ROADWAY CAPITAL IMPROVEMENTS PLAN AND LAND USE ASSUMPTIONS

FOR THE

CITY OF NEW FAIRVIEW

999 Illinois Lane New Fairview, Texas 76078 Phone (817) 638-5366 Fax (817) 638-5369



AUGUST 2023

Westwood

TX REG. ENGINEERING FIRM F-41756
TX REG. SURVEYING FIRM LS-10074301
4060 Bryant Irvin Road, Fort Worth, Texas 76109
(817) 412-7155 www.westwoodps.com
WW PROJECT NO. R0045103

Project Description and Summary

The City of New Fairview requested that Westwood Professional Services, INC. (Westwood) help with updating the City of New Fairview's Roadway Capital Improvements Plan and Land Use Assumptions. The Roadway Capital Improvements Plan, CIP, update is based on New Fairview's future roadway system needs along with the population projections¹ and future Land Use Assumptions. The Roadway CIP includes anticipated roadway needs for the City of New Fairview for the next ten (10) years (~2033). This Roadway CIP has divided the identified Roadway improvements into two (2) categories or priorities. The priorities are labeled in numerical order with one being the most immediate needs within a five (5) year window, and two being later needs within a ten (10) year window. Shall growth happen quicker along roadways that are categorized as priority 2, these can move up on the improvement plan list as needed. These priorities are fluid with how the city grows and needs them over the next ten (10) years.

The Roadway CIP is being done in order to update the impact fees for the City of New Fairview. The first step in updating the impact fees is updating and revising the Roadway CIP along with the Land Use Assumptions.

The proposed roadway widths are based on the cities Technical Construction Standards (TCS) and sized to carry the capacity for the ten-year growth projections. Minor arterial roadways will consist of a 4-lane undivided 65' back-to-back concrete curb and gutter corridor section. The collector roadways will be 2-lane undivided 41' back-to-back concrete curb and gutter roadways. This Roadway CIP provides a prioritized list of improvements, opinions of probable construction cost for the proposed Roadway improvements, and a map exhibit for the proposed roadway system improvements. The exact timing of construction needs within New Fairview over the next ten-year period is indeterminate, and this plan shall be revisited and updated as the city sees fit. Chapter 395 states a political subdivision shall go no longer than 5-years without updating their Land Use Assumptions and CIP. [CHAPTER 395: SEC. 395.052]

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¹ Growth projections are based upon anticipated developments within the city limits of New Fairview. Developers constantly reach out to city staff about city design standards and zoning for potential new developments in the city.

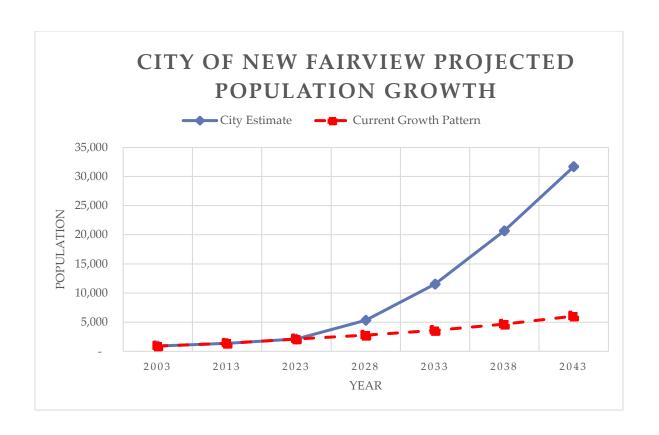
II. Land Use Assumptions

As previously mentioned in the project description, land use assumptions must be established in order to determine roadway demand, roadway sizes, population density and areas of growth. Dunaway & Associates has been periodically updating the Future Land Use map as developers come to the city with a concept plan for a future development. The assumptions made about the land use is with the most recent information that the city has of future developments. A copy of the Future Land Use Assumptions is attached in the appendix.

Population growth is an important factor to be considered with the land use assumptions. If there is no vacant or empty land and population growth is seen, then one can assume there will be redevelopment or denser population growth within existing areas. Conversely, if there are more empty areas in which to grow, one can assume that development will occur within these areas eventually. Thus, it is important to make sure that the land use assumptions along with the CIP take into account the population projections.

The table on the following page summarizes the historical and future population projections. The City of New Fairview had a population of 1,370 in the 2013 population estimate, and grew to 2,119 with the newest population numbers from NCTCOG.

The city has been in discussions with various developers and discussed future growth plans in the area. It has been forecasted that in the next 10-years upwards of 3,300 new homes could be built within the city limits. This doesn't take into account areas that are located within the cities ETJ that could eventually be annexed into city limits, adding to New Fairview's growth that isn't being modeled currently. The project population by the city was put together based off this information using an average number of persons per home (2.86), found from the Census Quickfacts for Wise County website. Potential for an additional 9,400 new residents within the city.



