



AGENDA

CITY COUNCIL SPECIAL MEETING

APRIL 11, 2023 @ 6:00 PM

Notice is hereby given the City Council for the City of Parker will meet on Tuesday, April 11, 2023, at 6:00 P.M. at the Parker City Hall, 5700 E. Parker Road, Parker, Texas 75002. The City Council meeting will be open to the public and live streamed.

Pursuant to Texas Government Code § 551.127, notice is given that it is the intent of the City Council that a quorum of the Council will be physically present for the above-referenced meeting at Parker City Hall, 5700 E. Parker Road, Parker Texas. Some council members or City employees may participate in this meeting remotely by means of video conference call in compliance with state law.

CALL TO ORDER – Roll Call and Determination of a Quorum

EXECUTIVE SESSION START TO FINISH - Pursuant to the provisions of Chapter 551, Texas Government Code the City Council may hold a closed meeting.

RECESS TO CLOSED EXECUTIVE SESSION IN ACCORDANCE WITH THE AUTHORITY CONTAINED IN:

Government Code Section 551.074 Personnel—To deliberate the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee.

RECONVENE REGULAR MEETING.

ANY APPROPRIATE DELIBERATION AND/OR ACTION ON ANY OF THE EXECUTIVE SESSION SUBJECTS LISTED ABOVE.

PUBLIC COMMENTS The City Council invites any person with business before the Council to speak to the Council. No formal action may be taken on these items at this meeting. Please keep comments to 3 minutes.

WORKSHOP

1. CAPITAL IMPROVEMENT PLAN (CIP)

ADJOURN

In addition to any specifically identified Executive Sessions, Council may convene into Executive Session at any point during the open meeting to discuss any item posted on this Agenda. The Open Meetings Act provides specific exceptions that require that a meeting be open. Should Council elect to convene into Executive Session, those exceptions will be specifically identified and announced. Any subsequent action, as a result of this Executive Session, will be taken and recorded in open session.

I certify that this Notice of Meeting was posted on or before April 7, 2023, by 5:00 p.m. at the Parker City Hall, and as a courtesy, this Agenda is also posted to the City of Parker Website at www.parkertexas.us.

The Parker City Hall is Wheelchair accessible. Sign interpretations or other special assistance for disabled attendees must be requested 48 hours in advance by contacting the City Secretary's Office at 972 442 6811.

Date Notice Removed

Patti Scott Grey
City Secretary

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Council Agenda Item

Budget Account Code:	Meeting Date:	See above.
Budgeted Amount:	Department/ Requestor:	Council
Fund Balance-before expenditure:	Prepared by:	City Secretary Scott Grey for City Administrator Olson
Estimated Cost:	Date Prepared:	April 6, 2023
Exhibits:	<i>Please review information provided.</i>	

AGENDA SUBJECT

WORKSHOP:

CAPITAL IMPROVEMENT PLAN (CIP)

SUMMARY

Please review information provided.

POSSIBLE ACTION

City Council may direct staff to take appropriate action.

Inter – Office Use			
Approved by:	Enter Text Here		
Department Head/ Requestor:	<i>Patti Scott Grey</i>	Date:	04/06/2023
Interim City Attorney:	<i>Catherine Clifton</i>	Date:	04/06/2023
City Administrator:	<i>Luke B. Olson</i>	Date:	04/06/2023



Parker Capital Improvement Plan Overview

- Background
- Current Situation
- Path Forward

Objective of This Review

Agreement of Boring Samples

Drainage Impact

Overall Cost

What is a Capital Improvement Plan?

Capital Improvement Plan (CIP) contains all the individual capital projects, equipment purchases, and major studies for a local government; in conjunction with construction and completion schedules, and in consort with financing plans. The plan provides a working blueprint for sustaining and improving the community's infrastructures. It coordinates strategic planning, financial capacity, and physical development. A CIP stands at the epicenter of a government's Planning, Public Works, and Finance departments.

Background

- As Parker matures and grows, a 5 year CIP was needed to address future needs
- Parker did not have a CIP in place to address our future
- A committee was assigned to understand the needs and provide a cost of these projects
- Key topics of this CIP committee were based on previous resident requests of the city's infrastructure needs
- Road integrity was a key part of the overall CIP that needed to be reviewed

Key Goal : Understand the Full View of All the Capital Needs of the City

Future Discussions will be Addressed Using City Council Workshops



IMMEDIATE GOAL

Establish a Capital Improvement Plan for the city

To be used in assigning projects and for budgeting.

As a communication tool to residents on maintenance of streets.

LONG TERM GOAL

City streets are maintained such that they remain in a condition of Fair or better.

All Capital Improvements Will Be Addressed and Prioritized

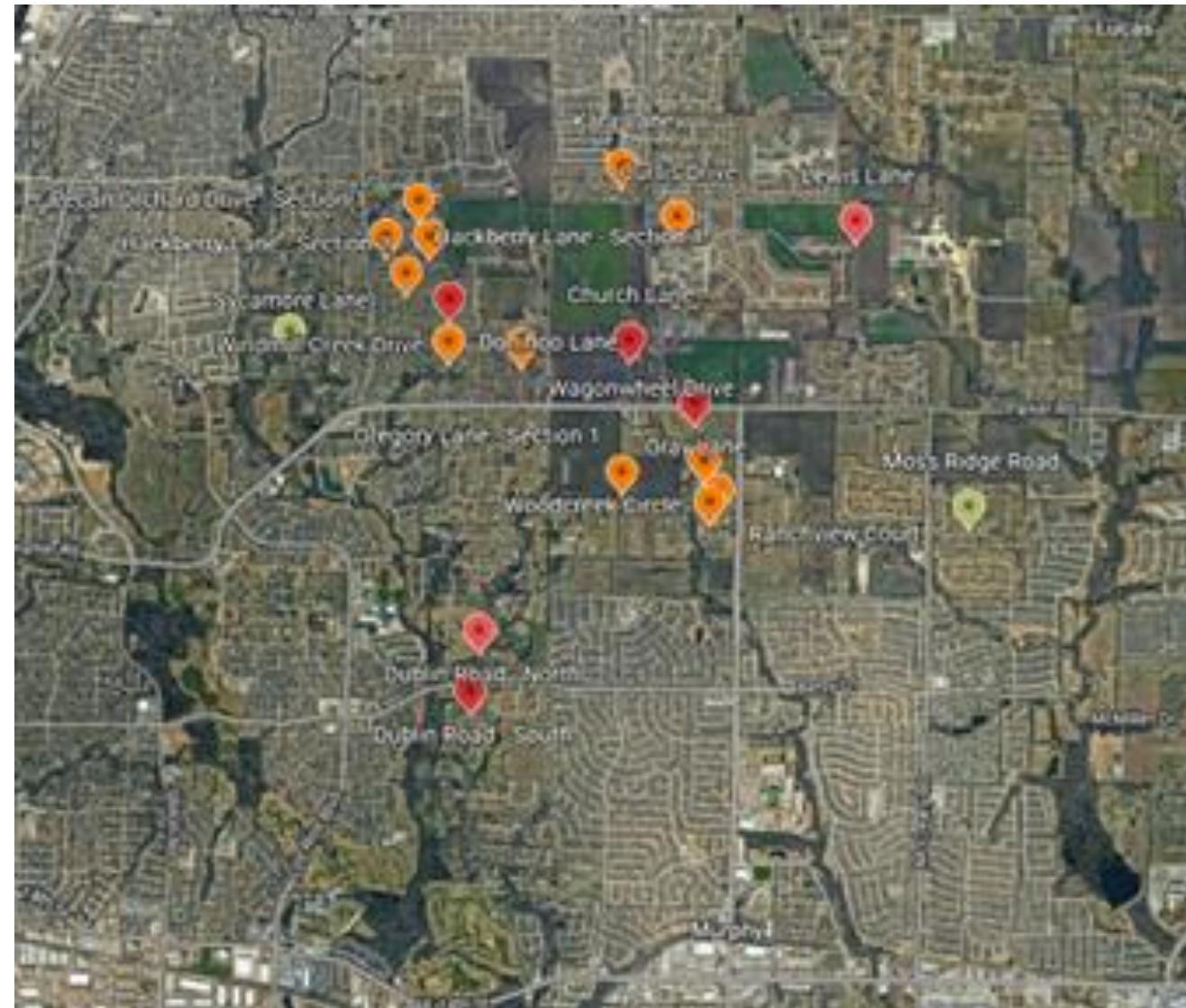
Parker CIP –Street Assessment

- 2021 Street Condition Survey created by city staff to assess detail of streets condition
- Determined that streets for further consideration were those with a rating of below fair
- Compiled additional information on streets identified above.
- Calculated potential costs using cost factors from engineer.
- Obtained proposals for boring samples

PCI Rating	Linear Feet	# of Segments
<i>Residential Streets</i>		
Failed (0 – 9)	0	0
Severe (10 – 24)	2,172	1
Very Poor (25 – 39)	4,248	2
Poor (40 – 54)	18,699	10
Borderline Poor (55)	11,514	2
	<u>36,633</u>	<u>15</u>
<i>Collector (or high traffic) streets</i>		
Very Poor (25 – 29)	5,037	3
Poor (40 – 54)	13,896	4
	<u>18,933</u>	<u>7</u>
Streets under consideration	55,566	22
% of all	20%	
All city streets	273,143	168



Streets Under Consideration





Streets Under Consideration

Review and discuss two schedules “Analysis of Streets Under Consideration” –

The first schedule shows results using engineer’s cost factors with 24’ width for pricing streets and city staff assessment of type of street repair and drainage that might be required.

	<u>Streets</u>	<u>Drainage</u>	<u>Total</u>
Residential Streets	8,765,803	6,163,567	14,929,370
Collector (or High Traffic) Streets	7,383,870	5,329,513	12,713,383
Total	16,149,673	11,493,080	27,642,753

The second schedule shows costing for all streets under consideration using the engineer’s cost factors of the four alternatives of street repairs provided as recapped below. Drainage costs are also reflected. options on drainage.

	<u>Overlay</u>	<u>Remix</u>	<u>Reconstruct</u>	<u>Concrete</u>
Residential Streets	4,029,680	8,975,197	14,287,049	23,335,513
Collector (or High Traffic) Streets	2,082,630	4,638,585	7,383,870	12,060,321
Total	6,112,310	13,613,782	21,670,919	35,395,834

Engineer's Opinion of Costs

Description	Cost per LF
2" Asphalt overlay with glas pave between existing and new	110
Remix existing w/ cement, placing 1" asphalt followed by glas pave followed by 1.5" asphalt	245
Reconstruct street with 12" of flex base material, 1.5" asphalt, glas pave followed by 2" asphalt	390
Reconstruct street with 6" of reinforced concrete with 6" lime treated subgrade	637

The engineer's cost factors shown above were provided to show the potential scope of the CIP street projects. These costs are only the engineer's opinion of what those costs could be based on bid sheets and unit prices which are highly volatile.

The engineer suggested that \$315 per foot should be added for significant drainage improvement for costing purposes. These are identified as poor on the schedule.

Costs of street repairs will not be firm until they are bid out. The costs were calculated in July 2022 and the engineer states he believes they have escalated about 10% since that time.



Proposals of Boring Samples

Review and discuss “Boring Sample Proposal” - Estimates provided for three Phases as summarized below

	Linear Feet	Boring Samples	Cost Proposal
<i>Residential Streets</i>			
Rating of 40 and lower	18,253	36	\$21,630
Ratings between 41 & 50	8,144	15	\$14,257
<i>Collector (or high traffic) streets</i>			
Dublin Road	13,582	27	\$17,953
Totals	39,978	78	\$53,840

The proposal is cost of the boring samples only (No Assessment)
Engineer's opinion of costs based on boring samples needed (Need Cost Estimate)
Drainage Assessment Must be Considered

Proposals of Boring Samples (cont'd)

- Core Samples Benefits
 - Help to understand the sub- base – dictates best repair method and aid in further fine tune the costs of the repairs needed.
 - Assessment will be valid for several years to allow longer-term plan.
 - Use results of early samples for other streets in the queue where possible.
- Process of obtaining boring samples is not trivial
 - Road closures and diversion of traffic needed during the process.
 - Traffic control can not be delegated. Proposal costs reflect \$3,500 per phase with 3 phased proposal.

The proposal only comprehends cost of the boring samples (No Assessment)
Engineer's opinion of costs using boring samples and drainage details needed (Need Cost Estimate)

Prioritization of Streets

- Establish prioritization of streets (establish Phases) –
 - Methods to consider for prioritization – Poorest rated streets, highest traffic volume streets, interruption to residents, cost limitations, other.
 - Benefits of establishing phases
 - Smaller projects are easier to manage/complete
 - Addresses need of the city – community needs are being acted upon
 - Limits the shorter-term capital requirements
- Move forward on plan using Engineering data – Based on bore samples, drainage, and engineering assessment, set plan and move forward.

Clarifying Scope of Work and Costs

- Identify & execute plan for clarifying the scope of the Work to be done and refining costs on Phase 1 streets –
 - Boring Samples
 - Determine updated pricing with Phase 1 streets,
 - After council approval, contract for boring samples
 - Engineer's estimates based on results of boring samples
 - Drainage
 - Identify best method for assessing drainage needs,
 - Assign responsibilities for executing to identify estimated costs
 - Identify other costs (Right of Way (ROW), Water Lines, Other)

Path Forward to CIP Plan

Identify what is needed to develop a CIP plan & timeline for implementation

- Identify the possible sources of financing and impacts on city and taxpayers –
 - 1% Sales Tax for Roads
 - Transfer from General Fund - Use a portion of existing M&O funds assigned to Street Construction and Drainage Funds for these projects
 - County, State, and Federal Grants
 - Debt - How much debt can the city afford? Breaking the project into phases would allow us to take monies out at different times, possibly lessening the tax burden until such time as the monies are needed.
- Estimate time and timing of projects
 - Preliminary work – Bid Preparation, ROW research, ???
 - Bid Process
 - Construction

Good Progress : However- A great deal of work needed to complete the CIP



Path Forward

- **Compile results and present options for City Council evaluation to provide the path forward for the next 5 years**
- **The process will need to be repeated to project the overall capital requirement for the city over 5 years**
- **Assemble the full scope of the CIP and present the capital need requirements as well as the financial options to fund the projects**
- **City Council will assess the best method to raise the finances to complete/rank these projects**

Good Progress : However- A great deal of work needed to complete the CIP

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

Area	STREET NAME	Segment LF	PCI Rating	Avg Daily Traffic Volume	Other Streets dependent on Street	Current Width LF	Current Surface Type	Process		Drainage		Surface	Drainage	Total
								Anticipated	Cond	Cond	Surface			
<u>Residential</u>														
NW	Church Lane	2,172	20			22	Asphalt	Reconstruct	Poor	847,080	705,900	1,552,980		
		2,172								847,080	705,900	1,552,980		
SW	Grey/Gray Ln.	2,211	25	City Park parking on this street		19	Asphalt	Remix	Average	541,799	359,357	901,156		
NW	Donihoo Lane	2,037	35			21	Chip Seal	Reconstruct	Average	794,430	331,013	1,125,443		
		4,248								1,336,229	690,369	2,026,598		
SW	Gregory Lane	4,171	40			22	Asphalt	Remix	Average	1,021,895	677,788	1,699,683		
SW	Gregory Lane	1,277	40	289		22	Asphalt	Remix	Average	312,865	207,513	520,378		
NW	Hackberry Lane	1,763	40	458		21	Chip Seal	Reconstruct	Average	687,570	286,488	974,058		
NW	Hackberry Lane	1,674				21	Chip Seal	Reconstruct	Average	652,860	272,025	924,885		
SW	Ranchview	1,002	40	109	Woodcreek Circle	19	Asphalt	Remix	Average	245,501	162,832	408,333		
SW	Woodcreek	668	40			19	Asphalt	Remix	Average	163,703	108,578	272,281		
NW	Kara Lane	2,606	45	287		20	Asphalt	Overlay	Average	286,660	423,475	710,135		
NE	Pecan Orchard Drive	1,146	50	433		20	Asphalt	Remix	Average	280,770	186,225	466,995		
NE	Pecan Orchard Drive	1,088	50			20	Asphalt	Remix	Average	266,560	176,800	443,360		
NW	Wagon Wheel	1,676	50	183	Cimarron Circle	24	Asphalt	Remix	Average	410,620	272,350	682,970		
NW	Windmill Creek Drive	1,628	50			22	Concrete	Overlay	Average	179,080	264,550	443,630		
		18,699								4,508,084	3,038,623	7,546,707		

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

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								Anticipated	Cond	Cond	Surface			
SE	Moss Ridge Rd	6,195	55	26		24	Concrete				-	-	-	-
NW	Sycamore Lane	5,319	55	375	Windream Lane & Ann's Lane	18	Asphalt	Reconstruct	Poor	2,074,410	1,728,675	3,803,085		
		11,514								2,074,410	1,728,675	3,803,085		
	All Residential Segm	36,633								8,765,803	6,163,567	14,929,370		

