	Construction Contingency:		\$ 1,982,000
	Mobilization		\$ 1,057,000
	Prep ROW	4%	528,000
	Construction C	ost TOTAL:	\$ 16,800,000

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

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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

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

Name: Red Bud Ln (1)

This project consists of the construction Limits: Forest Ridge Blvd to 265' S of Forest Ridge Blvd of a median in the existing center turn

lane.

Impact Fee Class: 4 Lane - Enhanced (AM)

**Ultimate Class:** 4 Lane - Enhanced

Length (If):

Service Area(s): C,ETJ/Other

Roa	idway Construction Cost Projection					
No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
104	Unclassified Street Excavation	497	су	\$	15.00	\$ 7,000
204	Asphalt (Type C)	0	ton	\$	72.00	\$ •
304	Base	0	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 37,000

	r aving concuracion cost castotal. •	01,000
laior Construction Component Allowances**:		

Majo	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		
**Allo	\$	45,000					
		Paving and Allowa	nce Subtotal:	\$	82,000		
		Construction Contingency:	15%	\$	12,000		
		Mobilization	5%	\$	4,000		
		Prep ROW	\$3,000 / STA	\$	1,000		
		Construction C	ost TOTAL:	\$	100.000		

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%	\$ _
	\$ 100,000		

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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** C-12 Description: Project No. Name: Red Bud Ln (2) This project consists of the

Limits: 265' S of Forest Ridge Blvd to 280' S of Woodlawn L reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

**Ultimate Class:** 4 Lane - Enhanced

Length (If): 565 Service Area(s): С

Roa	dway Construction Cost Proj	ection					
No.	Item Description		Quantity	Unit	Ur	nit Price	Item Cost
103	Unclassified Street Excavation		4,108	су	\$	15.00	\$ 62,000
203	12" Asphalt (Type C)		2,237	ton	\$	72.00	\$ 161,000
303	16" Base		1,507	су	\$	55.00	\$ 83,000
403	10" Lime Stabilization (with Lime @ 4	5#/sy)	3,641	sy	\$	6.00	\$ 22,000
503	, , ,			\$	6.00	\$ 4,000	
603	,				\$	5.50	\$ 62,000
703	Machine Laid Curb & Gutter 2,260 If			\$	16.00	\$ 36,000	
803					134.62	\$ 46,000	
		P	Paving Const	ruction (	Cost	Subtotal:	\$ 476,000
Majo	Major Construction Component Allowances**:						
	Item Description						Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	24,000
	Pavement Markings/Signs/Posts	Includes Striping/Sigi	ns for Shared Pa	ths		2%	10,000
	Roadway Drainage	Standard Internal Sys	stem			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%	\$ -
**Allo	wances based on % of Paving Construction Co	st Subtota <b>l</b>		Allowa	ınce	Subtotal:	\$ 274,000
			Paving an				\$ 750,000
		Constr	uction Conti			15%	\$ 113,000
				ilization		8%	\$ 60,000
				ep ROW		4%	30,000
			Constru	ction C	ost	TOTAL:	\$ 1,000,000

Impact Fee Project Cost Sum	mary		
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 C	ost TOTAL:	\$ 1,300,000

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. C-13

Name: Red Bud Ln (3) This project consists of the

Limits: 280' S of Woodlawn Ln to 130' S of Old Oaks Dr reco

reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 4 Lane - Enhanced

4 lane divided arterial.

Length (If): 554

Service Area(s): C,ETJ/Other

Roa	adway Construction Cost Proj	ection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		4,028	су	\$	15.00	\$	60,000
203	12" Asphalt (Type C)		2,194	ton	\$	72.00	\$	158,000
303	16" Base		1,477	су	\$	55.00	\$	81,000
403	10" Lime Stabilization (with Lime @ 4		3,570	sy	\$	6.00	\$	21,000
503	503 Surface Treatment (0.2 gal/sy,Prime Coat AE-P)			gal	\$	6.00	\$	4,000
603				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
		F	Paving Const	ruction (	Cost	Subtotal:	\$	465,000
Major Construction Component Allowances**:								
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	23,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	9,000
	Roadway Drainage	Standard Internal Sys	stem			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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	265,000
			Paving an	d Allowa	nce	Subtotal:	\$	730,000
		Consti	ruction Conti	ngency:		15%	\$	110,000
			Mob	ilization		8%	\$	58,000
			Pre	ep ROW		4%	\$	29,000

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

**Construction Cost TOTAL:** 

**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.

1,000,000

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Description: Project No. C-14 Red Bud Ln (4) Name: This project consists of the

Limits: 130' S of Old Oaks Dr to 315' S of Country Dr

reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial. **Ultimate Class:** 4 Lane - Enhanced

Length (If): 561 Service Area(s): С

Roa	Roadway Construction Cost Projection							
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		4,079	су	\$	15.00	\$	61,000
203	12" Asphalt (Type C)		2,222	ton	\$	72.00	\$	160,000
303	16" Base		1,496	су	\$	55.00	\$	82,000
403	10" Lime Stabilization (with Lime @ 4	·5#/sy)	3,615	sy	\$	6.00	\$	22,000
503	3 Surface Treatment (0.2 gal/sy,Prime Coat AE-P) 673 gal			\$	6.00	\$	4,000	
603	3 10' Concrete Sidewalk 11,220 sf			\$	5.50	\$	62,000	
703	Machine Laid Curb & Gutter	2,244 If			\$	16.00	\$	36,000
803	03 Turn Lanes and Median Openings 340 sy			\$	134.62	\$	46,000	
Paving Construction Cost Subtotal:							\$	473,000
Majo	Major Construction Component Allowances**:							
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	24,000
	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%	\$	9,000
$\sqrt{}$	Roadway Drainage	Standard Internal Sys	stem			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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	268,000
			Paving an			Subtotal:	\$	741,000
		Consti	ruction Conti	ngency:		15%	\$	111,000
				ilization		8%	\$	59,000
			Pr	ep ROW		4%	\$	30,000

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

Construction Cost TOTAL: \$

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.