Year	2003	2013	2023	2028	2033	2038	2043
City Fating at a	995	1 270	2 4 4 0	F 222	11 540	20.602	24 702
•	905	1,370	2,119	5,322	11,540	20,692	31,703
Pattern	905	1 370	2 119	2 755	3 582	4 657	6,054
	City Estimate Current Growth	City Estimate 905 Current Growth	City Estimate 905 1,370 Current Growth	City Estimate 905 1,370 2,119 Current Growth	City Estimate 905 1,370 2,119 5,322 Current Growth	City Estimate 905 1,370 2,119 5,322 11,540 Current Growth	City Estimate 905 1,370 2,119 5,322 11,540 20,692 Current Growth

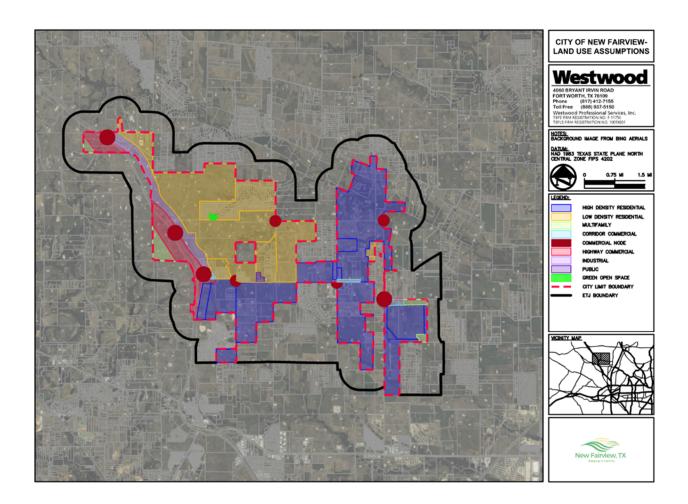
These population projection graph and chart help show the potential growth in new Fairview over the next 5, 10, 15 and 20 years. With the knowledge of future developers sharing concept plans with the city, the city was able to come up with a realistic growth pattern based off new developments being built in the city limits. This is shown against a current average growth rate that took place in New Fairview over the previous 20-years. It is easy to see that there is the potential for tons of growth in the coming years, and it is up to New Fairview to set themselves up for success to grow with these projected patterns.

III. Land Use Assumptions

With help of the cities contract Land Planner, Dunaway & Associates, we were able to create a Land Use Assumptions Map to anticipate not only where growth will be located within the city but also what type of growth. New Fairview is unique in the fact that it has a very large land area, 18.9 square miles within city limits, in which much of the land has not been developed and has many large parcels of land that are still intact. Even more land is in the cities ETJ of 41.0 square miles. With this amount of open land that has not yet been developed there is an abundant amount of space for developers to come in and begin building subdivisions.

The city is already reviewing construction plans for Settlers Glen and Paloma Ranch development in city limits, and Fairview Meadows that is located in the cities Southwest ETJ. Constellation Lakes and Shoop Ranch have created development agreements with the city, and are eager to begin construction in the next few years.

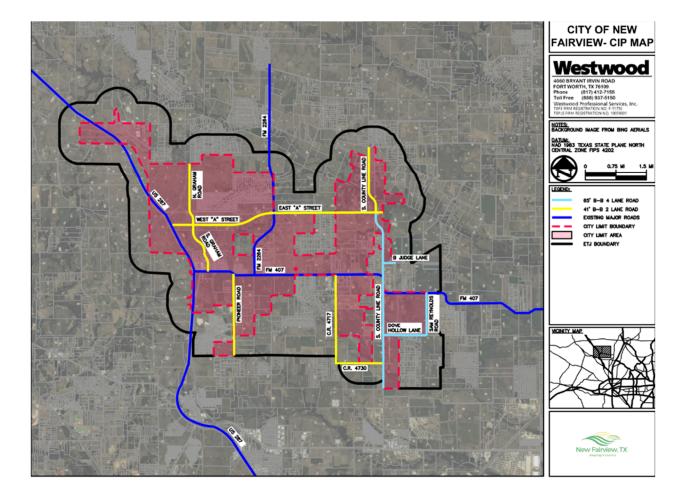
With these planned developments popping up inside the city limits, it isn't long until grocery stores and restaurants will follow. By already seeing where the subdivisions are starting to fall in line, we can make assumptions about where other types of development will begin to build in the city. Based off current zoning, a land assumptions were put together in the map shown on the next page. Having this map will help the city determine where larger portions of traffic could begin popping up in the next 10-years, which can help determine where new roads need to be built or expanded.



Land Use Assumptions Map

IV. Roadway Capital Improvement Plan

Now that the city has an idea of where they will see growth and what type they should expect, New Fairview needs a plan on how they will be able to handle the new increase in traffic across the city. First order is to create a Roadway Capital Improvement Plan. With help of city staff, Westwood has put together a CIP Map that includes proposed roadways inside city limits to help with the large, anticipated growth over the future 10-years. This map will show existing roadways that need to be reconstructed, existing roadways that need to be widened, and new roadways that would be added to handle population increase. 12 different street sections were identified as needing construction in the next 10-years. Below is a map showing roadway project locations, as well as a table separating anticipated priority of roadway projects into a 0-5 year and 5-10 year group. Priority of roads are fluid with how the city ends up growing in the next 10 years, and can change or be adjusted at any time.



	NEW	FAIRVIE	W CIP ROADS						
PRIORITY 1	(0-5 YEARS)		PRIORITY 2 (5-10 YEARS)						
ROADWAY	LENGTH (FT)	LANES	ROADWAY	LENGTH (FT)	LANES				
PIONEER ROAD	10,650	2	CR 4717	11,460	2				
S. COUNTY LINE ROAD	23,090	4	CR 4730	6,165	2				
DOVE HOLLOW	5,620	4	S. COUNTY LINE ROAD	8,785	2				
SAM REYNOLDS	5,620	4	NORTH GRAHAM ROAD	8,080	2				
B JUDGE LANE	1,730	4	WEST "A" STREET	13,480	2				
SOUTH GRAHAM ROAD	6,675	2	EAST "A" STREET	14,160	2				

V. Opinion of Probable Construction Cost (OPCC)

With a plan in place on where new roads will need to be built, the city now needs to look into the funding of this construction. Westwood was able to put together an OPCC based on each of the proposed roads shown in the CIP Map.