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

Area	STREET NAME	Segment LF	PCI Rating	Avg Daily Traffic Volume	Other Streets dependent on Street	Current Width LF	Current Surface Type	Process Anticipated	Drainage Cond	Surface	Drainage	Total
	Collector (or High Traffic)											
	Dublin Road											
SW	Dublin Road - South	5,907		1,456	St. Lawrence, Mahaney, Smith, Estate, Creekside, Edgewater	20	Asphalt			-	-	-
		1,583	30					Reconstruct	Poor	617,370	514,475	1,131,845
		1,177	30					Reconstruct	Poor	459,030	382,525	841,555
		3,147	33					Reconstruct	Poor	1,227,330	1,022,775	2,250,105
SW	Dublin Road - North	7,957		1,640	Dublin Creek, Reserve Court	20	Asphalt					
		3,495	45					Reconstruct	Poor	1,363,050	1,135,875	2,498,925
		4,462	50					Reconstruct	Poor	1,740,180	1,450,150	3,190,330
NE	Curtis Lane	1,783	40	1,185		21	Asphalt	Reconstruct	Average	695,370	289,738	985,108
NE	Lewis Lane	3,286	40	781	King's Crossing 2, 3,& 4 Poco Estados		Asphalt	Reconstruct	Average	1,281,540	533,975	1,815,515
	Lucas	3,471										
	Parker	426										
	Developer	1,992				24						
	County	884										
	Parker/Lucas	2,020										
	County	856										
	Parker	1,850										
		11,499										
Above is a breakdown of estimated responsibilities of this street using Google Earth measurements												
All Collector Segme	18,933									7,383,870	5,329,513	12,713,383

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Segment LF	Surface Only Option Costs					Drainage Adjustment Costs		
		Overlay \$ 110.00	Remix \$ 245.00	Reconstruct \$ 390.00	Concrete \$ 637.00	Good \$ -	Fair \$ 162.50	Poor \$ 325.00	
<u>Residential</u>									
Church Lane	2,172	238,920	532,140	847,080	1,383,564	-	352,950	705,900	
	2,172	238,920	532,140	847,080	1,383,564	-	352,950	705,900	
Grey/Gray Ln.	2,211	243,257	541,799	862,456	1,408,678	-	359,357	718,713	
Donihoo Lane	2,037	224,070	499,065	794,430	1,297,569	-	331,013	662,025	
	4,248	467,327	1,040,864	1,656,886	2,706,247	-	690,369	1,380,738	
Gregory Lane	4,171	458,810	1,021,895	1,626,690	2,656,927	-	677,788	1,355,575	
Gregory Lane	1,277	140,470	312,865	498,030	813,449	-	207,513	415,025	
Hackberry Lane	1,763	193,930	431,935	687,570	1,123,031	-	286,488	572,975	
Hackberry Lane	1,674	184,140	410,130	652,860	1,066,338	-	272,025	544,050	
Ranchview	1,002	110,225	245,501	390,797	638,302	-	162,832	325,665	
Woodcreek	668	73,499	163,703	260,588	425,627	-	108,578	217,157	
Kara Lane	2,606	286,660	638,470	1,016,340	1,660,022	-	423,475	846,950	
Pecan Orchard Drive	1,146	126,060	280,770	446,940	730,002	-	186,225	372,450	
Pecan Orchard Drive	1,088	119,680	266,560	424,320	693,056	-	176,800	353,600	
Wagon Wheel	1,676	184,360	410,620	653,640	1,067,612	-	272,350	544,700	
Windmill Creek Drive	1,628	179,080	398,860	634,920	1,037,036	-	264,550	529,100	
	18,699	2,056,914	4,581,309	7,292,695	11,911,402	-	3,038,623	6,077,246	

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Segment LF	Surface Only Option Costs					Drainage Adjustment Costs			
		<u>Overlay</u> \$ 110.00	<u>Remix</u> \$ 245.00	<u>Reconstruct</u> \$ 390.00	<u>Concrete</u> \$ 637.00	<u>Good</u> \$ -	<u>Fair</u> \$ 162.50	<u>Poor</u> \$ 325.00		
Moss Ridge Rd	6,195	681,430	1,517,729	2,415,978	3,946,097	-	1,006,657	2,013,315		
Sycamore Lane	5,319	585,090	1,303,155	2,074,410	3,388,203	-	864,338	1,728,675		
	11,514	1,266,520	2,820,884	4,490,388	7,334,300	-	1,870,995	3,741,990		
All Residential Segm	36,633	4,029,680	8,975,197	14,287,049	23,335,513	-	5,952,937	11,905,874		

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Segment LF	Surface Only Option Costs					Drainage Adjustment Costs		
		Overlay \$ 110.00	Remix \$ 245.00	Reconstruct \$ 390.00	Concrete \$ 637.00	Good \$ -	Fair \$ 162.50	Poor \$ 325.00	
Collector (or High Traffic)									
Dublin Road									
Dublin Road - South	5,907	649,770	1,447,215	2,303,730	3,762,759	-	959,888	1,919,775	
	1,583	174,130	387,835	617,370	1,008,371	-	257,238	514,475	
	1,177	129,470	288,365	459,030	749,749	-	191,263	382,525	
	3,147	346,170	771,015	1,227,330	2,004,639	-	511,388	1,022,775	
Dublin Road - North	7,957	875,270	1,949,465	3,103,230	5,068,609				
	3,495	384,450	856,275	1,363,050	2,226,315	-	567,938	1,135,875	
	4,462	490,820	1,093,190	1,740,180	2,842,294	-	725,075	1,450,150	
Curtis Lane	1,783	196,130	436,835	695,370	1,135,771	-	289,738	579,475	
Lewis Lane	3,286	361,460	805,070	1,281,540	2,093,182	-	533,975	1,067,950	
Lucas	3,471								
Parker	426								
Developer	1,992								
County	884								
Parker/Lucas	2,020								
County	856								
Parker	1,850								
	11,499								
Above is a breakdown of estim									
All Collector Segme	18,933	2,082,630	4,638,585	7,383,870	12,060,321	-	1,783,600	3,567,200	

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.



HENLEY | JOHNSTON
G ASSOCIATES

geotechnical and construction materials consultants

June 29, 2022
Proposal 10625 - Revised

City of Parker

In care of

Birkhoff, Hendricks & Carter, LLP
11910 Greenville Avenue, Suite 600
Dallas, Texas 75243
ATTN: Mr. John Birkhoff, P.E.
Phone: 214-361-7900
Email: jbirkhoff@bhcllp.com

**Proposal for Geotechnical Engineering Services
City of Parker Pavement Recommendations
Parker, Texas**

Gentlemen:

This proposal covers costs associated with performing a subsurface investigation for proposed pavement improvements for a range of existing roadways located in Parker, Texas. This proposal is based on your emails dated November 19, 2021, and June 24, 2022. It is understood that this project will be split into three phases. The first two phases will consist primarily of residential pavements, and the third and final phase will consist of collector streets. The purpose of these investigations will be to evaluate subsurface conditions within the pavement corridors and provide recommendations for repair and/or replacement paving sections and earthwork criteria.

Field Investigation

This project consists of fourteen roadway segments throughout the City of Parker, Texas, to be split into three phases of work. Based on a review of the project limits, as well as City of Parker requirements, we recommend subsurface conditions along the project roadway corridors be evaluated with a total of 78 soil borings. A summary of the project roadway segments for each phase, the approximate segment limits, pavement length, and proposed number of borings is presented in Table No. 1. These borings will be spaced out approximately every 500 linear feet and be drilled with a truck-mounted rig equipped with continuous flight augers. The borings would be sampled continuously to a depth of 5 feet below existing grades.

Table No. 1 - Pavement Length and Proposed Boring Quantities					
City of Parker Pavement Recommendations					
Various Locations – Parker, Texas					
Project Phase	Roadway Segment	Limits		Segment Length, ft.	Proposed Borings
		Start	End		
1	Church Lane	Parker Rd.	End	2,172	4
	Gray Lane	Parker Rd.	Gregory Ln.	2,211	4
	Donihoo Lane	Hackberry Ln.	Donna Ln.	2,037	4
	Gregory Lane I	Gray Ln.	End	5,448	10
	Gregory Lane II	Gray Ln.	Hogge Dr.	1,277	3
	Hackberry Lane	Donihoo Ln.	cul de sac	3,437	7
	Ranchview Court	Hogge Dr.	cul de sac	1,002	2
	Woodcreek Circle	Ranchview Ct.	cul de sac	668	2
Phase I Subtotals				18,252	36
2	Kara Lane	Dillehay Dr.	Bozeman Dr.	2,606	5
	Pecan Orchard Drive	Springhill Estates Dr.	cul de sac	2,234	4
	Wagonwheel Drive	Old Gate Ln.	Parker Rd.	1,676	3
	Windmill Creek Drive	Donna Ln.	Countryside Dr.	1,628	3
Phase II Subtotals				8,144	15
3	Dublin Road - South	Betsy Ln.	South City Limit	5,765	12
	Dublin Road - North	Betsy Ln.	Parker Rd.	7,817	15
Phase III Subtotals				13,582	27
Project Totals				39,978	78

Cohesive soils will be sampled using three-inch diameter "Shelby" tubes. Sands and gravels, if encountered, will be evaluated in-situ and sampled in conjunction with the Standard Penetration Test (SPT). Unweathered rock will be evaluated in-situ using the TxDOT Cone Penetration Test. Disturbed samples of the rock will be gathered from the flight augers. At the completion of the field investigation all samples will be transported to the Henley-Johnston & Associates, Inc. (HJA), laboratory for visual classification and testing.

The existing pavement at the boring locations will be drilled through utilizing the truck-mounted rig. Once these borings are completed, pavement will be patched using commercially available cold patch asphalt, or an equivalent. The finish of any patch will not match the existing asphalt pavement finish.

HJA will not be liable for damage to underground structures and/or below grade utilities not identified on plans provided by the Client, Owner, or other parties, and will not be liable for utility lines not marked by the 811/DigTESS system. If no relevant subsurface utility plans are available, a third-party utility locating company will be engaged at an additional cost in order to

clear the boring locations of active subsurface utilities. The Client agrees to accept all responsibility for providing HJA with any subsurface utility plans.

In the event of limited access, some damage to existing landscaping or paving may occur. Precautions will be taken to limit any impacts to the existing landscaping or paving; however, HJA will not be liable for any damage to these items or responsible for any repair.

At the completion of drilling, all borings would be plugged using on-site materials. Some settlement of these holes should be anticipated over an extended period of time. HJA will not be liable for any damage or injury that results from settlement of the holes after the initial filling or matching the finish of any existing asphalt pavement.

HJA will also not be responsible for securing and paying for any permits for street cuts or lane closures required by the City of Parker.

Laboratory Investigation

All samples will be logged and visually classified according to the Unified Soils Classification System by a Senior Level Engineering Geologist. Selected samples will be submitted for analysis to confirm visual classification and evaluate engineering properties. Atterberg Limits and moisture content tests will be performed. The potential for soil heave will be evaluated using free-swell tests. Bearing capacity of the subsurface materials would be evaluated using unconfined compression tests. Standard Proctor tests will be conducted on cement-treated materials and evaluated using unconfined compression tests, where appropriate. The required amount of lime stabilization will be evaluated using the Eades and Grimm method for soil pH. Samples will be disposed of 60 days after the project is completed.

Engineering Analysis and Report

Results of the field and laboratory investigations will be used to analyze the prevailing conditions at the site and provide information and recommendations for the following items:

1. Description of surface conditions to include any notable drainage features and surface topography.
2. Subsurface soil and ground water conditions, and impact on construction.
3. Elevations of ground water if encountered while drilling.
4. Estimates of potential vertical movements related to soil and recommendations to mitigate future heave (if necessary).
5. Recommendations for repair and/or replacement of the existing pavement sections per City of Parker requirements.
6. Earthwork material and compaction criteria.

These recommendations will be presented in a formal report. An electronic copy of the report will be provided. Hardcopies can be provided upon request.

Closure

The total estimated cost for this investigation is anticipated to be on the order of \$53,840.00. A general cost breakdown for the three phases of work is presented in Table No. 2; summaries of estimated costs for each phase of work are attached. This budget will not be exceeded without prior approval. Terms stated within this proposal are valid for 90 calendar days from the date issued.

HENLEY | JOHNSTON
& ASSOCIATES

Table No. 2 - General Phase Cost Estimate	
City of Parker Pavement Recommendations	
Various Locations – Parker, Texas	
Project Phase	Estimated Cost, \$
1	\$21,630.00
2	\$14,257.50
3	\$17,952.50
Project Total	\$53,840.00

Authorization to proceed may be given by signing and returning a copy of this proposal. Given the location of the project and the current backlog, it is anticipated that field operations can commence within three weeks of authorization, weather and site conditions permitting. The final report should be completed within two to three weeks of field operations.

The client, whether owner of the property or not, shall provide right of access to the subject property as required for Henley-Johnston & Associates, Inc. to perform the services defined in this proposal.

Payment for services will be due within 5 business days after the client receives monies from the owner.

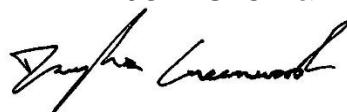
The client is responsible for clearing of the site and access for a truck-mounted rig. An additional mobilization charge of \$400.00 will be incurred if a street is not accessible to the drilling rig at the time of authorization.

Additional services not included in the scope of work outlined in this proposal or required after completion of the report will be billed at the following rates:

Principal Engineer	\$195.00/hour
Senior Geotechnical Engineer	\$185.00/hour
Staff Engineer	\$155.00/hour
Staff Geologist	\$105.00/hour
Administrative Support	\$ 65.00/hour.

We appreciate the opportunity to provide this proposal. If you desire any additional information, please do not hesitate to call.

Signed,
HENLEY-JOHNSTON & ASSOCIATES, INC.



Douglas Greenwood, P.E.
Senior Geotechnical Engineer
Firm Registration No.: F-1238

Authorized by: _____
Print Name _____

Signature _____ Date _____

HENLEY | JOHNSTON
& ASSOCIATES

Cost Estimate for Geotechnical Engineering Services
City of Parker Pavement Recommendations
Parker, Texas

PHASE I

Item	Quantity	Rate	Total
Field Investigation – Thirty-Six Borings to 5 Feet			
Mobilization – Truck Mounted Drill Rig	2	\$350.00	\$700.00
Soil Sampling (truck rig), lf	180	12.50	\$2,250.00
Concrete coring and patching, ea	36	75.00	\$2,700.00
Project Manager – Site Coordination, hr	6	95.00	\$ 570.00
Third Party Line Locating, ls	1	3000.00	\$3,000.00
Traffic Control, ls.	1	3500.00	\$3,500.00
		Subtotal	\$12,720.00

Laboratory Investigation

Moisture Content, ea.	110	5.00	\$ 550.00
Atterberg Limits, raw, ea.	18	55.00	\$ 990.00
Free-Swell test, ea.	8	65.00	\$ 520.00
Partial Gradation tests, ea.	4	50.00	\$ 200.00
Unconfined Compression tests - soil, ea.	8	60.00	\$ 480.00
Unconfined Compression tests – cement-treated materials, ea.	3	75.00	\$ 225.00
pH Lime Series test, ea.	3	265.00	\$ 795.00
Soluble Sulfates, ea.	12	135.00	\$1,620.00
Standard Proctor test, ea.	3	225.00	\$ 675.00
		Subtotal	\$6,055.00

Engineering Analysis

Principal Engineer, hr	4	195.00	\$ 780.00
Staff Engineer/Geologist (Analysis/Report Preparation), hr	8	155.00	\$1,240.00
Staff Geologist (Visual Classification), hr	3	105.00	\$ 315.00
Administrative Support, hr	8	65.00	\$ 520.00
	Subtotal		\$2,855.00

	Estimated Total	\$21,630.00
--	-----------------	-------------

The total cost for this phase of the project is estimated at \$21,630.00. The amount of testing and services will be changed, as the project requires. This estimated total budget will not be exceeded without prior approval.

HENLEY | JOHNSTON
& ASSOCIATES

Cost Estimate for Geotechnical Engineering Services
City of Parker Pavement Recommendations
Parker, Texas

PHASE II

Item	Quantity	Rate	Total
------	----------	------	-------

Field Investigation – Fifteen Borings to 5 Feet

Mobilization – Truck Mounted Drill Rig	1	\$350.00	\$ 350.00
Soil Sampling (truck rig), lf	75	12.50	\$ 937.50
Concrete coring and patching, ea	15	75.00	\$1,125.00
Project Manager – Site Coordination, hr	6	95.00	\$ 570.00
Third Party Line Locating, ls	1	3000.00	\$3,000.00
Traffic Control, ls.	1	3500.00	\$3,500.00
		Subtotal	\$9,482.50

Laboratory Investigation

Moisture Content, ea.	50	5.00	\$ 250.00
Atterberg Limits, raw, ea.	8	55.00	\$ 440.00
Free-Swell test, ea.	4	65.00	\$ 260.00
Partial Gradation tests, ea.	3	50.00	\$ 150.00
Unconfined Compression tests - soil, ea.	4	60.00	\$ 240.00
pH Lime Series test, ea.	2	265.00	\$ 530.00
Soluble Sulfates, ea.	5	135.00	\$ 675.00
		Subtotal	\$2,545.00

Engineering Analysis

Principal Engineer, hr	2	195.00	\$ 390.00
Staff Engineer/Geologist (Analysis/Report Preparation), hr	8	155.00	\$1,240.00
Staff Geologist (Visual Classification), hr	2	105.00	\$ 210.00
Administrative Support, hr	6	65.00	\$ 390.00
		Subtotal	\$2,230.00

	Estimated Total	\$14,257.50
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The total cost for this phase of the project is estimated at \$14,257.50. The amount of testing and services will be changed, as the project requires. This estimated total budget will not be exceeded without prior approval.

