

**AGENDA MEMO
BUSINESS OF THE CITY COUNCIL
CITY OF FULSHEAR, TEXAS**

AGENDA OF: July 12, 2018	AGENDA ITEM: BUS - A
DATE SUBMITTED: July 9, 2018	DEPARTMENT: Planning & Development
PREPARED BY: Sharon Valiante, Director of Public Works Brant Gary, Asst. City Manager	PRESENTER: Sharon Valiante, Director of Public Works Brant Gary, Asst. City Manager
SUBJECT: DISCUSSION AND POSSIBLE ACTION REGARDING THE PROPOSED CONTRACT WITH INFRAMARK FOR MAINTENANCE AND OPERATION OF THE CITY'S WATER AND WASTEWATER SYSTEMS	
ATTACHMENTS:	
<ol style="list-style-type: none"> 1. Memorandum of Findings – McManus & Johnson 2. Presentation from Council Meeting of February 20, 2018 3. Latest draft version of the proposed agreement (Provided via email) 	

EXECUTIVE SUMMARY

On February 20, 2018, City Council formally accepted the RFQ/RFP's submitted and authorized staff to enter into negotiations with Inframark Services to develop an O&M contract for consideration and approval by City Council. McManus & Johnson was asked by the City to assist in reviewing these proposals received and presented an overview of their findings at that meeting.

Since that time, City staff and Inframark (along with some additional assistance from McManus & Johnson) have been reviewing the proposed document and have come to an agreement on most of the proposed terms and conditions. Considering that some members of City Council were not present when this item was first approved to proceed, it was determined that an update regarding this agreement should be provided in anticipation of consideration to approve.

As a part of that review, staff has provided the presentation and recommendation report from McManus & Johnson evaluating the proposals received. In addition, a copy of the latest agreement has also been provided. City staff and representatives from Inframark will be on-hand to answer any questions Council may have. As of now, the City and Inframark are still discussing the following two items:

- 1.) Clarification on language regarding non-appropriation requirements
- 2.) Clarification on language regarding final payment terms and outstanding claims

Once these items are clarified, the contract will be brought to Council for consideration of approval.

RECOMMENDATION

Staff has no formal recommendation for action at this time. However, staff would request Council review the items provided and request any information needed to consider formal approval.



City of Fulshear, Texas

Water and Wastewater Operation Management Selection *Technical Memorandum*

Rev. 1

February 9, 2018



Tara L. Payne

2-9-2018

THE SEAL APPEARING ON THIS
DOCUMENT WAS AUTHORIZED BY
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Prepared by: **McManus & Johnson Consultant Engineers**
TBPE Firm Registration No. F-15276





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1 INTRODUCTION

McManus & Johnson Consulting Engineers (MJCE) was contracted by the City of Fulshear (City) to assist in the selection of the City’s water and wastewater operations management contract. MJCE has thoroughly reviewed submitted proposals from Severn Trent (now renamed Inframark) and TNG Utility, in addition to current contracts and service reports. Furthermore, interviews were conducted to clarify the proposals and determine the company’s abilities to deliver the anticipated services.

2 CURRENT WATER/ WASTEWATER SYSTEMS

Fulshear has two separate water and wastewater systems consisting of the City and Cross Creek Ranch (CCR). Currently, both systems are being operated and maintained by Inframark. Below is a summary of each water and wastewater system.

City of Fulshear:

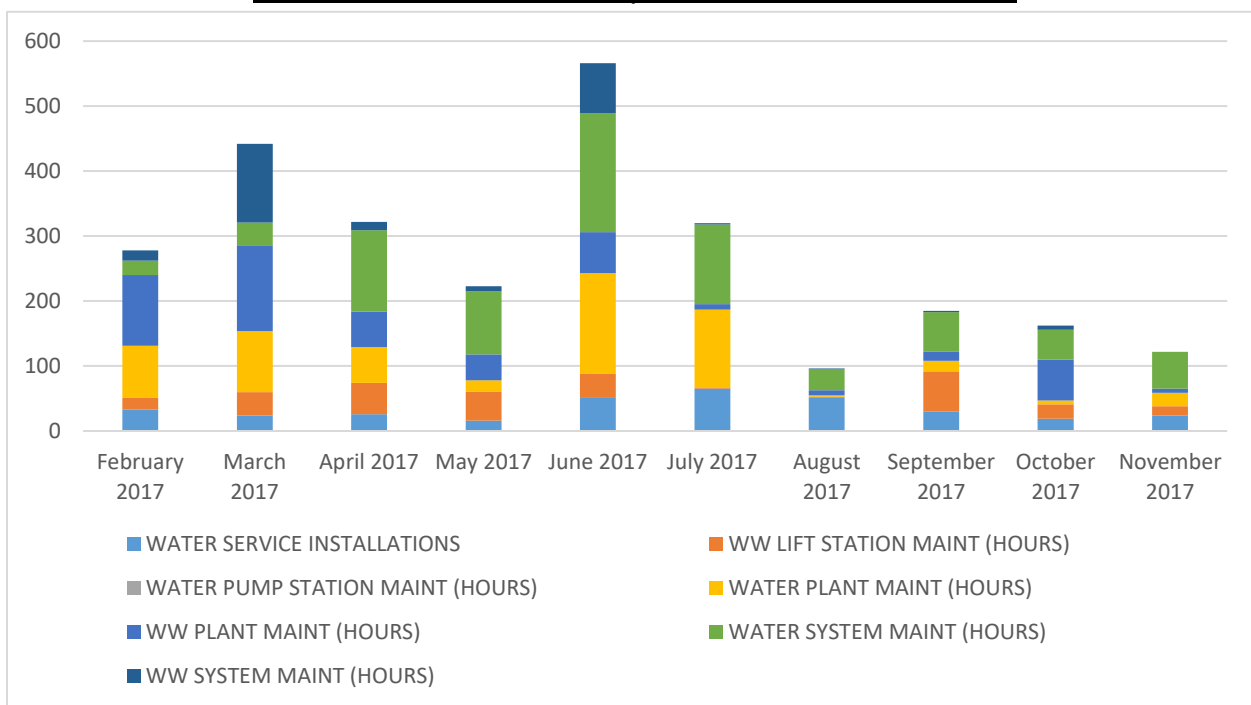
1 WWTP (0.7 MGD), 8 lift stations, 3 water wells, elevated and ground storage tanks, booster pumps; 68,431 linear feet (13 miles) of wastewater lines and 74,203 linear feet (14 miles) of water Lines

Cross Creek Ranch:

1 WWTP (2.5 MGD), 1 lift station, 2 WTP and 2 water wells, ground storage tanks, booster pumps, 179,979 (34 miles) linear feet wastewater lines and 200,437 linear feet (38 miles) of water Lines

After reviewing the 2017 service reports, MJCE has made the following observations (assuming 60% employee efficiencies):

2017 Water/Wastewater Operations and Maintenance





The above graph indicates existing service levels and tasks currently being provided by the vendor. This information was used to determine estimated manpower needs, equipment and inventory to perform these tasks.

3 RESPONDENTS

Two vendors submitted proposals for Fulshear's *Operations & Maintenance of City Water & Wastewater Utility System* RFQ: Inframark (formerly Severn Trent) and TNG Utility.

3.1 Inframark

Formerly known as Severn Trent, Inframark has been in business for over 40 years and has been the City's water and wastewater operator since 2012. The company has experience operating both utility districts and cities such as Pasadena and Kingwood. Its main office is in Katy, Texas, in addition to multiple support offices located minutes from Fulshear's facilities.

The largest wastewater treatment plant currently operated by Inframark is 14 MGD for the City of Pasadena and the largest water treatment plant is 10.2 MGD for the City of Kingwood. Inframark has transitioned selected tasks to Kingwood municipal operators including meter reading, billing, collection and customer service, but is still responsible for the water and wastewater operations for treatment and collection.

3.2 TNG

Founded in 2001, TNG is a mid-sized company with 48 employees, with one office located in Spring, Texas. TNG currently operates and maintains 52 water and wastewater facilities in the areas of Katy, Houston, Spring, Bay Brook and Magnolia. In addition to operators and maintenance crews, TNG also staffs a Compliance Manager to interface with the Texas Commission of Environmental Quality (TCEQ).

The largest wastewater treatment plant currently operated by TNG is 1.5 MGD and the largest system has approximately 3,200 accounts. For two years TNG operated the City of Magnolia and then transferred the water and wastewater system over to the City.

4 SCORING AND EVALUATION

4.1 City of Fulshear Goals

The City is seeking a qualified contractor to operate and maintain all water and wastewater systems under a single Operating Agreement. The vendor would also be responsible for implementing a plan to transition water and wastewater operations and maintenance to the City of Fulshear. The decision for the City to move operations inhouse, stems from the Cross Creek Ranch Developer Agreement. Section 2.10 of the



City of Fulshear

Water and Wastewater Operation Management Selection

developer agreement states: *The City may not independently operate the System until the number of connections in the Project exceeds 3000.* To date, the City has approximately 3,500 connections.

Additional objectives include:

- Training City staff to operate and maintain the systems and equipment
- Educating City Staff on TCEQ compliance paperwork and deadlines
- Transferring all records, maintenance logs and work orders to the City.
- Help the City implement a new work order system
- Positioning the City implement a GIS based asset management system

4.2 Scoring

The intention of scoring each vendor is to provide an objective evaluation on best value to the City and its ratepayers. Using the criteria provided in the original RFQ, MJCE has provided a suggested score for each proposer. Scoring is based on submitted proposals, references and in-depth interviews.

Table 3-1: Proposal Scores

<i>Criteria</i>	<i>Inframark</i>	<i>TNG</i>
Company Qualls (30%)		
• Experience (20%)	15	15
• References (5%)	3	4
• Finance Info (5%)	5	3
Technical Proposal – Incl. Transition Plan (40%)		
• Ops Plan (15%)	15	11
• Trans Plan (15%)	12	8
• Key Staff (10%)	10	8
Price Proposal (30%)		
a) Price (30%)	20	18
Totals		
	80/100	67/100

4.3 Justification

The table below provides a summary of key factors in determining a suggested score for each proposal.