The estimated construction cost is based on estimated quantities of construction material needed for each roadway improvement based on how many lanes of traffic will be constructed. Estimated unit prices for each material were taken from TxDOT's website that has previously bid projects, and average cost of different materials. With this being an early rough estimate, a 25% contingency is added to the end of each roadway project. This contingency covers any missed items in this estimate that will later come up during design and construction. Engineering and Surveying will need to be done, and their combined estimated cost of 15% is added on as well, to come up with a final estimated total construction cost for all 12 roadways that are included on the CIP. These OPCC's can be found at the end of the document in the Appendix.

V. Conclusion

A Capital Improvement Plan is a good key to have for a growing city. With many planned developments underway in New Fairview and others reaching out to the city to discuss, having this CIP will help aide the city in growth. With a Land Use Assumption Map and the CIP Map, the city will later be able to implement Transportation Impact Fees that will be able to help pay for the costs of these new roadway projects. These impact fees will be paid by developers as they come to the city and begin discussing what type of development they will build. To keep the city on track for this growth it is important to note that updating and revising this CIP will make sure New Fairview is properly growing to handle all the new developments that are coming to the city.

PRELIMINARY

NOT FOR CONSTRUCTION

THIS DOCUMENT IS ISSUED FOR THE PURPOSE OF SCHEMATIC REVIEW ONLY AND IS NOT INTENDED FOR PERMITTING, BUILDING, OR CONSTRUCTION PURPOSES.

PLANS PREPARED UNDER THE DIRECT SUPERVISION OF RYLEY C. PAROULEK TEXAS LICENSE NO. 144188

DATE: 08/18/2023

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DATE: 08/18/2023

Sincerely,

Ryley Paroulek, P.E.

(817) 412-7155

APPENDIX

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas WW NO: R0045103
Road Name: Pioneer Road Date: 08/18/2023

			Estimated		
Bid No.	Bid Item Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization	LS	1	\$ 450,000.00	\$ 450,000.00
2	Barricades, Signs & Traffic Handling	LS	1	50,000.00	50,000.00
3	SWPPP	LS	1	20,000.00	20,000.00
4	Prepare Right of Way	STA	107	1,500.00	160,500.00
5	Project Sign	EA	2	1,000.00	2,000.00
6	Unclassified Roadway Excavation	CY	16,100	25.00	402,500.00
7	8" Flexbase	SY	50,800	25.00	1,270,000.00
8	8" Reinforced Concrete Pavement	SY	43,800	90.00	3,942,000.00
9	6" Monolithic Concrete Curb (TY II)	LF	21,300	25.00	532,500.00
10	4" Sidewalk	SY	5,900	45.00	265,500.00
11	6" Concrete Driveway Approach	SY	345	80.00	27,600.00
12	Storm Inlets	EA	42	9,000.00	378,000.00
13	24" Storm Pipe	LF	3,500	140.00	490,000.00
14	36" Storm Pipe	LF	7,100	175.00	1,242,500.00
15	4'x4' Junction Box	EA	8	10,000.00	80,000.00
16	4" Topsoil	SY	16,500	5.00	82,500.00
17	Block Sodding	SY	16,500	7.50	123,750.00
18	Signage and Striping	LS	1	10,000.00	10,000.00
	TOTAL				\$ 9,529,350.00
	25% CONTINGENCIES				\$ 2,382,000.00
	15% ENGINEERING AND SURVEY				\$ 1,429,000.00
	TOTAL OPINION OF CONSTRUCTION COSTS				\$ 13,340,350.00
	Assumptions:				
1	OPCC does not include ROW acquistition.				l .
2	Length of proposed roadway is 10650 FT				
3	Limits of proposed roadway are FM 407 to Pioneer Rd				
4	Road assumed to be 2 lane, 41' B-B, ROW of 60', to get estir	nate of	SY.		
5	Unclassified Roadway Excavation is assumed to be 12" deep				
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford	ced con	crete pavem	ent Typical Se	ection.
7	Each Driveway is assumed to have new driveway approach.				
8	Block sodding added to each side of roadway work areas to re	eplace (existing vegi	tation.	
9	5' Wide Sidewalk to be added to one side of Roadway.				
10	Two Storm Inlets placed every 500', and Junction Boxes ever	y 1,200	·		
11	Unit Costs were updated based off the last 6 month average	of TyDC	T hid prices		

Date: 08/18/2023

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas WW NO: R0045103 Road Name: S. County Line Road