Cost Estimate for Geotechnical Engineering Services
City of Parker Pavement Recommendations
Parker, Texas

PHASE III

Item	Quantity	Rate	Total
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Field Investigation – Twenty-Seven Borings to 5 Feet

Mobilization – Truck Mounted Drill Rig	2	\$350.00	\$ 700.00
Soil Sampling (truck rig), lf	135	12.50	\$1,687.50
Concrete coring and patching, ea	27	75.00	\$2,025.00
Project Manager – Site Coordination, hr	6	95.00	\$ 570.00
Third Party Line Locating, ls	1	3000.00	\$3,000.00
Traffic Control, ls.	1	3500.00	\$3,500.00
		Subtotal	\$11,482.50

Laboratory Investigation

Moisture Content, ea.	75	5.00	\$ 375.00
Atterberg Limits, raw, ea.	14	55.00	\$ 770.00
Free-Swell test, ea.	6	65.00	\$ 390.00
Partial Gradation tests, ea.	4	50.00	\$ 200.00
Unconfined Compression tests - soil, ea.	4	60.00	\$ 240.00
pH Lime Series test, ea.	2	265.00	\$ 530.00
Soluble Sulfates, ea.	9	135.00	\$1,215.00
		Subtotal	\$3,720.00

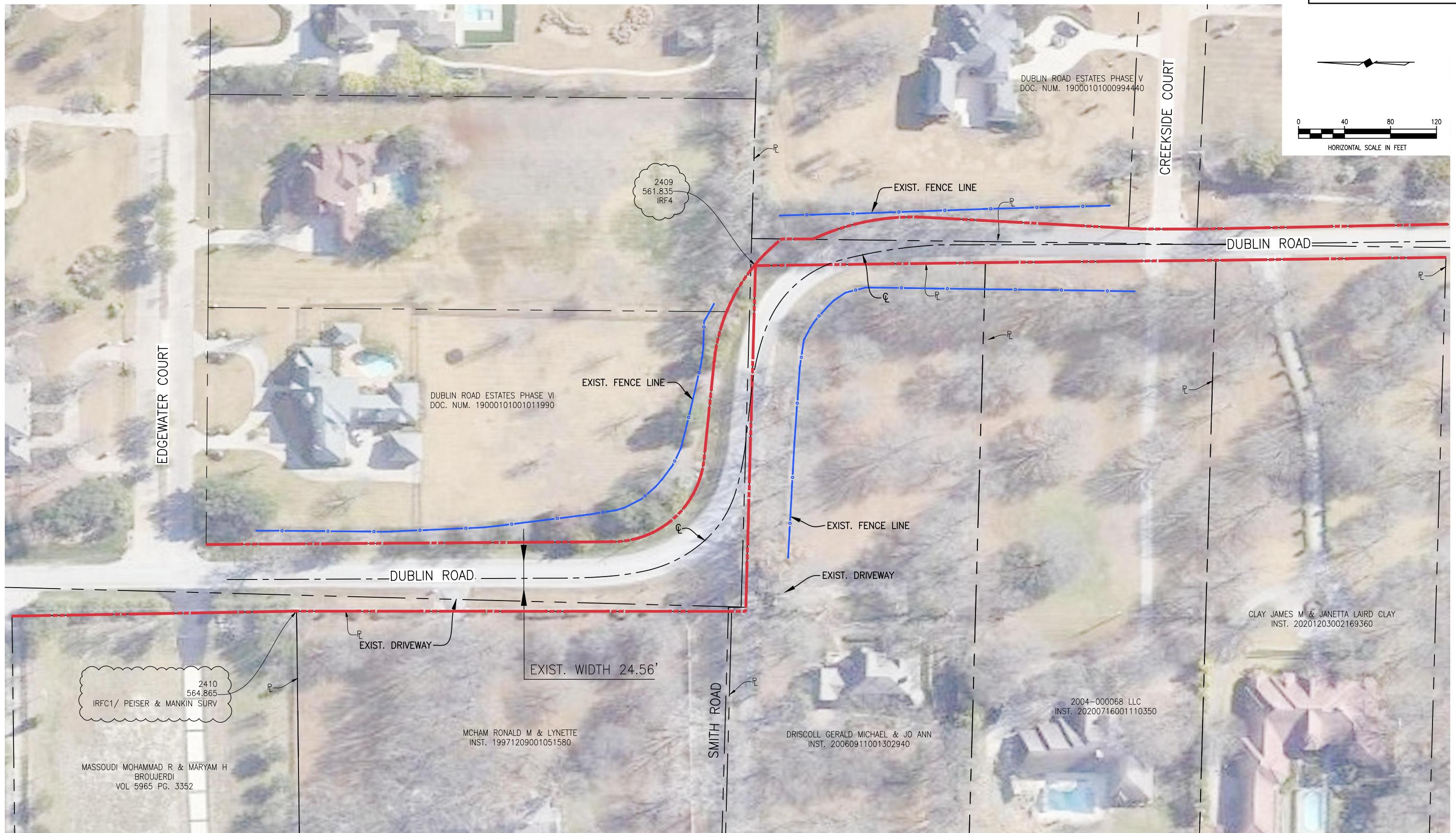
Engineering Analysis

Principal Engineer, hr	4	195.00	\$ 780.00
Staff Engineer/Geologist (Analysis/Report Preparation), hr	8	155.00	\$1,240.00
Staff Geologist (Visual Classification), hr	2	105.00	\$ 210.00
Administrative Support, hr	8	65.00	\$ 520.00
		Subtotal	\$2,750.00

	Estimated Total	\$17,952.50
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The total cost for this phase of the project is estimated at \$17,952.50. The amount of testing and services will be changed, as the project requires. This estimated total budget will not be exceeded without prior approval.

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& ASSOCIATES



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TBPE Firm No. 526; TBPLS Firm No. 10031800
11910 Greenville Ave., Suite 600
Dallas, Texas 75243 (214) 361-7900

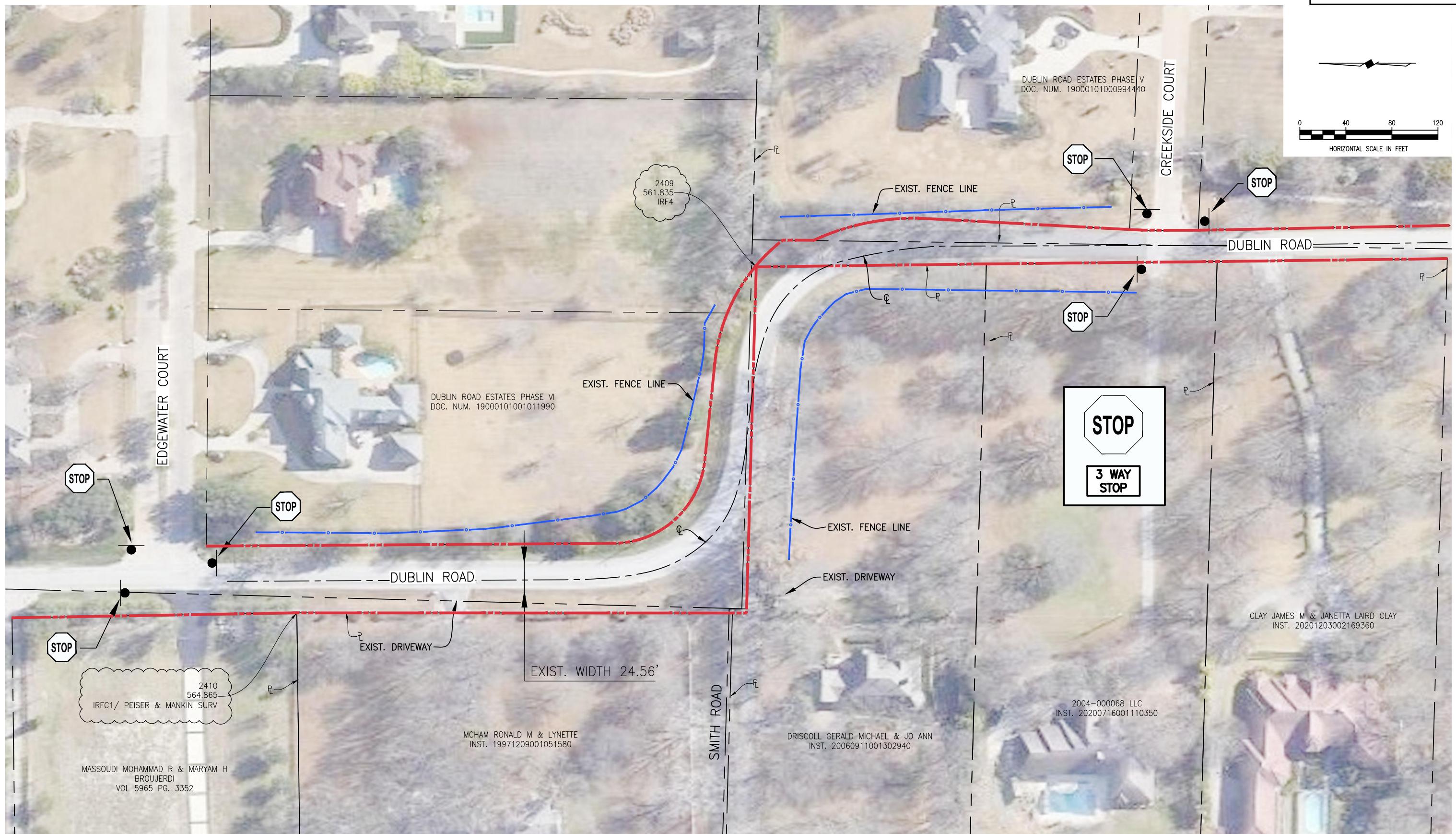
CITY OF PARKER, TEXAS

DUBLIN ROAD S-CURVE ANALYSIS

EXISTING DUBLIN ROAD RIGHT OF WAY

BHC
PROJECT NO.
4096-304
December 2022

SHEET NO.
#####



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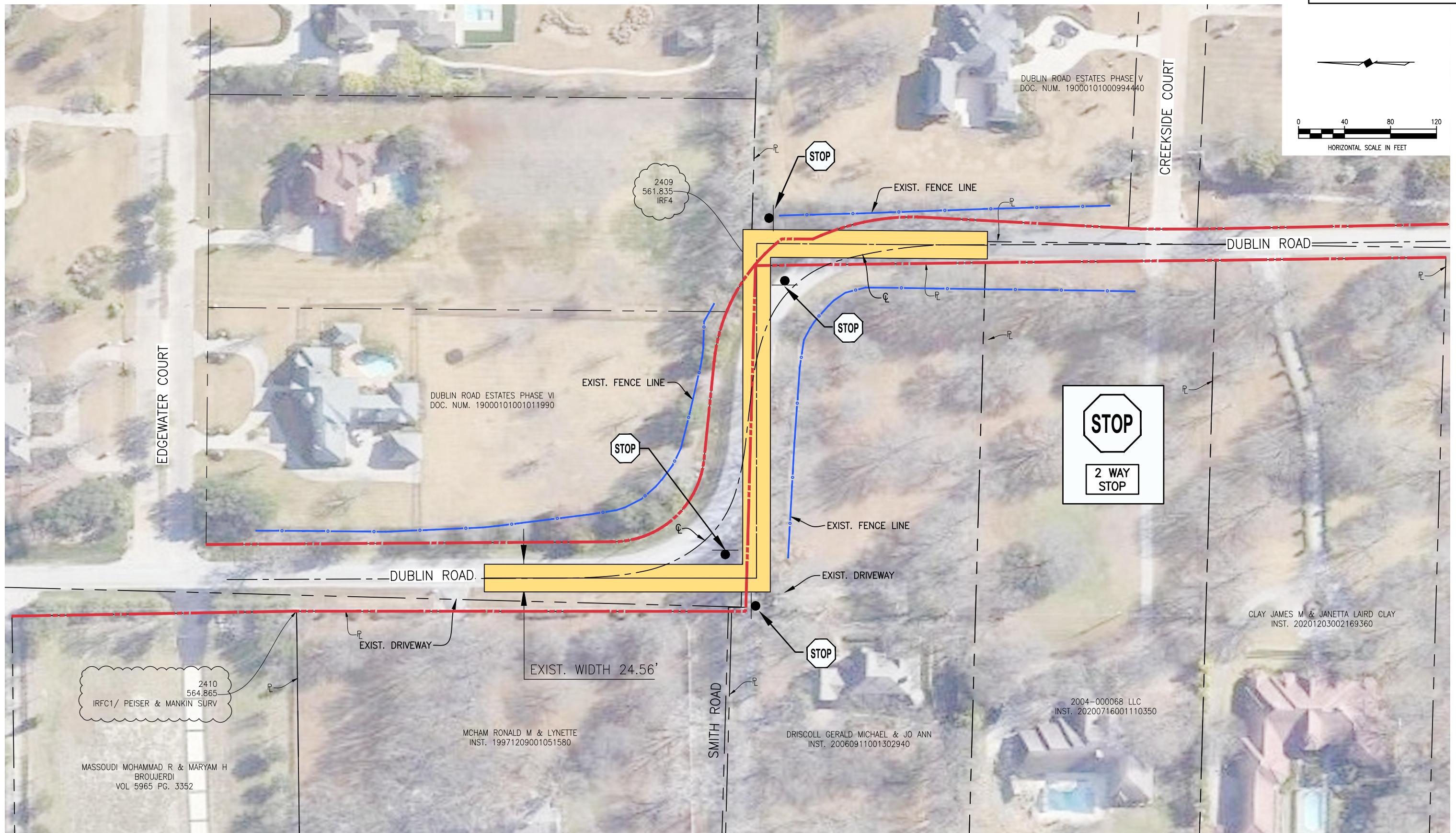
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CITY OF PARKER, TEXAS
DUBLIN ROAD S-CURVE ANALYSIS

DUBLIN - PROPOSED 3 WAY STOP SIGN LAYOUT

BHC
PROJECT NO.
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December 2022

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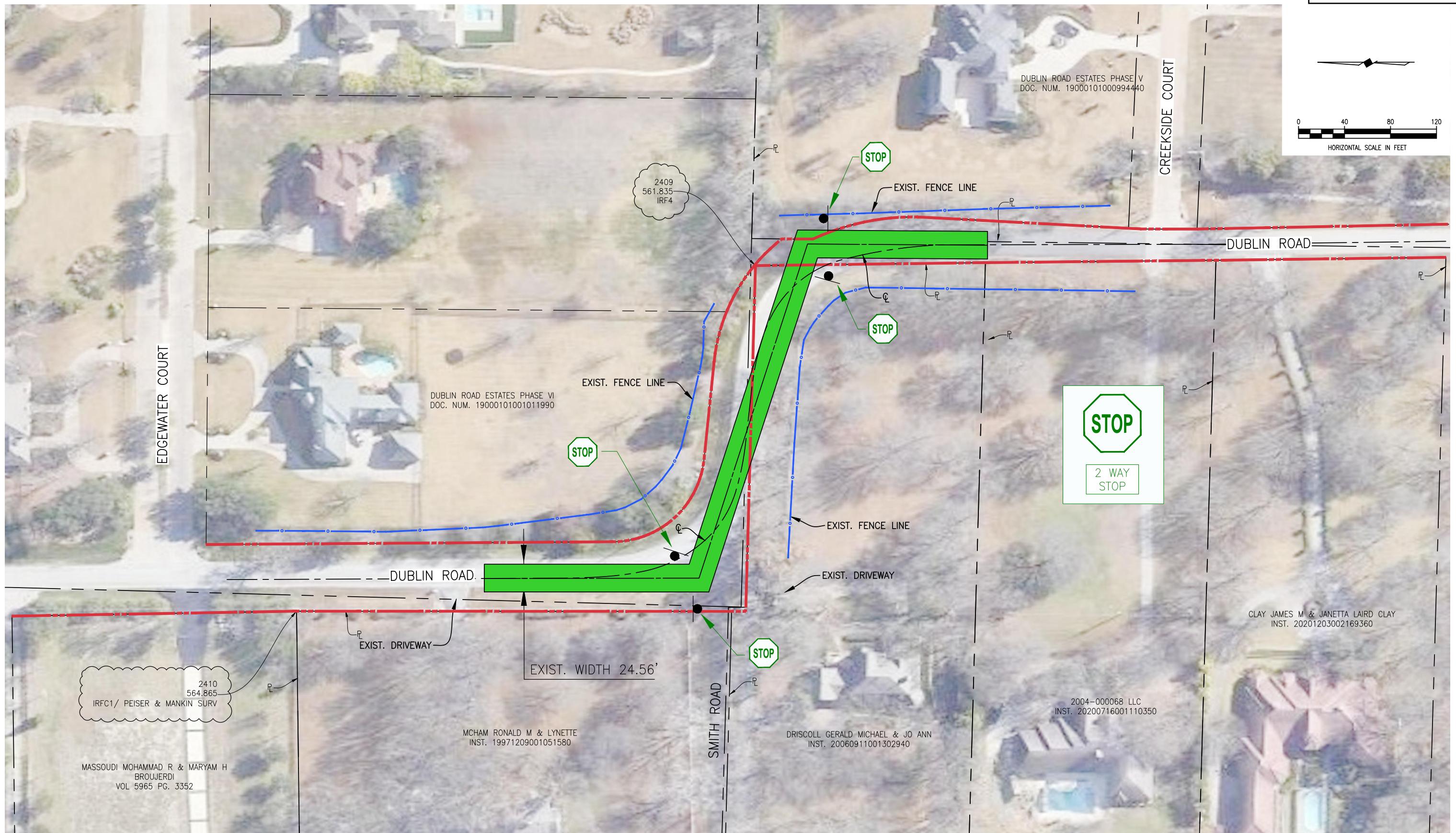
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CITY OF PARKER, TEXAS
DUBLIN ROAD S-CURVE ANALYSIS

