

AGENDA

City of Lucas Capital Improvements Advisory Committee May 11, 2017 6:30 PM City Hall - 665 Country Club Road – Lucas, Texas – 75002

Notice is hereby given that a City of Lucas Capital Improvements Advisory Committee meeting will be held on Thursday, May 11, 2017 at 6:30 pm at the Lucas City Hall, 665 Country Club Road, Lucas, Texas, 75002-7651 at which time the following agenda will be discussed.

Call to Order

- Roll Call
- Determination of Quorum
- Reminder to turn off or silence cell phones
- Pledge of Allegiance

Regular Agenda

- 1. Elect a Chairman and Vice Chairman to preside over meetings of the Capital Improvements Advisory Committee.
- 2. Discuss the City's Capital Improvement Plan, land use assumptions and provide written feedback to the Development Services Director.
- 3. Adjournment.

Certification

I hereby certify that the above notice was posted in accordance with the Texas Open Meetings Act on the bulletin board at Lucas City Hall, 665 Country Club Road, Lucas, TX 75002-7651 and on the City's website at www.lucastexas.us on or before 5:00 pm, May 5, 2017.

Stacy Henderson City Secretary

In compliance with the American with Disabilities Act, the City of Lucas will provide for reasonable accommodations for persons attending public meetings at City Hall. Requests for accommodations or interpretive services should be directed to Stacy Henderson at 972-912-1211 or by email at shenderson@lucastexas.us at least 48 hours prior to the meeting.





City of Lucas Advisory Committee Agenda Request May 11, 2017

Requester:	Development Services Director Joe Hilbourn
Agenda Item	<u>:</u>
Elect a Chair Advisory Con	rman and Vice Chairman to preside over meetings of the Capital Improvements nmittee.
Background	Information:
at its meetings Advisory Con	ucas Capital Improvements Advisory Committee shall elect a chairman to preside s and a Vice Chairman to serve in the absence of the Chairman. All meetings of the nmittee shall be open to the public and posted at least 72 hours in advance. A e membership of the Advisory Committee shall constitute a quorum.
Attachments	/Supporting Documentation:
NA	
Budget/Fina	ncial Impact:
NA	
Recommend	ation:
NA	
Motion:	

I make a motion to elect _____as Chairman to preside at its meetings and _____as

Vice Chairman to serve in the absence of the Chairman.

Item No. 02



City of Lucas Advisory Committee Agenda Request May 11, 2017

Requester: Development Services Director Joe Hilbourn

Agenda Item:

Discuss the City's Capital Improvement Plan, land use assumptions and provide written feedback to the Development Services Director.

Background Information:

The following is representative of the Capital Improvement Plan process:

- 1. Planning and Zoning Commission reviews and makes recommendations to City Council. (complete)
- 2. City Council reviews and incorporates their recommendations. (complete)
- 3. Capital Improvement Advisory Committee is formed and meetings scheduled. (complete)
- 4. Capital Improvement Advisory Committee is provided with Land Use Assumptions and CIP.
- 5. Committee provides written recommendations to Development Services Director by agreed upon deadline.
- 6. Staff incorporates recommendations and places item on Committee agenda for review to finalize recommendations to City Council.
- 7. City Council evaluates recommendations and finalizes CIP.
- 8. City contract with a consultant to review the impact fee calculations.
- 9. Schedule public hearing.
- 10. Ordinance approving CIP with land use assumptions and impact fee is placed on City Council agenda.

The City's Code of Ordinances states the following regarding required procedures of the Capital Improvement Advisory Committee:

Code of Ordinances, Section 10.02.003 - Advisory committee states:

- (a) The capital improvements advisory committee (advisory committee) shall consist of the planning and zoning commission. If the advisory committee does not include at least one representative of the real estate, development or building industry who is not an employee or official of a political subdivision or governmental entity, the city council shall appoint at least one such representative as an ad hoc voting member of the advisory committee. If any impact fee is to be applied in the extraterritorial jurisdiction of the city, a representative from the area shall be appointed by the city council.
- (b) The advisory committee serves in an advisory capacity and is established to:
 - (1) Advise and assist in the adoption of land use assumptions;



City of Lucas Advisory Committee Agenda Request May 11, 2017

- (2) Review the capital improvements plan and file written comments;
- (3) Monitor and evaluate implementation of the capital improvements plan;
- (4) File semiannual reports with respect to the progress of the capital improvements plan and report to the city council any perceived inequities in implementing the plan or imposing the impact fee; and
- (5) Advise the city staff and council of the need to update or revise the land use assumptions, capital improvements plan and impact fee.
- (c) All professional reports concerning the development and implementation of the capital improvements plan shall be made available to the advisory committee.
- (d) The advisory committee shall elect a chairperson to preside at its meetings and a vice-chairperson to serve in his absence. All meetings of the advisory committee shall be open to the public and posted at least 72 hours in advance. A majority of the membership of the advisory committee shall constitute a quorum.

Code of Ordinances, Section 10.02.004 - Periodic updates required states:

The land use assumptions and capital improvements plan upon which impact fees are based shall be updated at least every five years. The initial five-year period begins on the day the capital improvements plan was adopted, May 12, 1997. Alternatively, the city council may determine that no change to the land use assumptions, capital improvements plan, or impact fee is needed, pursuant to the provisions of section 395.075 of the Local Government Code.

The last review and update to the Capital Improvement Plan was conducted in 2011.

Attachments/Supporting Documentation:

1. Capital Improvement Plan

Budget/Financial Impact:

Depending on determination may impact the impact fee schedule.

Recommendation:

Review Capital Improvement Plan and provide written recommendations to the Development Services Director by agreed upon deadline.

Motion:

N/A

CITY OF LUCAS CAPITAL IMPROVEMENT PLAN (CIP) 2016-2030

CAPITAL IMPROVEMENT PLAN (CIP) 2016-2030 TABLE OF CONTENTS

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CAPITAL IMPROVEMENT PLAN (CIP) POLICIES AND PROCEDURES

Introduction

The City of Lucas Capital Improvement Plan (CIP) is a valuable part of the community planning process. The CIP links local infrastructure investments with comprehensive plan goals, land use ordinances, and economic development efforts. The CIP bridges the gap between planning and spending as well as between the visions of the comprehensive plan and the fiscal realities of improving and expanding community facilities. The purpose of the CIP policy is to create a fair and consistent process outlining procedures for proposing, evaluating, and adopting capital projects creating long-term benefits.

The CIP is a five-year planning document adopted by the City Council to plan for capital improvements related the City's street and drainage system, water system infrastructure and facilities. The CIP is not to be confused with the Capital Improvement Budget. The Capital Improvement Budget is prepared each year in conjunction with the annual Operating Budget. It generally includes only those projects from the first year of the CIP funded during the current year, and will address additional capital needs that are not included in the CIP, such as equipment and vehicles as recommended by the Vehicle Replacement Committee.

A capital project is defined as having a minimum cost of \$5,000 resulting in 1) the creation of a new fixed asset or 2) enhancement of an existing fixed asset.

Typically, the life expectancy of a capital project is 20 years, but it depends on the classification of the asset. Examples of capital projects include construction or expansion of public buildings, the acquisition of land for public use, planning, waterline/water system improvements, sewer mains as defined in the wastewater plan, engineering costs, and street and drainage construction. Example of an enhancement to a fixed asset would be reconstruction or reconditioning of streets.

Goals

- 1. Preserving public welfare and safety Providing the basic services that ensure public welfare and safety is the fundamental responsibility of local government.
- 2. Anticipating the demands of growth When related to the comprehensive plan, the capital improvement planning process works to anticipate investments in community facilities and infrastructure which are needed to serve or shape the pattern of growth and development.
- 3. Supporting economic development Having sound fiscal health and high quality facilities and services are attractive to business and potential residents. New corporate investment and reinvestment in a community may be influenced by improvements that enhance the quality of life for their labor force. Private decisions that bring jobs to an area and new taxes to a community are based not only on availability of water and sewer, but also upon the quality of schools, public safety, recreation opportunities, and many other services. The City of Lucas has identified two areas for commercial development that are located on its peripheral boundaries to complement the high quality of life and not hinder or negatively impact it.

- 4. Developing a fair distribution of capital costs The CIP process allows for public discussion of the preferred means of distributing capital costs over time. Funding strategies to consider include:
 - a. Annually, the City earmarks funds in the unrestricted fund balance to save for future projects.
 - b. Issuance of debt that is paid by both existing and future users of the facility.
 - c. User fees may be deemed more appropriate than property taxes.
 - d. Federal or state funds may also be available to help finance specific projects.

The CIP process can promote discussion of funding strategies.

5. Avoiding undue tax increases - Capital improvement planning is a means of avoiding the unpleasant surprise of expensive projects generating large property tax increases. While cost impacts cannot always be precisely determined in advance, the CIP fosters discussion of the distribution of the tax burden of new capital expenditures over time. A corollary benefit of fiscal stability and sound community facility planning can result in an improved bond rating.

Development Process

The CIP outlines the major utility infrastructure, streets and drainage, facilities, parks, and other improvements needed to serve the citizens, meet growth related needs, and comply with state and federal regulations.

Preparation - The Finance Director coordinates the annual update and adoption of the five-year CIP as a part of the annual budget process. The City Manager will lead the review and prioritization of capital projects for City Council consideration. The Finance Director, Public Works Director/City Engineer, Development Services Director, and the City Manager shall prioritize and rank projects according to the criteria listed in project criteria section. The CIP includes all costs associated with the design, rights-of-way acquisition, and construction of a project, as well as the estimated operating and maintenance costs, which impacts future operating budgets. The following guidelines will be utilized in developing the CIP:

- 1. Solicit citizen participation in formulating the identification and prioritization of the CIP.
- 2. Identify capital improvements through system models, repair and maintenance records, and growth demands.
- 3. Prioritize CIP projects based on input from City staff from all operational areas related to each project and its effect on operations.