_		_	Estimated		
d No.	Bid Item Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization	LS	1	\$ 1,100,000.00	\$ 1,100,000.0
2	Barricades, Signs & Traffic Handling	LS	1	100,000.00	100,000.0
3	SWPPP	LS	1	40,000.00	40,000.0
4	Prepare Right of Way	STA	231	1,500.00	346,500.0
5	Project Sign	EA	2	1,000.00	2,000.
6	Unclassified Roadway Excavation	CY	55,500	25.00	1,387,500.
7	8" Flexbase	SY	171.900	25.00	4,297,500.
8	8" Reinforced Concrete Pavement	SY	95,000	90.00	8,550,000.
9	6" Monolithic Concrete Curb (TY II)	LF	46.100	25.00	1,152,500.
10	4" Sidewalk	SY	12,800	45.00	576,000.
11	6" Concrete Driveway Approach	SY	600	80.00	48,000.
12	Storm Inlets	EA	92	9,000.00	828,000.
13	24" Storm Pipe	LF	7,600	140.00	1,064,000.
14	36" Storm Pipe	LF	15,300	175.00	2,677,500.
15	4'x4' Junction Box	EA	19	10,000.00	190,000.
16	4" Topsoil	SY	76,900	5.00	384,500.
17	Block Sodding	SY	76,900	7.50	576,750.
18	Signage and Striping	LS	1	21,500.00	21,500.
	TOTAL				\$ 23,342,250.
	25% CONTINGENCIES				\$ 5,835,000.
	15% ENGINEERING AND SURVEY				\$ 3,501,000.
	TOTAL OPINION OF CONSTRUCTION COSTS				\$ 32,678,250.0
	Assumptions:				
1	OPCC does not include ROW acquistition.				
2	Length of proposed roadway is 23090 FT				
3	Limits of proposed roadway are from south city limits to propo	sed Fa	st "Δ" Street		
4	Road assumed to be 4 lane, 65' B-B, ROW of 100', to get esti				
5	Unclassified Roadway Excavation is assumed to be 12" deep			the Road	
6	Price of Full Reconstruction based off 8" Flexbase, 8" Reinford				ion
7	Each Driveway is assumed to have new driveway approach.	eu con	crete pavem	ent Typical Seci	
8	Block sodding added to each side of roadway work areas to re	enlace (evisting vegit	ation	
9	5' Wide Sidewalk to be added to one side of Roadway.	spiace (Salating vegi	iduoII.	
10	Two Storm Inlets placed every 500', and Junction Boxes ever	v 1 200	!		
10	I wo otomi mice placed every 500, and sunction boxes ever	y 1,∠∪U	es.		

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas WW NO: R0045103
Road Name: Dove Hollow Lane Date: 08/18/2023

			Estimated			
Bid No.	Bid Item Description	Units	Quantity	Unit Cost		Total Cost
1	Mobilization	LS	1	\$ 280,000.00	\$	280,000.00
2	Barricades, Signs & Traffic Handling	LS	1	20,000.00		20,000.00
3	SWPPP	LS	1	10,000.00		10,000.00
4	Prepare Right of Way	STA	57	1,500.00		85,500.00
5	Project Sign	EA	2	1,000.00		2,000.00
6	Unclassified Roadway Excavation	CY	13,500	25.00		337,500.00
7	8" Flexbase	SY	41,800	25.00		1,045,000.00
8	8" Reinforced Concrete Pavement	SY	23,200	90.00		2,088,000.00
9	6" Monolithic Concrete Curb (TY II)	LF	11,200	25.00		280,000.00
10	4" Sidewalk	SY	3,100	45.00		139,500.00
11	6" Concrete Driveway Approach	SY	240	80.00		19,200.00
12	Storm Inlets	EA	22	9,000.00		198,000.00
13	24" Storm Pipe	LF	1,800	140.00		252,000.00
14	36" Storm Pipe	LF	3,700	175.00		647,500.00
15	4'x4' Junction Box	EA	4	10,000.00		40,000.00
16	4" Topsoil	SY	18,700	5.00		93,500.00
17	Block Sodding	SY	18,700	7.50		140,250.00
18	Signage and Striping	LS	1	5,000.00		5,000.00
	TOTAL				\$	5,682,950.00
	25% CONTINGENCIES				\$	1,420,000.00
	15% ENGINEERING AND SURVEY				\$	852,000.00
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	7,954,950.00
	Assumptions:					
1	OPCC does not include ROW acquistition.					
2	Length of proposed roadway is 5620 FT					
3	Limits of proposed roadway are from S. County Line Road to	Sam Re	eynolds Roa	d		
4	Road assumed to be 4 lane, 65' B-B, ROW of 100', to get est	imate o	f SY.			
5	Unclassified Roadway Excavation is assumed to be 12" deep	across	the width of	the Road		
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford	ced con	crete pavem	ent Typical Se	ctio	n.
7	Each Driveway is assumed to have new driveway approach.					
8	Block sodding added to each side of roadway work areas to re	eplace e	existing vegi	tation.		
9	5' Wide Sidewalk to be added to one side of Roadway.					
10	Two Storm Inlets placed every 500', and Junction Boxes ever					
11	Unit Costs are based off the last 6 month average of TxDOT	hid price	26			

WW NO: R0045103

Date: 08/18/2023

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas
Road Name: Sam Reynolds Road

			Estimated			
Bid No.	Bid Item Description	Units	Quantity	Unit Cost		Total Cost
	Mobilization	1.0	4	£ 270 000 00	Φ.	270,000,0
2		LS LS	1	\$ 270,000.00 20.000.00	\$	270,000.0 20.000.0
	Barricades, Signs & Traffic Handling SWPPP	LS	•	10,000.00		-,
<u>3</u>	Prepare Right of Way	STA	1 57	1,500.00		10,000.0 85,500.0
5	Project Sign	EA	2	1,000.00		2,000.0
6	Unclassified Roadway Excavation	CY	13,500	25.00		337,500.0
7	8" Flexbase	SY	41,800	25.00		1,045,000.0
8	8" Reinforced Concrete Pavement	SY	23,200	90.00		2,088,000.0
9	6" Monolithic Concrete Curb (TY II)	LF	11.200	25.00		280,000.0
10	4" Sidewalk	SY	3,100	45.00		139,500.0
11	6" Concrete Driveway Approach	SY	3,100	80.00		4,800.0
12	Storm Inlets	EA	22	9,000.00		198,000.0
13	24" Storm Pipe	LF	1,800	140.00		252,000.0
14	36" Storm Pipe	LF	3,700	175.00		647,500.0
15	4'x4' Junction Box	EA	3,700	10,000.00		40,000.0
16	4" Topsoil	SY	18,700	5.00		93,500.0
17	Block Sodding	SY	18,700	7.50		140,250.0
18	Signage and Striping	LS	10,700	5,000.00		5,000.0
10	orginage and outping	LO		3,000.00		0,000.0
	TOTAL				\$	5,658,550.0
	25% CONTINGENCIES				\$	1,414,000.0
	15% ENGINEERING AND SURVEY				\$	848,000.0
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	7,920,550.0
	Assumptions:					
1	OPCC does not include ROW acquistition.					
2	Length of proposed roadway is 5620 FT					
3	Limits of proposed roadway are FM 407 to Dove Hollow Lane					
4	Road assumed to be 4 lane, 65' B-B, ROW of 100', to get est		f SY.			
5	Unclassified Roadway Excavation is assumed to be 12" deep			the Road		
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford				ctio	n.
7	Each Driveway is assumed to have new driveway approach.			71		
8	Block sodding added to each side of roadway work areas to re	eplace (existing vegit	tation.		
9	5' Wide Sidewalk to be added to one side of Roadway.	•	<u> </u>			
10	Two Storm Inlets placed every 500', and Junction Boxes ever	y 1,200	!			
11	Unit Costs are based off the last 6 month average of TxDOT					