Table 3-2: Scoring Justification

Criteria	Inframark	TNG
EXPERIENCE	<ul style="list-style-type: none"> • Current provider • Familiar with Fulshear facilities, work load and compliance • 40 years in business 	<ul style="list-style-type: none"> • Only 1 City client • Not familiar with Fulshear facilities. • 17 years in business



City of Fulshear
Water and Wastewater Operation Management Selection

Criteria	Inframark	TNG
REFERENCES	<ul style="list-style-type: none"> Overall good references Fulshear is pleased with current service No transitional reference provided 	<ul style="list-style-type: none"> Overall good references Provided reference for city transition (Magnolia) City of Magnolia was generally pleased, but felt like TNG was in a hurry to leave and didn't explain facilities & compliance in detail before leaving
FINANCE	<ul style="list-style-type: none"> Provided detail financial background 	<ul style="list-style-type: none"> Provided minimal financials
OPS PLAN	<ul style="list-style-type: none"> Dedicated operator 40/hr per week Operator attended interview All work orders are electronic Inhouse GIS team 	<ul style="list-style-type: none"> Dedicated operator 40/hr per week Operator would be hired upon being selected Work orders on paper No GIS capabilities
TRANSITION PLAN	<ul style="list-style-type: none"> Detailed five-year program with City personnel and equipment breakdown per year During interview acknowledged variable time frames with 18 months as quickest recommended Inframark staff phase out as needed 	<ul style="list-style-type: none"> Generic operations plan provided No details on potential City staff and equipment Six-month time frame proposed-acknowledged 18-24 as optimal transition time
KEY STAFF	<ul style="list-style-type: none"> Full time operator attended interview Concern over city hiring employees through transition 	<ul style="list-style-type: none"> Hiring new people for job Identified operator as key employee during the transition
PRICE	<ul style="list-style-type: none"> Pricing competitive with existing contract Vendor plans to clarify existing workload and negotiate pricing based on current workload 	<ul style="list-style-type: none"> Pricing limited to basic tasks At interview, provided detail from comparison on existing contract workload

5 CONSIDERATIONS AND RECOMMENDATION

Both Inframark and TNG are qualified to operate and maintain Fulshear's water and wastewater systems. There are considerations between the two companies that have significant value in selecting a new vendor.

- Inframark already has staff in place, whereas TNG plans to hire new employees to manage the City's system.
- Both vendors expressed the transition timing to be flexible based on the City's needs.



City of Fulshear Water and Wastewater Operation Management Selection

- Inframark keeps all records electronically and has an inhouse GIS team that can provide digital data on the City's water and wastewater assets. TNG does not.
- Inframark has provided a detailed transition plan with future staff and equipment breakdown. TNG's transition plan was very generic and not tailored specifically to Fulshear.
- Inframark is already familiar with Fulshear facilities and staff.
- Inframark is proven to provide efficient emergency response, has multiple offices minutes from Fulshear facilities and can pull resources from nearby Cities if needed. TNG has one office in Spring approximately 40 minutes from the City with a promise to hire employees who live in the area.

In the end, Fulshear has extensively developed a vision for the City's future, and it is important that the vendor's capabilities align with Fulshear's vision for the future, while providing cost effective quality service. Based on these considerations, proposals and interviews, MJCE and City staff recommends renegotiating its current contract with Inframark.

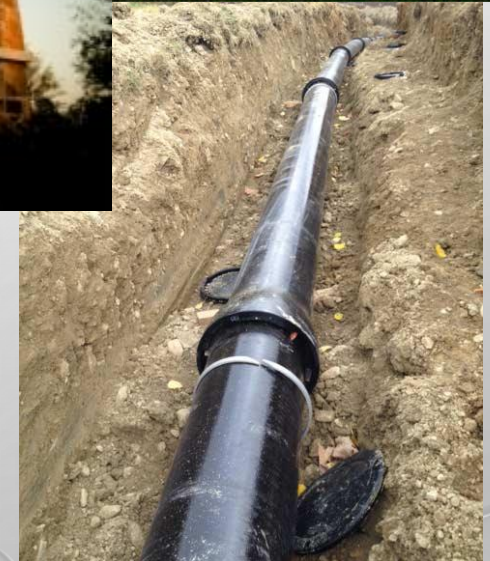
Considering the growth of the City's systems and the addition of Cross Creek Ranch, there is potential for the monthly costs to increase. However, as the vendor's staff phases out during the transition, it is expected that monthly costs will decrease. Other possible negotiation topics include the City contracting directly with suppliers for bulk chemicals and lab testing, noncompete clauses, updating itemized tasks and service costs, and setting measurable targets to renegotiate the contract as the system grows.



CITY OF FULSHEAR UTILITY OPERATIONS

Water and Wastewater Operations Request for Proposals

February 20, 2018





BACKGROUND

- Existing Contract (2012-2017) with Inframark
- City & Cross Creek Facilities:
 - 2 Wastewater Treatment Plants (over 3 MGD)
 - 9 Lift stations
 - 2 Water Treatment Plants & 5 Water Wells
 - 274,640 LF (52 miles) Water Lines & X 248,410 LF(47 miles) Wastewater Lines
- Operations Transfer to City



OBJECTIVES

- Evaluate Respondents: Inframark and TNG Utility
 - Review submittals
 - Contact references & Conduct interviews
- Additional City Goals
 - Train City staff & TCEQ compliance
 - Seamless record transfer & new work order system
 - Position City to implement GIS asset management
 - Evaluate emergency response



JUSTIFICATION

Criteria	Inframark	TNG
Experience	40 years; Current Provider	17 years; One city client
References	No transitional reference	City of Magnolia
Finance	Provided detailed background and insurance	Provided minimal background and insurance
Ops Plan	Operator 40 hr/week; Electronic work orders; inhouse GIS	Operator 40 hr/week; Paper work orders; no GIS capabilities
Transition Plan	5-year detailed plan; negotiable	18-month generic plan; negotiable
Key Staff	Operator attended interview	Hire new operator



CONSIDERATIONS & RECOMMENDATION

- Vendor's capabilities to align with Fulshear's vision
- MJCE & City Staff Recommend Inframark
- Negotiation Topics:
 - Cost
 - Direct contract with suppliers and labs
 - Setting measurable targets to renegotiate
 - Phase out vendor staff

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PREPARED BY: Sharon Valiante, Director of Public Works Brant Gary, Asst. City Manager	PRESENTER: Sharon Valiante, Director of Public Works Brant Gary, Asst. City Manager
SUBJECT: DISCUSSION AND REGARDING A PROPOSED REVIEW & UPDATE OF THE CITY'S DEVELOPMENT CODES	
ATTACHMENTS: 1. Presentation by Kendig Keast Collaborative 2. Latest Draft of Development Guidebook	

EXECUTIVE SUMMARY

As is the typically the case regarding certain ordinances, processes, and procedures, an update is needed from time to time. Discussions over the past year or so have included the potential need to review and potentially update several of our ordinances that are related to development standards in the City and its ETJ. As a part of that effort, City Council approved initial work to begin review of those ordinances and the processes and procedures relating to development activities. Since that time, the City has worked with Kendig Keast Collaborative (KKC) to develop a Draft Development Guidebook. While there are still a few additional items being developed for this, it is nearly complete and is attached for Council's review.

As part of the next steps to further review these items, City Staff has worked with KKC to identify a project scope that will result in a review of several ordinances to streamline our processes and make sure that the ordinances are reflective of the City's intent concerning development regulations and that all individual components are complements of each other.

If Council desires to pursue this effort, it would be a very involved process that would require the involvement of many stakeholders throughout the City and its ETJ. A representative from KKC will present an overview of the proposed project scope and will be able to answer any questions that Council may have.

RECOMMENDATION

City staff would request that Council provide feedback regarding the proposed project scope and authorize staff to proceed with the initial phase of the project for FY18 per the current on-call agreement with KKC. Alternatively, Council could request changes to the scope and have this brought back to Council at a future City Council meeting for consideration.



COORDINATED DEVELOPMENT ORDINANCE

FULSHEAR, TX

JULY 12, 2018



Overview

- Who We Are
- What We Will Do
- What You Will Get
- Why This Is Important

Who We Are



KENDIG KEAST
COLLABORATIVE

- ✓ Community planning specialists since 1982
- ✓ Based in Sugar Land
- ✓ Plans + land use regulations
- ✓ Plan implementation experts
- ✓ Staff has local government backgrounds
- ✓ Intentionally small firm



- ✓ Sister company to KKC
- ✓ Already in use to host portions of City Code
- ✓ Platform for our ordinance drafting
- ✓ Internet-based code publishing software
- ✓ Feature-rich platform for drafting, revising, displaying and codifying development regulations

Fulshear Texas
Fort Bend County's Premier Address

Menu Links

- VIEW
- Chapter 18 Environment
- Chapter 28 Signs
- Chapter 32 Access Management
- Chapter 34 Subdivision of Land
- Chapter 42 Vegetation
- Appendix A, Zoning