1,000,000

Kimley-Horn and Associates, Inc. updated: 6/5/2018

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

Red Bud Ln (5) This project consists of the

Limits: 315' S of Country Dr to Wildflower Trl reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial. **Ultimate Class:** 4 Lane - Enhanced

Length (If): 551

Service Area(s): C,ETJ/Other

No.	Item Description	Quantity	Unit	Ur	nit Price	Item Cost
103	Unclassified Street Excavation	4,007	су	\$	15.00	\$ 60,000
203	12" Asphalt (Type C)	2,182	ton	\$	72.00	\$ 157,000
303	16" Base	1,469	су	\$	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
		<b>Paving Const</b>	ruction (	Cost	Subtotal:	\$ 464,000

Majo	or Construction Component Allowa	nces**:			
	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
$\sqrt{}$	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%	\$	-
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	ınce Subtotal:	\$	263,000
		Paving and Allowa			727,000
		Construction Contingency:			109,000
		Mobilization			58,000
		Prep ROW		*	29,000
		Construction C	ost TOTAL:	\$	1,000,000

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

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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. C-16

Name: Red Bud Ln (6) This project consists of the

Limits: Wildflower Trl to 295' S of Wildflower Trl reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

Ultimate Class: 4 Lane - Enhanced

Length (If): 293 Service Area(s): C

Roa	dway Construction Cost Projection						
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost
103	Unclassified Street Excavation	2,131	су	\$	15.00	\$	32,000
203	12" Asphalt (Type C)	1,160	ton	\$	72.00	\$	84,000
303	16" Base	781	су	\$	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
		Pavina Conct	ruction (	Coct	Subtotal	¢	247 000

<b>Paving Construction Cost Subtotal:</b>	\$	247,000
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Maio	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%	\$	-			
**Allo	wances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$	141,000			
		Paving and Allowa	nce Subtotal:	\$	388,000			
		Construction Contingency:	15%	\$	58,000			
		Mobilization			31,000			
		Prep ROW	4%	\$	16,000			
		Construction C	ost TOTAL:	\$	500,000			

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
	\$ 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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Description:

Project No.

C-17

Name:

Red Bud Ln (7)

This project consists of the

Limits: 295' S of Wildflower Trl to 840' N of Forest Creek Dr reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

Ultimate Class: 4 Lane - Enhanced

Length (If): 2,907
Service Area(s): C,ETJ/Other

Roa	Roadway Construction Cost Projection							
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		21,139	су	\$	15.00	\$	317,000
203	12" Asphalt (Type C)		11,512	ton	\$	72.00	\$	829,000
303	16" Base		7,752	су	\$	55.00	\$	426,000
403	403 10" Lime Stabilization (with Lime @ 45#/sy)			sy	\$	6.00	\$	112,000
503	`			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
		P	Paving Const	ruction (	Cost	Subtotal:	\$	2,448,000
Majo	or Construction Component Allowa							
	Item Description	Notes			All	owance		Item Cost
$\sqrt{}$	Traffic Control	Construction Phase	Traffic Control			5%	\$	122,000
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Signs for Shared Paths				2%		49,000
$\sqrt{}$	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

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
	\$ 7,700,000		

**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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Description: Project No. C-18 Name: Red Bud Ln (8) This project consists of the

Limits:

840' N of Forest Creek Dr to 340' S of Forest Creek reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

**Ultimate Class:** 4 Lane - Enhanced

Length (If): 1,182 Service Area(s): С

Roadway Construction Cost Projection								
No.	Item Description		Quantity	Unit	Uı	nit Price		Item Cost
103	Unclassified Street Excavation		8,595	су	\$	15.00	\$	129,000
203	1 ( )1 /			ton	\$	72.00	\$	337,000
303	16" Base		3,152	су	\$	55.00	\$	173,000
403	10" Lime Stabilization (with Lime @ 4	5#/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
	Machine Laid Curb & Gutter		4,728	lf	\$	16.00	\$	76,000
803	Turn Lanes and Median Openings		716	sy	\$	134.62	\$	96,000
		P	Paving Const	ruction (	Cost	Subtotal:	\$	996,000
Majo	Major Construction Component Allowances**:							
	Item Description	Notes				owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	50,000
$\sqrt{}$	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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	ınce	Subtotal:	\$	569,000
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 Sum 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
	\$ 2,600,000		

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.

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

Limits: 340' S of Forest Creek Dr to Gattis School Rd

reconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced

4 lane divided arterial.

Ultimate Class: 4 Lane - Enhanced

Length (If): 3,735
Service Area(s): C,ETJ/Other

Ros	Roadway Construction Cost Projection							
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
103	Unclassified Street Excavation		27,159	су	\$	15.00	\$	407,000
203	12" Asphalt (Type C)		14,791	ton	\$	72.00	\$	1,065,000
303	16" Base		9,960	су	\$	55.00	\$	548,000
403				\$	6.00	\$	144,000	
503	03 Surface Treatment (0.2 gal/sy,Prime Coat AE-P)			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	803 Turn Lanes and Median Openings 2,264 sy			\$	134.62	\$	305,000	
	Paving Construction Cost Subtotal:							3,146,000
Majo	or Construction Component Allowa	nces**:						
	Item Description	Notes			All	owance		Item Cost
	Traffic Control	Construction Phase	Traffic Control			5%	\$	157,000
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns for Shared Pa	ths		2%		63,000
	Roadway Drainage	Standard Internal Sys	stem			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%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal	•	Allowa	nce	Subtotal:	\$	1,794,000
			Paving an			Subtotal:	\$	4,940,000
		Constr	ruction Conti	ngency:		15%	\$	741,000
				ilization		8%	\$	395,000
			Pre	ep ROW		4%	\$	198,000
			Constru	ction C	ost	TOTAL:	\$	6,300,000

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

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Name:
Gattis School Rd (1)
Limits:
Description:
Project No.
C-20
This project consists of the reconstruction of existing pavement to a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 3,446 Service Area(s): C

Roa	dway Construction Cost Projection											
No.	Item Description	Quantity	Unit	Uı	nit Price		Item Cost					
103	Unclassified Street Excavation	25,058	су	\$	15.00	\$	376,000					
203	12" Asphalt (Type C)	13,646	ton	\$	72.00	\$	983,000					
303	16" Base	9,189	су	\$	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 Const	ruction (	Cost	Paving Construction Cost Subtotal: \$							

Itama Dagaminatian	Mataa	A 11	14 • 4
ajor Construction Component Allowan	ces**:		
			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Мај	or Construction Component Allowa	nces**:		
	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%	\$ -
**Allo	owances based on % of Paving Construction Co	ost Subtotal Allowa	nce Subtotal:	\$ 1,654,000
		Paving and Allowa	nce Subtotal:	\$ 4,557,000
		Construction Contingency:	15%	\$ 684,000
		Mobilization		\$ 365,000
		Prep ROW	4%	\$ 182,000
		Construction C	ost TOTAL:	\$ 5,800,000