DUBLIN ROAD - PROPOSED 90°

BHC
PROJECT NO.
4096-304
December 2022

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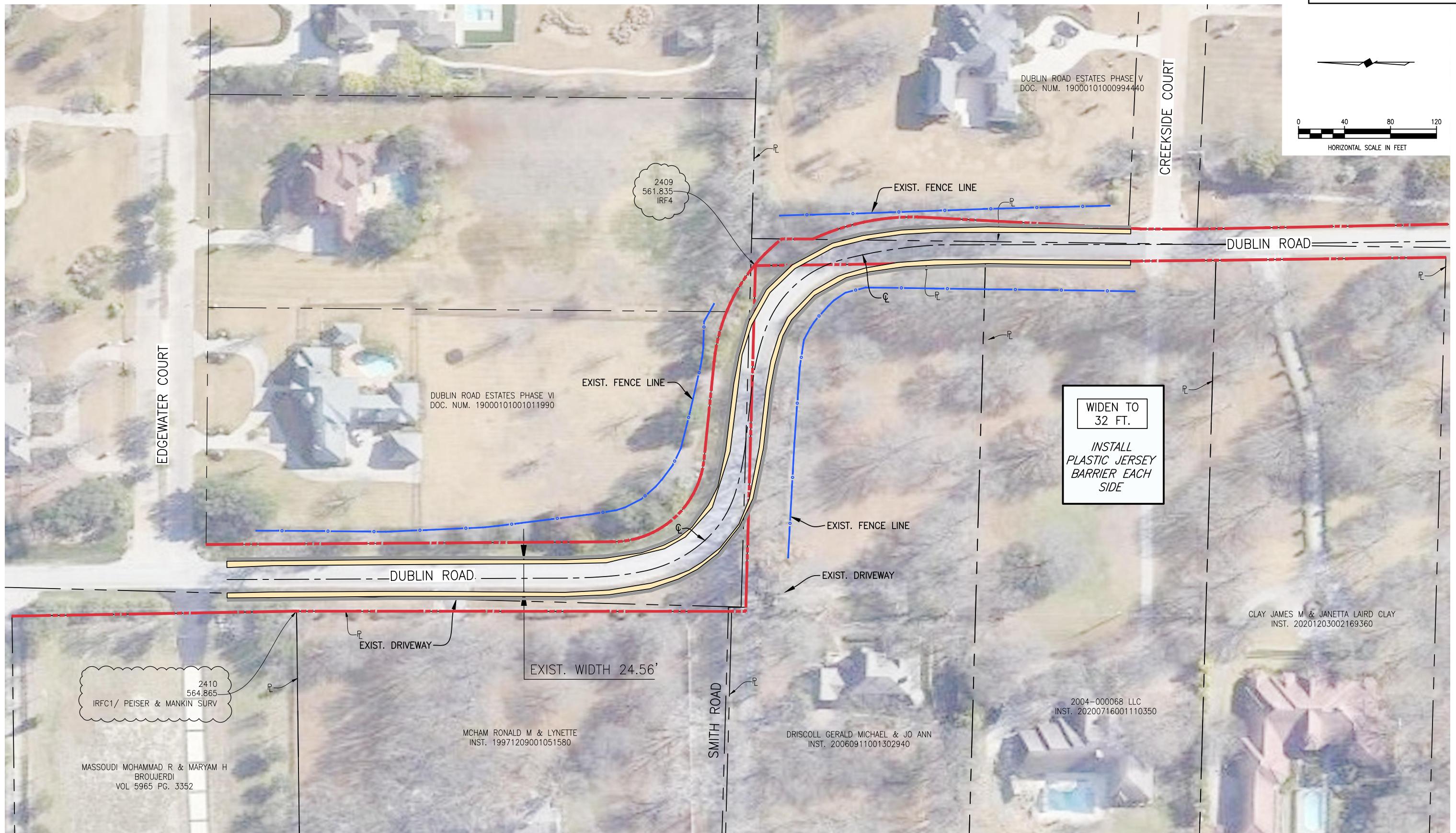
CITY OF PARKER, TEXAS

DUBLIN ROAD S-CURVE ANALYSIS

EXISTING DUBLIN ROAD - PROPOSED SKEWED

BHC
PROJECT NO.
4096-304
December 2022

SHEET NO.
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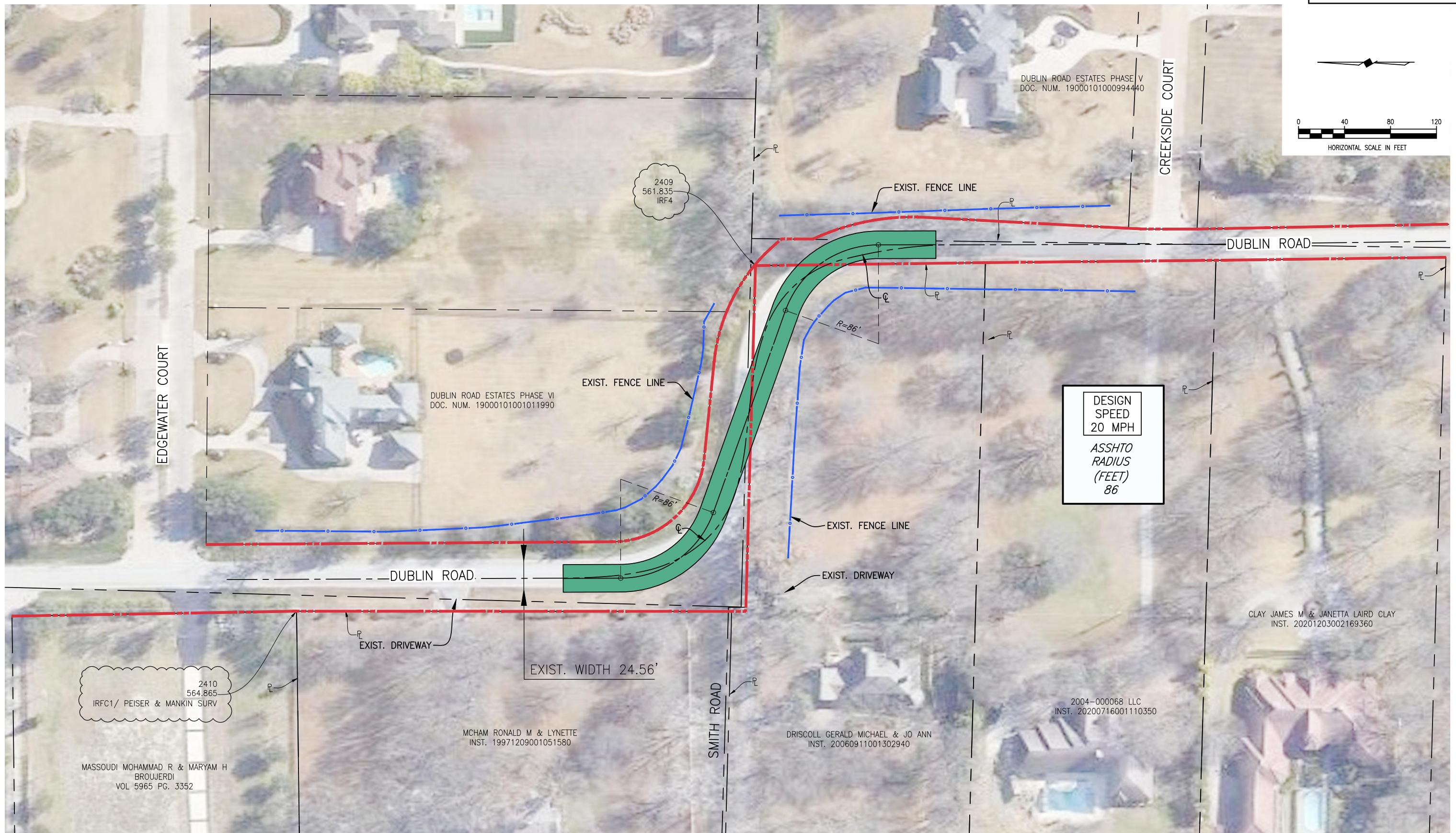
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PROFESSIONAL ENGINEERS
TBPE Firm No. 526; TBPLS Firm No. 10031800
11910 Greenville Ave., Suite 600
Dallas, Texas 75243 (214) 361-7900

CITY OF PARKER, TEXAS
DUBLIN ROAD S-CURVE ANALYSIS

EXISTING DUBLIN ROAD - PROPOSED 32' WIDTH

BHC
PROJECT NO.
4096-304
December 2022

SHEET NO.
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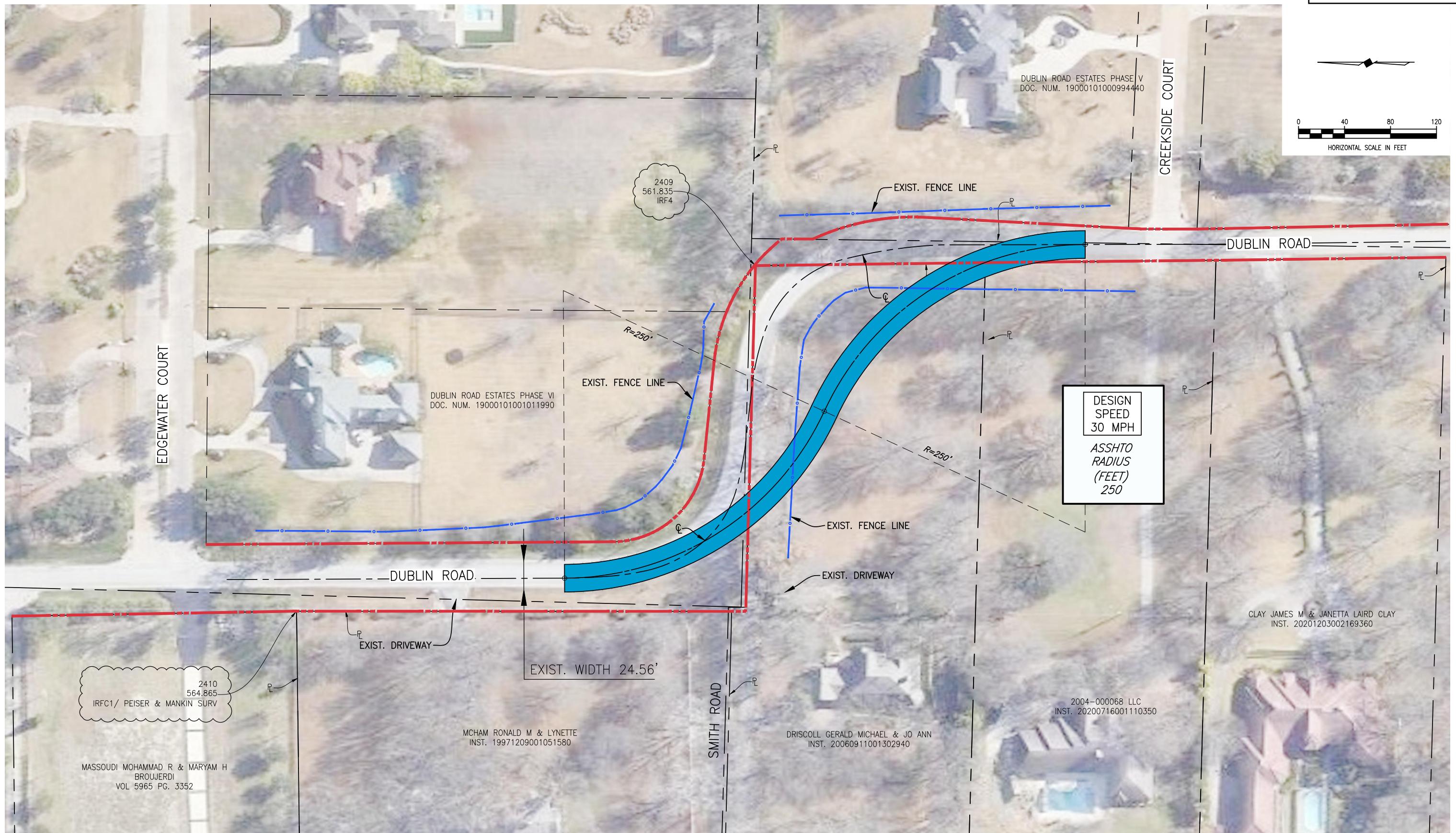
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PROFESSIONAL ENGINEERS
TBPE Firm No. 526; TBPLS Firm No. 10031800
11910 Greenville Ave., Suite 600
Dallas, Texas 75243 (214) 361-7900

CITY OF PARKER, TEXAS
DUBLIN ROAD S-CURVE ANALYSIS

EXISTING DUBLIN ROAD - PROPOSED ASSHTO 20 M.P.H. DESIGN

BHC
PROJECT NO.
4096-304
December 2022

SHEET NO.
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PROFESSIONAL ENGINEERS
TBPE Firm No. 526; TBPLS Firm No. 10031800
11910 Greenville Ave., Suite 600
Dallas, Texas 75243 (214) 361-7900

CITY OF PARKER, TEXAS

DUBLIN ROAD S-CURVE ANALYSIS

EXISTING DUBLIN ROAD - PROPOSED ASSHTO 30 M.P.H. DESIGN

BHC
PROJECT NO.
4096-304
December 2022

SHEET NO.
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BIRKHOFF, HENDRICKS & CARTER, L.L.P.

PROFESSIONAL ENGINEERS

11910 Greenville Ave., Suite 600

Dallas, Texas 75243

Phone (214) 361-7900

www.bhcllp.com

JOHN W. BIRKHOFF, P.E.
 GARY C. HENDRICKS, P.E., R.P.L.S.
 JOE R. CARTER, P.E.
 MATT HICKEY, P.E.
 ANDREW MATA, JR., P.E.
 DEREK B. CHANEY, P.E., R.P.L.S.
 CRAIG M. KERKHOFF, P.E.
 JUSTIN R. IVY, P.E.

June 21, 2021

Mr. Gary Machado
 5700 E Parker Road
 Parker, Texas 75002

Re: Street Condition Survey

Dear Mr. Machado:

We have compiled the pavement condition survey that was conducted over five days (June 4th, 5th, 8th, 10th & 11th). The raters included Gary Machado, Sandy Mooney, Bobby Nelson and John Birkhoff. 144 streets consisting of just over 50 miles were surveyed. Long sections of streets were broken down into smaller sections based on condition found during the survey. The condition street survey form was completed for each street and street section. A copy of that form is attached.

A pavement condition survey index (PCI) is a simple, convenient, and inexpensive way to monitor the condition of the surface of the city streets. The PCI is a subjective method of evaluation of each street thru driving each street and rating that street. For this survey, the city had 3 to 4 evaluators for each date of the physical survey and collectively the streets were rated. The pavement condition index allows the city to identify maintenance and rehabilitation needs. The PCI rates the condition of the surface of the city streets. It provides a numerical rating of the surface with 0 being the worst and 100 being the best. The PCI measures pavement distress and smoothness or ride comfort of the streets.

The survey should be conducted on a regular basis so road conditions can be evaluated over time. In the case of Parker there are many newer concrete streets that could be grouped, and the survey conducted less frequently.

Based on the results of this survey, a strategy should be established on how to complete maintenance and establish a timing for rehabilitation of the City streets. One strategy could be to address residential streets that are in the poor category first with rehabilitation before they get to a rating of very poor or less. In other words, extend the life of the streets before they fail and require a more costly total reconstruction. Streets that are in the very poor and severe rating that have not failed would be delayed allowing dollars to be spent on extending the life of the fair and poor streets to avoid the cost of major reconstruction.

The strategy for collector streets could be different than residential streets. Lastly street maintenance strategy for minor faults found along the streets that would be more surgical in nature to repair should be considered.

Over the last 13 years many asphalt streets have been improved and a limited number of concrete street panels have been removed and replaced. As time has gone on, we have included material testing as part of the construction process, which has improved the finished product. In addition, we have taken time to educate the city inspectors on what to view during construction and to explain the reasons why pavements fail and methods to minimize those types of failures. Recently fiberglass grids and mats have been included in the rehabilitation of asphalt streets to minimize reflective cracking from the base material below. This addition has proved to be effective and will be considered for future overlays and remix and overlay projects.

Dublin Road has been a challenge as traffic volumes increases. The roadway is only as good as the base material and the poor drainage along this busy roadway continues to weaken the base materials. In addition, the vision the City has for Dublin Road has been somewhat elusive over the years that has prevented major reconstruction to occur. The remix of the base material with overlays and patch repair are only short -term fixes. To compound the difficulties of drainage improvements is the limited rights of way along this corridor. Lewis Lane is another collector that has had minimal work done, due to the continued expected heavy construction equipment that will transverse this corridor with house building. The vision for the collector street is important to have to program in how to reconstruct the street with proper drainage.