The CIP will be submitted to City Council for review, revision, and approval. It will be reviewed and revised annually to include updated information.

Control – All capital project expenditures must be appropriated in the capital budget. The Finance Director or City Manager must certify the availability of resources before any capital project contract is presented to the City Council for approval.

Financing Programs - Recognizing that long-term debt is usually a more expensive financing method, alternative financing sources will be explored before debt is issued. When debt is issued, it will be used to acquire major assets with expected lives which equal or exceed the average life of the debt issue. Impact fees, assessments, pro-rata charges, or other fees may be used to fund

capital projects.

Reporting - Periodic financial reports will be prepared to enable the Department Directors to manage their capital budgets and to enable the Finance Department to monitor and control the budget as authorized. Capital project status reports will be presented to City Council.

Capital Improvement Plan (CIP) 2016-2020

Departments will include as part of their project proposal:

- 1. A Project Summary providing an overview and justification of the project.
- 2. A Fiscal Overview that includes estimated cost estimates and funding strategies that proposes funding options must be identified including:
 - a. Operating Revenues
 - b. Reserves and/or Debt
 - c. Grants
 - d. Partnerships with Other Organizations
 - e. Impact Fees
 - f. Developer Funded

Expense estimates must be identified in the section for design, site acquisition, construction, and estimated annual maintenance and operating cost impact based on the current estimated cost and values. To help manage cash flows, the financial plan must be complete to ascertain the impact on multiple fiscal years.

- 3. A Project Description section will provide additional project detail such as estimated linear feet, square feet or other applicable measurement, language that explains the overall need for the project as well as the benefit to the community.
- 4. Proposed Schedule identifying major milestones such as the design, bid, and construction phases.
- 5. Identification of the Project Manager.

Additional information may be requested by the City Manager and/or the members of the City Council.

Project Criteria

The evaluation of proposed capital projects will be in accordance with the following criteria:

- 1. Public Health, Safety, and Welfare Projects improving the public health, safety, and welfare of the community will be rated with highest priority. Projects must demonstrate the benefit provided to the community and possible risks from not completing the project. Compliance with state and federal mandates fall under this category.
- 2. Quality of Life Projects enhancing the quality of life enjoyed by citizens, such as equestrian and hiking trails throughout the city, will receive a high priority.

- 3. Funding Funding availability considerations are included when ranking projects. Grants and funding partnerships are considered first followed by operating revenues, fund balance, and debt. Debt may be issued to fund capital projects after alternative funding sources are explored.
- 4. Economic Development Projects enhancing and promoting the establishment of commercial business with the highest and best use for a parcel of land that is zoned commercial will be given the highest priority.

CIP Amendment

Amendments to the CIP effecting the current fiscal year must be recommended by the City Manager and approved by the City Council through a budget amendment. Amendments will be considered according to project scoring criteria as previously identified. Higher priority will be given to projects necessary for the public health, safety, and funding availability.

Any plan for the future must be based upon an estimate of certain characteristics. These characteristics may change and vary from time to time and when they do, the CIP should be updated. It may require that certain proposed improvements be implemented immediately or even delayed. Further, this plan is meant to be flexible. It is to be used as a tool to help establish a course of action.

CIP Project Prioritization

Using the criteria identified in the Project Criteria section of this document will assist staff and ultimately the elected officials in rating each project to facilitate prioritization.

There are various rating schemes available for establishing capital improvements priorities. The following set of standards are used as the evaluation method for the City:

- High Essential capital improvements are projects which are activities needed to promote
 public welfare and safety. Projects classified under this category are projects of the highest
 priority.
- Routine Necessary capital improvements are projects which are needed for the convenience
 and conservation of endangered resources, or for the completion of partially completed
 projects. Projects of this type include improvements which are considered necessary for a
 progressive growing community and for problems that do not negatively impact public
 welfare.
- Low Desirable capital improvements are projects which protect property, replace obsolete facilities, reduce operating costs and add to the attractiveness of the community. Projects of this type are not considered high priority and may be delayed, or removed from the CIP, as funding changes. Conversely, these types of projects can be brought forth when budget surpluses or additional funding sources are identified.
- **Deferrable** capital improvements are projects of the lowest priority. These projects can be postponed or eliminated from the CIP because of cost, timing, or need.

CIP Street and Trail Project List (2016 - 2031)

CIP At-A-Glance

The CIP At-A-Glance is to be used as a quick reference guide that summarizes the CIP. It indicates the fiscal year in which the project is scheduled to begin, a project number for identification purposes, the recommended priority of implementation, the preliminary estimated costs for improvements and the anticipated sources of funding for the recommended capital improvement projects.

YEAR	PROJECT NO.	PRIORITY	PROJECT	ESTIMATED COST	SOURCE OF FUNDING
	1	High	Reverse Curve on Winningkoff Road	\$964,000	Impact Fees and Certificate of Obligation
FY 2016- 2017	2	High	Stinson Road/W. Lucas Road Intersection	\$453,000	Impact Fees and Certificate of Obligation
2017	3	High	W. Lucas Road Reconstruction	\$1,500,000	Regional Toll Revenue (RTR), City of Lucas, and Collin County Bond
FY 2016- 2017	4	Routine	Maintenance of Multiple Streets	\$750,000	City - General Fund
5	5	High	Country Club Road/Estates Parkway Intersection	\$350,000	Certificate of Obligation
FY 2017	6	High	Winningkoff Road from the Reverse Curve to Snider Lane	\$1,400,000	Certificate of Obligation
2017- 2018	7	Routine	Trailhead on E. Winningkoff Road	\$240,000	\$131,000 City and \$109,000 Collin County Park Board Grant
	8	Routine	Maintenance of Multiple Streets	\$750,000	City - General Fund
	9	High	Stinson Road from Parker Road to Bristol Park	\$2,267,000	Certificate of Obligation
FY 2018-	10	High	Blondy Jhune Road Reconstruction from west bridge to Winningkoff	\$2,700,000	Certificate of Obligation
2019	11 A	T	A) Trail at Parker Road	# 00.000	\$ 16,000 City and \$
	11 B	Low	B) Trail at E. Winningkoff Road	\$80,000	64,000 Texas Parks Wild Life Department
	12	Routine	Maintenance of Multiple Streets	\$750,000	City - General Fund
FY 2019- 2020	13	High	Stinson Road from Bentwater Drive to reverse curve	\$2,000,000	Certificate of Obligation

YEAR	PROJECT NO.	PRIORITY	PROJECT	ESTIMATED COST	SOURCE OF FUNDING
	14	Routine	Maintenance of Multiple Streets	\$750,000	City - General Fund
	15	High	Winningkoff Rd from E. Lucas Road to the Reverse Curve	\$1,900,000	Certificate of Obligation
	16	Routine	Maintenance of Multiple Streets	\$750,000	City - General Fund
	17 A		A) Trail along Estates Parkway		
	17 B		B) Trail along Allison Ln		
	17 C	Low	C) Trail along W. Lucas Road		City and Possible State's Grants
FY 2020- 2021	17 D		D) Trail along Stinson Road	\$40,000	
	17 E		E) Trail along Powerline and Flood Plain		
	18 A		A) Trail along Blondy Jhune Road		City and Possible State Grants
	18 B	Low	B) Trail from Winningkoff Road to Trinity Trail	\$200,000	
	19	Low	Trail Head near the intersection of Southview Drive and Osage Lane	\$264,000	City and Possible Collin County Grants
FY 2021- 2026	20	Routine	Maintenance of Multiple Streets (5 years @ \$787,500/year)	\$3,937,500	City - General Fund
FY 2026- 2031	21	Routine	Maintenance of Multiple Streets (5 years @ \$826,875/year)	\$4,134,375	City - General Fund

	•	WINNINGK	OFF ROAD REVERSE CURVE	
PROJECT	SUMMARY	7		
Fiscal Year	Project No.	Category	Project	Priority
2016-2017	1	Roadway	Winningkoff Road Reverse Curve	High
FISCAL OV	ERVIEW			<u> </u>
Estimated C	ost	S	Source of Funding	
\$ 964,000		(Certificate of Obligation	
PROJECT	DESCRIPT	ION		
accommoda replaced with	te a school b h a three-way	us and an auto stop sign con	concrete pavement. The eastern curve with passing in opposite directions. The wester atrolled intersection with Forestview Drive. traight sections. The project length is appropriate the project length of the project length is approximately	rn curve will be The pavement
PROJECT	SCHEDUI	LE		
Project Begin Year Project Completion Year				

2018

PROJECT MANAGER: Stanton Foerster

2017

	STINSON ROAD/W. LUCAS ROAD INTERSECTION						
		,					
PROJECT SU	MMARY						
Fiscal Year	Project No.	Category	Project	Priority			
2016-2017	2	Roadways	Stinson Road/W.	High			
			Lucas Road				
			Intersection				
FISCAL OVE	RVIEW						
Estimated Cost		Source of Fu	ınding				
\$453,000		Certificates of	of Obligation				
PROJECT DE							
Provide for two	o northbound Stinso	n Road lanes: or	ne left turn and one right t	urn. Add W. Lucas			
Road westbour	nd to southbound lef	t turn lane and t	ransition. Improve drainag	e along the W.			
Lucas Road.							
PROJECT SO	CHEDULE						
Project Begin	Year	P	roject Completion Year				
2017	/						
PROIECT M	ANAGER: Stanton	Foerster					
- J							