Impact Fee Project Cost Sum	mary		
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

**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.

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

Limits: Windy Park Dr to Red Bud Ln

Impact Fee Class: 6 Lane - Enhanced
Ultimate Class: 6 Lane - Enhanced

Length (If): 14,903 Service Area(s): C This project consists of the reconstruction of existing pavement to a 6 lane divided arterial.

	dway Construction Cost Proj	ection						
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost
105	Unclassified Street Excavation		146,822	су	\$	15.00	\$	2,202,000
205	12" Asphalt (Type C)		83,059	ton	\$	72.00	\$	5,980,000
305	16" Base		55,932	су	\$	55.00	\$	3,076,000
405	10" Lime Stabilization (with Lime @ 4	.5#/sy)	132,471	sy	\$	6.00	\$	795,000
505	505 Surface Treatment (0.2 gal/sy,Prime Coat AE-P) 25,170 gal			\$	6.00	\$	151,000	
605	605 10' Concrete Sidewalk 29			sf	\$	5.50	\$	1,639,000
705	05 Machine Laid Curb & Gutter 59,612 If			\$	16.00	\$	954,000	
805	805 Turn Lanes and Median Openings 9,032 sy			\$	134.62	\$	1,216,000	
	Paving Construction Cost Subtotal:					\$	16,013,000	
Majo	Major Construction Component Allowances**:							
	Item Description Notes Allowance						Item Cost	
$\sqrt{}$	Traffic Control	Construction Phase				5%	\$	801,000
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Sig	ns for Shared Pa	ths		2%		320,000
$\sqrt{}$	Roadway Drainage	Standard Internal Sy	stem			30%		4,804,000
	Illumination					10%	\$	1,601,000
	Special Drainage Structures	Bridge Crossing					\$	3,900,000
	Water	Minor Adjustments				2%	\$	320,000
$\sqrt{}$	Sewer	Minor Adjustments				2%	\$	320,000
$\sqrt{}$	Turf and Erosion Control					4%	\$	641,000
$\sqrt{}$	Landscaping and Irrigation					2%	\$	320,000
	Miscellaneous:					0%	\$	-
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	ance	Subtotal:	\$	13,027,000
			Paving an				\$	29,040,000
		Consti	ruction Conti	-		15%	\$	4,356,000
			Mob	ilization		8%	\$	2,323,000
				ep ROW		4%	\$	1,162,000
			Constru	ction C	ost	TOTAL:	\$	36,900,000

Impact Fee Project Cost Sumi	nary		
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 C	ost TOTAL:	\$ 48,300,000

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. C-22

Name: S Mays St / Dell Way This project consists of the construction of a median

Limits: Gattis School Rd to Greenlawn Blvd in the existing center turn lane.

Impact Fee Class: 4 Lane - Enhanced (AM)
Ultimate Class: 4 Lane - Enhanced

Length (If): 6,565 Service Area(s): C

Roa	dway Construction Cost Pro	iection						
	Item Description		Quantity	Unit	Un	it Price		Item Cost
104	Unclassified Street Excavation		12,320	су	\$	15.00	\$	185,000
204	Asphalt (Type C)		0	ton	\$	72.00	\$	-
304	Base		0	су	\$	55.00	\$	-
404	404 Lime Stabilization (with Lime @ 45#/sy)			sy	\$	6.00	\$	-
504	504 Surface Treatment (0.2 gal/sy,Prime Coat AE-P)			gal	\$	6.00	\$	-
604	604 Concrete Sidewalk			sf	\$	5.50	\$	-
704	Machine Laid Curb & Gutter		13,130	lf	\$	16.00	\$	210,000
804				\$	134.62	\$	536,000	
	Paving Construction C				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 L	ength mrkgs (\$1.	50/LF)		\$750	\$	25,000
	Roadway Drainage	None Anticipated				0%	\$	-
	Street Lighting	1 Assem / 100', \$15/I	LF cond/cndr			\$2,800	\$	282,000
	Special Drainage Structures	None Anticipated					\$	-
	Utilities	Minor Adjustments			\$1,0	000 / STA	\$	13,000
	ADA Ramps & Requirements	4 ramps / 600'				\$2,200	\$	96,000
	Landscaping and Irrigation	Grass, Trees, Restor	ration, E/S Contro	ls		\$10 / SY	\$	310,000
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce S	Subtotal:	\$	741,000
			Paving an	d Allowa	nce S	Subtotal:	\$	1,672,000
		Consti	ruction Conti	ngency:		15%	\$	251,000
			Mob	ilization		5%	\$	84,000
			Pro	ep ROW	\$3,0	000 / STA	\$	20,000
			Constru	ction C	ost	TOTAL:	\$	2,100,000

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%	\$ _

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information: Description: Project No. C-23

Name: Kenney Fort Blvd (3)
Limits: 830' S of Gattis School Rd to SH 45

Description: Project No. C-23

This project consists of the construction of a new 6 lane divided arterial.

Impact Fee Class: 6 Lane - Proposed

Ultimate Class: 6 Lane - Proposed 6 Lane - Proposed

Length (If): 2,178
Service Area(s): C,ETJ/Other

	dway Construction Cost Projection					
No.	Item Description	Quantity	Unit	U	nit Price	Item Cost
108	Unclassified Street Excavation	21,457	су	\$	15.00	\$ 322,000
208	5" Asphalt (Type C)	12,139	ton	\$	72.00	\$ 874,000
308	10" Base	8,174	су	\$	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 Const	ruction (	Cost	Subtotal:	\$ 2 341 000

Paving Construction Cost Subtotal: \$ 2,34	1,000
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	Major Construction Component Allowances**:										
Major Construction Item Desc	•	nces**:  Notes	Allowance		Item Cost						
Traffic Cor	ntrol	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	า		10%	\$	234,000						
Special Dr	ainage Structures	None Anticipated		\$	-						
√ Water		Minor Adjustments	2%	\$	47,000						
√ Sewer		Minor Adjustments	2%	\$	47,000						
$\sqrt{}$ Turf and E	rosion Control		4%	\$	94,000						
√ Landscapi	ng and Irrigation		2%	\$	47,000						
Miscellane	ous:		0%	\$	-						
**Allowances based	on % of Paving Construction C	ost Subtotal Allowa	ance Subtotal:	\$	1,218,000						
		Paving and Allowa	ance Subtotal:	\$	3,559,000						
		Construction Contingency:	15%	\$	534,000						
		Mobilization	8%	\$	285,000						
		Prep ROW	4%	\$	142,000						
		Construction C	ost TOTAL:	\$	4,600,000						

Impact Fee Project Cost Sum	mary		
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 Proje	ct Cost TOTAL:	\$ 6,700,000

**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.

Kimley-Horn and Associates, Inc. updated: 6/5/2018

Project Information:

Description:

Project No.