The following summary shows the general overall rating of street in Parker:

<u>PCI Rating</u>	<u>No. of Segments</u>	<u>% of Total Segments</u>
Good 85-100	77	45.8%
Satisfactory 70-84	63	37.5%
Fair 55-69	8	4.8%
Poor 40-54	14	8.3%
Very Poor 25-39	5	3.0%
Severe 10-24	1	0.6 %
Failed 0-9	0	0%
	168	

Attached is the spreadsheet summary of the condition survey forms rating the streets from best to worst. Also attached are the street survey forms in the street index number order.

We are available at your convenience to discuss any questions you may have with the condition survey data.

Sincerely,

John W. Birkhoff, P.E.

City of Parker, Texas Street Inventory

STREET NAME	Residential	Collector	PCI Rating	LENGTH (L.F.)	Width (L.F.)	Surface Type	Open Ditch	Curb & Gutter	Const Date	Rehab Date	Rehab Type	Defect
Initial												
St. Lawrence Ct.-Dublin to Cul de sac	X		95	836		Concrete						
Ashford-Westfield to Middleton	X		90	650		Concrete	X					
Belvedere Drive-Whitestonee to Cul de sac	X		90	581		Concrete	X					
Cheshire Lane-Whitestone to Whitestone	X		90	1,753		Concrete	X					
Cheswick Court-Middleton to Cul de sac	X		90	1,289		Concrete	X					
Chilton Court-Middleton to Cul de sac	X		90	955		Concrete	X					
Cornwall-Devon to Cul de sac	X		90	204		Concrete	X					
Curtis Road Two lane to one large to Erin	X		90	3,470		Concrete	X					
Devon-Whitestone	X		90	1,054		Concrete	X					
Elaine Dr.-Bridge to Jeffrey	X		90	725		Concrete	X					
Erin Lane-Curtis to Lewis	X		90	1,738		Concrete	X					
Fulbrook Drive from Cheyenne to Cul de Sac	X		90	426		Concrete	X					
Havenhurst Court-Lewis to Middleton	X		90	934		Concrete	X					
Jeffery Dr.-South City Limit to Windmere	X		90	1,206		Concrete	X					
Kingston Court-Whitestone to Cul de sac	X		90	1,292		Concrete	X					
Ludlow Lane-Middleton to Stafford	X		90	714		Concrete	X					
Middleton Drive-Lewis	X		90	7,913		Concrete	X					
Middleton Drive Phase I-Lucas to Cul de sac	X		90	1,738								
Midnight Court East-Whisper to Cul de sac	X		90	1,399		Concrete	X					
Stafford Drive-Ludlow to Lewis	X		90	1,002		Concrete	X					
Tom Stone-Whitestone to Cul de sac	X		90	1,271		Concrete	X					
Warick Way-Middleton to Westfield	X		90	797		Concrete	X					
Whisper Drive-Cheyenne to Malone	X		90	2,707		Concrete	X					
Holbrook-Westfield to Westfield	X		89	1,563		Concrete	X					
Bryce Drive-Lewis to Erin	X		88	1,682		Concrete	X					
Donna lane from Cheshire to Donilho	X		88	1,898		Concrete	X					
Midnight Court West-Whisper to Cul de sac	X		88	605		Concrete	X					
Westfield Drive-Ashford to Cul de sac	X		88	6,205		Concrete	X					
Berwick-Chaparral to Salisbury	X		85	1,293		Concrete	X					
Betsy Road-West City Limit to Bridge	X		85	3,356		Concrete	X					

Good - 85-100

Fair - 55-69

Very Poor - 25-39

Failed 0-9

Satisfactory - 70-84

Poor - 40-54

Severe 10-24

Very Severe 1-9

City of Parker, Texas Street Inventory

Good - 85-100 Fair - 55-69 Very Poor - 25-39 Failed 0-9

City of Parker, Texas Street Inventory

STREET NAME	Residential	Collector	PCI Rating	LENGTH (L.F.)	Width (L.F.)	Surface Type	Open Ditch	Curb & Gutter	Const Date	Rehab Date	Rehab Type	Defect
Nocona Dr-Nancy to Jefffrey	X		85	1,483	1,312	Concrete	X					
Norwick-Chaparral to Barrington	X		85			Concrete	X					
Penbrooke-Rathbone to Cul de sac	X		85	232		Concrete	X					
Poco Drive-Estdatos Drive to Lewis	X		85	1,280		Asphalt	X		2015	Remix		
Ridgemore Drive-Rathbone to Cul de sac	X		85	1,612		Concrete	X					
Rolling Knolls Drive-Spring Creek Estates to Shady Knolls	X		85	1,911		Concrete	X					
Rosemont Court-Chaparral to Cul de sac	X		85	693		Concrete	X					
Salisbury-Allen Heights to Barrington	X		85	2,666		Concrete	X					
Savannah Circle-Glenn Meadows to Cul de sac	X		85	243		Concrete	X					
Shady Knolls Drive-Rollings Knolls to Lost Hollow	X		85	1,318		Concrete	X					
Sheffield-Barrington to Cul de sac	X		85	617		Concrete	X					
Stoney Oak Ct.-Margaux to Cul de sac	X		85	674		Concrete	X					
Tansworth Court from Ravensthorpe to Englenook	X		85			Concrete	X					
Tennyson-Salisbury to Cul de sac	X		85	868		Concrete	X					
Whitestone Drive (Welbridge) from Chaparral	X		85	5,062		Concrete	X					
Willow Ridge-Springhill to Boulder	X		85	871		Concrete	X					
Windomere Dr-Elaine to Cul de sac	X		85	1,866		Concrete	X					
Camden Drive-Andover to Bracknell	X		84	464		Concrete	X					
Dunaway Crossing-Rathbone to Cul de sac	X		84	280		Concrete	X					
Glen Meadows Drive-Shady Knolls to Rolling Knolls	X		84	2,214		Concrete						
Golden Pond Circle-Sycamore to Cul de sac	X		84	269		Stamped Concrete	X					
Kirkdale Drive-Keswick to Chaparral	X		84	1,332		Concrete	X					
Mary Ct.-Dublin Park to Cul de sac	X		84	1,047		Concrete	X					
Vista Ridge-Northridge to Southridge	X		84	595		Concrete	X					
Wayland-Lynwood to Chaparral	X		84	559		Concrete	X					
Wessex-Rathbone to Cul de sac	X		84	476		Concrete	X					
Ascot Court-Ridgemore to Cul de sac	X		83	537		Concrete	X					
Cheyene Drive-North City Limit to Cul de sac	X		83	2,659		Concrete	X					
Englenook Drive-Andover to Cul de sac	X		83	2,630		Concrete	X					
Forest Bend Dr-Meadow Glen to McCrae Creek	X		83	2,502		Concrete	X					

Good - 85-100 Fair - 55-69 Very Poor - 25-39 Failed 0-9

Satisfactory - 70-84 Poor - 40-54 Severe 10-24

City of Parker, Texas Street Inventory

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Residential	Collector	PCI Rating	LENGTH (L.F.)	Width (L.F.)	Surface Type	Open Ditch	Curb & Gutter	Const Date	Rehab Date	Rehab Type	Defect
Meadow Glen Dr.-McCreary Creek to Forest Bend	X		83	2,638		Concrete	X					
Northridge Parkway-Ravensthorpe to Vista Ridge	X		83	2,858		Concrete	X					
Old Gate Lane-Donna to Cul de sac	X		83	3,481		Asphalt	X			2013	50/Overlay with GlasPave	
93												
94												
Overbrook Dr.-Audubon to McCreary	X		83	3,542		Concrete	X					
127												
Tamsworth Court from Ravensthorpe to Englenook Drive	X		83	693		Concrete	X					
134												
Weston-Englenook to Ravensthorpe	X		83	701		Concrete	X					
136a												
Whitestone Drive from Parker to End	X		83			Concrete	X					
137												
Willow Pointe Circle-Rolling Hills to Cul de sac	X		83	387		Concrete	X					
30												
Corsham Drive-Andover to Bracknell	X		82	478		Concrete	X					
43												
Dumont Court-Ravensthorpe to Englenook	X		81	689		Concrete	X					
57												
Glenmore Drive-Dilliehay to Overton	X		81	813		Concrete	X					
106												
Ravensthorpe Drive from Curtis South to Cul de sac	X		81	5,043		Concrete	X					
2												
Amherst Court-Chaparral to Cul de sac	X		80	1,109		Concrete	X					
8												
Beechwood Court-Rathbone to Cul de sac	X		80	283		Concrete	X					
14a												
Boulder Drive South-Willow Ridge to Cul de sac	X		80	1,080		Concrete	X					
16												
Bracknell Drive-Corsham-Ravensthorpe	X		80	1,976		Concrete	X					
21												
Chaparral Road-Spring Hill Estates to Whitestone	X		80	6,851		Concrete	X					
28												
Copperhill Circle-Glenn Meadows to Cul de sac	X		80	391		Concrete	X					
46												
Edgewater Ct.-Dublin to Cul de sac	X		80	2,517		Concrete	X					
145												
McCready Southbound	X		80	12,233		Concrete	X					
95												
Overton Drive-Rathbone to Ridgemore	X		80	2,662		Concrete	X					
99												
Pecan Bend-Springhill to Red Oak	X		80	597		Concrete	X					
100												
Pecan Orchard Drive from Sycamore to 4200 Pecan Orchard	X		80	6,906		Concrete	X					
105												
Rathbone Drive-Lucas to Dilliehay	X		80	4,476		Concrete	X					
106a												
Ravensthorpe Drive from Bracknell to Curtis	X		80	2,983		Concrete	X					
107												
Red Oak Circle-Pecan Bend to Cul de sac	X		80	704		Concrete	X					

Good - 85-100 Fair - 55-69 Very Poor - 25-39 Failed 0-9

Satisfactory - 70-84 Poor - 40-54 Severe 10-24

H2G2C1010101-2026 General Services\2027 Government Condition Survey\Street Inventory 2020.xlsx

City of Parker, Texas Street Inventory

STREET NAME	Residential	Collector	PCI Rating	LENGTH (L.F.)	Width (L.F.)	Surface Type	Open Ditch	Curb & Gutter	Const Date	Rehab Date	Rehab Type	Defect
Ridgeview Drive from Saddle to Cul de sac	X		80	863		Concrete	X	X				
Silverton Court-Hathaway to Cul de sac	X		80	461		Concrete	X					
Southridge Parkway-Vista Ridge to Curtis	X		80	4,018		Concrete	X					
Springhill Estates Drive from Chaparral to Asphalt	X		80	9,798		Concrete				2016	Reconstruct Glass Grid	
Virginia-Edgewater to Cul de sac	X		80	484		Concrete	X					
Andover Drive-Dill to Ravensthorpe	X		75	2,282		Concrete	X					
Brookwood Drive-Parker to End	X		75	790		Asphalt	X					
Creekside Ct. Dublin to Cul de sac	X		75	1,264		Concrete	X					
Donna Lane from Donlihoo to Parker Road	X	X	75	3,976		Asphalt	X			2018	Glass Pave 25 Overlay	
Parker Village-Dill to Eastgate	X		75	1,012		Concrete	X					
Springhills Estates Dr, from Pecan Orchard to Parker Rd.	X		75	4,268		Asphalt	X					
Old Gate Lane from Donna to Cul de sac	X		73	1,467		Asphalt	X					
Bluffs Lane-Dublin Creek to Cul de sac	X		70	1,656		Concrete						
Bois-d'arc Ln.-Parker Road to Bridge	X		70	805		Asphalt	X			2012	Remix	
Dublin Creek-Dublin Road to Cul de sac	X		70	1,984		Concrete	X					
Dublin Creek Circle-Dublin Creek to Cul de Sac	X		70	392		Concrete	X					
Estate Ln.-Dublin to Cul de sac	X		70	3,068		Concrete	X					
52												
86												
Moss Ridge Circle	X		70	350		Concrete	X					
98												
Parrent Ct.-Estate to Cul de sac	X		70	208		Concrete						
103												
Ramsey Ct.-Estate to Cul de sac	X		70	201		Concrete	X					
108												
Reserve Court-Dublin Road to Cul de sac	X		70	1,655		Concrete	X					
109												
Ricks Ct.-Estate to Cul de sac	X		70	315		Concrete						
111a												
Ridgeview Drive-Dublin to Saddle	X		70	2,160		Asphalt	X			2012	Remix	
114												
Saddle Trail-Ridgeview to Parker	X		70	2,632		Asphalt	X			2012	Remix	
121b												
Springhill Estates Drive from Asphalt to Pecan Orchard	X		65	2,350		Asphalt	X					
15												
Bozeman Drive-Kara to Elisa	X		60	502		Asphalt	X					
27												
Cimmaron Circle-Wagon Wheel to Cul de sac	X		60	511		Asphalt	X					
42												
Dublin Road from South City Limit to Creekside	X		60	1,225		Asphalt	X					
48												
Elisa Lane-Boseman to Dilliehay	X		60	2,608		Asphalt	X			2014	Remix	

Good - 85-100 Fair - 55-69 Very Poor - 25-39 Failed 0-9

Satisfactory - 70-84 Poor - 40-54 Severe 10-24

:\\C:\Data\City\Parker\14096 General Services\2021 Pavement Condition Survey\Street Inventory 2020-2025

City of Parker, Texas Street Inventory

STREET NAME	Residential	Collector	PCI Rating	LENGTH (L.F.)	Width (L.F.)	Surface Type	Open Ditch	Curb & Gutter	Const Date	Rehab Date	Rehab Type	Defect
Pecan Orchard Drive from 4200 Pecan Orchard to Springhill Estates												
87 Moss Ridge Rd-McCreary to McCreary	X		60	4,507		Asphalt	X		2011		Remix	
126 Sycamore Lane-Parker Road to Pecan Orchard	X		55	5,319		Concrete Asphalt	X					
42a Dublin Road from Dublin Creek to Parker Road		X	50	4,462		Asphalt	X					
100b Pecan Orchard Dr. from Springhill Estates to Cul de sac	X		50	2,234		Asphalt	X					
131 Waggonwheel-Old Gate to Parker	X		50	1,676		Concrete	X					
138 Windmill Creek Drive-Donna to Countryside	X		50	1,628		Concrete	X					
42b Dublin Road-Betsey to Dublin Creek		X	45	13,742		Asphalt	X					
67 Kara Lane-Dillehay to Bozeman	X		45	2,606		Asphalt	X				2014	Remix
35 Curtis Lane East from Dillehay to Southridge		X	40	1,783		Asphalt	X					
42c Dublin Road from Betsy to Dublin Creek		X	40	3,495		Asphalt	X					
60 Gregory Ln. from Bridge to End	X		40	5,448		Asphalt	X		2012		Remix/2014	
60a Gregory Ln. from Gray to 2551 Hogge	X		40	1,277		Asphalt	X					
62 Hackberry Lane-Donihoo to Cul de sac	X		40	3,437		Asphalt	X		2019		Chip & Seal	
74 Lewis Lane-Lift Station to City Limit		X	40	9,340		Asphalt	X		2012		Remix	
104 Ranchview-Dillehay to Cul de sac	X		40	1,002		Asphalt	X		2011		Remix	
140 Woodcreek-Ranchview to Cul de sac	X		40	668		Asphalt	X					
36 Donihoo Lane-Hackberry to Donna	X		35	2,037		Chip Seal/Asphalt	X					
42d Dublin Road from Edgewater to St. Lawrence to Betsey		X	33	3,147		Asphalt	X					
42e Dublin Road to St. Lawrence		X	30	1,177		Asphalt	X					
42f Dublin Road from Creek Side to Edgewater		X	30	1,583		Asphalt	X					
61 Grey Ln.-Parker Road to Gregory	X		25	2,211		Concrete	X		2011		Remix	
26 Church Lane-Parker to End	X		20	2,172		Asphalt	X		2011		Remix	
Under Construction												
1 Aesthetica Place					473							
20 Canterbury					1,479							
38 Dover					1,102							

Good - 85-100 Fair - 55-69 Very Poor - 25-39 Failed 0-9
 Satisfactory - 70-84 Poor - 40-54 Severe 10-24

City of Parker, Texas Street Inventory

Meeting D														
STREET NAME			Residential	Collector	PCI Rating	LENGTH (L.F.)	Width (L.F.)	Surface Type	Open Ditch	Curb & Gutter Date	Const Date	Rehab Date	Rehab Type	Defect
Totals														
149						184,202	34.89							

Private Streets/ Private Maintenance

TxDot/County Maintenance

1	Dillehay Drive (FM 2551)	10,961
2	FM2551	17,877
3	Hogge	5,203
5	Parker Road	20,043
Totals		
5 streets	54,084	10.24

Good - 85-100 Fair - 55-69 Very Poor- 25-39 Failed 0-9
Satisfactory - 70-84 Poor - 40-54 Severe 10-24
In: C:\Users\Public\Pictures\My Pictures\General Services\2025 Pavement Condition Survey\Street Inventory 2020.xlsx