SEARCH

ARCHIVES

LAND USE

MAPS

TABLES

LIBRARY

LINKS

APPTRACK+

WELCOME TO OUR ORDINANCES

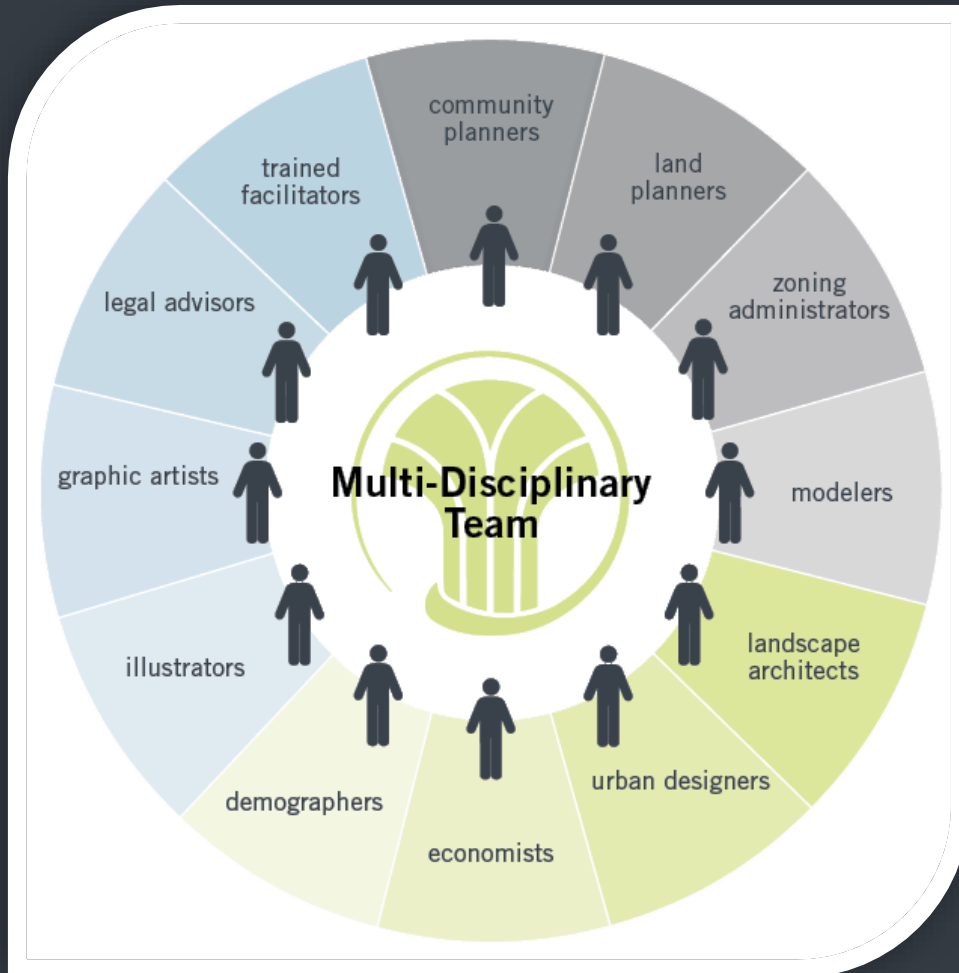
Welcome to the City of Fulshear's Planning and Development website. We hope you find it easy to navigate through links, code references, maps, ordinances, and applications. The City is dedicated to making more services available online through the tools and information offered here.

Please contact us at (281) 346-8860 if you need assistance.

Building Services Department
29378 Acklenon Rd, Suite C
Fulshear, Texas 77411
Ph: (281) 346-8860
Fax: (281) 346-8237

Hours of Operation:
Mon-Thur 7:00 AM to 4:00 PM
Friday 7:00 AM to 3:00 PM
(excluding scheduled holidays)

Who We Are



FULSHEAR, TX
OFFICIALS, STAFF, RESIDENTS

PROJECT DIRECTOR
BRANT GARY,
ASSISTANT CITY MANAGER

KENDIG KEAST COLLABORATIVE
BRET C. KEAST, AICP
CEO AND OWNER

GARY MITCHELL, AICP
PRESIDENT

ASSOCIATES, ADMIN SUPPORT,
PROGRAMMERS

ENCODEPLUS, LLC
CODE PUBLISHING



What We Will Do

How would the CDO be organized?

As it is most often used:

1. What is my property zoned?
2. What uses are permitted?
3. Where and how much can I build?
4. What are the building/site design standards?
5. What are the steps in the process?
6. From whom do I receive approval?
7. How are things measured or defined?

Casual
Users

Power
Users

Objectives

- Combine all Land Development Regulations into One Document
- Implement the Comprehensive Plan
- Preserve / Enhance Character
- Integrate Best Practices
- Comply with Constitution and State Statutes
- Structure Logically
- Enhance Formatting

Outcomes

- One Source for All Development Regulations
- Good Development as a Rule
- Predictable and Certain
- Multiple Paths to “Yes”
- Legally Defensible
- Procedural Streamlining
- Well-Articulated
- Intuitive Organization
- User-Friendly, Easily Navigable

What We Will Do

Phase 1: KICK OFF

- Staff, Stakeholder and Focus Group Interviews
- Meetings with Advisory Committee, Planning & Zoning Commission, City Council
- Drafting of Annotated Outline & Modules 1 & 2

Phase 2: DRAFTING OF DESIGN AND SUBDIVISION STANDARDS & PROCEDURES

- Drafting of Modules 3 & 4
- Revisions to Modules

Phase 3: PUBLIC REVIEW, COMMENT & HEARINGS

- Public Hearing Draft
- 30-Day Comment Period
- Public Hearing(s) at Planning & Zoning Commission and City Council

Phase 4: STAFF TRAINING & FINAL DELIVERY

- Familiarity Training for Staff
- Adopted Code in enCodePlus, Word, and PDF

Deliverables

- Annotated Outline
- Module Drafts and Revisions
 - Illustrative presentations
 - Draft deliverables in **enCodePlus™**, MS Word, and Adobe PDF
 - Revised and final draft modules
- **enCodePlus™** Site
 - Red-line drafts in interactive format
 - Comment / response recordation
- Adopted Ordinance
 - Published online in **enCodePlus™**



What We Will Do

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- Familiarity Training for Staff
- Adopted Code in enCodePlus, Word, and PDF

Optional Phase 5: Implementation Assistance

- Issue Papers
 - Community character
 - Neighborhood conservation and protection
 - Open space preservation and parks and trails development
 - Downtown & Mixed Use Development
- Update and Revision of Development Guidebook
- Comprehensive Plan Consistency Review and Update
- Adoption Follow Up (One Year After Adoption)
 - Performance Audit
 - Draft Amendments



Citizen Engagement

"Early and Often"

The ability to implement the Comprehensive Plan is directly correlated to the amount of citizen participation and the sense of ownership derived from the 12-month planning process (July 2013 through June 2014). The City hired a multi-disciplinary consulting team of planners, designers, and civil engineers to spearhead the overall planning effort. The project team designed public involvement events to engage a wide variety of citizens at frequent check-in points and across multiple platforms. This engagement process provided opportunities for two-way communication between citizens and local government officials.

As part of the comprehensive planning process, the City hosted an **Online Discussion Forum** to identify community needs and innovative approaches to improve Belleville's prosperity and quality of life. This ongoing, "24/7" dialogue helped to guide the plan's findings and recommendations by solidifying input from citizens who do not typically attend or voice opinions at traditional public meetings. Approximately 170 citizens participated on the website. This forum also complemented other engagement activities by providing an outlet to continue ongoing conversations. The website was organized as a series of question prompts introduced at various points amid the planning process.



Listening Session



Advisory Committee Meeting



Community Workshop



Joint Workshop



Student Outreach

What You Will Get

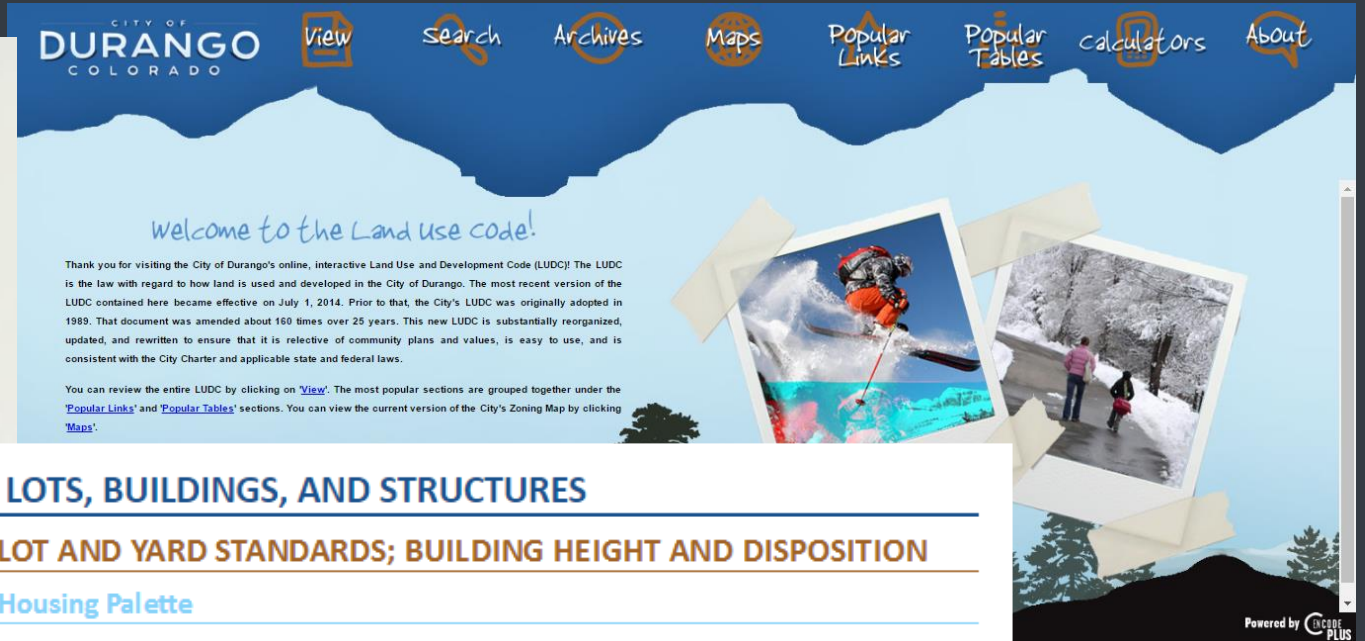
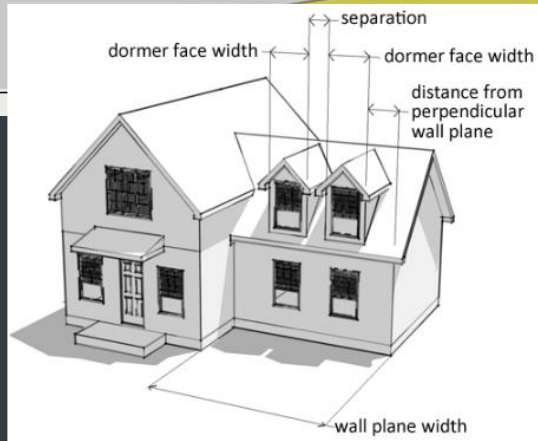
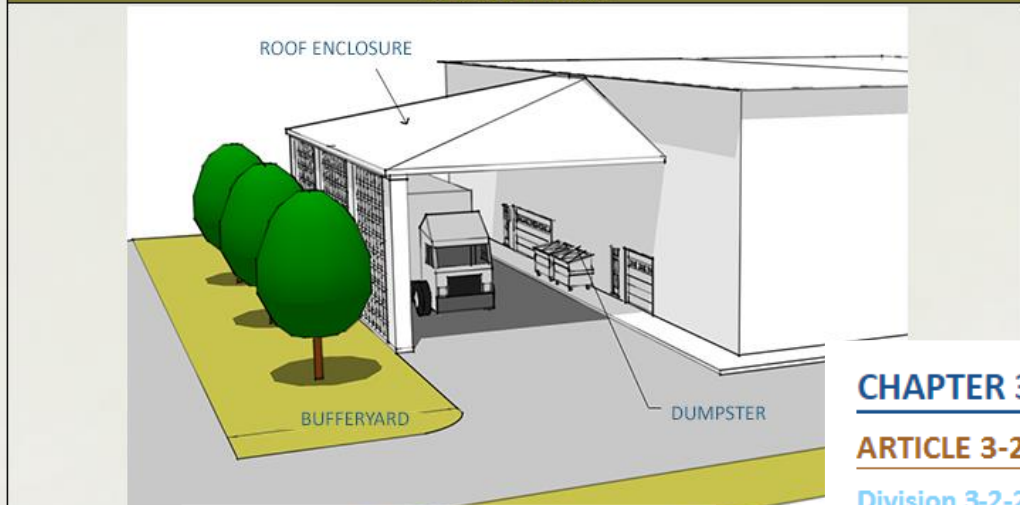
Public Engagement