	W. LUCAS ROAD RECONSTRUCTION				
PROJECT S	SUMMARY				
Fiscal Year	Project No.	Category	Project	Priority	
2016-2017	3	Roadways	W. Lucas Road Reconstruction	High	
FISCAL OV	ERVIEW				
Estimated Co	ost	Source of Fun	ding		
\$1,500,000		Regional Toll	Revenue (RTR), City of Lucas General F	und, and Collin	
		County Bond			
	DESCRIPTION				
			chool to Middleton Drive by adding a ce	nter, left turn lane.	
The project le	ength is approxir	nately 2.5 miles.			
PROJECT	SCHEDULE				
Project Begin Year Project Completion Year					
2017 2019					
			·		
PROJECT MANAGER: Stanton Foerster					

	MAINTENANCE OF MULTIPLE STREETS				
DDOIECT C	IMMADV				
PROJECT SI Fiscal Year	Project No.	Category	Project	Priority	
2016-2017	4	Roadways	Maintenance of Multiple Streets	Routine	
FISCAL OVI					
Estimated Cos	st	Source of Fun	0		
\$750,000		City – General	l Fund		
	ESCRIPTION				
Each year, roa	ds require prop	er maintenance 1	to provide reliable mobility at minimal co	st.	
PROJECT S	CHEDULE				
Project Begin	Project Begin Year Project Completion Year				
2017	2017 2017				
PROJECT MANAGER: Stanton Foerster					

COUNTRY CLUB ROAD/ESTATES PARKWAY INTERSECTION IMPROVEMENTS					
PROJECT S		_		T	
Fiscal Year	Project No.	Category	Project	Priority	
2017-2018	5	Roadways	Country Club Road/Estates Parkway	High	
		-	Intersection Improvements		
FISCAL OV	ERVIEW				
Estimated Co	st	Source of Fun	ding		
\$350,000		Certificate of (Obligation		
		_			
	ESCRIPTION				
			tates Parkway to southbound Country Club I	Road, and add a	
left turn lane f	from northboun	d Country Club	Road to westbound Estates Parkway.		
PROJECT S	SCHEDULE				
Project Begin	Year		Project Completion Year		
2017			2020		

WIN	WINNINGKOFF ROAD FROM THE REVERSE CURVE TO SNIDER LANE				
PROJECT S	UMMARY				
Fiscal Year	Project No.	Category	Project	Priority	
2017-2018	6	Roadways	Winningkoff Road from the Reverse Curve to Snider Lane	High	
FISCAL OVI					
Estimated Cos	st	Source of Fun	C		
\$1,400,000		Certificates of	Obligation		
	ESCRIPTION				
Reconstruct 0	.55 miles of Wir	nningkoff Road v	with concrete pavement and improve draina	ge.	
	PROJECT SCHEDULE				
Project Begin	Project Begin Year Project Completion Year				
2018	2018 2020				
PROJECT MANAGER: Stanton Foerster					

	TRAILHEAD ON E. WINNINGKOFF ROAD				
PROJECT SU	J MMARY				
Fiscal Year	Project No.	Category	Project	Priority	
2016-2021	7	Trails	Trailhead on E. Winningkoff Road	Routine	
FISCAL OVE		Source of Fund	dino		
\$240,000			- \$109,000 Collin County Parks and Open S	Space Grant	
	ESCRIPTION				
			structed during this fiscal year. Trailhead polletin board or kiosk for trail information.	rovides parking	
PROJECT S	PROJECT SCHEDULE				
Project Begin	Project Begin Year Project Completion Year				
2017	2017 2018				
PROJECT MANAGER:					

MAINTENANCE OF MULTIPLE STREETS					
PROJECT S	UMMARY				
Fiscal Year	Project No.	Category	Project	Priority	
2017-2018	8	Roadways	Maintenance of Multiple Streets	Necessary	
FISCAL OV	ERVIEW				
Estimated Co	st	Source of Fun	ding		
\$750,000		City – General	l Fund		
PROJECT I	ESCRIPTION	1			
Each year, roa	ads require prop	er maintenance 1	to provide reliable mobility at minimal co	st.	
PROJECT	SCHEDULE				
Project Begin	Project Begin Year Project Completion Year				
2018	2018 2018				
PROJECT	MANAGER:	Stanton Foerst	er		

	STINSON	ROAD FROM	I PARKER ROAD TO BRISTOL PARI	X	
PROJECT S	UMMARY				
Fiscal Year	Project No.	Category	Project	Priority	
2018-2019	9	Roadways	Stinson Road from Parker Road to Bristol Park	Necessary	
FISCAL OV		Source of Fun	ding		
\$2,267,000		Certificates of Obligation			
	DESCRIPTION				
mile long. It	does not include	the Muddy Cre	2514) to south of the Muddy Creek Bridge, ek Bridge. This is a straight and flat roadwive. The pavement could be a combination	ay with only one	

PROJECT SCHEDULE

TROJECT CONED CLE				
Project Begin Year	Project Completion Year			
2018	2020			
_				

	BL	ONDY JHUN	E ROAD RECONSTRUCTION	
PROJECT S	SUMMARY			
Fiscal Year	Project No.	Category	Project	Priority
2018-2019	10	Roadways	Blondy Jhune Road Reconstruction from the west bridge to Winningkoff Road	High
FISCAL OV				
Estimated Cost Source of Funding			nding	
\$2,700,000 Certificates of O		Certificates of	Obligation	
PROJECT I	DESCRIPTION	N		
Blondy Jhune	Road extending	g from Country (Club Road on the west to Winningkoff Road	on the east.
			Club Road on the east side of the west Blond	
			could be a combination of both asphalt and	
priority will b	e given to prote	ct the tree canop	by along the roadway. The project length is a	ibout a mile long.
PROJECT	SCHEDULE			
Project Begin	Year		Project Completion Year	
2018			2020	
			•	

A) TRAIL AT PARKER ROAD B) TRAIL AT E. WINNINGKOFF ROAD

PROJECT SUMMARY

Fiscal Year	Project No.	Category	Project	Priority
2016-2021	11	Trails	A) Trail at Parker Road	Desirable
			B) Trail at E. Winningkoff Road	

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$80,000	\$16,000 City - \$64,000 Texas Parks and Wildlife Grant

PROJECT DESCRIPTION

Trail will be constructed from W. Lucas Road to Parker Road and from E. Winningkoff Road to Trinity Trail. Few of the important steps that will be carried out during construction are staking of trail route, removal of rocks, trees and bushes, removal and clearance of vegetation and grading the trail bed on slopes etc.

PROJECT SCHEDULE

2018 2019	

MAINTENANCE OF MULTIPLE STREETS								
PROJECT SU	J MMARY							
Fiscal Year	Project No.	Category	Project	Priority				
2018-2019	12	Roadways	Maintenance of Multiple Streets	Routine				
FISCAL OVE	RVIEW	1						
Estimated Cos	Estimated Cost Source of Funding							
\$750,000 City – General Fund								
PROJECT D								
Each year, roads require proper maintenance to provide reliable mobility at minimal cost.								
PROJECT S	CHEDULE							
Project Begin Year Project Completion Year								
2019	2019							
PROJECT M	PROJECT MANAGER: Stanton Foerster							

STI	NSON ROAD	FROM BENT	WATER DRIVE TO THE REVERSE	CURVE	
Fiscal Year	Project No.	Category	Project	Priority	
2019-2020	13	Roadways	Stinson Road from Bentwater Drive to the Reverse Curve	High	
FISCAL OV		La			
Estimated Co	ost	Source of Funding			
\$2,000,000		Certificate of Obligation			
	DESCRIPTION				
			y Creek Bridge for about 0.66 miles to the re		
			addy Creek Bridge. This is a straight and fla		
no planned for	our-way intersect	ions. The paver	ment could be a combination of both asphal	t and concrete.	
PROJECT	SCHEDULE				
Project Begin	Year		Project Completion Year		
2019			2021		
			l		

MAINTENANCE OF MULTIPLE STREETS						
PROJECT S	UMMARY					
Fiscal Year	Project No.	Category	Project	Priority		
2019-2020	14	Roadways	Maintenance of Multiple Streets	Routine		
FISCAL OV	ERVIEW					
Estimated Cost Source of Funding						
\$750,000 City – Gener			l Fund			
PROJECT D	ESCRIPTION	J				
Each year, roads require proper maintenance to provide reliable mobility at minimal cost.						
PROJECT	SCHEDULE					
Project Begin Year Project Completion Year						
2020	2020 2020					
PROJECT MANAGER: Stanton Foerster						

	W	INNINGKOFI	F ROAD (SOUTH PORTION)	
PROJECT S	UMMARY			
Fiscal Year	Project No.	Category	Project	Priority
		Roadways	Winningkoff Road from E. Lucas Road to the Reverse Curve	High
FISCAL OVI		Source of Fun	dino	
		Certificate of Obligation		
South portion		Road, which ex	stends from E. Lucas Road on the south to	
			. The project length is about 0.6 miles and feet north of E. Lucas Road will be part of	
PROJECT S	SCHEDULE			
Project Begin	Year		Project Completion Year	

2022

2020

PROJECT MANAGER: Stanton Foerster

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MAINTENANCE OF MULTIPLE STREETS						
PROJECT S	UMMARY					
Fiscal Year	Project No.	Category	Project	Priority		
2020-2021	16	Roadways	Maintenance of Multiple Streets	Routine		
FISCAL OV	ERVIEW					
Estimated Cost Source of F			unding			
\$750,000 City -		City – Genera	City – General Fund			
PROJECT D	ESCRIPTION	1				
Each year, ro	ads require pro	oper maintenan	ice to provide reliable mobility at mini	mal cost.		
	•	•	•			
PROJECT S	SCHEDULE					
Project Begin Year Project Completion Year						
2021			2021			
PROIECT	MANAGER:	Stanton Foerste	e r			

A)	TRAIL	AL(ONG	ESTA	ATES	PAR	KWAY
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- B) TRAIL ALONG ALLISON LANE
- C) TRAIL ALONG W. LUCAS ROAD
- D) TRAIL ALONG STINSON ROAD
- E) TRAIL ALONG POWERLINE AND FLOODPLAIN