<u>PCI Rating</u>	<u>Linear Feet</u>	<u># of Segments</u>
<i>Residential Streets</i>		
Failed (0 - 9)	-	0
Severe (10 - 24)	2,172	1
Very Poor (25 - 39)	4,248	2
Poor (40 - 54)	18,699	11
Borderline Poor (55)	11,514	2
	<u>36,633</u>	<u>16</u>
<i>Collector (or high traffic) Streets</i>		
Very Poor (25 - 39)	5,907	3
Poor (40 - 54)	13,026	4
	<u>18,933</u>	<u>7</u>
Total Under Consideration	<u>55,566</u>	<u>23</u>
% of Total	20%	14%
Total Streets	273,143	168

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

Section	Area	Sub - section	STREET NAME		Street Location	Segment LF	PCI Rating	Avg Daily Traffic Volume	Other Streets dependent on Street	Current Width LF	Current Surface Type	Yr Constructed	Yr
				Residential									
26	NW		Church Lane		Parker to End	2,172	20			22	Asphalt		2011
						2,172							
61	SW		Grey/Gray Ln.		Parker Road to Gregory	2,211	25		City Park parking on this street	19	Asphalt		2011
36	NW		Donihoo Lane		Hackberry to Donna	2,037	35			21	Chip Seal		
						4,248							
60	SW	1	Gregory Lane		Bridge to End (LF adjusted by below)	4,171	40			22	Asphalt		2012
60	SW	2	Gregory Lane		Gray to 2551 Hogge	1,277	40	289		22	Asphalt		
62	NW	1	Hackberry Lane		Donihoo to Pecan Orchard	1,763	40	458		21	Chip Seal		2018
62	NW	2	Hackberry Lane		Pecan Orchard to Cul de sac	1,674				21	Chip Seal		
104	SW		Ranchview		Dillehay to Cul de sac	1,002	40	109	Woodcreek Circle	19	Asphalt		2011
140	SW		Woodcreek		Ranchview to Cul de sac	668	40			19	Asphalt		
67	NW		Kara Lane		Dillehay to Bozeman	2,606	45	287		20	Asphalt		2014
100	NE	1	Pecan Orchard Drive		Springhill Estates to Hackberry Lane	1,146	50	433		20	Asphalt		
100	NE	2	Pecan Orchard Drive		Hackberry Lane to Cul de sac	1,088	50			20	Asphalt		
131	NW		Wagon Wheel		Old Gate to Parker	1,676	50	183	Cimarron Circle	24	Asphalt		

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

<u>Section</u>	<u>Area</u>	<u>Sub - section</u>	<u>STREET NAME</u>	<u>Street Location</u>	<u>Segment LF</u>	<u>PCI Rating</u>	<u>Avg Daily Traffic</u>	<u>Volume</u>	<u>Other Streets dependent on Street</u>	<u>Current Width LF</u>	<u>Current Surface Type</u>	<u>Yr Constructed</u>	<u>Yr</u>
138	NW		Windmill Creek Drive	Donna to Countryside	1,628	50				22	Concrete		2018
					18,699								
87	SE		Moss Ridge Rd	McCreary to McCreary	6,195	55	26			24	Concrete		
126	NW		Sycamore Lane	Parker Road to Pecan Orchard	5,319	55	375	Windream Lane & Ann's Lane	18	Asphalt		2018	
					11,514								
			All Residential Segments		36,633								

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

Section	Area	Sub - section	STREET NAME	Street Location	Segment LF	PCI Rating	Avg Daily Traffic	Volume	Other Streets dependent on Street	Current Width LF	Current Surface Type	Yr Constructed	Yr
<u>Collector (or High Traffic)</u>													
			Dublin Road										All
	SW		Dublin Road - South	* excludes Creek Side to south city limit - PCI 60	5,907		1,456		St. Lawrence, Mahaney, Smith, Estate, Creekside, Edgewater	20	Asphalt		
42	f			Creek Side to Edgewater	1,583	30							
42	e			Dublin Road to St. Lawrence	1,177	30							
42	d			Edgewater to St. Lawrence to Betsey	3,147	33							
	SW		Dublin Road - North		7,957		1,640		Dublin Creek, Reserve Court	20	Asphalt		2020
42	b			Betsy to Dublin Creek	3,495	45							
42	a			Dublin Creek to Parker Road	4,462	50							
35	NE	z	Curtis Lane	East from Dillehay to Southridge	1,783	40	1,185			21	Asphalt		
74	NE		Lewis Lane	*Street inventory reflects					King's Crossing 2, 3,& 4 Poco Estados				
				9,340	3,286	40	781				Asphalt		2021
			Lucas	Lucas Rd to end of white p	3,471								2018
			Parker	Fence to new road surface	426								
			Developer	New road	1,992					24			
			County	Adjacent to Dean Homeste	884								
			Parker/Lucas	Adjacent to Southridge Ea	2,020								
			County	Adjacent to ETJ Properties	856								
			Parker	Bridge to Parker Road	1,850								
					11,499								
			Above is a breakdown of estimated responsibilities of this street using Google Earth measurements										
			All Collector Segments		18,933								

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

		Segment LF	Renovation & Repair History				Proposed Width	Street Widening	Phased Approach?	Proposed	Other Notes
STREET NAME	Street Location		Description (per Contract)	Cost (per							
Residential											
Church Lane	Parker to End	2,172	Remix				-			Asphalt	
		2,172									
Grey/Gray Ln.	Parker Road to Gregory	2,211	Remix				Yes			Asphalt	
Donihoo Lane	Hackberry to Donna	2,037					Yes			Asphalt	
		4,248									
Gregory Lane	Bridge to End (LF adjusted by below)	4,171	Remix. In 2014 Crack Seal was applied				-			Asphalt	
Gregory Lane	Gray to 2551 Hogge	1,277					-			Asphalt	
Hackberry Lane	Donihoo to Pecan Orchard	1,763	SPI Asphalt bid - double course surface	27,789.60			Yes			Asphalt	
Hackberry Lane	Pecan Orchard to Cul de sac	1,674					Yes			Asphalt	
Ranchview	Dillehay to Cul de sac	1,002	Remix				Yes			Asphalt	
Woodcreek	Ranchview to Cul de sac	668					Yes			Asphalt	
Kara Lane	Dillehay to Bozeman	2,606	Remix. 1/16 data show \$6,600 spend on				Yes			Asphalt	
Pecan Orchard Drive	Springhill Estates to Hackberry Lane	1,146					Yes			Asphalt	
Pecan Orchard Drive	Hackberry Lane to Cul de sac	1,088				22	Yes			Asphalt	
Wagon Wheel	Old Gate to Parker	1,676				24	-			Asphalt	

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Renovation & Repair History			Proposed Width	Street Widening	Phased Approach?	Proposed	Other Notes
			Description (per Contract)	Cost (per	Unit					
Windmill Creek Drive	Donna to Countryside	1,628	SPI Asphalt bid - Believe concrete improvements were made.	not specified on bid	22	-		Asphalt		
		18,699								
Moss Ridge Rd	McCreary to McCreary	6,195			24	-		?		
Sycamore Lane	Parker Road to Pecan Orchard	5,319	KIK Underground bid for Water line and road	946,076.00	22	Yes		Asphalt		
		11,514								
All Residential Segments		36,633								

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Renovation & Repair History			Proposed Width	Street Widening	Phased Approach?	Proposed	Other Notes
			Description (per Contract)	Cost (per	Unit					
Collector (or High Traffic)										
Dublin Road			of Dublin road was overlayed 7 or 8 years ago							
Dublin Road - South	* excludes Creek Side to south city limit - PCI 60	5,907					24	Y	Asphalt	
	Creek Side to Edgewater	1,583								
	Dublin Road to St. Lawrence	1,177								
	Edgewater to St. Lawrence to Betsey	3,147								
Dublin Road - North		7,957	Anderson Asphalt Bid included Lewis Ln Channel but no split provided. Total Shown	240,631					Asphalt	
	Betsy to Dublin Creek	3,495								
	Dublin Creek to Parker Road	4,462								
Curtis Lane	East from Dillehay to Southridge	1,783							Asphalt	
Lewis Lane	*Street inventory reflects 9,340	3,286	Portion (adjacent to King's Crossing) was redone	Developer Paid					Asphalt	
Lucas	Lucas Rd to end of white p	3,471	SPI Asphalt (laying 2' HMAC Type "D" Roadway Surface on Compacted Subgrade; cement mixing; and scarifying & mixing existing surface)	111,835.72						
Parker	Fence to new road surface	426								
Developer	New road	1,992								
County	Adjacent to Dean Homeste	884								
Parker/Lucas	Adjacent to Southridge Ea	2,020								
County	Adjacent to ETJ Properties	856								
Parker	Bridge to Parker Road	1,850								
		11,499	In 2012 the road was							
Above is a breakdown of estimated responsibilities of this										
All Collector Segments		18,933								

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Other				Comments on Methods & Drainage Concerns	Surface
			Process Anticipated	Drainage Cond	Water Line	ROW		
Residential								
Church Lane	Parker to End	2,172	Reconstruct	Poor	-			847,080
		2,172						847,080
Grey/Gray Ln.	Parker Road to Gregory	2,211	Remix	Average	-			541,799
Donihoo Lane	Hackberry to Donna	2,037	Reconstruct	Average	-			794,430
		4,248						1,336,229
Gregory Lane	Bridge to End (LF adjusted by below)	4,171	Remix	Average	-			1,021,895
Gregory Lane	Gray to 2551 Hogge	1,277	Remix	Average	-			312,865
Hackberry Lane	Donihoo to Pecan Orchard	1,763	Reconstruct	Average	-			687,570
Hackberry Lane	Pecan Orchard to Cul de sac	1,674	Reconstruct	Average	-			652,860
Ranchview	Dillehay to Cul de sac	1,002	Remix	Average	-			245,501
Woodcreek	Ranchview to Cul de sac	668	Remix	Average	-			163,703
Kara Lane	Dillehay to Bozeman	2,606	Overlay	Average	-			286,660
Pecan Orchard Drive	Springhill Estates to Hackberry Lane	1,146	Remix	Average	-			280,770
Pecan Orchard Drive	Hackberry Lane to Cul de sac	1,088	Remix	Average	-	This portion of street is a cul-de-sac with 2 homes. It is adjacent to properties that are in the process of being		266,560
Wagon Wheel	Old Gate to Parker	1,676	Remix	Average	-			410,620

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Other				Comments on Methods & Drainage Concerns	Surface
			Process Anticipated	Drainage Cond	Water Line	ROW		
Windmill Creek Drive	Donna to Countryside	1,628	Overlay	Average	-		City staff suggests overlaying the existing concrete street with asphalt. This approach was used on nearby Old Gate & Countryside.	179,080
		18,699						4,508,084
Moss Ridge Rd	McCreary to McCreary	6,195			-		City staff recommends replacement of the panels that have been identified.	-
Sycamore Lane	Parker Road to Pecan Orchard	5,319	Reconstruct	Poor	-		As this street was redone in 2018, city staff suggests maintenance with crack sealing at this time. They believe	2,074,410
		11,514						2,074,410
All Residential Segments		36,633						8,765,803

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Other			Comments on Methods & Drainage Concerns	Surface
			Process Anticipated	Drainage Cond	Water Line		
Collector (or High Traffic)							
Dublin Road							
Dublin Road - South	* excludes Creek Side to south city limit - PCI 60	5,907					-
	Creek Side to Edgewater	1,583	Reconstruct	Poor	Y Y		617,370
	Dublin Road to St. Lawrence	1,177	Reconstruct	Poor	Y Y		459,030
	Edgewater to St. Lawrence to Betsey	3,147	Reconstruct	Poor	Y Y		1,227,330
					Y Y		
Dublin Road - North		7,957					
	Betsy to Dublin Creek	3,495	Reconstruct	Poor	Y Y		1,363,050
	Dublin Creek to Parker Road	4,462	Reconstruct	Poor	Y Y		1,740,180
Curtis Lane	East from Dillehay to Southridge	1,783	Reconstruct	Average		The city will continue to maintain the road for driving conditions. However, due to construction of 2551 repairing road is not considered reasonable.	695,370
Lewis Lane	*Street inventory reflects						
	9,340	3,286	Reconstruct	Average			1,281,540
Lucas	Lucas Rd to end of white p	3,471					
Parker	Fence to new road surface	426					
Developer	New road	1,992					
County	Adjacent to Dean Homeste	884					
Parker/Lucas	Adjacent to Southridge Ea	2,020					
County	Adjacent to ETJ Properties	856					
Parker	Bridge to Parker Road	1,850					
		11,499					
Above is a breakdown of estimated responsibilities of this							
All Collector Segments		18,933					7,383,870

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

<u>STREET NAME</u>	<u>Street Location</u>	<u>Segment LF</u>	<u>Process</u>	<u>Drainage</u>	<u>Water Line</u>	<u>ROW</u>	<u>Comments on Methods & Drainage Concerns</u>	<u>Surface</u>
			<u>Anticipated</u>	<u>Cond</u>				
Total	10.52	55,566						16,149,673
% of All Streets		20%						
All Streets	51.73	273,143						
	50							

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Surface Only Option Costs									Drainage
			Drainage	Other	Total	Overlay \$ 110.00	Remix \$ 245.00	Reconstruct \$ 390.00	Concrete \$ 637.00	Good \$ -		
Residential												
Church Lane	Parker to End	2,172	705,900		1,552,980	238,920	532,140	847,080	1,383,564			-
		2,172	705,900		1,552,980	238,920	532,140	847,080	1,383,564			-
Grey/Gray Ln.	Parker Road to Gregory	2,211	359,357		901,156	243,257	541,799	862,456	1,408,678			-
Donihoo Lane	Hackberry to Donna	2,037	331,013		1,125,443	224,070	499,065	794,430	1,297,569			-
		4,248	690,369		2,026,598	467,327	1,040,864	1,656,886	2,706,247			-
Gregory Lane	Bridge to End (LF adjusted by below)	4,171	677,788		1,699,683	458,810	1,021,895	1,626,690	2,656,927			-
Gregory Lane	Gray to 2551 Hogge	1,277	207,513		520,378	140,470	312,865	498,030	813,449			-
Hackberry Lane	Donihoo to Pecan Orchard	1,763	286,488		974,058	193,930	431,935	687,570	1,123,031			-
Hackberry Lane	Pecan Orchard to Cul de sac	1,674	272,025		924,885	184,140	410,130	652,860	1,066,338			-
Ranchview	Dillehay to Cul de sac	1,002	162,832		408,333	110,225	245,501	390,797	638,302			-
Woodcreek	Ranchview to Cul de sac	668	108,578		272,281	73,499	163,703	260,588	425,627			-
Kara Lane	Dillehay to Bozeman	2,606	423,475		710,135	286,660	638,470	1,016,340	1,660,022			-
Pecan Orchard Drive	Springhill Estates to Hackberry Lane	1,146	186,225		466,995	126,060	280,770	446,940	730,002			-
Pecan Orchard Drive	Hackberry Lane to Cul de sac	1,088	176,800		443,360	119,680	266,560	424,320	693,056			-
Wagon Wheel	Old Gate to Parker	1,676	272,350		682,970	184,360	410,620	653,640	1,067,612			-

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Surface Only Option Costs										Drainage
			Drainage	Other	Total	Overlay \$ 110.00	Remix \$ 245.00	Reconstruct \$ 390.00	Concrete \$ 637.00	Good \$ -			
Windmill Creek Drive	Donna to Countryside	1,628	264,550		443,630	179,080	398,860	634,920	1,037,036				-
		18,699	3,038,623	-	7,546,707	2,056,914	4,581,309	7,292,695	11,911,402				-
Moss Ridge Rd	McCreary to McCreary	6,195	-		-	681,430	1,517,729	2,415,978	3,946,097				-
Sycamore Lane	Parker Road to Pecan Orchard	5,319	1,728,675		3,803,085	585,090	1,303,155	2,074,410	3,388,203				-
		11,514	1,728,675		3,803,085	1,266,520	2,820,884	4,490,388	7,334,300				-
All Residential Segments		36,633	6,163,567	-	14,929,370	4,029,680	8,975,197	14,287,049	23,335,513				-

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME		Street Location	Segment LF	Surface Only Option Costs								Drainage
				Drainage	Other	Total	Overlay \$ 110.00	Remix \$ 245.00	Reconstruct \$ 390.00	Concrete \$ 637.00	Good \$ -	
Collector (or High Traffic)						-						
Dublin Road												
Dublin Road - South	* excludes Creek Side to south city limit - PCI 60	5,907	-			-	649,770	1,447,215	2,303,730	3,762,759		-
	Creek Side to Edgewater	1,583	514,475		1,131,845	174,130	387,835	617,370	1,008,371			-
	Dublin Road to St. Lawrence	1,177	382,525		841,555	129,470	288,365	459,030	749,749			-
	Edgewater to St. Lawrence to Betsey	3,147	1,022,775		2,250,105	346,170	771,015	1,227,330	2,004,639			-
Dublin Road - North		7,957				875,270	1,949,465	3,103,230	5,068,609			
	Betsy to Dublin Creek	3,495	1,135,875		2,498,925	384,450	856,275	1,363,050	2,226,315			-
	Dublin Creek to Parker Road	4,462	1,450,150		3,190,330	490,820	1,093,190	1,740,180	2,842,294			-
Curtis Lane	East from Dillehay to Southridge	1,783	289,738		985,108	196,130	436,835	695,370	1,135,771			-
Lewis Lane	*Street inventory reflects 9,340	3,286	533,975		1,815,515	361,460	805,070	1,281,540	2,093,182			-
Lucas		Lucas Rd to end of white p	3,471									
Parker	Fence to new road surface	426										
Developer	New road	1,992										
County	Adjacent to Dean Homestead	884										
Parker/Lucas	Adjacent to Southridge East	2,020										
County	Adjacent to ETJ Properties	856										
Parker	Bridge to Parker Road	1,850										
		11,499										
Above is a breakdown of estimated responsibilities of this												
All Collector Segments		18,933	5,329,513	-	12,713,383	2,082,630	4,638,585	7,383,870	12,060,321			-