What You Will Get

A Customized Modern Code

Figure 25.03.100.4
Service Area Enclosure



CHAPTER 3 LOTS, BUILDINGS, AND STRUCTURES

ARTICLE 3-2 LOT AND YARD STANDARDS; BUILDING HEIGHT AND DISPOSITION

Division 3-2-2 Housing Palette

Sec. 3-2-2-1 Lot Averaging

A. **Generally.** Lot averaging is a design technique which replaces a minimum lot area or width with an average lot width and a requirement that certain percentages of lots fall into one of three lot area groups: small lots, average lots, and large lots. See Figure 3-2-2-1A, *Lot Averaging*. Lot averaging shall be applied as required in Subsection B., and is optional in other cases.

Figure 3-2-2-1A
Lot Averaging



Why This is Important

Benefits of a Coordinated Development Ordinance

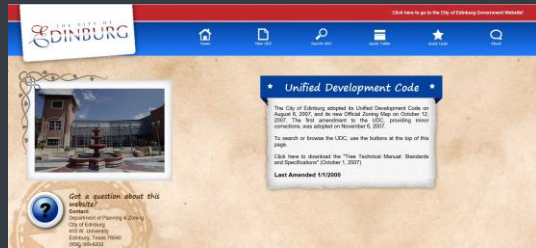
- ✓ A consolidated source of review procedures, standards, and definitions
- ✓ Resulting consistency from such consolidation
- ✓ User-friendliness for staff and lay persons
- ✓ Organized to match the flow of the review process: from zoning change to subdivision review to site plan to building permit to certificate of occupancy
- ✓ Power of **enCodePlus™**

- Ordinances have been drafted and adopted piecemeal over the years
- Inconsistencies within and between these ordinances
 - Problematic administration and interpretation
 - Troublesome for development applicants, staff, P&Z
- Difficulty in decision making, delayed processing and approval, frustration
- Ordinances do not reflect the community supported policies of the Comprehensive Plan



Corpus Christi

<http://online.encodeplus.com/regs/CorpusChristi-TX>



Edinburg

<http://online.encodeplus.com/regs/Edinburg-TX>



Fort Bend County

<http://online.encodeplus.com/regs/FortBendCounty-TX>



Huntsville

<http://online.encodeplus.com/regs/Huntsville-TX>



Pflugerville

<http://online.encodeplus.com/regs/Pflugerville>

THE CITY OF
FULSHEAR, TX

Development
Guidebook
2018 edition

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Dear Property Owners and Citizens,

Our City has been experiencing and will continue to experience unprecedented growth. Because we knew that we were going to grow, our City has been engaged in numerous planning initiatives to ensure that we are prepared to continue manage these additions to our community.

We know that Fulshear is a great place to work and live and we are dedicated to maintaining the quality community that we have built for ourselves. In order for us to do this we must set certain standards that our new and existing neighborhoods will either meet or exceed. We also want to be respectful and understanding of the role that businessmen and developers have taken to make Fulshear what it is today. For this reason, we decided to create this Development Guidebook to serve as a reference for developers and citizens of Fulshear who are interested in adding new infrastructure to our community. The Development Guidebook is not law; it summarizes the existing land development process and it serves as a guide for anyone who is considering developing in our City.

If you are reading this letter then let us first say “thank you,” because you are probably considering making an investment in our community. We along with you want your investment to grow and prosper.

Sincerely,

Mayor, City Council, and City Staff of Fulshear

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INTRODUCTION TO THE DEVELOPMENT REVIEW PROCESS

1

Part 1

Purpose of the Guidebook

Fulshear has adopted Zoning, Subdivision, Sign, Flood Prevention, and other land development regulations designed to protect the health, safety, and general welfare of City residents and businesses. This Guidebook summarizes those regulations.

This Guidebook is designed to be used by residents, developers, contractors, public leaders, and staff. The Guidebook summarizes land development processes and procedures in a comprehensive manner but is not a substitute for any development code and does not supersede any development code requirements.

The Guidebook includes tables and figures that logically groups land development processes and permits. In this way, the reader has a better understanding of the various processes administered by the City and clarity about which processes may be approved by staff or another approval body.

This Guidebook will:

1. Summarize the different steps in the development application, submittal, and review processes, including a summary of the public notice requirements;
2. Briefly describe each development review body and the role of each, in the development processes of the City;
3. Describe which applications may be approved administratively, and those that require Planning and Zoning Commission, City Council, or Board of Adjustment action;
4. Provide application forms and submittal checklists; and
5. Provide the current fee schedule and application submittal schedule.

Introduction

This Development Guidebook is a reference guide that summarizes all land development applications, permits, and processes of the City of Fulshear to help facilitate the development, redevelopment, and improvements of property. The Guidebook lists the various application and permit types, processes and procedures, and the information to submit with applications. The staff or review body responsible for the approval of each is provided.

City staff is available to meet with applicants to discuss their projects and the requirements and processes of the City. We believe that this Guidebook will be helpful to aid applicants in the successful completion of the development processes of the City.

Predevelopment Conference

The City encourages prospective applicants to schedule a Predevelopment Conference prior to the submittal of any development application to the City. While the conference is not mandatory, it does allow applicants to receive initial City feedback about the proposed project and confirms which applications, steps, and sequencing is required to complete the development process. The conference will benefit the applicant by avoiding unnecessary processing delays, determining the proper application sequencing, and clarifying the information that must be submitted with applications. Predevelopment Conferences require the submittal of a Predevelopment Application and a preliminary plan or a sketch plan. Multiple meetings can be scheduled, as necessary, to answer questions or address issues prior to the submittal of a development application.

Application Review and Timing

Table 1.1, Administrative Approvals, and Table 1.2, *Public Meeting and Hearing Approvals*, list permits and approvals, when each is required, the timing for each, and who has final approval authority. Each table shows any applicable exceptions.

To ensure timely plan review by all referral agencies, applicants must submit complete and sound applications. Doing so will allow adequate time for staff and referral agency review of the application for compliance with all utility and engineering specifications and code requirements, and to allow time for applicants to correct any application deficiencies. Incomplete submittals cannot be reviewed. Noncompliant submittals cannot be approved.

Application forms for the processes and procedures described in this Guidebook are provided in Part 8. Information about the submittal requirements and application fees are in Part 8 and Part 6, of this Guide, respectively.

Complete applications will be referred to all review staff and referral agencies and/or the Development Review Team (DRT) for review and comments. Comments will be forwarded to the applicant and the respective review body or City Administration for recommendation and/or a decision.

Incomplete applications will either be referred back to the applicant, or, due to statutory requirements, forwarded to Commission and Council with a recommendation for denial.

Development Review Processes

Table 1.1, *Administrative Approvals*, lists the development applications that may be approved administratively. Table 1.2, *Public Meeting and Hearing Approvals*, lists the applications that require a public meeting, or public hearing, prior to action by the Planning and Zoning Commission, City Council, or Board of Adjustment. Each table provides details regarding the timing of the applications and who has final authority.

Meetings, Hearings, and Notification Requirements

Meetings of the Planning and Zoning Commission are held at 8:30 am on the first Friday of each month. Meetings of the City Council are held at 7:00 pm on the third Tuesday of each month. All meeting dates and times are subject to change based on holidays or other circumstances. The Board of Adjustment meets only as required. All Commission, Council, and Board meetings are open to the public.

Introduction to the Submittal and Development Review Processes

Administrative approvals are those that are prescribed by ordinance as only requiring City staff approval without a public meeting or hearing. City Administration who will issue final approval will vary, based on the application, as set out in out in Table 1.1,

Administrative Approvals.

For applications that require a public meeting and approval, permits will only be issued after compliance with all requirements have been determined at the required public meeting or public hearing. Meeting approvals requiring a public hearing (and therefore public notice) are noted as applicable. The public meeting and hearing approvals are set out in Table 1.2, *Public Meeting and Hearing Approvals*. With respect to Table 1.2, it should be noted that the “Exceptions” listed do not include those exceptions that are expressly included within any Development Agreement or any other Special Agreement approved by the City Council.

Figure 1.1, *Development Review Checklist*, shows a flow chart of critical questions that should be considered by applicants and staff for all development projects. By following the flow sequence, a critical pathway to obtain development approval(s) can be determined.

Figure 1.1
DEVELOPMENT REVIEW
CHECKLIST

STEP 1 ▼

Is the proposed use allowed (as a permitted, limited, or special use) in the zoning district in which the property is located?

- Yes**.....**Proceed to Step 2**
- No**.....Rezoning is Required

STEP 2 ▼

Does the proposed use require a Special Use Permit, as currently zoned, or is the use already allowed via a prior specific approval process?