C-24

Name:

Creenlawn Blvd

This project consists of the reconstruction of existing pavement with one third of a 6 lane divided arterial.

Ultimate Class:

Obscription:

Project No.

C-24

This project consists of the reconstruction of existing pavement with one third of a 6 lane divided arterial.

Length (If): 5,351 Service Area(s): C

Roa	adway Construction Cost Proj	ection							
No.	Item Description		Quantity	Unit	U	nit Price		Item Cost	
106	Unclassified Street Excavation		20,083	су	\$	15.00	\$	301,000	
206	12" Asphalt (Type C)		4,578	ton	\$	72.00	\$	330,000	
306	16" Base		7,399	су	\$	55.00	\$	407,000	
406	10" Lime Stabilization (with Lime @ 4	l5#/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	,							
806	Turn Lanes and Median Openings	\$	134.62	\$	1				
		P	Paving Const	ruction (	Cost	Subtotal:	\$	1,932,000	
Majo	or Construction Component Allowa	nces**:							
	Item Description	Notes			Al	lowance		Item Cost	
	Traffic Control	Construction Phase	Traffic Control			5%	\$	97,000	
	Pavement Markings/Signs/Posts	Includes Striping/Sign	ns for Shared Pa	ths		2%	\$	39,000	
$\sqrt{}$	Roadway Drainage	Standard Internal Sys	stem			60%		1,159,000	
	Illumination					10%	\$	193,000	
	Special Drainage Structures	Minor Stream Crossi	ng				\$	200,000	
$\sqrt{}$	Water	Minor Adjustments				2%	\$	39,000	
$\sqrt{}$	Sewer	Minor Adjustments				2%	\$	39,000	
$\sqrt{}$	Turf and Erosion Control					4%	\$	77,000	
$\sqrt{}$	Landscaping and Irrigation					2%	\$	39,000	
	Miscellaneous:					0%	\$	-	
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	ınce	Subtotal:	\$	1,882,000	
			Paving an	d Allowa	ınce	Subtotal:	\$	3,814,000	
		Constr	ruction Conti	ngency:		15%	\$	572,000	
			Mob	ilization		8%	\$	305,000	
			Pro	ep ROW		4%	\$	153,000	
			Constru	ction C	ost	TOTAL:	\$	4,900,000	

Construction:			Item Cost
Construction.		-	\$ 4,900,000
Engineering/Survey/Testing:		16%	\$ 784,000
Previous City contribution			
Other			
ROW/Easement Acquisition:	Existing Alignment	15%	\$ 735,000

**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.

## **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

Limits: A.W. Grimes Blvd to 2060' W of A.W. Grimes Blvd reconstruction of existing pavement to

Impact Fee Class: 3 Lane - Proposed a 3 lane collector.

Ultimate Class: 3 Lane - Proposed

Length (If): 2,058
Service Area(s): C

# Roadway Construction Cost Projection Construction Cost TOTAL: \$ 2,699,826

Impact Fee Project Cost Sumi	nary		
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	<b>Cost Total:</b>	\$ 3,279,257
	City Co	ontribution:	\$ 1,134,412
	Impact Fee Project	Cost (35%):	\$ 1,134,412

**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.

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 SH 45 EBFR to 290' S of SH 45 EBFR existing pavement to a 4 lane divided arterial.

Impact Fee Class: 4 Lane - Enhanced
Ultimate Class: 4 Lane - Enhanced

Length (If): 291 Service Area(s): C

Roa	Roadway Construction Cost Projection											
	Item Description	•	Quantity	Unit	Ur	nit Price		Item Cost				
103	Unclassified Street Excavation		2,116	су	\$	15.00	\$	32,000				
203	12" Asphalt (Type C)		1,152	ton	\$	72.00	\$	83,000				
303	16" Base		776	су	\$	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				
		Cost	Subtotal:	\$	246,000							
	Major Construction Component Allowances**:											
Majo												
	Item Description	Notes			All	owance		Item Cost				
	Traffic Control	Construction Phase	Traffic Control		5%	\$	12,000					
$\sqrt{}$	Pavement Markings/Signs/Posts	Includes Striping/Sig	ıns for Shared Pa	ths		2%		5,000				
	Roadway Drainage	Standard Internal Sy	rstem			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%	\$	-				
**Allo	wances based on % of Paving Construction C	ost Subtotal		Allowa	nce	Subtotal:	\$	141,000				
			Paving an ruction Conti		nce	Subtotal: 15%	\$	387,000				
	\$ \$	58,000 31,000										
	Mobilization 8%											
				ep ROW		4%	*					
			Constru	ction C	ost	TOTAL:	\$	500,000				

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 C	ost 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.

Kimley-Horn and Associates, Inc. 6/5/2018 updated:

**Project Information:** Description: Project No. C-27 Name: Schultz (2) This project consists of the

Limits:

290' S of SH 45 EBFR to 255' S of Autumn Sage Wareconstruction of existing pavement to a

Impact Fee Class: 4 Lane - Enhanced 4 lane divided arterial.

**Ultimate Class:** 4 Lane - Enhanced

Length (If): 2,636 Service Area(s): C,ETJ/Other

Roa	adway Construction Cost Proj	ection									
No.	Item Description		Quantity	Unit	Ur	nit Price		Item Cost			
103	Unclassified Street Excavation		19,168	су	\$	15.00	\$	288,000			
203	12" Asphalt (Type C)		10,439	ton	\$	72.00	\$	752,000			
303	16" Base		7,029	су	\$	55.00	\$	387,000			
403	10" Lime Stabilization (with Lime @ 4	5#/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			
	Machine Laid Curb & Gutter		10,544	\$	16.00	\$	169,000				
803	Turn Lanes and Median Openings		1,598	\$	134.62	\$	215,000				
		Subtotal:	\$	2,222,000							
Major Construction Component Allowances**:  Item Description  Notes  Allowance Item											
	Item Description	owance		Item Cost							
	Traffic Control	Construction Phase			5%	\$	111,000				
	Pavement Markings/Signs/Posts	Includes Striping/Sign		ths		2%		44,000			
	Roadway Drainage	Standard Internal Sys	stem			30%		667,000			
	Illumination					10%	\$	222,000			
	Special Drainage Structures	None Anticipated					\$	-			
	Water	Minor Adjustments				2%	\$	44,000			
$\checkmark$	Sewer	Minor Adjustments				2%	\$	44,000			
	Turf and Erosion Control					4%	\$	89,000			
	Landscaping and Irrigation					2%	\$	44,000			
<u>L</u>	Miscellaneous:					0%	\$				
**Allo	wances based on % of Paving Construction Co	st Subtotal		Allowa	nce	Subtotal:	\$	1,265,000			
			Paving an		nce		\$	3,487,000			
		Constr	ruction Conti	-		15%	\$	523,000			
				ilization		8%					
			Pre	ep ROW		4%	· · · · · · · · · · · · · · · · · · ·				
			Construc	ction C	ost ˈ	TOTAL:	\$	4,500,000			