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas

Road Name: B Judge Lane

WW NO: R0045103

Date: 08/18/2023

			Estimated			
Bid No.	Bid Item Description	Units	Quantity	Unit Cost		Total Cost
1	Mobilization	LS	1	\$ 80,000.00	\$	80,000.00
2	Barricades, Signs & Traffic Handling	LS	1	10,000.00		10,000.00
3	SWPPP	LS	1	5,000.00		5,000.00
4	Prepare Right of Way	STA	18	1,500.00		27,000.00
5	Project Sign	EA	2	1,000.00		2,000.00
6	Unclassified Roadway Excavation	CY	2,600	25.00		65,000.00
7	8" Flexbase	SY	8,200	25.00		205,000.00
8	8" Reinforced Concrete Pavement	SY	7,200	90.00		648,000.00
9	6" Monolithic Concrete Curb (TY II)	LF	3,400	25.00		85,000.00
10	4" Sidewalk	SY	900	45.00		40,500.00
11	6" Concrete Driveway Approach	SY	30	80.00		2,400.00
12	Storm Inlets	EA	6	9,000.00		54,000.00
13	24" Storm Pipe	LF	500	140.00		70,000.00
14	36" Storm Pipe	LF	1,100	175.00		192,500.00
15	4'x4' Junction Box	EA	1	10,000.00		10,000.00
16	4" Topsoil	SY	2,600	5.00		13,000.00
17	Block Sodding	SY LS	2,600	7.50		19,500.00
18	Signage and Striping	LS	1	1,500.00		1,500.00
	TOTAL				\$	1,530,400.00
	25% CONTINGENCIES				\$	382,000.00
	15% ENGINEERING AND SURVEY				\$	229,000.00
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	2,141,400.00
	Assumptions:					
1	OPCC does not include ROW acquistition.					
2	Length of proposed roadway is 1730 FT					
3	Limits of proposed roadway are S. County Line Road to east	citv limit	ts			
4	Road assumed to be 4 lane, 65' B-B, ROW of 100', to get est					
5	Unclassified Roadway Excavation is assumed to be 12" deep			the Road		
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford	ced con	crete pavem	ent Typical Se	ctio	n.
7	Each Driveway is assumed to have new driveway approach.		•			
8	Block sodding added to each side of roadway work areas to re	eplace e	existing vegi	tation.		
9	5' Wide Sidewalk to be added to one side of Roadway.					
10	Two Storm Inlets placed every 500', and Junction Boxes ever					
11	Unit Costs are based off the last 6 month average of TxDOT					•

WW NO: R0045103

Date: 08/18/2023

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas

Road Name: S. Graham Road

Bid No.	Bid Item Description	Units	Estimated Quantity	Unit Cost		Total Cost
1	Mobilization	LS	1	\$ 300,000.00	Φ.	300,000.0
2	Barricades, Signs & Traffic Handling	LS	1	30,000.00	Ψ	30,000.0
3	SWPPP	LS	1	10,000.00		10,000.0
4	Prepare Right of Way	STA	67	1,500.00		100,500.0
5	Project Sign	EA	2	1,000.00		2,000.0
6	Unclassified Roadway Excavation	CY	10,100	25.00		252,500.0
7	8" Flexbase	SY	31,900	25.00		797,500.0
8	8" Reinforced Concrete Pavement	SY	27,500	90.00		2,475,000.0
9	6" Monolithic Concrete Curb (TY II)	LF	13,300	25.00		332,500.0
10	4" Sidewalk	SY	3,700	45.00		166,500.0
11	6" Concrete Driveway Approach	SY	300	80.00		24,000.0
12	Storm Inlets	EA	26	9,000.00		234,000.0
13	24" Storm Pipe	LF	2,200	140.00		308,000.0
14	36" Storm Pipe	LF	4,400	175.00		770,000.0
15	4'x4' Junction Box	EA	5	10,000.00		50,000.0
16	4" Topsoil	SY	10,300	5.00		51,500.0
17	Block Sodding	SY	10,300	7.50		77,250.0
18	Signage and Striping	LS	1	6,000.00		6,000.0
	TOTAL				\$	5,987,250.0
	25% CONTINGENCIES				\$	1,496,000.0
	15% ENGINEERING AND SURVEY				\$	898,000.0
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	8,381,250.0
	Assumptions:					
1	OPCC does not include ROW acquistition.					
2	Length of proposed roadway is 6675 FT					
3	Limits of proposed roadway are FM 407 to proposed West "A	" Street				
4	Road assumed to be 2 lane, 41' B-B, ROW of 60', to get estin					
5	Unclassified Roadway Excavation is assumed to be 12" deep			the Road		
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford				ctio	n.
7	Each Driveway is assumed to have new driveway approach.			/ [
8	Block sodding added to each side of roadway work areas to re	eplace (existina veai	tation.		
9	5' Wide Sidewalk to be added to one side of Roadway.		<u> </u>			
10	Two Storm Inlets placed every 500', and Junction Boxes ever	y 1,200	'			
11	Unit Costs are based off the last 6 month average of TxDOT I	<u>, .,_ 50</u>				