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Age Adjustment Costs	
			Fair	Poor
			\$ 162.50	\$ 325.00
Residential				
Church Lane	Parker to End	2,172	352,950	705,900
		2,172	352,950	705,900
Grey/Gray Ln.	Parker Road to Gregory	2,211	359,357	718,713
Donihoo Lane	Hackberry to Donna	2,037	331,013	662,025
		4,248	690,369	1,380,738
Gregory Lane	Bridge to End (LF adjusted by below)	4,171	677,788	1,355,575
Gregory Lane	Gray to 2551 Hogge	1,277	207,513	415,025
Hackberry Lane	Donihoo to Pecan Orchard	1,763	286,488	572,975
Hackberry Lane	Pecan Orchard to Cul de sac	1,674	272,025	544,050
Ranchview	Dillehay to Cul de sac	1,002	162,832	325,665
Woodcreek	Ranchview to Cul de sac	668	108,578	217,157
Kara Lane	Dillehay to Bozeman	2,606	423,475	846,950
Pecan Orchard Drive	Springhill Estates to Hackberry Lane	1,146	186,225	372,450
Pecan Orchard Drive	Hackberry Lane to Cul de sac	1,088	176,800	353,600
Wagon Wheel	Old Gate to Parker	1,676	272,350	544,700

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

<u>STREET NAME</u>	<u>Street Location</u>	Segment LF	Age Adjustment Costs	
			<u>Fair</u>	<u>Poor</u>
\$	162.50	\$	325.00	
Windmill Creek Drive	Donna to Countryside	1,628	264,550	529,100
		18,699	3,038,623	6,077,246
Moss Ridge Rd	McCreary to McCreary	6,195	1,006,657	2,013,315
Sycamore Lane	Parker Road to Pecan Orchard	5,319	864,338	1,728,675
		11,514	1,870,995	3,741,990
All Residential Segments		36,633	5,952,937	11,905,874

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan
Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

STREET NAME	Street Location	Segment LF	Age Adjustment Costs	
			Fair	Poor
		\$ 162.50	\$ 325.00	
Collector (or High Traffic)				
Dublin Road				
Dublin Road - South	* excludes Creek Side to south city limit - PCI 60	5,907	959,888	1,919,775
	Creek Side to Edgewater	1,583	257,238	514,475
	Dublin Road to St. Lawrence	1,177	191,263	382,525
	Edgewater to St. Lawrence to Betsey	3,147	511,388	1,022,775
Dublin Road - North		7,957	1,293,013	2,586,025
	Betsy to Dublin Creek	3,495	567,938	1,135,875
	Dublin Creek to Parker Road	4,462	725,075	1,450,150
Curtis Lane	East from Dillehay to Southridge	1,783	289,738	579,475
Lewis Lane	*Street inventory reflects			
	9,340	3,286	533,975	1,067,950
Lucas	Lucas Rd to end of white p	3,471		
Parker	Fence to new road surface	426		
Developer	New road	1,992		
County	Adjacent to Dean Homeste	884		
Parker/Lucas	Adjacent to Southridge Ea	2,020		
County	Adjacent to ETJ Properties	856		
Parker	Bridge to Parker Road	1,850		
		11,499		
Above is a breakdown of estimated responsibilities of this				
All Collector Segments		18,933	3,076,613	6,153,225

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

City of Parker - Capital Improvement Plan Analysis of Streets Under Consideration

Meeting Date: 04/11/2023 Item 1.

Based on Engineer's Opinion of Costs - Actual amount is not known until competitive bidding completed.

Area	Street	LF	Current Street Width	Avg DTV	Rating		Raveling	Bleeding	Rutting	Longitudinal	Centerline	Edge Cracking	Alligator	Potholes	Smoothness	Prior Repairs	Geo Tech	# Boring Samples Needed		
Phase 1																				
Collector Streets																				
SW	Dublin Road - South	5,907	20	1,456	Very Poor	30-33	Y		Y	Y	Y	Y	Y	Y	25	Overlay 7 or 8 years ago	P III	12		
NE	Lewis Lane	3,286	-	781	Poor	40	Y		Y					Y	30	2018 (?Bridge?), 2012 Remix	-	7		
Total Collector		9,193																18		
Residential Streets																				
NW	Church Lane	2,172	22		Severe	20		Y	Y	Y	Y	Y	Y	Y	20	2011 Remix	P I	4		
SW	Grey/Gray Lane	2,211	19	Preserve Access	Very Poor	25	Y		Y	Y			Y		10	2011 Remix	P I	4		
SW	Gregory Lane (Grey to Hogge)	1,277	22	289	Poor	40		Y	Y		Y	Y			30	2014 CrackSeal, 2012 Remix	P I	3		
NW	Hackberry Lane	1,763	21	458	Poor	40	Y		Y	Y			Y	Y	35	2018 Chip Seal	P I	4		
NE	Pecan Orchard	1,146	20	433	Poor	50	Y		Y	Y	Y	Y	Y		50		P 11	2		
SE	Moss Ridge *	6,195	24		Fair	55											-	12		
Total Residential		14,764																30		
Total Phase		23,957																48		

Area	Street	LF	Current Street Width	Avg DTV	Rating	Raveling	Bleeding	Rutting	Longitudinal	Centerline	Edge Cracking	Alligator	Potholes	Smoothness	Prior Repairs	Geo Tech	# Boring Samples Needed
Phase 2																	
Collector Streets																	
SW	Dublin Road - North	7,957	20	1,640	45-50	Y	Y	Y	Y	Y	Y	Y	40	2020 work done. In addition overlay 7 or 8 years ago	P III	16	
NE	Curtis Road ^	1,783	21	1,185	40	Y			Y	Y	35					-	4
Total Collector		9,740															19
Residential Streets																	
NW	Donihoo Lane	2,037	21		Very Poor	35	Y		Y	Y	30					P I	4
SW	Gregory Lane (Bridge to end)	4,171	22		Poor	40	y	y	y	y	30	2014 Crack Seal. 2012 Remix.			P I	8	
NW	Hackberry (Pecan Orchard to Cul de Sac)	1,674	21		Poor	40	Y	Y	Y	Y	35	2018 Chip Seal			P I	3	
SW	Ranchview	1,002	19	109	Poor	40	Y	Y	Y	Y	35	2011 Remix			P I	2	
SW	Woodcreek	668	19		Poor	40	Y	Y	Y	Y	35				P I	1	
NW	Kara Lane	2,606	20	287	Poor	45	Y	Y	Y		50	2014 Remix, 2016 Minor Repairs			P II	5	
NE	Pecan Orchard Drive (Hackberry to Cul de Sac)	1,088	20		Poor	50	Y	Y	Y	Y	50					2	
NW	Wagon Wheel	1,676	24	183	Poor	50	Y	Y	Y	Y	60				P II	3	
NW	Windmill Creek Drive *	1,628	22		Poor	50					40	2018 ???			P II	3	
NW	Sycamore Lane	5,319	18	375		55	Y	Y			60	2018 Replaced w/ Waterline			-	11	
Total Residential		21,869															44
Total Future Phases		31,609														61	68
Total ALL		55,566														111	2023

By Phases

Meeting Date: 04/11/2023 Item 1.

Area	Street	LF	Current Street Width	Avg DTV	Rating	Raveling	Bleeding	Rutting	Longitudinal	Centerline	Edge Cracking	Alligator	Potholes	Smoothness	Prior Repairs	Geo Tech	# Boring Samples Needed
		-															

Area	Street	Process Anticipated	Drainage Condition	Total	Surface	Drainage	
Phase 1							
Collector Streets							
SW	Dublin Road - South	Reconstruct	Poor	4,223,505	2,303,730	1,919,775	
NE	Lewis Lane	Reconstruct	Average	1,815,515	1,281,540	533,975	
Total Collector				6,039,020	3,585,270	2,453,750	
Residential Streets							
NW	Church Lane	Reconstruct	Poor	1,552,980	847,080	705,900	
SW	Grey/Gray Lane	Remix	Average	901,156	541,799	359,357	
SW	Gregory Lane (Grey to Hogge)	Remix	Average	520,378	312,865	207,513	
NW	Hackberry Lane	Reconstruct	Average	974,058	687,570	286,488	
NE	Pecan Orchard	Remix	Average	466,995	280,770	186,225	
SE	Moss Ridge *			-	-	-	
Total Residential				4,415,566	2,670,084	1,745,482	
	Total Phase			10,454,586	6,255,354	4,199,232	

Area	Street	Process Anticipated	Drainage Condition	Total	Surface	Drainage	
Phase 2							
Collector Streets							
SW	Dublin Road - North	Reconstruct		5,689,255	3,103,230	2,586,025	
NE	Curtis Road ^	Reconstruct		985,108	695,370	289,738	
Total Collector				6,674,363	3,798,600	2,875,763	
Residential Streets							
NW	Donihoo Lane	Reconstruct	Average	1,125,443	794,430	331,013	
SW	Gregory Lane (Bridge to end)	Remix	Average	1,699,683	1,021,895	677,788	
NW	Hackberry (Pecan Orchard to Cul de Sac)	Reconstruct	Average	924,885	652,860	272,025	
SW	Ranchview	Remix	Average	408,333	245,501	162,832	
SW	Woodcreek	Remix	Average	272,281	163,703	108,578	
NW	Kara Lane	Overlay	Average	710,135	286,660	423,475	
NE	Pecan Orchard Drive (Hackberry to Cul de Sac)	Remix	Average	443,360	266,560	176,800	
NW	Wagon Wheel	Remix	Average	682,970	410,620	272,350	
NW	Windmill Creek Drive *	Overlay	Average	443,630	179,080	264,550	
NW	Sycamore Lane	Reconstruct	Poor	3,803,085	2,074,410	1,728,675	
Total Residential				10,513,804	6,095,719	4,418,086	
Total Future Phases				17,188,167	9,894,319	7,293,848	
Total ALL				27,642,753	16,149,673	11,493,080	

<u>Area</u>	<u>Street</u>	<u>Process Anticipated</u>	<u>Drainage Condition</u>	<u>Total</u>	<u>Surface</u>	<u>Drainage</u>	
				-			

Area	Street	<u>Overlay</u>	<u>Remix</u>	<u>Reconstruct</u>	<u>Concrete</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>	
Phase 1									
Collector Streets									
SW	Dublin Road - South	649,770	1,447,215	2,303,730	3,762,759	-	959,888	1,919,775	-
NE	Lewis Lane	361,460	805,070	1,281,540	2,093,182	-	533,975	1,067,950	
Total Collector		1,011,230	2,252,285	3,585,270	5,855,941	-	1,493,863	2,987,725	
Residential Streets									
NW	Church Lane	238,920	532,140	847,080	1,383,564	-	352,950	705,900	
SW	Grey/Gray Lane	243,257	541,799	862,456	1,408,678	-	359,357	718,713	
SW	Gregory Lane (Grey to Hogge)	140,470	312,865	498,030	813,449	-	207,513	415,025	
NW	Hackberry Lane	193,930	431,935	687,570	1,123,031	-	286,488	572,975	
NE	Pecan Orchard	126,060	280,770	446,940	730,002	-	186,225	372,450	
SE	Moss Ridge *	681,430	1,517,729	2,415,978	3,946,097	-	1,006,657	2,013,315	
Total Residential		1,624,066	3,617,239	5,758,053	9,404,821	-	2,399,189	4,798,378	
Total Phase		2,635,296	5,869,524	9,343,323	15,260,762	-	3,893,051	7,786,103	

Area	Street	Overlay	Remix	Reconstruct	Concrete	Good	Fair	Poor	
Phase 2									
Collector Streets									
SW	Dublin Road - North	875,270	1,949,465	3,103,230	5,068,609	-	1,293,013	2,586,025	
NE	Curtis Road ^	196,130	436,835	695,370	1,135,771	-	289,738	579,475	
Total Collector		1,071,400	2,386,300	3,798,600	6,204,380	-	1,582,750	3,165,500	
Residential Streets									
NW	Donihoo Lane	224,070	499,065	794,430	1,297,569	-	331,013	662,025	
SW	Gregory Lane (Bridge to end)	458,810	1,021,895	1,626,690	2,656,927	-	677,788	1,355,575	
NW	Hackberry (Pecan Orchard to Cul de Sac)	184,140	410,130	652,860	1,066,338	-	272,025	544,050	
SW	Ranchview	110,225	245,501	390,797	638,302	-	162,832	325,665	
SW	Woodcreek	73,499	163,703	260,588	425,627	-	108,578	217,157	
NW	Kara Lane	286,660	638,470	1,016,340	1,660,022	-	423,475	846,950	
NE	Pecan Orchard Drive (Hackberry to Cul de Sac)	119,680	266,560	424,320	693,056	-	176,800	353,600	
NW	Wagon Wheel	184,360	410,620	653,640	1,067,612	-	272,350	544,700	
NW	Windmill Creek Drive *	179,080	398,860	634,920	1,037,036	-	264,550	529,100	
NW	Sycamore Lane								
Total Residential		1,820,524	4,054,804	6,454,585	10,542,489	-	2,689,411	5,378,821	
Total Future Phases		2,891,924	6,441,104	10,253,185	16,746,869	-	4,272,161	8,544,321	
Total ALL		5,527,220	12,310,627	19,596,509	32,007,631	-	8,165,212	16,330,424	

Area	Street	Overlay	Remix	Reconstruct	Concrete	Good	Fair	Poor

<u>City Area</u>	<u>Phase</u>	<u>Type</u>	<u>LF</u>	<u>Boring Samples</u>	<u>Estimated Costs</u>
NW	1	-	3,935	8	2,527,038
SW	1		9,395	19	5,645,038
NE	1		4,432	9	2,282,510
SE	1		6,195	12	-
		Total Phase 1	23,957	48	10,454,586
NW	2		14,940	30	7,690,148
SW	2		13,798	28	8,069,552
NE	2		2,871	6	1,428,468
SE	2		-	-	-
		Total Phase 2	31,609	63	17,188,167
			55,566	111	27,642,753
NW	1	Residential	3,935	8	2,527,038
SW	1	Residential	3,488	7	1,421,533
NE	1	Residential	1,146	2	466,995
SE	1	Residential	6,195	12	-
		Total Phase 1	14,764	30	4,415,566
NW	2	Residential	14,940	30	7,690,148
SW	2	Residential	5,841	12	2,380,297
NE	2	Residential	1,088	2	443,360
SE	2	Residential	-	-	-
		Total Phase 2	21,869	44	10,513,804
		Total Residential	36,633	73	14,929,370
SW	1	Collector	5,907	12	4,223,505
NE	1	Collector	3,286	7	1,815,515
		Total Phase 1	9,193	18	6,039,020
SW	2	Collector	7,957	16	5,689,255
NE	2	Collector	1,783	4	985,108
		Total Phase 2	9,740	19	6,674,363
			18,933	38	12,713,383
			55,566	111	27,642,753

Capital Improvement Plan Committee
Analysis of Streets Under Consideration - Costs

Meeting Date: 04/11/2023 Item 1.