- Yes**A Special Use Permit is Required (Please refer to the guidelines)
- Yes**....The use is allowed if all conditions are met. **Proceed to Step 3**
- No**, the use is permitted.....**Proceed to Step 3**

STEP 3 ▼

Is the property legally platted?

- Yes**..... **Proceed to Step 4**
- No**.....An Administrative, or Preliminary/Final Plat is Required
- No**, but it is exempt **Proceed to Step 4**

STEP 4 ▼

Is the property in a Floodplain or a Flood Zone?

- Yes**.....Consult with the Floodplain Administrator
- No**.....**Proceed to Step 5**

STEP 5 ▼

Has a Building Permit, or any other required permits been issued?

- Yes**.....**Proceed to Step 6**
- No**..... Submit Plans and a Permit Application

STEP 6 ▼

Has a Certificate of Occupancy been issued (commercial) and/or a Final Inspection passed (residential)?

- Yes**..... **Process Complete**
- No**.....Complete Final Inspections

Table 1.1 Administrative Permits and Procedures

Permit	Required For	Timing	Exceptions	Approval Authority
Plats				
Minor Plats	Minor Plats, per TLGC § 212.0065	Prior to sale or construction	All other plats	City Manager & City Engineer
Minor Amending Plats	Minor Amending Plats, per TLGC § 212.016	Prior to sale or construction	Prior to sale or construction	City Manager & City Engineer
Design Review				
Site Plan and Landscape Plan Approval	Non-residential development and expansion	Prior to construction or development	Single-family residential and duplexes	Development Review Team (DRT)
Predevelopment Meetings	An optional process to allow an applicant to review a proposed project prior to submittal.	Prior to submitting any development application	The process is available for all development projects	Development Review Team (DRT)
Other Administrative Permits and Approvals				
Zoning Interpretations	Zoning Ordinance text and the Official Zoning Map	Prior to subsequent review and permitting	None	Chief Building Official (input from DRT as needed)
Sign Interpretations	Sign Ordinance text and requirements	Prior to permitting	None	Chief Building Official (input from DRT as needed)
Sign Permits	Installation of permanent and temporary signs	Prior to sign installation	As specified by the Sign Ordinance	Chief Building Official (input from DRT as needed)
Grading Plan	Prior to site work	One week prior to the event	None	Chief Building Official (input from DRT as needed)
Certificate of Occupancy	Certification that construction and/or a new use is code compliant	Prior to occupying a building or commencing business operations	None	Chief Building Official (input from DRT as needed)
Building Construction Permits, Licenses, and Registration	All construction permits, licenses, contractor registration, demolition permits, sprinkler, and alarm permits	Prior to construction or operation	None	Chief Building Official (input from DRT as needed)
Utility Connections	Prior to connecting to utilities	Prior to beginning work	None	Chief Building Official (input from DRT as needed)

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Table 1.2 Public Meeting: Permits and Procedures				
Permit	Required For	Timing	Exceptions	Approval Authority
PUBLIC MEETINGS WHERE NO PUBLIC HEARING IS REQUIRED				
Appeals, Plats, and Public Improvement Acceptance				
Sign Appeal	Appeals from decision-making body	Within 30 days of the action being appealed	None	Planning and Zoning Commission
Zoning Appeal	Appeals from decision-making body	Within 30 days of the action being appealed	None	Board of Adjustment
Preliminary Plat	Preliminary Plats and subdivision variances	Prior to the submittal of a Final Plat	Minor Plats	City Council, after receipt of a Planning and Zoning Commission recommendation
Final Plat	Final Plats and subdivision variances	Prior to recordation and starting development	Minor Plats	City Council, after receipt of a Planning and Zoning Commission recommendation
Easement Vacation / Dedication	Easement Vacation / Dedication	Prior to easement abandonment or conveyance	None	City Council, by plat, after Planning and Zoning Commission review, or by ordinance by the Council
Public Improvement Acceptance	Accepting public improvements	Prior to accepting public improvements	None	City Council
PUBLIC MEETINGS WHERE PUBLIC HEARINGS ARE REQUIRED				
Special Use Permits				
Special Use Permit	A new SUP or an amendment to an existing SUP	Prior to construction and permitting	None	City Council, upon receipt of a Planning and Zoning Commission recommendation
Land Development Ordinances and Comprehensive Plan Amendments				
Zoning Text Amendment	Amendments to the Zoning Ordinance text	Prior to amending the Zoning Ordinance text	None	City Council, upon receipt of a Planning and Zoning Commission recommendation

Table 1.2 Public Meeting: Permits and Procedures

Permit	Required For	Timing	Exceptions	Approval Authority
Zoning Map Amendment (Rezoning)	Changing the zoning of a parcel from one district to another.	Prior to a change in land use	None	City Council, upon receipt of a Planning and Zoning Commission recommendation
Comprehensive Plan Amendment	Amending the Comprehensive Plan, per TLGC § 213.003	Prior to amendments to any aspect of the Comprehensive Plan	None	City Council, upon receipt of a Planning and Zoning Commission recommendation
Variances				
Variance, Zoning	Variance from a Zoning regulation	Prior to permit issuance	None	Board of Adjustment
Variance, Floodplain	Floodplain variances	Prior to permit issuance when a floodplain variance is required	None	City Council, upon City Engineer recommendation
Variance, Subdivision	Subdivision Ordinance variances	In conjunction with plat review	None	City Council, upon receipt of a Planning and Zoning Commission recommendation



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Table 1.3 Required Notice		
Type of Application	By Mail	Publication
Annexation and Certain Replats		
Annexation, per TLGC § 43	Required ¹	Required
Replat, per TLGC § 212.015	Required ¹	Required
Land Development Ordinances and Comprehensive Plan Amendments		
Rezoning (per TLGC § 211.006)	Required ¹	Required
Zoning Ordinance Text Amendment (per TLGC § 211.006)	Not Required	Required
Planned Unit Development Approval, or Amendment (per TLGC § 211.006)	Required ¹	Required
Special Use Permit (per TLGC § 211.006)	Required ¹	Required
Comprehensive Plan Amendment (per TLGC § 213.003)	Not Required	Required
Variances and Appeals		
Appeals	Required ²	Required
Floodplain Variance	Not Required	Required
Zoning Variance (per TLGC § 211.008)	Required ¹	Required
TABLE NOTES:		
<ol style="list-style-type: none"> 1. By mail to all owners of property located within the notice area. 2. For appeals, TLGC § 211.010 requires notice to “all interested parties”. At a minimum, this shall include the original applicant and the persons who are the party to the appeal. 3. Applicants should consult with staff in a Predevelopment Conference to determine the specific notice requirements of the City, such as the area and distance from a property where notice is required, prior to making an application that requires notice. Distances and who receives notice vary based on the type of application that is proposed. Applicants must submit all required information to ensure that notice will comply with State statutes and Fulshear ordinance requirements. Failure to submit all required information is adequate cause for staff to determine that an application is incomplete and to not docket the application for action. 		

DEVELOPMENT REVIEW BODIES

Part 2

2

Part 2 of the Guide describes each of the development review bodies and the city staff that are responsible for the administration, review, and consideration of applications set out in this Guide. The respective roles and responsibilities of each of the Development Review Bodies (both elected and appointed bodies) and City Staff positions are also identified.

Development Review Bodies

City Council

The Council has Final Approval responsibilities on all non-Administrative processes and procedures described in this Guide, with the exception of Zoning and Sign Appeals and Zoning Variances. Council exercises these responsibilities in the City and its extraterritorial jurisdiction (ETJ), as prescribed by the Texas Local Government Code (TLGC). Council also has the authorities granted to it by the City Charter and Code of Ordinances, the State of Texas Constitution, and the laws of the State of Texas. Generally, the Council has the power to adopt plans, policies, and ordinances to implement the municipal functions of planning and community development; to approve plans and programs for its jurisdiction with respect to the Comprehensive Plan; to render decisions regarding annexation, planned development, text amendments, and rezonings. The City Council is comprised of a Mayor and five Council members who are elected every two years.

The City Council has the authority to hear and decide the following:

- Plans and programs for the development and redevelopment within the city and its ETJ. This includes, but is not limited to, amending the text and maps of the Comprehensive Plan from time to time;
- The City's Capital Improvements Program (CIP);
- Annexations;
- Other policies and procedures to facilitate implementation of planning elements;
- Proposed amendments to the text of any City development codes;
- Proposed amendments to the Official Zoning Map (Rezoning); and
- Variances that are not under the authority of the Board of Adjustment.

The City Council may also take any other actions that are not delegated to an appointed Board, Commission, or City Administration as necessary to implement the development codes of the City and the policies, goals, and objectives of the City, provided that such actions are not contrary to the Fulshear City Charter or Code of Ordinances, or State of Texas law.

Planning and Zoning Commission

The Commission is created and authorized by TLGC §211.007, and further outlined in Zoning Ordinance Section 1-277(1), Planning and Zoning Commission. The Commission reviews, deliberates, and makes recommendations to the City Council on all Zoning and Subdivision Ordinance processes and applications, with the exception of Zoning and Flood Protection ordinance variances and Zoning Appeals, and renders a final decision for Sign Ordinance Appeals. The Commission is authorized to render recommendations on Preliminary and Final Plats, and to conduct public meetings and hearings to review, deliberate, and make recommendations to the City Council regarding plats, rezonings, planned unit developments text amendments to any proposed or existing development ordinance, and may be designated by Council to serve as the Capital Improvements Plan (CIP) Advisory Committee and make recommendations regarding Impact Fees, per TLGC §395.058.

On its own initiative, or as requested by City Council, the Commission is empowered to:

- Review the Comprehensive Plan and propose amendments, extensions, or additions;
- Review past and present land use conditions and trends, population, building intensity, public facilities, transportation facilities, economic conditions, natural resources, and any other element deemed necessary to support the implementation of the Comprehensive Plan; and
- Accept referral of any matter from the City Administration or City Council.

The Planning and Zoning Commission consists of seven regular members and one ex-officio member from the City's ETJ appointed by the Council. They meet once a month, on the first Friday of the month, at 8:30 am.