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas WW NO: R0045103
Road Name: CR 4717 Date: 08/18/2023

Bid No.	Bid Item Description	Units	Estimated Quantity	Unit Cost		Total Cost
1	Mobilization	LS	1	\$ 490,000.00	\$	490,000.0
2	Barricades, Signs & Traffic Handling	LS	1	50.000.00	Ψ_	50,000.0
3	SWPPP	LS	1	20,000.00		20,000.0
4	Prepare Right of Way	STA	115	1,500.00		172,500.0
5	Project Sign	EA	2	1,000.00		2,000.0
6	Unclassified Roadway Excavation	CY	17,400	25.00		435,000.0
7	8" Flexbase	SY	54,700	25.00		1,367,500.0
8	8" Reinforced Concrete Pavement	SY	47,200	90.00		4,248,000.0
9	6" Monolithic Concrete Curb (TY II)	LF	22,900	25.00		572,500.0
10	4" Sidewalk	SY	6,300	45.00		283,500.0
11	6" Concrete Driveway Approach	SY	375	80.00		30,000.0
12	Storm Inlets	EA	44	9,000.00		396,000.0
13	24" Storm Pipe	LF	3,800	140.00		532,000.0
14	36" Storm Pipe	LF	7,600	175.00		1,330,000.0
15	4'x4' Junction Box	EA	9	10,000.00		90,000.0
16	4" Topsoil	SY	17,800	5.00		89,000.0
17	Block Sodding	SY	17,800	7.50		133,500.0
18	Signage and Striping	LS	1	10,500.00		10,500.0
	TOTAL				\$	10,252,000.0
	25% CONTINGENCIES				\$	2,563,000.0
	15% ENGINEERING AND SURVEY				\$	1,537,000.0
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	14,352,000.0
	Assumptions:					
1	OPCC does not include ROW acquistition.					
2	Length of proposed roadway is 11460 FT					
3	Limits of proposed roadway are FM 407 to CR 4730					
4	Road assumed to be 2 lane, 41' B-B, ROW of 60', to get esting	nate of	SY.			
5	Unclassified Roadway Excavation is assumed to be 12" deep			the Road		
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford				ctio	n.
7	Each Driveway is assumed to have new driveway approach.			/ [
8	Block sodding added to each side of roadway work areas to re	eplace e	existing vegi	tation.		
9	5' Wide Sidewalk to be added to one side of Roadway.		<u> </u>			
10	Two Storm Inlets placed every 500', and Junction Boxes ever	y 1,200	1			
11	Unit Costs are based off the last 6 month average of TxDOT					

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas WW NO: R0045103 Road Name: CR 4730 Date: 08/18/2023

Bid No.	Bid Item Description	Units	Estimated Quantity	Unit Cost		Total Cost
SIU NO.	Bid item description	Units	Quantity	Unit Cost	_	Total Cost
1	Mobilization	LS	1	\$ 270,000.00	\$	270,000.0
2	Barricades, Signs & Traffic Handling	LS	1	20.000.00	۲	20.000.0
3	SWPPP	LS	1	10,000.00		10,000.0
4	Prepare Right of Way	STA	62	1,500.00		93,000.0
5	Project Sign	EA	2	1,000.00		2,000.0
6	Unclassified Roadway Excavation	CY	9,300	25.00		232,500.0
7	8" Flexbase	SY	29,400	25.00		735,000.0
8	8" Reinforced Concrete Pavement	SY	25,400	90.00		2,286,000.0
9	6" Monolithic Concrete Curb (TY II)	LF	12,300	25.00		307,500.0
10	4" Sidewalk	SY	3,400	45.00		153,000.0
11	6" Concrete Driveway Approach	SY	105	80.00		8,400.0
12	Storm Inlets	EA	24	9,000.00	<u> </u>	216,000.0
13	24" Storm Pipe	LF	2,000	140.00	<u> </u>	280,000.0
14	36" Storm Pipe	LF	4,100	175.00	<u> </u>	717,500.0
15	4'x4' Junction Box	EA	5	10,000.00	<u> </u>	50,000.0
16	4" Topsoil	SY	9,500	5.00	<u> </u>	47,500.0
17	Block Sodding	SY	9,500	7.50	<u> </u>	71,250.0
18	Signage and Striping	LS	1	5,500.00	<u> </u>	5,500.0
	TOTAL				\$	5,505,150.0
	25% CONTINGENCIES				\$	1,376,000.0
	15% ENGINEERING AND SURVEY				\$	825,000.0
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	7,706,150.0
	Assumptions:					
1	OPCC does not include ROW acquistition.					
2	Length of proposed roadway is 6165 FT					
3	Limits of proposed roadway are CR 4717 to S. County Line R	oad				
4	Road assumed to be 2 lane, 41' B-B, ROW of 60', to get estin		SY.			
5	Unclassified Roadway Excavation is assumed to be 12" deep			the Road		
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford				ctio	n
7	Each Driveway is assumed to have new driveway approach.	JUG 0011	c. cto pavein	one rypiour oc	3110	
		onloos :	ovietina vesi	tation		
8	Block sodding added to each side of roadway work areas to re	epiace (existing vegi	laliUII.		
9	5' Wide Sidewalk to be added to one side of Roadway.	4 000				
10	Two Storm Inlets placed every 500', and Junction Boxes ever	y 1,200	•			