Construction: Engineering/Survey/Testing:		-	\$ 4,500,000
Engineering/Survey/Testing:			.,500,000
		16%	\$ 720,000
Previous City contribution			
Other			
ROW/Easement Acquisition: Exis	ting Alignment	15%	\$ 675,000

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.



## 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

Project ID #	ROADWAY  New Hope Rd (1)	LIMITS  Sam Bass Rd to 240' W of Lagoona Dr	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION 4 Lane - Enhanced (1/2)	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN 810	VEH-MI SUPPLY PK-HR TOTAL <sup>1</sup> 3569	VEH-MI TOTAL DEMAND PK-HR <sup>2</sup> 142	EXCESS CAPACITY PK-HR VEH-MI <sup>3</sup> 3,427	TOTAL PROJECT COST	cos	TAL PROJECT ST IN SERVICE AREA 7.800.000
A-1 A-2	New Hope Rd (1)	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	ą.	950.000.00
A-2 A-3	New Hope Rd (2)	Mayfield Ranch Blvd to 1000' E of Wyoming Springs Dr	0.23	4	4 Lane - Enhanced (1/2)	New	50%	810	1501	0	1501	\$ 1,900,000	\$	4,650,000
A-3 A-4, B-1	Westinghouse Rd	IH 35 SBFR to IH 35 NBFR	0.93	6	6 Lane - Proposed	n/a	50%	900	519	0	519	\$ 9,00,000		4,515,648
A-4, B-1 A-5	Wyoming Springs Dr (1)	New Hope Dr (Future) to Blue Ridge Dr	0.19	0	4 Lane - Enhanced (1/2)	n/a	100%	810	730	0	730	\$ 9,031,296 \$ 1,700,000		1,700,000
A-6	Wyoming Springs Dr (1)  Wyoming Springs Dr (2)	Blue Ridge Dr to RM 1431	0.23	4	4 Lane - Proposed	New	100%	810	2338	0	2,338	\$ 1,700,000		9,100,000
A-7	RM 1431 (1)	1100' W of Mavfield Ranch Blvd to 850' E of Stone Oak Dr	0.72	6	6 Lane - Enhanced	3177	50%	900	2627	1.545	1,082	\$ 9,100,000		1,440,000
A-7 A-8	RM 1431 (1)	850' E of Stone Oak Dr to IH 35 SBFR	2.16	6	6 Lane - Enhanced	3177	100%	900	11676	6,870	4,806	\$ 2,860,000		6,860,000
A-0 A-9	Wyoming Springs Dr (3)	RM 1431 to 390' N of Goldenoak Cir	0.73	4	4 Lane - Proposed	New	100%	810	2369	0,070	2,369	\$ 9,200,000		9,200,000
A-10	Wyoming Springs Dr (4)	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-10 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 PI	0.80	4	4 Lane - Proposed	New	100%	810	2590	0	2,590	\$ 10,500,000		10,500,000
A-13	Creek Bend Blvd (1)	West End PI to Camino Del Verdes PI	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 (5)	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									73,022	18,408	54,614	\$ 191,524,222	\$	166,188,262
Al-1	Sam Bass Rd and FM 3406	SIGNAL	-	-			100%					\$ 295,000	\$	295,000
Al-2	Sam Bass Rd and Hairy Man Rd	ROUNDABOUT	-	-			100%					\$ 2,000,000	\$	2,000,000
Al-3	Sam Bass Rd and Chisholm Trl Rd	TURN LANES	-	-	Intersection		100%					\$ 139,000		139,000
Al-4, Cl-1	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES	-		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
-	Update ITS and Traffic Managmenet Infrastructure		-	-			33%					\$ 20,900,000	\$	6,967,000
SUBTOTAL												\$ 24,314,000	\$	9,891,000
									2018 Ro	adway Impad	ct Fee Study C	ost Per Service Area	\$	34,673

TOTAL COST IN SERVICE AREA A \$ 176,113,935

6/5/2018

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.

<sup>1.</sup> Veh-Mi Supply Pk-Hr Total = [Length (mi)] \* [Exist Lanes] \* [Veh-Mi Capacity Pk-Hr Per Ln] \* [% in Service Area]

<sup>2.</sup> Veh-Mi Demand Pk-Hr Total = [ Length (mi)] \* [PM Peak Hour Vol] \* [% In Service Area]

<sup>3.</sup> Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]