Board of Adjustment

The Board of Adjustment (BOA) is created and authorized by TLGC §211.008, and further outlined in Zoning Ordinance Section 1-277(2), Board of Adjustment. The Board has the power to hear the Zoning Appeals regarding alleged errors in an order, requirement, decision, or determination by City Administration, or any other administrative official, who is responsible for administering, interpreting, and enforcing the Zoning Ordinance. The BOA may also authorize variances from specific development standards of the Zoning Ordinance if the requested variance meets the criteria warranting a variance, as set out in Zoning Ordinance Sec. 1-281. The BOA is composed of five members who are appointed by the City Council and who meet as required to hear and decide appeals and variances.

City Staff

City Administration

City Administration includes the City staff positions who, as a team, lead the City in their administrative duties. This list includes the City Manager, the Executive Director of Planning and Development Services and other Senior staff officials. City Administration officials are often authorized to make final approvals with, or without, consultation with other staff or referral agencies and to make professional recommendations to the approval bodies described in Part 2 of this Guide. Recommendations will be based on compliance with development code requirements consistency with the Comprehensive Plan and other City policies, and sound and generally accepted planning principals. City Administration has the authority to delegate review and approval responsibilities to other members of City staff or consultants who have the requisite and relevant technical training or expertise to make a specific type of decision.

Public Works Director

The Director, under the general direction of City Administration and in concert with the City Engineer and other City staff as needed, is responsible for verifying that all technical engineering standards, specifications, and quality assurance requirements are met for all public street, utility, and drainage improvements and all development projects. The Director also establishes and promulgates construction standards for public improvements and other infrastructure and serves as the Floodplain Administrator, managing the City's Flood Damage Prevention regulations. The Director is responsible for construction plan review and ensuring that required public improvements comply with City standards and specifications before being accepted by the City. In Table 2.1, *City of Fulshear Development Review Bodies*, it should be noted that the Public Works Director, shall always imply coordination and review by the City Engineer.

The Director, with the City Engineer and City staff as needed, reviews plans to verify that the construction design meets all minimum City requirements, conducts inspections, maintains records related to all construction permits, inspections, as-built plans, and improvement warranty instruments, reviews development applications, and provides recommendations on other most permits types and approvals.

Chief Building Official

The Chief Building Official (CBO), under the general direction of City Administration, is responsible for the review of building construction plans and verifying code compliance for all building construction in the City, to the extent permitted by state law. The CBO reviews building plans and other administrative permits and applications to verify that the building or structure design meets the minimum Building, Mechanical, Plumbing, Electrical, Irrigation, and Fire Code requirements of the City, conducts inspections to ensure code compliance, and issues Certificates of Occupancy to certify that an applicant has complied with all applicable City codes and requirements and may commence operating a use and occupy a building for the purposes that were intended.

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Table 2.1 City of Fulshear Development Review Bodies

Procedure	City Council	Planning and Zoning Commission	Board of Adjustment	City Administration	Chief Building Official	Public Works Director/City Engineer	Referral Agencies (Utilities, Fire, TXDOT)
Public Meeting and Public Hearing Permits and Processes							
Preliminary Plat	Final Decision	Recommendation	N/A	Staff Recommendation	N/A	Review and Comment	Review and Comment
Final Plat	Final Decision	Recommendation	N/A	Staff Recommendation	N/A	Review and Comment	Review and Comment
Subdivision Variance	Final Decision	Recommendation	N/A	Staff Recommendation	N/A	Review and Comment	Review and Comment
Park Land Dedication	Final Decision	N/A	N/A	Staff Recommendation	N/A	Review and Comment	Review and Comment
Zoning Map Amendment (Rezoning)	Final Decision	Recommendation	N/A	Staff Recommendation	N/A	N/A	N/A
Zoning Text Amendment	Final Decision	Recommendation	N/A	Staff Recommendation	N/A	N/A	N/A
Planned Unit Development	Final Decision	Recommendation	N/A	Staff Recommendation	N/A	Review and Comment	Review and Comment
Special Use Permit	Final Decision	Recommendation	N/A	Staff Recommendation	N/A	N/A	N/A
Zoning Variance	N/A	N/A	Final Decision	Staff Recommendation	N/A	N/A	N/A
Zoning Appeal	N/A	N/A	Final Decision	Staff Recommendation	N/A	N/A	N/A
Sign Appeal	N/A	Final Decision	N/A	Staff Recommendation	N/A	N/A	N/A
Floodplain Variance	Final Decision	N/A	N/A	Review and Comment	N/A	Staff Recommendation	N/A

Table 2.1 City of Fulshear Development Review Bodies

Procedure	City Council	Planning and Zoning Commission	Board of Adjustment	City Administration	Chief Building Official	Public Works Director / City Engineer	Referral Agencies (Utilities, Fire, TXDOT)
Administrative Approvals							
Minor Plats	N/A	N/A	N/A	Review and Comment	Review and Comment	Final Decision	Review and Comment
Minor Amending Plats	N/A	N/A	N/A	Review and Comment	Review and Comment	Final Decision	Review and Comment
Site Plan Approval	N/A	N/A	N/A	Final Decision	Review and Comment	Review and Comment	Review and Comment
Predevelopment Meetings	N/A	N/A	N/A	Coordinate	Attend	Attend	Attend
Zoning Interpretations	N/A	N/A	N/A	Final Decision	Review and Comment	Review and Comment	N/A
Sign Interpretations	N/A	N/A	N/A	N/A	Final Decision	N/A	N/A
Sign Permit	N/A	N/A	N/A	Comment	Final Decision	N/A	N/A
Floodplain Development Permit	N/A	N/A	N/A	Final Decision	Review and Recommend	Review and Recommend	N/A
Certificate of Occupancy	N/A	N/A	N/A	Inspect	Final Decision	Inspect	Inspect
Building Permit	N/A	N/A	N/A	Confirm Approvals	Final Decision	Review and Recommend	Review and Comment
Utility Connections	N/A	N/A	N/A	N/A	Final Decision	Review and Comment	Review and Comment

ADMINISTRATIVE PERMITS

Part 3

This section describes each of the Administrative Permits that can be applied for in the City, and where, allowed by the state law, within the ETJ.

3

Administrative Approvals and Processes

Administrative approvals are those certificates, permits, plans, and licenses that may be reviewed for their conformance with the standards and regulations of the Zoning, Subdivision, Sign, and Flood Ordinances and the other development ordinances and codes of the City. Each of these permits, processes, or procedures are either issued, designated, or initiated by members of City staff, and completed upon an affirmative finding of conformance. These types of applications do not require submission to or a recommendation or decision of the Planning and Zoning Commission, City Council, or the Board of Adjustment. The following does not include all of the various building construction permits, licenses, certifications, and other miscellaneous approvals that may be issued by the City, all of which may be approved administratively.

- Minor Plats and Minor Amending Plats (*See Preliminary Plat Application*)
- Site Plan Approval
- Zoning Interpretations (*See Rezoning Application*)
- Sign Interpretations (*See Sign Permit Application*)
- Sign Permit
- Floodplain Development Permit
- Certificate of Occupancy
- Building Permit
- Utility Connections

Summary of Administrative Approval Types and Processes

Minor Plats and Minor Amending Plats

The City delegates to the city engineer the authority to approve amending plats and minor plats.

Site Plan

Required prior to the issuance of a building permit for all new construction.

- Site plans are reviewed and approved City Administration if the application demonstrates compliance with all applicable development requirements and standards.

Zoning Interpretations

The Zoning Ordinance authorizes City Administration to make interpretations of the text and requirements of the Zoning Ordinance and the Official Zoning Map.

- City Administration interpretations may be appealed to the Board of Adjustment.

Sign Interpretations

The Sign Ordinance authorizes the Building Official to make interpretations of the text and requirements of the Sign Ordinance.

- Building Official interpretations may be appealed to the Planning and Zoning Commission.

Sign Permit

Required when there is a request to construct, erect, install, repair, remove, alter, relocate, or replace a sign, except for signs that are expressly prohibited or that are exempt from permitting, as set out in the Sign Ordinance.

- All signs require a sign permits to be issued by the Building Official if the application demonstrates compliance with the standards and regulations of the Sign Ordinance. Some sign types also require an electrical permit, which are also issued by the Building Official.

Floodplain Development Permit

Required when any proposed grading or any other alteration, including fill, is proposed within a Special Flood Hazard Area, as defined and regulated by FEMA in the Federal Flood Insurance Program and the City's Flood Damage Prevention Code.

- A Floodplain Development Permit may not be issued until an applicant demonstrates compliance with all FEMA criteria.



Certificate of Occupancy (CO)

Required upon the completion of construction and inspection, buildings and structures may be granted a CO. All required permits and inspections must be approved prior to the issuance of a CO by the Chief Building Official. The Chief Building Official has the discretion to issue a temporary CO subject to the successful completion of all improvements.

Building Permit

Required when there is a request to construct, reconstruct, remodel, or substantially alter a building or structure within the City Limits.

- When new construction, reconstruction, remodeling, or substantial repairs to a building or structure are proposed, plans must be submitted demonstrating conformance with the City’s adopted building codes to obtain a building permit. Construction, which may not commence until a building permit is issued, is subject to inspections as it is being completed.
- The City has separate Residential and Commercial building forms and procedures. For more information see the City’s Commercial Building Permit packet and the City’s Residential Building Permit packet.





Utility Connections

Required by the City of Fulshear and all effected utility providers to lawfully establish utility services.

Miscellaneous Permits

The Building Services Department is responsible for a variety of other permits and applications that are approved administratively. These include, but are not limited to the following: Alarm Permit; Backflow Prevention Test Report; Banner Permit; Contractor Registration; Demolition Permit; Electrical Permit; Energy Registration; Fireworks Display Permit; Golf Cart Permit; HVAC Permit; Lawn Sprinkler Permit; Open Records Request; Plumbing Permit; Pool Permit; and Solicitation Application.

Figure 3.1
Typical Administrative
Approval Process

-  Application with correct fee is filed with appropriate City staff member
-  Review for completeness
-  Review by appropriate City staff member(s) to determine whether permit requirements are met.
-  Final decision made and applicant notified.