WW NO: R0045103

Date: 08/18/2023

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas

Road Name: S. County Line Road

			Estimated		
Bid No.	Bid Item Description	Units	Quantity	Unit Cost	Total Cost
1	Mobilization	LS	1	\$ 380,000.00	\$ 380,000.00
2	Barricades, Signs & Traffic Handling	LS	1	40,000.00	40,000.00
3	SWPPP	LS	1	15,000.00	15,000.00
4	Prepare Right of Way	STA	88	1,500.00	132,000.00
5	Project Sign	EA	2	1,000.00	2,000.00
6	Unclassified Roadway Excavation	CY	13,300	25.00	332,500.00
7	8" Flexbase	SY	41,900	25.00	1,047,500.00
8	8" Reinforced Concrete Pavement	SY	36,200	90.00	3,258,000.00
9	6" Monolithic Concrete Curb (TY II)	LF	17,500	25.00	437,500.00
10	4" Sidewalk	SY	4,800	45.00	216,000.00
11	6" Concrete Driveway Approach	SY	75	80.00	6,000.00
12	Storm Inlets	EA	34	9,000.00	306,000.00
13	24" Storm Pipe	LF	2,900	140.00	406,000.00
14	36" Storm Pipe	LF	5,800	175.00	1,015,000.00
15	4'x4' Junction Box	EA	7	10,000.00	70,000.00
16	4" Topsoil	SY	13,600	5.00	68,000.00
17	Block Sodding	SY	13,600	7.50	102,000.00
18	Signage and Striping	LS	1	8,000.00	8,000.00
	TOTAL				\$ 7,841,500.00
	25% CONTINGENCIES				\$ 1,960,000.00
	15% ENGINEERING AND SURVEY				\$ 1,176,000.00
	TOTAL OPINION OF CONSTRUCTION COSTS				\$ 10,977,500.00
	Assumptions:				
1	OPCC does not include ROW acquistition.				
2	Length of proposed roadway is 8785 FT				
3	Limits of proposed roadway are proposed East "A" Street to n	orth city	y limits		
4	Road assumed to be 2 lane, 41' B-B, ROW of 60', to get estin	nate of	SY.		
5	Unclassified Roadway Excavation is assumed to be 12" deep	across	the width of	the Road	
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford	ced con	crete pavem	ent Typical Se	ction.
7	Each Driveway is assumed to have new driveway approach.				
8	Block sodding added to each side of roadway work areas to re	eplace e	existing vegi	tation.	
9	5' Wide Sidewalk to be added to one side of Roadway.				
10	Two Storm Inlets placed every 500', and Junction Boxes ever			-	-
11	Unit Costs are based off the last 6 month average of TxDOT	hid price			

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas WW NO: R0045103 Road Name: N. Graham Road Date: 08/18/2023

Bid No.	Bid Item Description	Units	Estimated Quantity	Unit Cost		Total Cost
1	Mobilization	LS	1	\$ 350,000.00	\$	350,000.0
2	Barricades, Signs & Traffic Handling	LS	1	30.000.00	Ψ	30,000.0
3	SWPPP	LS	1	15,000.00		15,000.0
4	Prepare Right of Way	STA	81	1,500.00	 	121,500.0
5	Project Sign	EA	2	1,000.00	-	2,000.0
6	Unclassified Roadway Excavation	CY	12,200	25.00	T	305,000.0
7	8" Flexbase	SY	38,600	25.00	T	965,000.0
8	8" Reinforced Concrete Pavement	SY	33,300	90.00		2,997,000.0
9	6" Monolithic Concrete Curb (TY II)	LF	16,100	25.00		402,500.0
10	4" Sidewalk	SY	4,400	45.00		198,000.0
11	6" Concrete Driveway Approach	SY	75	80.00		6,000.0
12	Storm Inlets	EA	32	9,000.00		288,000.0
13	24" Storm Pipe	LF	2,600	140.00		364,000.0
14	36" Storm Pipe	LF	5,300	175.00		927,500.0
15	4'x4' Junction Box	EA	6	10,000.00		60,000.0
16	4" Topsoil	SY	12,500	5.00		62,500.0
17	Block Sodding	SY	12,500	7.50		93,750.0
18	Signage and Striping	LS	1	7,500.00	<u> </u>	7,500.0
	TOTAL				\$	7,195,250.0
	25% CONTINGENCIES				\$	1,798,000.0
	15% ENGINEERING AND SURVEY				\$	1,079,000.0
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	10,072,250.0
	Assumptions:					
1	OPCC does not include ROW acquistition.		•	•		
2	Length of proposed roadway is 8080 FT					
3	Limits of proposed roadway are proposed West "A" Street to	north ci	tv limits			
4	Road assumed to be 2 lane, 41' B-B, ROW of 60', to get estin					
5	Unclassified Roadway Excavation is assumed to be 12" deep			the Road		
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinford				ctio	n.
7	Each Driveway is assumed to have new driveway approach.					
8	Block sodding added to each side of roadway work areas to re	eplace (existina veai	tation.		
9	5' Wide Sidewalk to be added to one side of Roadway.		<u> </u>			
10	Two Storm Inlets placed every 500', and Junction Boxes ever	y 1,200	1			
11	Unit Costs are based off the last 6 month average of TxDOT					