#### City of Round Rock - 2018 Roadway Impact Fee Study

#### **CIP Service Units of Supply**

#### Service Area B

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 <sup>1</sup>	VEH-MI TOTAL DEMAND PK-HR <sup>2</sup>	EXCESS CAPACITY PK-HR VEH-MI <sup>3</sup>	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	
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		
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	
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	
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		
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	
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	
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
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	,,	, , , , , , , , , , , , , , , , , , , ,
B-12	Arterial L (2)	IH 35 NBFR to Cypress Blvd	0.69	4	4 Lane - Proposed	New	100%	810	2236	0	2236		
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	
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		
B-16 B-17	Sunrise Rd (3)	325' S of Eagles Nest St to Applegate Cir	0.30	4	4 Lane - Enhanced (AM) 4 Lane - Enhanced (AM)	1,325 1,325	50% 100%	810 810	484 660	198 270	286 390	\$ 600,000 \$ 500,000	\$ 300,000 \$ 500.000
B-17 B-18	Sunrise Rd (4) Sunrise Rd (5)	Applegate Cir to Lake Dr Lake Dr to 545' S of Lake Dr	0.20	4	4 Lane - Enhanced (AM) 4 Lane - Enhanced (AM)	1,325	50%	810	167	68	99	\$ 500,000	\$ 500,000 \$ 100.000
B-18 B-19	Sunrise Rd (5) Sunrise Rd (6)	545' S of Lake Dr	0.10	4	4 Lane - Enhanced (AM)	1,325	100%	810	1287	526	761	7	\$ 100,000
B-19 B-20	College Park (1)	Satellite View to Avery Nelson Blvd	0.75	4	4 Lane - Enhanced (AW)	448	100%	810	2423	335	2088	\$ 5,400,000	\$ 5.400,000
B-20	Avery Nelson	Gulf Way to College Park	0.73	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	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,
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
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	
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		
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	
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	
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
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	
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	, , , , , , , , ,	
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		
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	+ .,,	\$ 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	,,
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	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , ,
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
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		
B-43 B-44	Red Bud Ln (4)	Old Settlers Blvd to 170' N of Joseph St	0.45 0.18	4	4 Lane - Enhanced 4 Lane - Enhanced	1,400 1,400	100% 50%	810 810	1446 294	625 127	821 167	\$ 5,200,000	
B-44 B-45	Red Bud Ln (5) Red Bud Ln (6)	170' N of Joseph St to 160' S of Covered Wagon Trl 160' S of Covered Wagon Trl to US 79	0.18	4	4 Lane - Ennanced 4 Lane - Enhanced	1,400	100%	810 810	1314	127 568	746	\$ 2,200,000 \$ 4,700,000	
B-45 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	1314	6789	4879	\$ 4,700,000 \$ 13.340.000	\$ 4,700,000 \$ 6,670,000
B-46, C-6	US 79 (1)	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	,,	
SUBTOTAL	00 /3 (2)	200 E OF Ned Dud En to 1080 E OF Ned Dud EN	0.20	U	o Lane - Ellianced	۷,۶۵0	JU /0	500	104.987	32,160	72,827	\$ 316,133,704	
BI-1	N Mays St and University Blvd	TURN LANES	-	-			100%		.04,001	02,100	, 2,02,	\$ 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	-	-	Intersection		100%					\$ 170,235	
BI-4, CI-8	A.W. Grimes Blvd and Palm Valley Blvd	OTHER & TURN LANES	-	-	Improvements		50%					\$ 2,041,000	
-	Update ITS and Traffic Managmenet Infrastructure	-	<b> </b> -	-			33%				1	. , , , , , , , , , , , , , , , , , , ,	\$ 6,967,000
SUBTOTAL				•	·	•						\$ 24,958,235	

2018 Roadway Impact Fee Study Cost Per Service Area \$

TOTAL COST IN SERVICE AREA B \$ 281,337,464

34,673

6/5/2018

<sup>1.</sup> 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

#### **CIP Service Units of Supply**

Service Area C

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 <sup>1</sup>	VEH-MI TOTAL DEMAND PK-HR <sup>2</sup>	EXCESS CAPACITY PK-HR VEH-MI <sup>3</sup>		PROJECT	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	\$ 1	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	\$ 1	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	\$ 2	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	\$ 2	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	\$ 19	92,810,529	\$ 160,010,217
Al-4, Cl-1	Deepwood Dr and Round Rock Ave (RM 620)	TURN LANES	-	-			50%					\$	392,000	\$ 196,000
Al-5, Cl-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	-	-	Intersection		100%					\$	353,000	\$ 353,000
CI-6	Mays St and Gattis School Rd	TURN LANES	-	-	Improvements		100%					\$	1,847,503	\$ 1,847,503
CI-7	Greenlawn Blvd and Louis Henna Blvd (SH 45 FR)	OTHER	-	-	improvements		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	-	-	1		100%					\$	1,595,000	\$ 1,595,000
- 1	Update ITS and Traffic Managmenet Infrastructure	<u> </u>	-				33%					\$ 2	20,900,000	\$ 6,967,000
SUBTOTAL												\$ 3	32,654,503	\$ 17,211,003

2018 Roadway Impact Fee Study Cost Per Service Area \$

TOTAL COST IN SERVICE AREA C \$ 177,255,893

6/5/2018

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.

<sup>1.</sup> Veh-Mi Supply Pk-Hr Total = [Length (mi)] \* [Exist Lanes] \* [Veh-Mi Capacity Pk-Hr Per Ln] \* [% in Service Area]

<sup>2.</sup> Veh-Mi Demand Pk-Hr Total = [ Length (mi)] \* [PM Peak Hour Vol] \* [% In Service Area]

<sup>3.</sup> Excess Capacity Pk-Hr Veh-Mi = [Veh-Mi Supply Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total]



## Appendix C - Existing Facilities Inventory

#### City of Round Rock - 2018 Roadway Impact Fee Study **Existing Roadway Facilities Inventory**

Service Area A 6/5/2018

ROADWAY	FROM	то	LENGTH (ft)	LENGTH (mi)		EXIST EX LANES LAN		CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL <sup>1</sup>		DEN PK	H-MI IAND -HR FAL <sup>2</sup>	EXCESS CAPACITY PK-HR VEH-MI <sup>3</sup>		EXISTING DEFICIENCIES PK-HR VEH-MI <sup>4</sup>	
					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 PI	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 PI	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	a 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	a 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		Mayfield Ranch Blyd	1.223	0.23	1	1	2U	4 Lane - Enhanced	4D	73	56	50%	410	410	47	47	8	6	39	41		
RM 1431		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		1
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	17	<b>-</b>
Sam Bass Rd	390' W of Wyoming Spring		391	0.23	2	2	4U	6 Lane - Enhanced	6D	694	1,018	100%	680	680	101	101	51	75	49	25		<del>                                     </del>
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		<del>                                     </del>
Sam Bass Rd		Creek Bend Blvd	991	0.19	1	1	2U	4 Lane - Enhanced	4D	228	219	100%	410	410	77	77	43	41	34	36		<del></del>
Sam Bass Rd	Wyoming Springs Dr	Sam Bass Rd	1.178	0.19	2	2	4U	6 Lane - Enhanced	4D 6D	694	1.018	100%	680	680	303	303	155	227	149	76		<del></del>
US 79	IH 35 SBFR	IH 35 NBFR	541	0.22	2	4	6D	6 Lane - Existing	6D	n/a	n/a	50%	900	900	92	184	100	221	140	70		<del></del>
Wyomina Sprinas Dr	300' S of Falcon Dr	RM 620	2.877	0.10	2	2	4D	4 Lane - Existing	4D	636	886	100%	810	810	883	883	347	483	536	400		<del>                                     </del>
Wyoming Springs Dr	Cloud Peak Ln	300' S of Falcon Dr	776	0.15	2	2	4D 4D	4 Lane - Existing	4D 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 - Existing 4 Lane - Enhanced	4D 4D	319	186	100%	410	410	55	55	47	25	12	30		<del>                                     </del>
	Goldenoak Cir	FM 3406	3.372	0.13	2	2	4D	4 Lane - Enhanced 4 Lane - Existing	4D 4D	319	186	100%	810	810	1.035	1.035	204	119	831	916		├
Wyoming Springs Dr			3,372	0.64	2	2	4D 4D		4D 4D	319	186	100%	810	810	1,035	1,035	204	119	93	103		<del></del>
Wyoming Springs Dr Wyoming Springs Dr	Goldenoak Cir New Hope Dr	390' N of Goldenoak Cir Blue Ridge Dr	1.190	0.07	0	0	4D 2U	4 Lane - Enhanced 4 Lane - Enhanced	4D 4D	319 n/a	186 n/a	100%	410	410	116	116	23	13	93	103		
SUBTOTAL	INCM LIOPE DI	Dide Nage DI	97.625	18.49	U	U	20	4 Lanc - Elliancec	40	ıı/d	ıı/d	10070	410	410	17.965	18.115	10.321	10.705	7.158	6.832	796	050
																						650