PROJECT SUMMARY

Fiscal Year Project	No. Category	Project	Priority
2021-2026 17	Trails	A) Trail along Estates Parkway B) Trail along Allison Lane C) Trail along W. Lucas Road D) Trail along Stinson Road E) Trail along Powerline and Floodplain	Desirable

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$40,000	City and State Grants

PROJECT DESCRIPTION

Trail will be constructed at multiple locations in Lucas. The routes planned for the trail includes from Estates Parkway to Country Club Road, trail along the W. Lucas Road, from W Lucas Road along Allison Lane to Estates Parkway. Trails on the southern part of Lucas include the trail along the power line and the flood plain and trail from powerline to north along Stinson Road. Few of the important steps that will be carried out during construction are staking of trail route, removal of rocks, trees and bushes, removal and clearance of vegetation and grading the trail bed on slopes.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2025	2026

A) TRAIL ALONG BLONDY JHUNE ROAD B) TRAIL FROM WINNINGKOFF ROAD TO TRINITY TRAIL

PROJECT SUMMARY

Fiscal Year	Project No.	Category	Project	Priority
2021-2026	18	Trails	A) Trail along Blondy Jhune Road B) Trail from Winningkoff Road to Trinity Trail	Desirable

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$200,000	City and State Grants

PROJECT DESCRIPTION

Trail will be constructed from Country Club Road to Winningkoff Road along Blondy Jhune Road, and from Winningkoff Road to Trinity Trail along the flood plain. Few of the important steps that will be carried out during construction are staking of trail route, removal of rocks, trees and bushes, removal and clearance of vegetation and grading the trail bed on slopes etc. Bridges over creeks may be required.

PROJECT SCHEDULE

2025 2026	Project Begin Year	Project Completion Year
	2025	2026

TRAILHEAD NEAR THE INTERSECTION
OF SOUTHVIEW DRIVE AND OSAGE LANE

PROJECT SUMMARY

Fiscal Year	Project No.	Category	Project	Priority
2021-2026	19	Trails	Trailhead near the intersection of Southview Drive and Osage Lane	Desirable

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$264,000	City and Collin County Grants

PROJECT DESCRIPTION

Trailhead near the intersection of Southview Drive and Osage Lane will be constructed during the fiscal year. Trailhead provides parking for a number of vehicles and will contain a bulletin board or kiosk for trail information.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2025	2026

MAINTENANCE OF MULTIPLE STREETS					
DDOIECT CI	IMMADV				
PROJECT SU Fiscal Year	Project No.	Category	Project	Priority	
2021-2026	20	Roadways	Maintenance of Multiple Streets	Necessary	
FISCAL OVE	FISCAL OVERVIEW				
Estimated Cost Source of Funding					
\$787,500 (per year) City – General I		al Fund			
PROJECT D	ESCRIPTION	1			
Each year, roads require proper maintenance to provide reliable mobility at minimal cost.					
,	CHEDULE	•	,		
Project Begin Year		Project Completion Year			
2021-2025		2022-2026			
PROJECT N	MANAGER:	Stanton Foerst	er		

MAINTENANCE OF MULTIPLE ROADWAYS				
PROJECT S	UMMARY			
Fiscal Year	Project No.	Category	Project	Priority
2026-2031	21	Roadways	Maintenance of Multiple Roadways	Necessary
FISCAL OV		C CE	T.	
Estimated Cost Source of Funding				
\$826,875 (per year) City – General Fu			al Fund	
PROJECT I	DESCRIPTION	J		
Each year, ro	oads require pro	oper maintenar	nce to provide reliable mobility at minin	nal cost.
PROJECT	SCHEDULE			
Project Begin Year		Project Completion Year	Project Completion Year	
2026-2030			2027-2031	
PROJECT	MANAGER:			

CIP Water System Project List (2016 - 2030)

CIP Water System Project List 2016 – 2020

Ci	ty of Lucas Water System Capital Improvement Plan Project	ts	
T_{i}	hese numbers were estimated and generated by BW2 Engineers in September 2010	6	
FY 2016-2017			
Engineering Priority	Project	Е	stimated Cost
1A	Parker Road 12-Inch Phase 1-1 (from Stinson Road to Enchanted Way)This project is need to improve infrastructure and to accommodate the TxDOT Parker Road widening which is causing Lucas to abandon an existing six-inch waterline along Parker Road. Funding Source: 21-8210-490-120 Begin in 2016 Complete in 2017	\$	150,000
2A	Parker Rd 8-Inch Phase 2 (from Shepherds Creek Drive to Santa Fe Trail)This project is need to improve infrastructure and to accommodate the TxDOT Parker Road widening which is causing Lucas to abandon an existing six-inch waterline along Parker Road. Funding Source: 21-8210-490-122 Begin in 2016 Complete in 2017	\$	36,004
3A	Wiltshire Court to the North Pump Station 8-Inch Connection This will allow the ground storage at the North Pump Station to be filled by the upper pressure plane and eliminate water service to seven homes. Funding Source: 21-8210-490-125 Begin in 2016 Complete in 2017	\$	21,000
4A	New 500,000 Gallon Water Tower at the North Pump Station or behind City Hall This will allow for the elimination of the lower pressure plane. Funding Source: 21-8210-490-125 Begin in 2016 Complete in 2018	\$	201,000
5A	System Pressure Reducing Valves (PRVs) These PRVs are needed when the lower pressure plane is eliminated. Funding Source: 21-8210-490-125 Begin in 2017 Complete in 2020	\$	120,000
6	25 Dead End Waterline Automatic Flushing Valves (AFVs) and loop dead end lines The location of these AFVs will installed where looping of the waterlines is not practical. Funding Source: 21-8210-490-123 Begin in 2016 Complete in 2017	\$	400,000

7A	Automatic Meter Reading (AMR) System with New Water Meters Funding Source: 21-8210-490-104 Begin in 2017 Complete in 2020		250,000
FY 2016-2017		\$	1,178,004
	FY 2017-2018		
Engineering Priority	Project	Е	Estimated Cost
1B	Parker Road 12-Inch Phase 1-1 (from Stinson Road to Enchanted Way) This project is need to improve infrastructure and to accommodate the TxDOT Parker Road widening which is causing Lucas to abandon an existing six-inch waterline along Parker Road. Funding Source: 21-8210-490-120 Begin in 2016 Complete in 2017	\$	142,037
2B	Parker Rd 8-Inch Phase 2 (from Shepherds Creek Drive to Santa Fe Trail) This project is need to improve infrastructure and to accommodate the TxDOT Parker Road widening which is causing Lucas to abandon an existing six-inch waterline along Parker Road. Funding Source: 21-8210-490-122 Begin in 2016 Complete in 2017	\$	290,000
3B	Wiltshire Court to the North Pump Station 8-Inch Connection This will allow the ground storage at the North Pump Station to be filled by the upper pressure plane. Funding Source: 21-8210-490-125 Begin in 2016 Complete in 2017	\$	77,237
4B	New 500,000 Gallon Water Tower at the North Pump Station or behind City Hall This will allow for the elimination of the lower pressure plane. Funding Source: 21-8210-490-125 Begin in 2016 Complete in 2018	\$	1,295,880
5B	System Pressure Reducing Valves (PRVs) These PRVs are needed when the lower pressure plane is eliminated. Funding Source: 21-8210-490-125 Begin in 2017 Complete in 2020	\$	120,000
7B	Automatic Meter Reading (AMR) System with New Water Meters Funding Source: 21-8210-490-104 Begin in 2017 Complete in 2020	\$	250,000
8A	Loop Dead End Lines The location to be determined. Funding Source: TBD Begin in 2016 Complete in 2020	\$	100,000
FY 2017-2018		\$ 2	2,275,154
	FY 2018-2019	I	
Engineering Priority	Project	Е	Estimated Cost

7C	Automatic Meter Reading (AMR) System with New Water Meters Funding Source: 21-8210-490-104	\$	248,785			
8B	Begin in 2017 Complete in 2020 Loop Dead End Lines The location to be determined. Funding Source: TBD Begin in 2016 Complete in 2020	\$	100,000			
9	Restore aging, existing pumps at the North Pump Station Funding Source: 21-8210-490-125 Begin in 2018 Complete in 2019	\$	153,821			
10	Parker Road Four-Inch Temporary Phase 3T (from Santa Fe Trail to Stinson Road) This project is need to accommodate the TxDOT Parker Road widening which is causing Lucas to abandon an existing six-inch waterline along Parker Road between Santa Fe Trail and Stinson Road. The four-inch line will provide temporary, minimal service to three residential properties: Waxler, McCreery, and Craft. When the properties along Parker Road develop, the four-inch line would be replaced by the developer with a 12-inch line. Funding Source: 21-8210-490-126 Begin in 2018 Complete in 2019	\$	132,919			
11	Add new pump house at the North Pump Station with three 500 GPM pumps This will provide redundancy to move water from the ground storage tanks to the new water tower in Priority 4. Funding Source: 21-8210-490-125 Begin in 2018 Complete in 2019	\$	432,575			
12	From Rollingwood Circle to Choice Lane to Lakeview Drive Six-Inch Waterline This project will improve water quality and fire protection to 97 homes. Funding Source: TBD Begin in 2018 Complete in 2019	\$	432,165			
13	Part 1 From Edgefield Lane to W. Lucas Road Six-Inch Waterline Part 2 From Cedar Bend Trail to E. Lucas Road Six-Inch Waterline This project will improve water quality and fire protection to 32 homes. Funding Source: TBD Begin in 2018 Complete in 2019	\$	113,530			
14	Part 1 From Country Club Road to Graham Lane to Rock Ridge Court to Rock Ridge Road Eight-Inch and Six-Inch Waterline Part 2 From Glenbrook Circle to Country Club Road Six-Inch Waterline This project will improve water quality and fire protection to 30 homes. Funding Source: TBD Begin in 2018 Complete in 2019	\$	571,775			
FY 2018-2019 Subtotal			2,185,570			
	FY 2019-2020	FY 2019-2020				