WW NO: R0045103

Date: 08/18/2023

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas
Road Name: West "A" Street

			Estimated							
Bid No.	Bid Item Description	Units	Quantity	Unit Cost	L	Total Cost				
1	Mobilization	LS	1	\$ 580,000.00	\$	580,000.0				
2	Barricades, Signs & Traffic Handling	LS	1	60,000.00	-	60,000.0				
3	SWPPP	LS	1	25,000.00		25,000.0				
4	Prepare Right of Way	STA	135	1,500.00		202,500.0				
5	Project Sign	EA	2	1,000.00		2,000.0				
6	Unclassified Roadway Excavation	CY	20,400	25.00		510,000.0				
7	8" Flexbase	SY	64,400	25.00		1,610,000.0				
8	8" Reinforced Concrete Pavement	SY	55,500	90.00		4,995,000.0				
9	6" Monolithic Concrete Curb (TY II)	LF	26,900	25.00		672,500.0				
10	4" Sidewalk	SY	7,400	45.00		333,000.0				
11	6" Concrete Driveway Approach	SY	150	80.00		12,000.0				
12	Storm Inlets	EA	52	9,000.00		468,000.0				
13	24" Storm Pipe	LF	4,400	140.00		616,000.0				
14	36" Storm Pipe	LF	8,900	175.00		1,557,500.0				
15	4'x4' Junction Box	EA	11	10,000.00		110,000.0				
16	4" Topsoil	SY	20,900	5.00		104,500.0				
17	Block Sodding	SY	20,900	7.50		156,750.0				
18	Signage and Striping	LS	1	12,500.00		12,500.0				
	TOTAL				\$	12,027,250.0				
	25% CONTINGENCIES				\$	3,006,000.0				
	15% ENGINEERING AND SURVEY				\$	1,804,000.0				
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	16,837,250.0				
	Assumptions:									
1	OPCC does not include ROW acquistition.									
2	Length of proposed roadway is 13480 FT									
3	Limits of proposed roadway are US 287 to FM 2264									
4	Road assumed to be 2 lane, 41' B-B, ROW of 60', to get estimate of SY.									
5	Unclassified Roadway Excavation is assumed to be 12" deep across the width of the Road									
6	Price of Full Reconstrucion based off 8" Flexbase, 8" Reinforced concrete pavement Typical Section.									
7	Each Driveway is assumed to have new driveway approach.									
8	Block sodding added to each side of roadway work areas to replace existing vegitation.									
9	5' Wide Sidewalk to be added to one side of Roadway.									
10	Two Storm Inlets placed every 500', and Junction Boxes every 1,200'									
11	Unit Costs are based off the last 6 month average of TxDOT									

WW NO: R0045103

Date: 08/18/2023

ENGINEER'S PREDESIGN OPINION OF CONSTRUCTION COST

Client Name: City of New Fairview, Texas
Road Name: East "A" Street

id No.	Bid Item Description	Units	Estimated Quantity	Unit Cost		Total Cost				
1	Mobilization	LS	1	\$ 610,000.00	\$	610,000.0				
2	Barricades, Signs & Traffic Handling	LS	1	60.000.00	Ψ.	60,000.0				
3	SWPPP	LS	1	25,000.00		25,000.0				
4	Prepare Right of Way	STA	142	1,500.00		213,000.0				
5	Project Sign	EA	2	1,000.00		2,000.0				
6	Unclassified Roadway Excavation	CY	21,500	25.00		537,500.0				
7	8" Flexbase	SY	67,600	25.00		1,690,000.0				
8	8" Reinforced Concrete Pavement	SY	58,300	90.00		5,247,000.				
9	6" Monolithic Concrete Curb (TY II)	LF	28,300	25.00		707,500.0				
10	4" Sidewalk	SY	7,800	45.00		351,000.				
11	6" Concrete Driveway Approach	SY	150	80.00		12,000.				
12	Storm Inlets	EA	56	9,000.00		504,000.				
13	24" Storm Pipe	LF	4,700	140.00		658,000.				
14	36" Storm Pipe	LF	9,400	175.00		1,645,000.				
	4'x4' Junction Box	EA	11	10,000.00		110,000.				
	4" Topsoil	SY	22,000	5.00		110,000.				
	Block Sodding	SY	22,000	7.50		165,000.				
18	Signage and Striping	LS	1	13,000.00		13,000.				
	TOTAL				\$	12,660,000.				
	25% CONTINGENCIES				\$	3,165,000.				
	15% ENGINEERING AND SURVEY				\$	1,899,000.				
	TOTAL OPINION OF CONSTRUCTION COSTS				\$	17,724,000.0				
	Assumptions:									
1	OPCC does not include ROW acquistition.									
2	Length of proposed roadway is 14160 FT									
3	Limits of proposed roadway are FM 2264 to east city limits									
4	Road assumed to be 2 lane, 41' B-B, ROW of 60', to get estimate of SY.									
5	Unclassified Roadway Excavation is assumed to be 12" deep across the width of the Road									
6	Price of Full Reconstruction based off 8" Flexbase, 8" Reinforced concrete pavement Typical Section.									
7										
-	Each Driveway is assumed to have new driveway approach.									
8	Block sodding added to each side of roadway work areas to replace existing vegitation.									
9	5' Wide Sidewalk to be added to one side of Roadway.									
10	Two Storm Inlets placed every 500', and Junction Boxes every 1,200' Unit Costs are based off the last 6 month average of TxDOT bid prices.									