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] \* [Veh-Mi

#### City of Round Rock - 2018 Roadway Impact Fee Study Existing Roadway Facilities Inventory

Service Area B

Service Area B																						6/5/2018
		TO									PM	% IN		H-MI	VEH-MI SUPPLY			H-MI		CESS		TING
ROADWAY FROM		и то	LENGTH	LENGTH		(IST NES	EXIST LANES	CLASS	FUTURE LANES		EAK DUR	SERVICE AREA		ACITY -HR		PPLY C-HR		IAND -HR		ACITY (-HR		ENCIES -HR
			(ft)	(mi)	L-A	INES	LANES		LANES		OL	AREA		R LN		TAL <sup>1</sup>		-nk FAL²		H-MI <sup>3</sup>		-nk I-MI <sup>4</sup>
					NB/EB	SB/WB				NB/EB		1	NB/EB	SB/WB	NB/EB	SB/WB		SB/WB		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	400	00	500	500		
Avery Nelson Bass Pro Dr	College Park Dr IH 35 NBFR	A.W. Grime Blvd Oakmont Dr	2,075 1.800	0.39	2	2	4D 4D	4 Lane - Existing 4 Lane - Existing	4D 4D	275 448	173 399	100%	810 810	810 810	637 552	637 552	108 153	68 136	529 400	569 416		
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	2/1	202	010	041		
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 CR 111/Westinghouse Rd	University Blvd 3895' E of A.W. Grimes	Sattellite View 6350' W of A.W. Grimes	711 2,456	0.13 0.47	1	1	4D 2U	4 Lane - Existing 6 Lane - Enhanced	4D 6D	173 234	275 243	100% 50%	810 410	810 410	218 95	218 95	23 54	37 57	195 41	181 39		
CR 112	3580' E of A.W. Grimes Bl		2,430	0.47	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 CR 117	840' W of Marshall Trl Kenney Fort Blvd	Red Bud Ln San Felipe St	2,498 912	0.47	1	1	2U 2U	4 Lane - Enhanced 4 Lane - Enhanced	2U 2U	79 79	94 94	50% 50%	410 410	410 410	97 35	97 35	19 7	22 8	78 29	75 27	-	
CR 117	160' N of Bluffstone Dr	440' S of Bluffstone Dr	602	0.17	1	1	2U 2U	4 Lane - Enhanced 4 Lane - Enhanced	2U 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			'`	l		
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 Blve FM 1460 (A.W. Grimes Blve		US 79 175' S of Lantana Dr	3,966 1,382	0.75 0.26	2	2	5U 5U	6 Lane - Enhanced 6 Lane - Enhanced	6D 6D	1,150 1,150	1,147	100% 100%	770 770	770 770	1,157 403	1,157 403	864 301	862 300	293 102	295 103		
FM 1460 (A.W. Grimes Blvd		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 Blve	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 Blv	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 Blve		375' S of Chandler Creek I	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 Blve		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		
		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 FM 1460 (A.W. Grimes Blvd		440' N of Old Settlers Blvd Avery Nelson Pkwy	2,374 5.309	0.45 1.01	2	2	4D 4D	6 Lane - Enhanced 6 Lane - Enhanced	6D 6D	797 797	917 917	100%	810 810	810 810	728 1.629	728 1.629	358 801	412 922	370 828	316 707		
FM 3406	IH 35 NBFR	N Mays St	682	0.13	2	2	4D 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 Kenney Fort 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	Chandler Creek Blvd	US 79 Joe DiMaggio Blvd	1,512 1,565	0.29	2	1	5U 2U	4 Lane - Existing 6 Lane - Enhanced	5U 6D	n/a 236	n/a 222	100% 100%	770 410	770 410	441 122	441 122	70	66	52	56		
Kenney Fort Blvd	Old Settler's Blvd	2540' S of Old Settler's Blv	1,566	0.30	0	0	3U	6 Lane - Proposed	6D	n/a	n/a	100%	510	510	0	0	70	00	32	30		
Kenney Fort Blvd	Old Settler's Blvd	2540' S of Old Settler's Blv	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	540' N of Steam Way Old Settlers Blvd	1,402 1,823	0.27 0.35	1 2	2	3U 5U	4 Lane - Enhanced 4 Lane - Enhanced	4D 4D	173 173	243 243	100% 100%	510 770	510 770	135 532	271 532	46 60	65 84	89 472	206 448		
N Mays St N Mays St	Teravista Pkwy	University Blvd	3,301	0.63	2	2	4D	4 Lane - Enhanced 4 Lane - Existing	4D 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	- 00
Red Bud Ln Red Bud Ln	160' S of Covered Wagon CR 117	US 79 Old Settlers Blvd	2,141 1,788	0.41	1	1	2U 2U	4 Lane - Enhanced 4 Lane - Enhanced	4D 4D	749 532	651 339	100% 100%	410 410	410 410	166 139	166 139	304 180	264 115	-137 -41	-98 24	137 41	98
Red Bud Ln Red Bud Ln	Old Settlers Blvd	170' N of Joseph St	2.356	0.34	1	1	3U	4 Lane - Enhanced 4 Lane - Enhanced	4D 4D	749	651	100%	510	510	228	228	334	290	-41	-63	107	63
Red Bud Ln	170' N of Joseph St	160' S of Covered Wagon	957	0.45	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		2,397	0.45	0	0	3U	3 Lane - Proposed	3U	n/a	n/a	100%	510	510	0	0	- 50	- 50	<u> </u>	T	T	
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 Old Settlers Blvd	Northwest Dr	2,112	0.40	2	2	5U	4 Lane - Enhanced	4D	475	698	100%	770	770	616	616	190	279	426	337	1	
Spur 379 (N Mays St) Sunrise Rd	Bowman Rd	Bowman Rd US 79	3,589 4.485	0.68	2	2	5U 4U	4 Lane - Enhanced 4 Lane - Enhanced	4D 4U	475 469	698 515	100%	770 680	770 680	1,047 1,155	1,047 1,155	323 398	474 437	724 757	572 718	1	
Garingo Ma	Downlan ING	0015	4,400	0.00		ı -	40	- Lane - Ellianced	40	409	טוט	10070	000	000	1,100	1,100	390	431	101	/ 10	ı	· •