Engineering Priority	Project	Estimated Cost	
8C	Loop Dead End Lines The location to be determined. Funding Source: TBD Begin in 2016 Complete in 2020	\$	100,000
15	Snider Lane Eight-Inch (from Shady Lane to Sterling Brown Lane) This project is need as part of the Lakeview Downs subdivision, add fire hydrants, and will improve water quality on the east side of Lucas. Funding Source: TBD Begin in 2019 Complete in 2020	\$	594,549
16	Glencove Circle and Crestview Circle Six-Inch Extensions to Brockdale Park Road 8-Inch This project will improve water quality and fire protection to 15 homes and add fire hydrants to the area. Funding Source: TBD Begin in 2019 Complete in 2020	\$	224,255
17	From Stinson Road to Hickory Hill Street to Brookhaven Drive Eight-Inch Waterline This project will improve water quality and fire protection and add fire hydrants to 12 homes. Funding Source: TBD Begin in 2019 Complete in 2020	\$	226,383
18	Manor Lane Eight-Inch Waterline This will eliminate an undersized four-inch line, add fire hydrants, and improve the water looping between Estelle Lane and Winningkoff Road. Funding Source: TBD Begin in 2019 Complete in 2020	\$	313,951
19	From Estates Parkway to Rock Ridge Road to Fairbrook Circle Eight-Inch and 12-Inch Waterline This will eliminate an existing six-inch waterline and bring Fairbrook Circle into the Lucas Waterworks. Funding Source: TBD Begin in 2019 Complete in 2020	\$	491,953
20	Repaint 200,000 Gallon McGarity Ground Storage Tank Funding Source: TBD Begin in 2019 Complete in 2020	\$	150,150
21	From Enchanted Way to Brookhaven Drive Eight-Inch Waterline This project will improve water quality and fire protection to 23 homes. Funding Source: TBD Begin in 2019 Complete in 2020	\$	203,262
22	From Rock Ridge Road to Lovejoy High School Eight-Inch Waterline This project improves the looping on the west side of the city and at the high school. Funding Source: TBD Begin in 2019 Complete in 2020	\$	56,773
FY 2019-2020 S	Subtotal	\$ 2	2,361,276

FY 2016-2020 Total	\$ 8,500,004

	FY 2021 to 2025	Estimated Cost
8D	Loop Dead End Lines	\$ 500,000
23	950,000 Gallon McGarity Ground Storage Tank	\$1,279,093
24	Shiloh Dr/Toole Dr 6-Inch and Braehurn 8-Inch (Dead End Fix)	\$ 190,546
25	Parker Rd 12-Inch Phase 3 from Santa Fe Trl to Stinson Rd	\$ 353,184
26	Fairbrook Cr 8-Inch (Dead End Fix)	\$ 256,453
27	Lewis Ln/Shepherds Creek Dr/Green Acres Ln 8-Inch	\$ 300,113
28	Angel Pkwy/McGarity Ln/Estates Pkwy 8-Inch and 12-Inch	\$ 425,539
29	Ingram Ln/McGarity Ln/W Lucas Rd 6-Inch and 12-Inch	\$ 836,217
30	Estates Rd 8-Inch	\$ 232,014
31	Chisholm Trl/Caman Park Dr and Turnberry Ln/Highland Dr 8-Inch (Dead End Fixes)	\$ 322,203
32	Stinson Rd/Enchanted Wy 8-Inch	\$ 142,278
33	Stinson Rd/E Lucas Rd 8-Inch	\$ 147,827
34	Rock Creek Estates 6-Inch	\$ 175,610
35	Stinson Rd 12-Inch Connector	\$ 39,189
36	Repaint 750,000 Gallon N Pump Station Ground Storage Tank	\$ 409,303
37	Repaint 350,000 Gallon McGarity Ground Storage Tank	\$ 228,690
38	Parker Rd 12-Inch Phase 1-2, Parker Rd to Brookhaven Dr 8-Inch	\$ 835,239
39	Loop Dead End Waterlines	\$ 400,000
	2021 to 2025 Total	\$6,573,498
	FY 2026 to 2030	
40	500,000 Gallon McGarity Water Tower	\$1,372,140
41	Rock Ridge Rd 12-Inch from Fairbrook Cr to Exchange Pkwy	\$ 224,712
42	Lakeview Downs and Trinity Park 6-Inch 8-Inch Loop	\$1,135,688
43	Forest Grove Rd/Horseman Dr/Orr Rd 6-Inch and 8-Inch	\$ 867,422
44	Orr Rd (North) 8-Inch	\$ 426,327
45	PR 5252 6-Inch	\$ 93,486
46	Repaint 500,000 Gallon N Pump Station Ground Storage Tank	\$ 297,124
	2026 to 2030 Total	\$4,416,899
	2016 to 2030 Grand Total	\$19,490,401

PARKER ROAD PHASE 1 – SECTION 1 12-INCH WATER LINE

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2016-2017	1	Water	12-inch water line replacement

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$292,037	21-8210-490-120

PROJECT DESCRIPTION

This project is need to improve infrastructure and to accommodate the TxDOT Parker Road widening which is causing Lucas to abandon an existing six-inch waterline along Parker Road.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2016	2017

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$11,500.00	\$11,500
Traffic Control/ Construction Signing	1	\$3,000.00	\$3,000
Erosion Control	1	\$5,000.00	\$5,000
Trench Safety	2,115	\$1.50	\$3,173
Furnish & install 12" PVC, including Class "B" embedment	2,100	\$60.00	\$126,000
Furnish & install 12" PVC, by bore and jacking	25	\$320.00	\$8,000
Furnish & install 8" PVC, including Class "B" embedment	15	\$42.00	\$630
Furnish & install 8" PVC, by bore and jacking	25	\$280.00	\$7,000
Furnish & install 12" Bend	1	\$8,000.00	\$8,000
Furnish & install 8" Bend	1	\$800.00	\$800
Furnish & install 12" Tee	4	\$1,200.00	\$4,800
Furnish & install 12" Valve	5	\$1,500.00	\$7,500
Furnish & install 8" Valve	1	\$500.00	\$500
Furnish & install 12"x8" Reducer	1	\$1,200.00	\$1,200
Furnish & install Fire Hydrant, lead and 6" valve	3	\$4,000.00	\$12,000
Connections to Existing Water Lines	1	\$8,000.00	\$8,000
Cut and Plug Existing Water Lines	1	\$2,000.00	\$2,000
Remove Existing Fire Hydrant and Return to City	2	\$500.00	\$1,000
Furnish & install Water Service Connection	16	\$1,500.00	\$24,000
Block Sod	500	\$7.00	\$3,500
Seeding	3,000	\$1.25	\$3,750
Construction Contingency (10%)	1	\$24,135.25	\$24,135
Engineering/Surveying Services (10%)	1	\$26,548.78	\$26,549
	Total:	•	\$292,037

PARKER ROAD EIGHT-INCH WATER LINE

PROJECT SUMMARY

Fiscal Year	Engineering	Category	Project
	Priority No.		
2016-2017	2	Water	Lewis Lane/Parker Road 8-inch replacement water
			line

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$326,004	21-8210-490-122

PROJECT DESCRIPTION

This project is need to improve infrastructure and to accommodate the TxDOT Parker Road widening which is causing Lucas to abandon an existing six-inch waterline along Parker Road.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2016	2017

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$12,850.00	\$12,850
Traffic Control/ Construction Signing	1	\$2,000.00	\$2,000
Erosion Control	1	\$4,000.00	\$4,000
Trench Safety	3,500	\$1.50	\$5,250
Furnish & install 8" PVC, including Class "B" embedment	3,500	\$42.00	\$147,000
Furnish & install 8" PVC, by bore and jacking	80	\$280.00	\$22,400
Furnish & install 8" PVC, by wet bore	100	\$90.00	\$9,000
Furnish & install 8" PVC Creek Crossing, by bore and jacking	50	\$330.00	\$16,500
Furnish & install 8" Bend	1	\$4,050.00	\$4,050
Furnish & install 8" Valve	4	\$500.00	\$2,000
Furnish & install Fire Hydrant, including lead and 6" valve	4	\$4,000.00	\$16,000
Connections to Existing Water Lines	1	\$4,000.00	\$4,000
Block Sod	2,500	\$7.00	\$17,500
Seeding	5,500	\$1.25	\$6,875
Construction Contingency (10%)	1	\$26,942.50	\$26,943
Engineering/Surveying Services (10%)	1	\$29,636.75	\$29,637
	Total:	•	\$326,004

WILTSHIRE COURT EIGHT-INCH WATER LINE CONNECTION

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2016-2017	3	Water	Wiltshire Court 8-inch water line connection

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$98,237	21-8210-490-123

PROJECT DESCRIPTION

This will allow the ground storage at the North Pump Station to be filled by the upper pressure plane and eliminate water service to seven homes.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2016	2017

Description	Est.	Unit Cost	Cost
-	Quantity		
Mobilization, Bonds, Insurance	1	\$3,850.00	\$3,850
Traffic Control/ Construction Signing	1	\$500.00	\$500
Erosion Control	1	\$2,550.00	\$2,550
Trench Safety	975	\$1.50	\$1,463
Furnish & install 8" PVC, including Class "B" embedment	975	\$42.00	\$40,950
Furnish & install 8" PVC, by wet bore	120	\$90.00	\$10,800
Furnish & install 8" Bend	1	\$4,300.00	\$4,300
Furnish & install 8" Valve	2	\$500.00	\$1,000
Furnish & install Fire Hydrant, including lead and 6" valve	1	\$4,000.00	\$4,000
Connections to Existing Water Lines	1	\$5,000.00	\$5,000
Block Sod	700	\$7.00	\$4,900
Seeding	1,500	\$1.25	\$1,875
Construction Contingency (10%)	1	\$8,118.75	\$8,119
Engineering/Surveying Services (10%)	1	\$8,930.63	\$8,931
	Total:	.	\$98,237