<u>Title</u>	<u>Product</u>	<u>Description</u>	<u>Cost</u>
Concrete	Concrete	6" reinforced concrete w/ 6" lime treated subgrade	637
Reconstruct	Asphalt	12' flexbase material, 1.5" asphalt, glass pave, and 2" asphalt	390
Remix	Asphalt	remix existing roadbed w/ cement, placing 1" asphalt with glass pave and 1.5" asphalt	245
Overlay	Asphalt	2" overlay with glass pave between existing and new	110
<u>Drainage Adjustment Percentage Add Ons</u>			
Good			-
Average			163
Poor			325
Per John Birkhoff, City Engineer			
"these numbers from bid tabs and unit prices in this environment are highly volatile, but will provide a reality cost between alternatives and should help in prioritizing streets for funds available."			
The numbers are from various street reconstruction or rehabilitation based on a 24-foot wide pavement			
<u>Other</u>			
Right of Way Costs			
Water Line Costs			

<u>Area</u>	<u>Street</u>	<u>LF</u>	<u>Current Street Width</u>	<u>Avg DTV</u>	<u>Rating</u>	<u>Raveling</u>	<u>Bleeding</u>	<u>Rutting</u>	<u>Longitudinal</u>	<u>Centerline Cracks</u>	<u>Edge Cracking</u>	<u>Alligator Cracking</u>	<u>Potholes</u>	<u>Smoothness</u>	<u>Prior Repairs</u>	<u>Geo Tech</u>	<u># Boring Samples Needed</u>	
Phase 1																		
Collector Streets																		
SW	Dublin Road - South	5,907	20	1,456	Very Poor	30-33	Y		Y	Y	Y	Y	Y	Y	25	Overlay 7 or 8 years ago 2018 (?Bridge?), 2012	P III	12
NE	Lewis Lane	3,286	-	781	Poor		40	Y		Y				Y	30	Remix	-	7
Total Collector		9,193															18	
Residential Streets																		
NW	Church Lane	2,172	22		Severe	20		Y	Y	Y	Y	Y	Y	Y	20	2011 Remix	P I	4
SW	Grey/Gray Lane	2,211	19	Preserve Access	Very Poor	25	Y		Y	Y				Y	10	2011 Remix	P I	4
SW	Gregory Lane (Grey to Hogge)	1,277	22	289	Poor		40		Y	Y		Y	Y		30	2014 CrackSeal, 2012 Remix	P I	3
NW	Hackberry Lane	1,763	21	458	Poor	40	Y		Y	Y			Y	Y	35	2018 Chip Seal	P I	4
NE	Pecan Orchard	1,146	20	433	Poor	50	Y		Y	Y	Y	Y	Y	Y	50		P 11	2
SE	Moss Ridge *	6,195	24		Fair	55											-	12
Total Residential		14,764															30	
Total Phase		23,957															48	

<u>Area</u>	<u>Street</u>	<u>Process Anticipated</u>	<u>Drainage Condition</u>	<u>Total</u>	<u>Surface</u>	<u>Drainage</u>
<i>Phase 1</i>						
<i>Collector Streets</i>						
SW	Dublin Road - South	Reconstruct	Poor	4,223,505	2,303,730	1,919,775
NE	Lewis Lane	Reconstruct	Average	1,815,515	1,281,540	533,975
Total Collector				6,039,020	3,585,270	2,453,750
<i>Residential Streets</i>						
NW	Church Lane	Reconstruct	Poor	1,552,980	847,080	705,900
SW	Grey/Gray Lane	Remix	Average	901,156	541,799	359,357
SW	Gregory Lane (Grey to Hogge)	Remix	Average	520,378	312,865	207,513
NW	Hackberry Lane	Reconstruct	Average	974,058	687,570	286,488
NE	Pecan Orchard	Remix	Average	466,995	280,770	186,225
SE	Moss Ridge *			-	-	-
Total Residential				4,415,566	2,670,084	1,745,482
Total Phase				10,454,586	6,255,354	4,199,232

<u>Area</u>	<u>Street</u>	<u>Process Anticipated</u>	<u>Drainage Condition</u>	<u>Total</u>	<u>Surface</u>	<u>Drainage</u>
Phase 2						
Collector Streets						
SW	Dublin Road - North	Reconstruct		5,689,255	3,103,230	2,586,025
NE	Curtis Road ^	Reconstruct		985,108	695,370	289,738
Total Collector				6,674,363	3,798,600	2,875,763
Residential Streets						
NW	Donihoo Lane	Reconstruct	Average	1,125,443	794,430	331,013
	Gregory Lane (Bridge to end)	Remix	Average	1,699,683	1,021,895	677,788
	Hackberry (Pecan Orchard to Cul de Sac)	Reconstruct	Average	924,885	652,860	272,025
SW	Ranchview	Remix	Average	408,333	245,501	162,832
SW	Woodcreek	Remix	Average	272,281	163,703	108,578
NW	Kara Lane	Overlay	Average	710,135	286,660	423,475
	Pecan Orchard Drive (Hackberry to Cul de Sac)	Remix	Average	443,360	266,560	176,800
NW	Wagon Wheel	Remix	Average	682,970	410,620	272,350
	Windmill Creek Drive *	Overlay	Average	443,630	179,080	264,550
NW	Sycamore Lane	Reconstruct	Poor	3,803,085	2,074,410	1,728,675
Total Residential				10,513,804	6,095,719	4,418,086
Total Future Phases				17,188,167	9,894,319	7,293,848
Total ALL				27,642,753	16,149,673	11,493,080
				-		

Area	Street	Overlay	Remix	Reconstruct	Concrete	Good	Fair	Poor	
Phase 1									
Collector Streets									
SW	Dublin Road - South	649,770	1,447,215	2,303,730	3,762,759	-	959,888	1,919,775	-
NE	Lewis Lane	361,460	805,070	1,281,540	2,093,182	-	533,975	1,067,950	
Total Collector		1,011,230	2,252,285	3,585,270	5,855,941	-	1,493,863	2,987,725	
Residential Streets									
NW	Church Lane	238,920	532,140	847,080	1,383,564	-	352,950	705,900	
SW	Grey/Gray Lane	243,257	541,799	862,456	1,408,678	-	359,357	718,713	
SW	Gregory Lane (Grey to Hogge)	140,470	312,865	498,030	813,449	-	207,513	415,025	
NW	Hackberry Lane	193,930	431,935	687,570	1,123,031	-	286,488	572,975	
NE	Pecan Orchard	126,060	280,770	446,940	730,002	-	186,225	372,450	
SE	Moss Ridge *	681,430	1,517,729	2,415,978	3,946,097	-	1,006,657	2,013,315	
Total Residential		1,624,066	3,617,239	5,758,053	9,404,821	-	2,399,189	4,798,378	
Total Phase		2,635,296	5,869,524	9,343,323	15,260,762	-	3,893,051	7,786,103	

Area	Street	Overlay	Remix	Reconstruct	Concrete	Good	Fair	Poor	
Phase 2									
Collector Streets									
SW	Dublin Road - North	875,270	1,949,465	3,103,230	5,068,609	-	1,293,013	2,586,025	
NE	Curtis Road ^	196,130	436,835	695,370	1,135,771	-	289,738	579,475	
Total Collector		1,071,400	2,386,300	3,798,600	6,204,380	-	1,582,750	3,165,500	
Residential Streets									
NW	Donihoo Lane	224,070	499,065	794,430	1,297,569	-	331,013	662,025	
SW	Gregory Lane (Bridge to end)	458,810	1,021,895	1,626,690	2,656,927	-	677,788	1,355,575	
NW	Hackberry (Pecan Orchard to Cul de Sac)	184,140	410,130	652,860	1,066,338	-	272,025	544,050	
SW	Ranchview	110,225	245,501	390,797	638,302	-	162,832	325,665	
SW	Woodcreek	73,499	163,703	260,588	425,627	-	108,578	217,157	
NW	Kara Lane	286,660	638,470	1,016,340	1,660,022	-	423,475	846,950	
NE	Pecan Orchard Drive (Hackberry to Cul de Sac)	119,680	266,560	424,320	693,056	-	176,800	353,600	
NW	Wagon Wheel	184,360	410,620	653,640	1,067,612	-	272,350	544,700	
NW	Windmill Creek Drive *	179,080	398,860	634,920	1,037,036	-	264,550	529,100	
NW	Sycamore Lane								
Total Residential		1,820,524	4,054,804	6,454,585	10,542,489	-	2,689,411	5,378,821	
Total Future Phases		2,891,924	6,441,104	10,253,185	16,746,869	-	4,272,161	8,544,321	
Total ALL		5,527,220	12,310,627	19,596,509	32,007,631	-	8,165,212	16,330,424	
StreetsUnderConsideration_CostEstimates									

<u>City Area</u>	<u>Phase</u>	<u>Type</u>	<u>LF</u>	<u>Boring Samples</u>	<u>Estimated Costs</u>
NW	1	-	3,935	8	2,527,038
SW	1		9,395	19	5,645,038
NE	1		4,432	9	2,282,510
SE	1		6,195	12	-
		Total Phase 1	23,957	48	10,454,586
NW	2		14,940	30	7,690,148
SW	2		13,798	28	8,069,552
NE	2		2,871	6	1,428,468
SE	2		-	-	-
		Total Phase 2	31,609	63	17,188,167
			55,566	111	27,642,753
NW	1	Residential	3,935	8	2,527,038
SW	1	Residential	3,488	7	1,421,533
NE	1	Residential	1,146	2	466,995
SE	1	Residential	6,195	12	-
		Total Phase 1	14,764	30	4,415,566
NW	2	Residential	14,940	30	7,690,148
SW	2	Residential	5,841	12	2,380,297
NE	2	Residential	1,088	2	443,360
SE	2	Residential	-	-	-
		Total Phase 2	21,869	44	10,513,804
		Total Residential	36,633	73	14,929,370
SW	1	Collector	5,907	12	4,223,505
NE	1	Collector	3,286	7	1,815,515
		Total Phase 1	9,193	18	6,039,020
SW	2	Collector	7,957	16	5,689,255
NE	2	Collector	1,783	4	985,108
		Total Phase 2	9,740	19	6,674,363
			18,933	38	12,713,383
			55,566	111	27,642,753

Capital Improvement Plan ~ Request for Action

- **Agreement on the list of Phase I streets.** Additional efforts will be made to these streets to assess the underlying structure of the streets, drainage, and other issues enabling a better assessment of cost to make the needed repairs. This will in turn aid in the creation of a Capital Improvement Plan.
 - Phase 1 streets were determined with consideration of:
 - Volume of traffic
 - Condition of Road
 - Previous repairs
 - The streets recommended for Phase 1 include:

Area	Street	LF	Current Street Width	Avg DTV	Rating	Raveling	Bleeding	Rutting	Longitudinal	Centerline	Edge	Alligator	Potholes	Smoothness	Prior Repairs
Collector Streets															
SW	Dublin Road - South	5,907	20	1,456	Very Poor	30-33	Y	Y	Y	Y	Y	Y	Y	25	Overlay 7 or 8 years ago
NE	Lewis Lane	3,286	-	781	Poor	40	Y	Y				Y	Y	30	2018 (?Bridge?), 2012 Remix
Total Collector		9,193													
Residential Streets															
NW	Church Lane	2,172	22		Severe	20	Y	Y	Y	Y	Y	Y	Y	20	2011 Remix
SW	Grey/Gray Lane	2,211	19	Preserve Access	Very Poor	25	Y	Y	Y			Y		10	2011 Remix
SW	Gregory Lane (Grey to Hogge)	1,277	22	289	Poor	40	Y	Y	Y	Y	Y			30	2014 CrackSeal, 2012 Remix
NW	Hackberry Lane	1,763	21	458	Poor	40	Y	Y	Y		Y	Y	Y	35	2018 Chip Seal
NE	Pecan Orchard	1,146	20	433	Poor	50	Y	Y	Y	Y	Y	Y	Y	50	
SE	Moss Ridge *	6,195	24		Fair	55									
Total Residential		14,764													
Total Phase		23,957													

* Borderline fair/poor Concrete Street. City staff suggests considering replacement of faulty panels on Moss Ridge to help to extend the life of this road.

- **Approval to obtain firm proposals** for Phase I streets agreed upon above with
 - Henley-Johnston & Associates, Inc. a biotechnical engineering firm to provide **boring samples** and
 - Birkhoff, Hendricks & Carter, L.L.P., to provide **engineer's opinion of costs based upon results of boring samples**.

These proposals will be presented in the council agenda as soon upon receipt for approval of agreement to proceed.

- Provide **guidance for estimating cost of drainage repair** on Phase 1 streets. Options of estimating include:
 - Recommendations based on observations
 - Engineering Study

- Other
- **Updated reports with assessment of costs** will be presented to council upon completion of work including boring samples, engineer's opinion of costs, and drainage repair estimates with recommended path forward.
- Other streets under consideration will be considered as part of the larger Capital Improvement Plan and will be addressed in the next phase of the plan development. These streets include:

Area	Street	LF	Current Street Width	Avg DTV	Rating	Raveling	Bleeding	rutting	Longitudinal	Centerline	Edge	Alligator	Potholes	Smoothness	Prior Repairs
Collector Streets															
SW	Dublin Road - North	7,957	20	1,640	45-50	Y	Y	Y	Y	Y	Y	Y	Y	40	2020 work done. In addition overlay 7 or 8 years ago
NE	Curtis Road ^	1,783	21	1,185	40	Y				Y	Y			35	
Total Collector		9,740													
Residential Streets															
NW	Donahoo Lane	2,037	21		Very Poor	35	Y		Y	Y	Y	30			
SW	Gregory Lane (Bridge to end)	4,171	22		Poor	40	Y	Y	Y	Y	Y	Y	30	2014 Crack Seal. 2012 Remix.	
NW	Hackberry (Pecan Orchard to Cul de Sac)	1,674	21		Poor	40	Y	Y	Y	Y	Y	Y	35	2018 Chip Seal	
SW	Ranchview	1,002	19	109	Poor	40	Y	Y	Y	Y	Y	Y	35	2011 Remix	
SW	Woodcreek	668	19		Poor	40	Y	Y	Y	Y	Y	Y	35		
NW	Kara Lane	2,606	20	287	Poor	45	Y	Y	Y	Y			50	2014 Remix, 2016 Minor Repairs	
NE	Pecan Orchard Drive (Hackberry to Cul de Sac)	1,088	20		Poor	50	Y	Y	Y	Y	Y	Y	50		
NW	Wagon Wheel	1,676	24	183	Poor	50	Y	Y	Y	Y	Y	Y	60		
NW	Windmill Creek Drive *	1,628	22		Poor	50							40	2018 ???	
NW	Sycamore Lane	5,319	18	375		55	Y	Y					60	2018 Replaced w/ Waterline	
Total Residential		21,869													
Total Future Phases		31,609													

* Concrete street. City recommends considering this street be overlaid with asphalt.

^ Curtis Road currently in the middle of the reconstruction of FM2551 (Dillehay). City staff will work with TXDOT to maintain street in drivable condition during the construction and to fix the street after work is completed.

City of Parker
Capital Improvement Plan Committee
Update for use at November 17, 2021 Joint Meeting with City Council

Below is a recap of information researched and discussed by the Capital Improvement Plan Committee.

- CIP Committee - responsibility for considering the city's current and future infrastructure needs relative to Streets, Drainage (relating to streets), and Water and present a 5-Year Plan for consideration by the City Council.
- City Infrastructure Standards as noted in Ordinances, Section 155, Subdivision Regulations as they relate to Capital Improvements can be found at the links provided.

- Streets and thoroughfares ([155.052](#)) – Below are the defined Street Standards

	Pavement			Right of Way
	Type	Width	Thickness	
Estate Residential	Concrete	24'	6"	60'
Suburban Residential	Concrete	26'	6"	60'
Estate Collector	Concrete	24'	8"	60'
Suburban Collector	Concrete	36'	8"	70'
Suburban Undivided 4-Lane (M4U-S)	Concrete	44'		90'
Suburban Divided 4-Lane (M4D-S)	Concrete	60'		105'

- Drainage ([155.054](#)) – Current standards require
 - Developments be designed to carry off 100-year design storm. The requirements include defining sizes of driveway, street culverts as well as drainage channels and headwalls. However, parts of Parker developed prior to this requirement are not held to this standard.
 - Creeks and drainage ways are the property owner's responsibility to maintain the area, except as otherwise provided.
 - The city also has an ordinance relating to Storm Water Management (Ord. 785) and a Flood Damage Prevention Policy (Ord. 422) but they do not appear to provide any specific guidance on maintaining proper drainage.
- Sewage ([155.055](#)) & Water ([155.056](#)) Facilities

- On Streets & Drainage
 - **Street Condition Survey** performed by city engineer and public works director and staff. To the best of my knowledge this is the first such survey done. Objective - to provide an assessment of all streets. ([Engineer's Summary Report](#) provided previously)
 - At present, the Committee is considering all **Streets identified with a rating below fair (those that have a rating of 55 or lower)**. The committee is first exploring following the recommendations of the city engineer in the development of a plan ([Engineer's Summary Report](#)). Specific streets to be addressed or included in the plan have not yet been identified.

City of Parker
Capital Improvement Plan Committee
Update for use at November 17, 2021 Joint Meeting with City Council

- Additional data has been gathered for **Streets Under Consideration - Residential and Collector** with the assistance of Gary Machado, Chief Brooks and Officer Price. (See attached)
- There are areas of the city developed years ago where ownership of the **Rights of Way** of the existing streets is unknown. Clarifying this is detailed and time consuming, however, essential before work can begin on the affected streets. Dublin Rd is one such road. Randy Kercho and I are assisting in gathering the underlying data from Collin County's Public Access System for use by city staff to complete this project.
- A preliminary estimate of costs to repair **Dublin Road – North and South** for both streets and water Lines totaling \$6.161 million was prepared by our City Engineer in 2020. (See attached)
- On Water
 - **A Capital Improvement Plan for 2016-2026 Water Impact Fee** was performed in 2016. Projects identified in this plan will be considered in the development of this Plan.
 - Additional needs of water infrastructure are being gathered in conjunction with a **Water Rate Study**. This will also be considered in the development of the CIP plan.
- On Financing
 - City Funds for Streets, Drainage, and Water –
 - Historical analysis of Street maintenance and repair expenditures by year and by project with assistance of Grant Savage. (See attached)
 - Report of funds activity and current balances with assistance of Grant Savage. (See attached)
 - Define the restrictions on funds –
 - Water Impact Fee
 - Other Sources - Not yet discussed in committee at any length, however, a few items noted for such discussions
 - The amount of revenues received from property taxes has increased over the years with the most recent audited year (2020) reflecting 71% of all revenues come from residents through the property tax. 2021 and 2022 use higher estimates.
 - Adding 1% Sales tax could bring in \$250,000+/year. This requires voter approval. Possible to have tax for "infrastructure".
 - Long Term Financial Projection is needed to assess the city's funding availability. A draft with core data has been created for discussion and further development.