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PUBLIC MEETING AND HEARING APPROVALS

Part 4

The approvals outlined in Part 4 of the Guide are those that require review, consideration, and approval by the City Council, review, recommendation, or approval by the Planning and Zoning Commission, or approval by the Board of Adjustment. For certain applications, including those specified by state statutes, a public hearing must be held to allow the public an opportunity to be heard regarding the application. These types of applications are reviewed and recommended by staff, but final decisions are made by the City Council, Planning and Zoning Commission, or the Board of Adjustment. Below is a list of all permits that require a public meeting or public hearing. The applicable Development Code, and code section for certain plat types, is included as a reference.

- Preliminary Plat (Chapter 34, Sec. 55 - 60)
- Final Plat (Chapter 34, Sec. 79 - 85)
- Subdivision Variance (Sec. 34-31)
- Park Land Dedication (Chapter 34, Sec. 199 - 206) (*See Preliminary Plat Application*)
- Zoning Text and Zoning Map Amendments [Rezoning] (Appendix A, Sec. 1-279)
- Planned Unit Development (Appendix A, Sec. 1-192)
- Special Use Permits (Appendix A, Sec. 1-283)
- Zoning Variance (Appendix A, Sec. 1-280)
- Zoning Appeals (Appendix A, Sec. 1-132)
- Sign Appeals (Sec. 28-18)
- Floodplain Management Variance (Sec. 22-53)

Summary of Public Meeting and Public Hearing Types








Zoning Map Amendment (Rezoning)

Also referred to as a Rezoning, a Zoning Map Amendment (Rezoning) is required in order to change zoning of a property (or properties) from one zoning district to another, within the City Limits.

A rezoning may be initiated by the owner of a property or their authorized agent or representative, or by the City Council, Planning and Zoning Commission, and City Administration. A rezoning request is decided by the City Council after a public hearing and recommendation of the Planning and Zoning Commission and a public hearing by the City Council. Upon receipt of a written summary of recommendations from City Administration and the Planning and Zoning Commission, the City Council will take action on the request. A request for a zoning map amendment (rezoning) should ideally conform to the recommendations of the Future Land Use Plan and the Comprehensive Plan.

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Figure 4.1
Zoning Map
Amendment
(Rezoning)






-  Pre-application conference is held
-  Application with correct fee is filed
-  Review for Completeness
-  Mail and Publication Notice Posted
-  Public Hearing and Commission recommendation
-  Publication Notice Posted
-  Public Hearing and action by City Council

Zoning Text Amendment

Required when there is a request by the City Administrator, Planning and Zoning Commission, or City Council to amend the text of the Zoning Ordinance.

Amendments to the Zoning Ordinance are necessary from time to time to implement the Comprehensive Plan, conform to state or federal legal requirements, address changing or changed conditions, or to advance the public health, safety, and welfare of the City. Text amendments are decided by the City Council after a public hearing

Figure 4.2
Zoning Text
Amendments

-  Report is prepared by City Administration with proposed text and rationale for proposed changes
-  Publication Notice Posted
-  Planning Commission conducts a public hearing and provides a recommendation to the City Council
-  Publication Notice Posted
-  City Council conducts a public hearing and takes action

Planned Unit Development

Required prior to the submittal of a final plat and before issuance of any permit in a proposed planned unit development (PUD).

Generally, applications for a PUD are handled in the same manner prescribed for a rezoning application, including the same requirements for public notice, advertisement of a public hearing, protests, and adoption.

**Figure 4.3
Planned
Development Units**

-  Pre-application conference is held

-  Application with correct fee is filed

-  Review for Completeness

-  Review of preliminary plan and recommendations by the City Administration, other staff members and referral agencies

-  Mail and Publication Notice Posted

-  Planning Commission conducts a public hearing and makes recommendations to the City Council

-  Publication Notice Posted


-  City Council conducts a public hearing and takes action on the request


Special Use Permit


Required for certain land uses identified as requiring a public hearing and special review to ensure that the use is compatible with surrounding properties. Plans for the site, landscaping, grading, drainage, signage and lighting are all required.


Special Use Permit applications are subject to a public hearing and recommendation by the Planning and Zoning Commission, and a public hearing and action by the City Council. The approval criteria is set out in Zoning Ordinance Sec. 1-283, Special Use Permits. City Administration will provide a staff recommendation and may propose conditions of approval to mitigate potential use impacts. The Commission and Council may add additional conditions, consider alternative conditions, or approve the request unconditionally, or may deny the request.


**Figure 4.4
Special Use Permit**


-  Pre-application conference is held


-  Application with correct fee is filed

-  Review of request and recommendation by City Administration to the hearing

-  Mail and Publication Notice Posted

-  The Commission will conduct a public hearing and make a recommendation

-  Publication Notice Posted






-  City Council will conduct a public hearing and make a final decision

Zoning Variances

In cases where there is deemed to be an unnecessary hardship by reason of special conditions that exist and are unique to the subject property, the Board of Adjustment may consider granting a variance. Generally, the variance is not to be contrary to the public interest, the spirit of the Zoning Ordinance, public health or safety, and that substantial justice shall be done. The Board may impose conditions and restrictions, as necessary, to uphold the spirit of the Zoning Ordinance, or to reduce, or minimize, the effect of the variance on adjacent properties.

Zoning variances are authorized on a case-by-case basis. Just as no two lots will have the same development constraints, no two variances are the same. The granting of variances is subject to five approval criteria listed below. Failure to satisfy all criteria constitutes grounds to deny the variance request. Four affirmative votes of the five person Board is required to approve a variance.

1. The need for the variance arises from a condition unique to the property and is not ordinarily found in the same zoning district, and was not created by an action or actions of the applicant;
2. Granting the variance will not adversely affect the rights of adjacent property owners or residents;
3. Strict application of the Zoning Ordinance will constitute an unnecessary hardship on the owner;
4. The variance will not adversely affect the public health, safety, or general welfare; and
5. Granting the variance would not be contrary to spirit and intent of the Zoning Ordinance.

- Figure 4.5**
Zoning
Variances
-  Pre-application conference is held
 -  Application with correct fee is filed to request a variance from the Zoning Ordinance
 -  Review and report by City Administration and other administrative staff members, if necessary
 -  Mail and Publication Notice Posted
 -  Board of Adjustment conducts a public hearing and renders a final decision

Administrative Appeals

Zoning Appeal

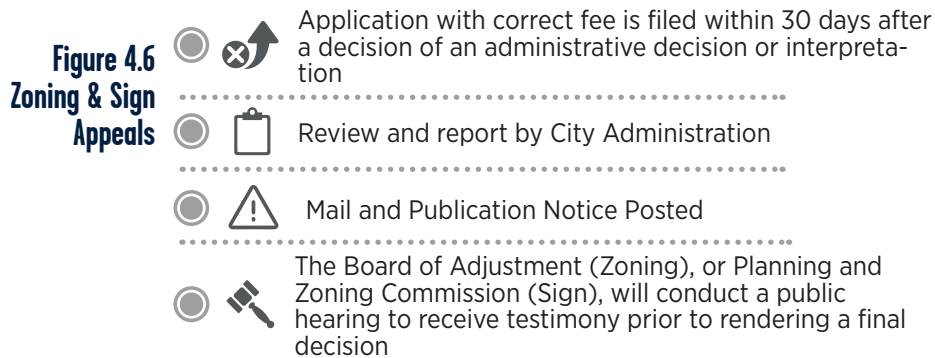
- Any person aggrieved by a decision or interpretation of the City in the administration of the Zoning Ordinance may appeal that decision to the Board of Adjustment.

Sign Appeal

- Any person aggrieved by a decision or interpretation of the City in the administration of the Sign Ordinance may appeal such decision to the Planning and Zoning Commission.

Required when there is an appeal by an applicant of a decision or interpretation made by City Administration or another administrative official charged with administering the Zoning Ordinance or Sign Ordinance.

As long as final action on the appeal conforms to the Zoning and Sign Ordinances, the Board and Commission can reverse or affirm, wholly or partly, or may modify the decision, or determination of the City. The Board and Commission each have the powers of the officer from whom the appeal is taken, including directing the issuance of a permit. In deciding appeal from the Zoning and Sign Ordinances, the Board and Commission, respectively, may prescribe supplementary conditions, limitations, and safeguards deemed to be necessary to protect the public health, safety, and the neighboring properties.





Floodplain Management Variance


A variance from the Flood Damage Prevention Ordinance may be requested upon a demonstration of cause and hardship to necessitate a variance.


The City Council will consider all technical data and evaluations provided by the applicant's engineer demonstrating that the variance, if granted, will not result in a rise in the regulatory floodplain or in any material up-stream or down-stream impacts on public health and safety and the recommendation of the Floodplain Administrator, and weigh all relevant factors in relation to the standards and criteria set out in Flood Damage Prevention Ordinance. The Council may approve, approve with conditions, or deny the variance, upon adopting formal Findings of Fact for the action to be taken. Any person aggrieved by the decision of the City Council may appeal such decision to a court of competent jurisdiction.

Figure 4.7
Floodplain
Management Variance

-  Application with correct fee is filed to request a variance or determination of the Floodplain Administrator

-  Review and report by the Floodplain Administrator

-  Mail and Publication Notice Posted

-  City Council conducts a public hearing and renders a final decision after the public hearing

LAND SUBDIVISION

Part 5

The City of Fulshear regulates the subdivision of land to ensure compliance with the zoning and subdivision regulations with respect to lot size requirements, percentage of open space, street alignments, and rights-of-way standards, and the provision and improvement of public infrastructure. In addition, the general purpose and intent of the Subdivision Regulations is to provide for:





- Harmonious development of the community;
- Proper location and width of streets, building lines, open spaces, safety and recreational facilities, utilities, easements, drainage, and for the avoidance of congestion of population through requirements of minimum lot width, depth, and area and the compatibility of design;
- The manner in which streets shall be graded and improved, and water, sewer, drainage, and other utility mains and piping or connections or other physical improvements shall be installed;
- The actual construction of physical improvements;
- Implementation of the Comprehensive Plan;
- Light, air, and other spaces for the public; and
- The administration and regulation of resource protection areas and open spaces as might be articulated by policies of the Comprehensive Plan.