500,000 GALLON WATER TOWER AT NORTH PUMP STATION

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2016-2018	4	Water	500,000-gallon elevated storage tank at North Pump Station

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$1,496,880	21-8210-490-125

PROJECT DESCRIPTIONThis will allow for the elimination of the lower pressure plane.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2016	2018

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$60,000.00	\$60,000
Traffic Control/ Construction Signing	1	\$1,000.00	\$1,000
Erosion Control	1	\$4,000.00	\$4,000
Furnish & install 500,000 Gallon Elevated Storage Tank	1	\$1,100,000.00	\$1,100,000
Furnish & install Yard Piping/Valving	1	\$20,000.00	\$20,000
Furnish & install Electrical	1	\$45,000.00	\$45,000
Furnish & install Tank Piping/Valving	1	\$20,000.00	\$20,000
Site Work	1	\$5,000.00	\$5,000
Seeding	4,000	\$1.25	\$5,000
Construction Contingency (10%)	1	\$126,000.00	\$126,000
Engineering/Surveying/Geotechnical Services (8%)	1	\$110,880.00	\$110,880
	Total:	•	\$1,496,880

	SYSTEM PRESSURE REDUCING VALVES								
PROJECT S	PROJECT SUMMARY								
Fiscal Year	Engineering Priority No.	Category	Project						
2017-2020	5	Water	System	n pressui	re reducing	valves			
FISCAL OV	ERVIEW								
Estimated Co	est	Source of Fu	ınding						
\$240,000		21-8210-490	0-125						
	DESCRIPTION	ha larran nuan	plane :	io olimpino	at a d				
These PKVs a	are needed when t	ne lower pressu	are piane i	is elimina	itea.				
PROJECT	SCHEDULE								
Project Begin	Year		Pr	oject Co	mpletion Y	ear ear			
2017			20)20					
PROJECT	DETAILS:								
1					Unit Cost	Cost			
Furnish and Install Residential Pressure Reducing Valve				Quantity 1,200	\$200.00	\$240,000			
<u> </u>							\$240,000		

DEAD END WATER LINE AUTOMATIC FLUSHING VALVES								
DDOIDOT								
PROJECT S								
Fiscal Year	Engineering Priority No.	Category	Project					
2016-2018	6	Water	Dead end war	ter line auto	matic flushing	valves and loops		
FISCAL OV	ERVIEW							
Estimated Co	ost	Source of Fun	ding					
\$100,000		21-8210-490-	123					
	DESCRIPTION of these AFVs w		where looping of t	he waterline	s is not practic	al.		
	SCHEDULE		T					
Project Begin	1 Year			Completion Year				
2016			2016					
PROJECT	DETAILS:							
Description			Est. Quantity	Unit Cost	Cost			
Furnish and Install Automatic Flushing Valve				25	\$4,000.00	\$60,000		
Install dead end loops at locations to be determined				•	\$340,000			
			Total:		\$400,000			

AMR SYSTEM WITH NEW WATER METERS								
PROJECT S	SUMMARY							
Fiscal Year	Engineering Priority No.	Category	Project					
2017-2020	7	Water	AN	AR System v	with new wa	iter meters		
FISCAL OV	ERVIEW							
Estimated Co	ost	Source of Fu	ınding	;)				
\$1,182,430		21-8210-49	0-104					
	DESCRIPTION							
AMR System	with new water n	neters						
PROJECT	SCHEDULE							
Project Begin	Year			Project Co	Completion Year			
2017				2020				
PROJECT	DETAILS:							
Description					Est. Quantity	Unit Cost	Cost	
Furnish and Install AMR System				1	\$629,860	\$629,860		
Annual Hosting and Maintenance Costs			5	\$23,785	\$118,925			
					Total:	1	\$748,785	

	LOOP DEAD END WATER LINES					
PROJECT S	SUMMARY					
Fiscal Year	Engineering Priority No.	Category	Project			
2016-2018	8	Water	Loop dead end water lines			
FISCAL OV	ERVIEW					
Estimated Co	ost	Source of Fundin	ng			
\$800,000		TBD				
The location	OESCRIPTION of these AFVs w SCHEDULE	vill be installed who	ere looping of th	ne waterline	s is not practi	cal.
Project Begin	Year		Project Co	ompletion \	Tear	
2017 2022			2022			
PROJECT	DETAILS:					
Description				Est. Quantity	Unit Cost	Cost
Install dead e	nd loops at locat	tions to be determi	ined		1	\$800,000
				Total:		\$800,000

RES	RESTORE AGING EXISTING PUMPS AT NORTH PUMP STATION					N	
PROJECT S	SUMMADV						
Fiscal Year	Engineering Priority No.	Category	Proje	ect			
2018-2019	9	Water	Resto	ore aging	existing pum	ps at North Pur	np Station
FISCAL OV	ERVIEW		-				
Estimated Co	ost	Source of Fu	anding				
\$153,821		TBD					
	DESCRIPTION g Existing Pump		mp Station				
Restore right	g Existing 1 ump	s at rotti i u	тр запон				
PROJECT	SCHEDULE						
7 0				mpletion Ye	ear		
2018 2019		2019					
PROJECT	DETAILS:						
Description				Est. Quantity	Unit Cost	Cost	
Mobilization, Bonds, Insurance				1	\$6,500.00	\$6,500	
Restore Existing Pump Station				1	\$120,000.00	\$120,000	
Seeding	Seeding				500	\$1.25	\$625
Construction Contingency (10%)				1	\$12,712.50	\$12,713	
Engineering/	Surveying Service	ces (10%)			1	\$13,983.75	\$13,984
	<u> </u>	<u> </u>			Total:		\$153,821

PARKER ROAD 4-INCH TEMPORARY PHASE 3T (FROM SANTA FE TRAIL TO STINSON ROAD)

PROJECT SUMMARY

Fiscal Year	Engineering	Category	Project
	Priority No.		
2018-2019	10	Water	Parker Road 4-inch temporary Phase 3T (from Santa Fe to Stinson Road)

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$132,919	TBD

PROJECT DESCRIPTION

This project is need to accommodate the TxDOT Parker Road widening which is causing Lucas to abandon an existing six-inch waterline along Parker Road between Santa Fe Trail and Stinson Road. The four-inch line will provide temporary, minimal service to three residential properties: Waxler, McCreery, and Craft. When the properties along Parker Road develop, the four-inch line would be replaced by the developer with a 12-inch line.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2018	2019

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$2,000.00	\$2,000
Erosion Control	1	\$1,000.00	\$1,000
Trench Safety	500	\$1.50	\$750
Furnish & install 4" PVC	2,500	\$30.00	\$75,000
Furnish & install 4" PVC, by bore	100	\$200.00	\$20,000
Furnish & install 4" Valve	1	\$100.00	\$100
Connections to Existing Water Lines	1	\$1,000.00	\$1,000
Cut and Plug Existing Water Lines	1	\$4,000.00	\$4,000
Furnish & install Water Service Connection	4	\$1,500.00	\$6,000
Construction Contingency (10%)	1	\$10,985.00	\$10,985
Engineering/Surveying Services (10%)	1	\$12,083.50	\$12,084
	Total:		\$132,919

PUMP STATION WITH THREE PUMPS AT NORTH PUMP STATION

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2018-2019	11	Water	Pump Station with three pumps at North Pump Station

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$432,575	TBD

PROJECT DESCRIPTION

This will provide redundancy to move water from the ground storage tanks to the new water tower in Priority 4.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2018	2019

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$17,000.00	\$17,000
Erosion Control	1	\$3,000.00	\$3,000
Furnish & install Pumps	3	\$20,000.00	\$60,000
Furnish & construct Pump Building	1	\$120,000.00	\$120,000
Furnish & install Pipes and Valves	1	\$50,000.00	\$50,000
Furnish & install Electrical	1	\$100,000.00	\$100,000
Site Work	1	\$5,000.00	\$5,000
Seeding	2,000	\$1.25	\$2,500
Construction Contingency (10%)	1	\$35,750.00	\$35,750
Engineering/Surveying/Geotechnical Services (10%)	1	\$39,325.00	\$39,325
	Total:	•	\$432,575

SIX INCH WATER LINE FROM ROLLINGWOOD CIRCLE TO CHOICE LANE TO LAKEVIEW DRIVE

PROJECT SUMMARY	UMMARY
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Fiscal Year	Engineering	Category	Project
	Priority No.		
2018-2019	12	Water	Six-inch waterline from Rollingwood Circle to Choice
			Lane to Lakeview Drive

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$432,165	TBD

PROJECT DESCRIPTION

This project will improve water quality and fire protection for 97 homes.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2018	2019