Sunrise Rd		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		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	لــــــا	L
Sunrise Rd		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		<u> </u>
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	<u> </u>	<u> </u>
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		<u> </u>
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	1	1
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	1	1
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	1	1
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 PI	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 PI	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		1
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	1
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	1
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	
	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	2,0	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 Demand Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total] \* [Veh-Mi

#### City of Round Rock - 2018 Roadway Impact Fee Study Existing Roadway Facilities Inventory

Service Area C

ROADWAY	FROM	то	LENGTH (ft)	LENGTH (mi)		XIST ANES	EXIST LANES	CLASS	FUTURE LANES	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		SUP PK	VEH-MI SUPPLY PK-HR TOTAL <sup>1</sup>		H-MI IAND -HR	EXCESS CAPACITY PK-HR VEH-MI <sup>3</sup>		EXISTING DEFICIENCIES PK-HR VEH-MI <sup>4</sup>	
					ND/ED	SB/WB	4				OL SB/WB	4	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	I-MI <sup>3</sup>	NB/EB	
A. W. Grimes	Gattis School Rd	SH 45 WBFR	4.834	0.92	ND/ED	36/886	6D	6 Lane - Existing	6D	1.794	862	100%	900	900	2.472	2,472	1.642	789	829	1.683	ND/ED	SD/WD
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		i
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						i
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		i
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		i
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		i
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		i
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		l
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		1
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		l
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		l .
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						l .
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						l
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		l
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		l
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	<u> </u>
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	1
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		1
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		<b>-</b>
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		<b></b>
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		<del></del>
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						<del></del>
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		<del>                                     </del>
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	404	445				t
Hesters Crossing	IH 35 NBFR	S Mays St	484	0.09	_		4D	4 Lane - Existing	4D	1,324	1,255	100%	810	810	149	149	121	115	27	33		t
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		1
Hesters Crossing Rd	La Frontera Blvd CR 172	Dry Creek Dr	2,459	0.47	2		4D	4 Lane - Existing	4D	934	815	100%	810	810	754	754	435	380	319	375		<del>                                     </del>
Hesters Crossing Rd	Roundabout Ln	La Frontera Blvd	1,605	0.30	2	2	4D	4 Lane - Existing	4D	n/a	n/a	100%	810	810	492	492	644	100	254	200	251	<del>                                     </del>
High Country Blvd High Country Blvd	Gattis School Rd	SH 45 WBFR Roundabout Ln	4,037 779	0.76 0.15	2	2	3U 4D	2 Lane - Existing 2 Lane - Existing	3U 4D	838 838	238 238	100%	510 810	510 810	390 239	390 239	641 124	182 35	-251 115	208 204	201	1
Kenney Fort Blvd	US 79		5,039	0.15	3	3	4D 6D	,	4D 6D		238	100%	900	900	2,577	2,577	301	284	2,276	2,292		1
La Frontera	Hesters Crossing Rd	Forest Creek Blvd SH 45 WBFR	1,845	0.95	2	2	4D	6 Lane - Existing 4 Lane - Existing	4D	315 703	436	100%	810	810	566	566	246	152	320	414		1
Main St	Mays St	Georgetown St	2,442	0.35	1	1	2U	2 Lane - Existing	2U	539	294	100%	410	410	190	190	249	136	-60	54	60	
Main St	Brown St	Mavs St	935	0.46	1	+ 1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	73	73	2-10	100	-50		- 50	
McNeil Rd	1275' S of W Messick Loo	CR 172	3,777	0.16	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	020	200	107	200		f
McNeil Rd	E Bagdad Ave	Blair St	360	0.02	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%	410	410	28	28						ſ
McNeil Rd	IH 35 NBFR	Blair St	1.782	0.07	2	2	4U	4 Lane - Existing	4U	175	340	100%	680	680	459	459	59	115	400	344		f
McNeil Rd	CR 172	Deepwood Dr	1,102	0.34	2	2	4U	6 Lane - Enhanced	6D	860	591	100%	680	680	284	284	179	123	104	160		f
McNeil Rd	Deepwood Dr	IH 35 SBFR	5,193	0.21	2	2	4U	6 Lane - Enhanced	6D	825	521	100%	680	680	1,338	1,338	811	512	526	825		f
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	٠			020		ſ
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		ſ
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		ſ
Red Bud Ln	340' S of Forest Creek Dr	Gattis School Rd	3,735	0.03	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	3,733	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	-23	-90	91	90
Red Bud Ln	CR 123	270' N of Forest Ridge Blv	848	0.33	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		1
Red Bud Ln	270' N of Forest Ridge Blv		272	0.10	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 1	2U	4 Lane - Enhanced	4D	740	738	50%	410	410	10	10	19	19	-8	-8	8	8
Red Bud Ln		280' S of Woodlawn Ln	565	0.03	<del>                                     </del>	+ :-	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
		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		
		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		
		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 Wa	2,636	0.50	1	1	2U	4 Lane - Enhanced	2U	276	186	50%	410	410	102	102	69	46	33	56		
	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		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	
	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	
	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		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		
		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%										
		Mays St	698	0.13	1	1	2U	2 Lane - Existing	2U	n/a	n/a	100%										
	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 Demand Pk-Hr Total] - [Veh-Mi Demand Pk-Hr Total] \* [Veh-Mi