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds and Insurance	1	\$17,250.00	\$17,250
All Traffic Control, Barricading and Signing Measures	1	\$7,500.00	\$7,500
Temporary erosion control	1	\$8,500.00	\$8,500
Cut and Plug Existing 2" Water Line	3	\$450.00	\$1,350
Cut and Plug Existing 8" Water Line	1	\$500.00	\$500
Furnish and Install Trench Safety system	4550	\$1.75	\$7,963
Cut Out and Remove Existing 8" Water Line as needed	1	\$2,250.00	\$2,250
Cut Out and Remove Existing Reducer and 2" Water Line	3	\$1,500.00	\$4,500
Connect to Existing 6" Water Line	1	\$500.00	\$500
Furnish and Install 6" 11.25 Degree Bend	4	\$675.00	\$2,700
Furnish and Install 6" 90 Degree Bend	7	\$650.00	\$4,550
Furnish and Install 6"x6" Tee	1	\$1,000.00	\$1,000
Furnish and Install 6" Gate Valve	4	\$1,500.00	\$6,000
Furnish and Install Fire Hydrant, Valve and Riser	4	\$3,750.00	\$15,000
Furnish and Install 6" waterline w/Class "B" Embedment	4550	\$ 45.00	\$204,750
Furnish & Install 6" DR-18 w/14" Steel by Boring and Jacking	180	\$ 275.00	\$49,500
Furnish and Install Long Service Water Line	1	\$ 1,250.00	\$1,250
Furnish and Install Short Service Water Line	8	\$ 800.00	\$6,400
Furnish and Install Service Line Over 250 LF	2	\$ 5,000.00	\$10,000
Furnish and Place Block Sodding	1150	\$ 7.00	\$8,050
Furnish and Place Grass Seed	2500	\$ 1.25	\$3,125
Construction Contingency (10%)	1	\$36,263.75	\$36,264
Engineering/Surveying/Geotechnical Services (10%)	1	\$36,263.75	\$36,264
	Total:		\$432,165

EDGEFIELD LANE/W. LUCAS ROAD 6 INCH WATER LINE LOOP

PROJECT SUMMARY

Fiscal Year	Engineering	Category	Project
	Priority No.		
2018-2019	13	Water	Edgefield Lane/W. Lucas Road 6-inch water line loop

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$113,530	TBD

PROJECT DESCRIPTION

This project will improve water quality and fire protection to 32 homes.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2018	2019

Description	Est. Quantity	Unit Cost	Cost
Edgefield Ln./West Lucas Road 6" Water Line Loop		•	•
Mobilization, Bonds and Insurance	1	\$3,150.00	\$3,150
All Traffic Control, Barricading and Signing Measures	1	\$2,000.00	\$2,000
Temporary erosion control including operational control of SW3P	1	\$4,000.00	\$4,000
Cut and Plug Existing 2" Water Line	1	\$450.00	\$450
Furnish and Install Trench Safety system, design and implementation	535	\$1.75	\$936
Cut Out and Remove Existing 12" Water Line as needed, Furnish and Install 12"x6" Tee	2	\$2,750.00	\$5,500
Cut Out and Remove Existing 6" Water Line as needed, Furnish and Install 6"x6" Tee	1	\$1,850.00	\$1,850
Connect to Existing 6" Water Line	1	\$500.00	\$500
Furnish and Install 6" Gate Valve	2	\$1,500.00	\$3,000
Furnish and Install Fire Hydrant, Including 6" Gate Valve and Riser	1	\$3,750.00	\$3,750
Furnish and Install 6" AWWA C900 DR-18 w/Class "B" Embedment	535	\$45.00	\$24,075
Furnish and Install 6" AWWA C900 DR-18 w/14" Steel Casing by Boring and Jacking	50	\$275.00	\$13,750
Furnish and Install Long Service Water Line	2	\$1,250.00	\$2,500
Furnish and Place Block Sodding, including all Fertilization and Watering Until Established	100	\$7.00	\$700

Furnish and Place Grass Seed, including all Fertilization and Watering Until Established	280	\$1.25	\$350
	Edgefield	Subtotal:	\$66,511
Cedar Bend/East Lucas Road 6" Water Line Loop			
Mobilization, Bonds and Insurance	1	\$1,350.00	\$1,350
All Traffic Control, Barricading and Signing Measures	1	\$ 5,000.00	\$5,000
Temporary erosion control including operational control of SW3P	1	\$ 1,000.00	\$1,000
Furnish and Install Trench Safety system, design and implementation	105	\$ 1.75	\$184
Cut Out and Remove Existing 12" Water Line as needed, Furnish and Install 12"x6" Tee	1	\$ 2,750.00	\$2,750
Connect to Existing 6" Water Line	1	\$ 500.00	\$500
Furnish and Install 6" Gate Valve	1	\$ 1,500.00	\$1,500
Furnish and Install 6" AWWA C900 DR-18 w/Class "B" Embedment	105	\$ 45.00	\$4,725
Furnish and Install 6" AWWA C900 DR-18 w/14" Steel Casing by Boring and Jacking	40	\$ 275.00	\$11,000
Furnish and Place Grass Seed, Including all Fertilization and Watering Until Established	70	\$1.25	\$88
· ·	Cedar Bend Trail Subtotal:		\$28,096
	Project Subtotal:		\$94,608
Construction Contingency (10%)	1	\$9,461.00	\$9,461
Engineering/Surveying/Geotechnical Services (10%)	1	\$9,461.00	\$9,461
	Total:	•	\$113,530

GRAHAM LANE/ROCK RIDGE COURT 6 INCH/8 INCH WATER LINE LOOP

PROJECT SUMMARY

Fiscal Year	Engineering	Category	Project
	Priority No.		
2018-2019	14	Water	Graham Lane/Rock Ridge Court 6 inch/8-inch water
			line loop

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$571,775	TBD

PROJECT DESCRIPTION

This project will improve water quality and fire protection to 30 homes.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2018	2019

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$22,500.00	\$22,500
Traffic Control/ Construction Signing	1	\$2,000.00	\$2,000
Erosion Control	1	\$13,000.00	\$13,000
Trench Safety	5,230	\$1.50	\$7,845
Furnish & install 6" PVC, including Class "B" embedment	3,115	\$35.00	\$109,025
Furnish & install 6" PVC, by bore and jacking	80	\$260.00	\$20,800
Furnish & install 6" PVC, by wet bore	185	\$75.00	\$13,875
Furnish & install 8" PVC, including Class "B" embedment	2,115	\$42.00	\$88,830
Furnish & install 8" PVC, by bore and jacking	90	\$280.00	\$25,200
Furnish & install 8" PVC, by wet bore	100	\$90.00	\$9,000
Furnish & install 6" Bend	1	\$2,250.00	\$2,250
Furnish & install 8" Bend	1	\$1,085.00	\$1,085
Furnish & install 6" Valve	1	\$400.00	\$400
Furnish & install 8" Valve	4	\$500.00	\$2,000
Furnish & install 8"x6" reducer	1	\$700.00	\$700
Connections to Existing Water Lines	1	\$10,000.00	\$10,000
Furnish & install Fire Hydrant, including lead and 6" valve	9	\$4,000.00	\$36,000
Cut and Plug Existing Water Lines	1	\$4,500.00	\$4,500
Remove Existing Fire Hydrant and Return to City	2	\$500.00	\$1,000
Furnish & install Water Service Connection	28	\$1,500.00	\$42,000
Block Sod	8,000	\$7.00	\$56,000
Seeding	3,625	\$1.25	\$4,531
Construction Contingency (10%)	1	\$47,254.13	\$47,254
Engineering/Surveying Services (10%)	1	\$51,979.54	\$51,980
	Total:		\$571,775

SNIDER LANE 8 INCH REPLACEMENT WATER LINE

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2019-2020	15	Water	Snider Lane 8-inch replacement water line

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$594,549	TBD

PROJECT DESCRIPTION

This project is need as part of the Lakeview Downs subdivision, add fire hydrants, and will improve water quality on the east side of Lucas.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2019	2020

Description	Est.	Unit Cost	Cost
	Quantity		
		***	#
Mobilization, Bonds, Insurance	1	\$23,500.00	\$23,500
Traffic Control/ Construction Signing	1	\$6,500.00	\$6,500
Erosion Control	1	\$15,000.00	\$15,000
Trench Safety	6,075	\$1.50	\$9,113
Furnish & install 8" PVC, including Class "B" embedment	6,075	\$42.00	\$255,150
Furnish & install 8" PVC, by bore and jacking	80	\$280.00	\$22,400
Furnish & install 8" PVC Creek Crossing, by bore and jacking	50	\$330.00	\$16,500
Furnish & install 8" PVC, by wet bore	270	\$90.00	\$24,300
Furnish & install 8" Bend	1	\$3,150.00	\$3,150
Furnish & install 8" Tee	1	\$900.00	\$900
Furnish & install 8" Valve	7	\$500.00	\$3,500
Furnish & install Fire Hydrant, including lead and 6" valve	13	\$4,000.00	\$52,000
Connections to Existing Water Lines	1	\$4,000.00	\$4,000
Cut and Plug Existing Water Lines	1	\$2,225.00	\$2,225
Furnish & install Water Service Connection	20	\$1,500.00	\$30,000
Remove Existing Fire Hydrant and Return to City	1	\$500.00	\$500
Block Sod	1,000	\$7.00	\$7,000
Seeding	12,500	\$1.25	\$15,625
Construction Contingency (10%)	1	\$49,136.25	\$49,136
Engineering/Surveying Services (10%)	1	\$54,049.88	\$54,050
	Total:	I	\$594,549

GLENCOVE CIRCLE/CRESTVIEW CIRCLE 6 INCH WATER LINE LOOP

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2018-2019	16	Water	Glencove Circle/Crestview Circle 6-inch water line loop

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$224,255	TBD

PROJECT DESCRIPTION

This project will improve water quality and fire protection to 15 homes and add fire hydrants to the area.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2018	2019

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$9,000.00	\$9,000
Traffic Control/ Construction Signing	1	\$1,000.00	\$1,000
Erosion Control	1	\$5,100.00	\$5,100
Trench Safety	1,965	\$1.50	\$2,948
Furnish & install 6" PVC, including Class "B" embedment	1,965	\$35.00	\$68,775
Furnish & install 6" PVC, by bore and jacking	40	\$260.00	\$10,400
Furnish & install 6" PVC, by wet bore	180	\$75.00	\$13,500
Furnish & install 6" Bend	1	\$2,500.00	\$2,500
Furnish & install 6" Valve	2	\$400.00	\$800
Furnish & install Fire Hydrant, including lead and 6" valve	4	\$4,000.00	\$16,000
Connections to Existing Water Lines	1	\$7,750.00	\$7,750
Cut and Plug Existing Water Lines	1	\$4,000.00	\$4,000
Furnish & install Water Service Connection	14	\$1,500.00	\$21,000
Block Sod	3,000	\$7.00	\$21,000
Seeding	1,375	\$1.25	\$1,719
Construction Contingency (10%)	1	\$18,377.25	\$18,377
Engineering/Surveying Services (10%)	1	\$20,386.85	\$20,387
	Total:		\$224,255

HICKORY HILL 8 INCH WATER LINE LOOP

PROJECT SUMMARY

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Fiscal Year	Engineering	Category	Project		
	Priority No.				
2019-2020	17	Water	Hickory Hill 8-inch water line loop		

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$226,383	TBD

PROJECT DESCRIPTION

This project will improve water quality and fire protection to 12 homes.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2019	2020

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$9,000.00	\$9,000
Traffic Control/ Construction Signing	1	\$1,000.00	\$1,000
Erosion Control	1	\$5,300.00	\$5,300
Trench Safety	2,120	\$1.50	\$3,180
Furnish & install 8" PVC, including Class "B" embedment	2,120	\$42.00	\$89,040
Furnish & install 8" PVC, by bore and jacking	40	\$280.00	\$11,200
Furnish & install 8" PVC, by wet bore	100	\$90.00	\$9,000
Furnish & install 8" Bend	1	\$1,500.00	\$1,500
Furnish & install 8" Valve	3	\$500.00	\$1,500
Connections to Existing Water Lines	1	\$5,000.00	\$5,000
Furnish & install Fire Hydrant, including lead and 6" valve	2	\$4,000.00	\$8,000
Cut and Plug Existing Water Lines	1	\$1,800.00	\$1,800
Furnish & install Water Service Connection	12	\$1,500.00	\$18,000
Remove Existing Fire Hydrant and Return to City	2	\$500.00	\$1,000
Block Sod	3,015	\$7.00	\$21,105
Seeding	1,175	\$1.25	\$1,469
Construction Contingency (10%)	1	\$18,709.38	\$18,709
Engineering/Surveying Services (10%)	1	\$20,580.31	\$20,580
	Total:		\$226,383

MANOR LANE 8 INCH REPLACEMENT WATER LINE PROJECT SUMMARY Engineering Category Project Priority No.

Manor Lane 8-inch replacement water line

FISCAL OVERVIEW

Fiscal Year

2019-2020

Estimated Cost	Source of Funding
\$313,951	TBD

PROJECT DESCRIPTION

18

Water

This will eliminate an undersized four-inch line, add fire hydrants, and improve the water looping between Estelle Lane and Winningkoff Road.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2019	2020

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$12,500.00	\$12,500
Traffic Control/ Construction Signing	1	\$3,150.00	\$3,150
Erosion Control	1	\$7,500.00	\$7,500
Trench Safety	3,010	\$1.50	\$4,515
Furnish & install 8" PVC, including Class "B" embedment	3,010	\$42.00	\$126,420
Furnish & install 8" PVC, by bore and jacking	40	\$280.00	\$11,200
Furnish & install 8" PVC, by wet bore	115	\$90.00	\$10,350
Furnish & install 8" Bend	1	\$1,500.00	\$1,500
Furnish & install 8" Valve	3	\$500.00	\$1,500
Connections to Existing Water Lines	1	\$6,250.00	\$6,250
Furnish & install Fire Hydrant, including lead and 6" valve	6	\$4,000.00	\$24,000
Cut and Plug Existing Water Lines	1	\$2,000.00	\$2,000
Furnish & install Water Service Connection	6	\$1,500.00	\$9,000
Remove Existing Fire Hydrant and Return to City	5	\$500.00	\$2,500
Block Sod	5,025	\$7.00	\$35,175
Seeding	1,675	\$1.25	\$2,094
Construction Contingency (10%)	1	\$25,756.00	\$25,756
Engineering/Surveying Services (10%)	1	\$28,540.98	\$28,541
	Total:		\$313,951

ESTATES PARKWAY/ROCK RIDGE ROAD 8 INCH/12 INCH REPLACEMENT WATER LINE

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2019-2020	19	Water	Estates Parkway/Rock Ridge Road 8 inch/12-inch replacement water line

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$491,953	TBD

PROJECT DESCRIPTION

This project will improve water quality and fire protection to 23 homes.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2019	2020

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$19,500.00	\$19,500
Traffic Control/ Construction Signing	1	\$5,000.00	\$5,000
Erosion Control	1	\$10,400.00	\$10,400
Trench Safety	4,165	\$1.50	\$6,248
Furnish & install 8" PVC, including Class "B" embedment	925	\$42.00	\$38,850
Furnish & install 8" PVC, by wet bore	100	\$90.00	\$9,000
Furnish & install 12" PVC, including Class "B" embedment	3,240	\$60.00	\$194,400
Furnish & install 12" PVC, by bore and jacking	40	\$320.00	\$12,800
Furnish & install 12" PVC, by wet bore	120	\$130.00	\$15,600
Furnish & install 12" Bend	1	\$3,000.00	\$3,000
Furnish & install 12" Tee	1	\$1,250.00	\$1,250
Furnish & install 8" Valve	5	\$500.00	\$2,500
Furnish & install 12" Valve	1	\$1,500.00	\$1,500
Furnish & install Fire Hydrant, including lead and 6" valve	9	\$4,000.00	\$36,000
Connections to Existing Water Lines	1	\$5,000.00	\$5,000
Cut and Plug Existing Water Lines	1	\$2,250.00	\$2,250
Furnish & install Water Service Connection	14	\$1,500.00	\$21,000
Remove Existing Fire Hydrant and Return to City	6	\$500.00	\$3,000
Block Sod	1,325	\$7.00	\$9,275
Seeding	8,000	\$1.25	\$10,000
Construction Contingency (10%)	1	\$40,657.25	\$40,657
Engineering/Surveying Services (10%)	1	\$44,722.98	\$44,723
	Total:		\$491,953

REPAINT 200,000-GALLON GROUND STORAGE TANK AT MCGARITY PUMP STATION

Fiscal Year	Engineering	Category	Project
	Priority No.		
2019-2020	20	Water	Repaint 200,000-gallon ground storage tank at McGarity
			Pump Station

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$150,150	TBD

PROJECT DESCRIPTION

Repaint 200,000-gallon ground storage tank at McGarity Pump Station

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2019	2020

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$8,000.00	\$8,000
Repaint existing 200,000-gallon ground storage tank	1	\$120,000.00	\$120,000
Disinfect Tank	1	\$2,000.00	\$2,000
Construction Contingency (10%)	1	\$13,000.00	\$13,000
Engineering/Surveying Services (5%)	1	\$7,150.00	\$7,150
	Total:		\$150,150

ENCHANTED WAY/BROOKHAVEN DRIVE 8 INCH WATER LINE LOOP

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2019-2020	21	Water	Enchanted Way/Brookhaven Drive 8-inch water line loop

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$203,262	TBD

PROJECT DESCRIPTIONThis project will improve water quality and fire protection to 23 homes.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2019	2020

Description	Est.	Unit Cost	Cost
	Quantity		
Mobilization, Bonds, Insurance	1	\$8,000.00	\$8,000
Traffic Control/ Construction Signing	1	\$500.00	\$500
Erosion Control	1	\$1,400.00	\$1,400
Trench Safety	3,235	\$1.50	\$4,853
Furnish & install 8" PVC, including Class "B" embedment	3,235	\$42.00	\$135,870
Furnish & install Fire Hydrant, including lead and 6" valve	1	\$4,000.00	\$4,000
Connections to Existing Water Lines	1	\$3,500.00	\$3,500
Block Sod	150	\$7.00	\$1,050
Seeding	7,050	\$1.25	\$8,813
Construction Contingency (10%)	1	\$16,798.50	\$16,799
Engineering/Surveying Services (10%)	1	\$18,478.35	\$18,478
	Total:		\$203,262

ROCK RIDGE ROAD/LOVEJOY HIGH SCHOOL 8 INCH WATER LINE LOOP

PROJECT SUMMARY

Fiscal Year	Engineering Priority No.	Category	Project
2019-2020	22	Water	Rock Ridge Road/Lovejoy High School 8-inch water line loop

FISCAL OVERVIEW

Estimated Cost	Source of Funding
\$56,773	TBD

PROJECT DESCRIPTION

This project improves the looping on the west side of the city and improves water quality and fire protection at the high school.

PROJECT SCHEDULE

Project Begin Year	Project Completion Year
2019	2020

Description	Est. Quantity	Unit Cost	Cost
Mobilization, Bonds, Insurance	1	\$2,250.00	\$2,250
Traffic Control/ Construction Signing	1	\$1,000.00	\$1,000
Erosion Control	1	\$1,800.00	\$1,800
Trench Safety	770	\$1.50	\$1,155
Furnish & install 8" PVC, including Class "B" embedment	770	\$42.00	\$32,340
Furnish & install 8" Bend	1	\$750.00	\$750
Connections to Existing Water Lines	1	\$5,500.00	\$5,500
Seeding	1,700	\$1.25	\$2,125
Construction Contingency (10%)	1	\$4,692.00	\$4,692
Engineering/Surveying Services (10%)	1	\$5,161.20	\$5,161
	Total:		\$56,773

Notes:	1. Does not include any cost for right-of-way, easement, or property acquisition.
	2. Does not include any costs for permitting, mitigation, or construction testing and inspection.