A subdivision plat is a legally recorded document that provides important property information about the legal division of land. Among others, it includes information as to lot line locations, dimensions, and bearings; property setbacks; the locations and widths of easements; street rights-of-way requirements and alignments; and limits of floodplains, etc.

It is recommended that a party interested in platting property is first to submit a sketch plat and request a Predevelopment Meeting. Preliminary and Final Plats must be prepared by a Texas Registered Professional Land Survey or a Professional Engineer. If the plats are approved by the City, a Final Plat is recorded and filed with the County Recorder.








The sequential steps in the process of subdividing land are as follows:

STEP 1 ▼ PRELIMINARY PLAT

-  Application is filed for Preliminary Plat approval
-  Review for completeness is conducted
-  Review of preliminary plat and recommendations by City Administration and other staff members and referral agencies
-  Planning and Zoning Commission makes a recommendation and City Council takes final action

Staff Review

STEP 2 ▼ FINAL PLAT

-  Application is filed for Final Plat approval
-  Review for completeness is conducted
-  Review of final plat and recommendations by City Administration, other staff members and referral agencies
-  Construction Plans approved for compliance with all City and utility provider standards and specifications
-  The Planning and Zoning Commission makes a recommendation and the City Council takes final action on the plat
-  Installation of infrastructure or surety
-  Final plat recordation

Staff Review

Preliminary Plat

Required prior to submittal of a final plat.

- Applications for a Preliminary Plat are first reviewed for completeness and then for compliance with City codes and construction standards and specifications by City staff, external referral agencies, and utility providers.
- Review comments are provided to City Administration and applicant to finalize the plat and to formulate a staff recommendation. Incomplete plats will either not be docketed for Commission or Council action, or will be docketed with a recommendation for denial. A plat is incomplete if it lacks any substantive requirement as stated in the City’s Code of Ordinances (i.e. All easements including drainage easements must be on the preliminary plat.)
- Docketed plats are reviewed by the Planning and Zoning Commission and sent to the City Council with a recommendation. The Council will take final action on the plat. Due to statutory requirements, once a “complete” plat has been filed, it may only be continued at the request of the applicant.

Final Plat

Required after the approval of a preliminary plat and construction plans, and prior to the approval of a site plan, grading permit, and building permit.

- The application for a final plat may be inclusive for the entire preliminary plat or a unit or section of the land area encompassed by the preliminary plat. Final Plats are reviewed and processed as described above for a Preliminary Plat, with the additional requirement that the Final Plat be consistent with the approved Preliminary Plat, Phasing Plan, and Construction Plans and address any conditions of approval stipulated by the City Council with the Preliminary Plat. The final plat shall be filed for recordation by the County Recorder.

Amending Plats and Replats

Required to modify, amend, or vacate an approved plat or a recorded plat. When replatting, amending, or vacating a recorded plat, a combined Preliminary/Final Plat can be submitted, with the application processed as if it were a Final Plat.

Subdivision Variances

Subdivision variances may be submitted with a preliminary plat application prior to a final plat submission. In order to approve a subdivision variance, the following items must be found:

- There are special circumstances or conditions affecting the property in question;
- The literal enforcement will deprive the developer of a property right;
- If the variance request is granted it will not be materially detrimental to public welfare or property rights

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FEE SCHEDULE

Part 6

The fees listed on the following pages are current, but are subject to change. Please contact the Planning, Inspection, and Enforcement Department for the most recent fee schedule.

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DEVELOPMENT CALENDAR

Part 7

The following pages show meeting dates and submittal deadlines for each of the development processes procedures that require Public Meetings and Public Hearing described in the Guidebook. The calendar is subject to change, depending on public holidays and any necessary adjustments required for the meeting date or time.

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AGENDA MEMO
BUSINESS OF THE CITY COUNCIL
CITY OF FULSHEAR, TEXAS

AGENDA OF: July 12, 2018	AGENDA ITEM: BUS - C
DATE SUBMITTED: July 9, 2018	DEPARTMENT: Planning & Development
PREPARED BY: Sharon Valiante, Director of Public Works Brant Gary, Asst. City Manager	PRESENTER: Sharon Valiante, Director of Public Works Brant Gary, Asst. City Manager
SUBJECT: DISCUSSION AND POSSIBLE ACTION REGARDING THE CITY'S PROPOSED WATER AND WASTEWATER MASTER PLAN	
ATTACHMENTS: 1. Overview Presentation by Freese & Nichols 2. Latest Draft of Master Plan Document (via website)	

EXECUTIVE SUMMARY

Starting in 2016, the City has been working with Freese & Nichols in developing a Water and Wastewater Master Plan. The City has worked with Freese & Nichols to update and revise the plan based on various changes in assumptions since the process began.

The plan has reached a point to where we believe that it is ready to be formally adopted and serve as a guide for implementing utility needs as growth continues in the City and its ETJ. Representatives from Freese & Nichols will be in attendance to present an overview of the plan and its findings. Council may then choose to formally adopt the plan or request additional information.

RECOMMENDATION

City staff would recommend adoption of the Water & Wastewater Master Plan as presented. However, if Council has any outstanding questions or requested changes, this item can be brought back to Council at a future City Council meeting for consideration at that time.



WATER & WASTEWATER MASTER PLAN

FULSHEAR CITY COUNCIL

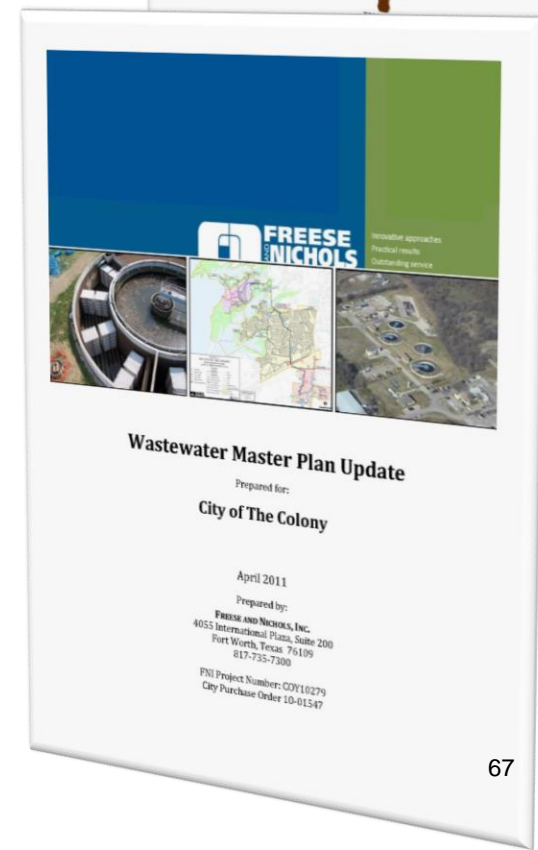
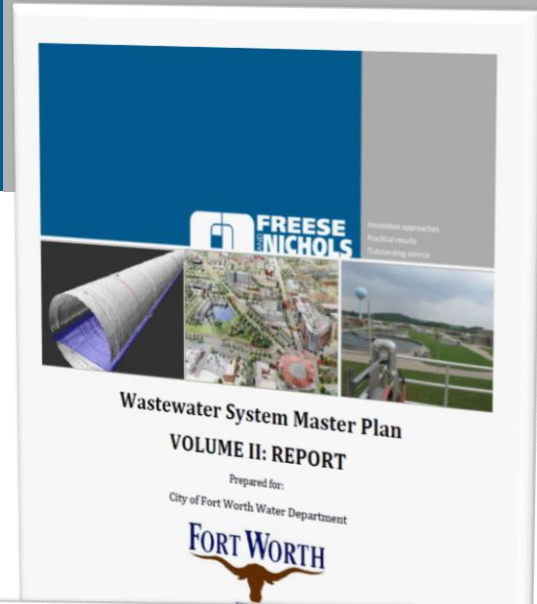


July 12, 2018

- **Introductions/Overview**
- Population Projections
- Water System Overview
 - Water Demands
 - Water System Design Criteria
- Wastewater Overview
 - Wastewater Flows
 - WWTP Siting
 - Wastewater System Design Criteria
- Water and Wastewater Capital Improvement Plans
- Next Steps

Overview of City of Fulshear's Water & Wastewater Master Plan

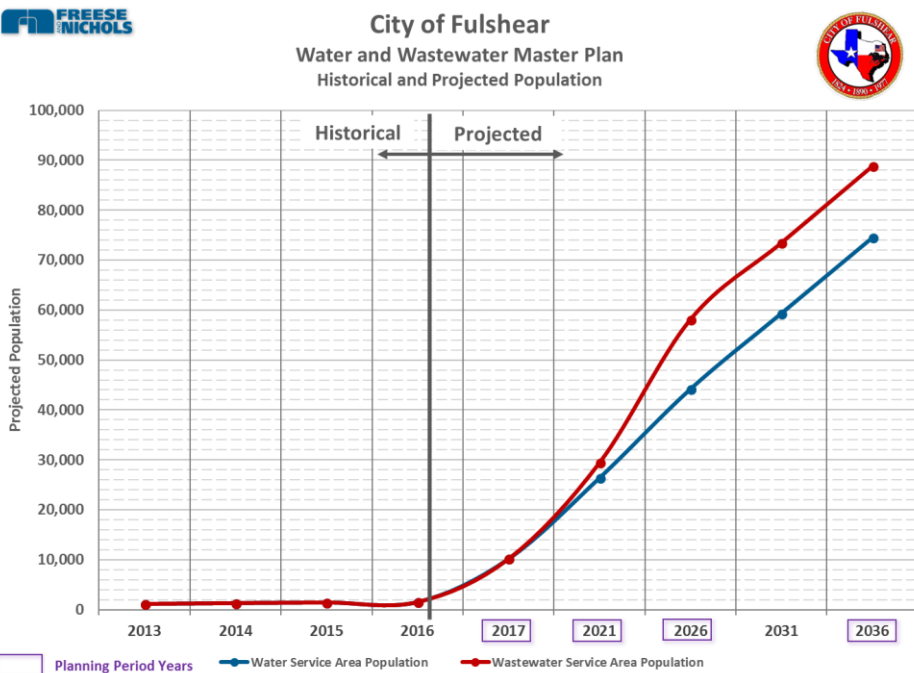
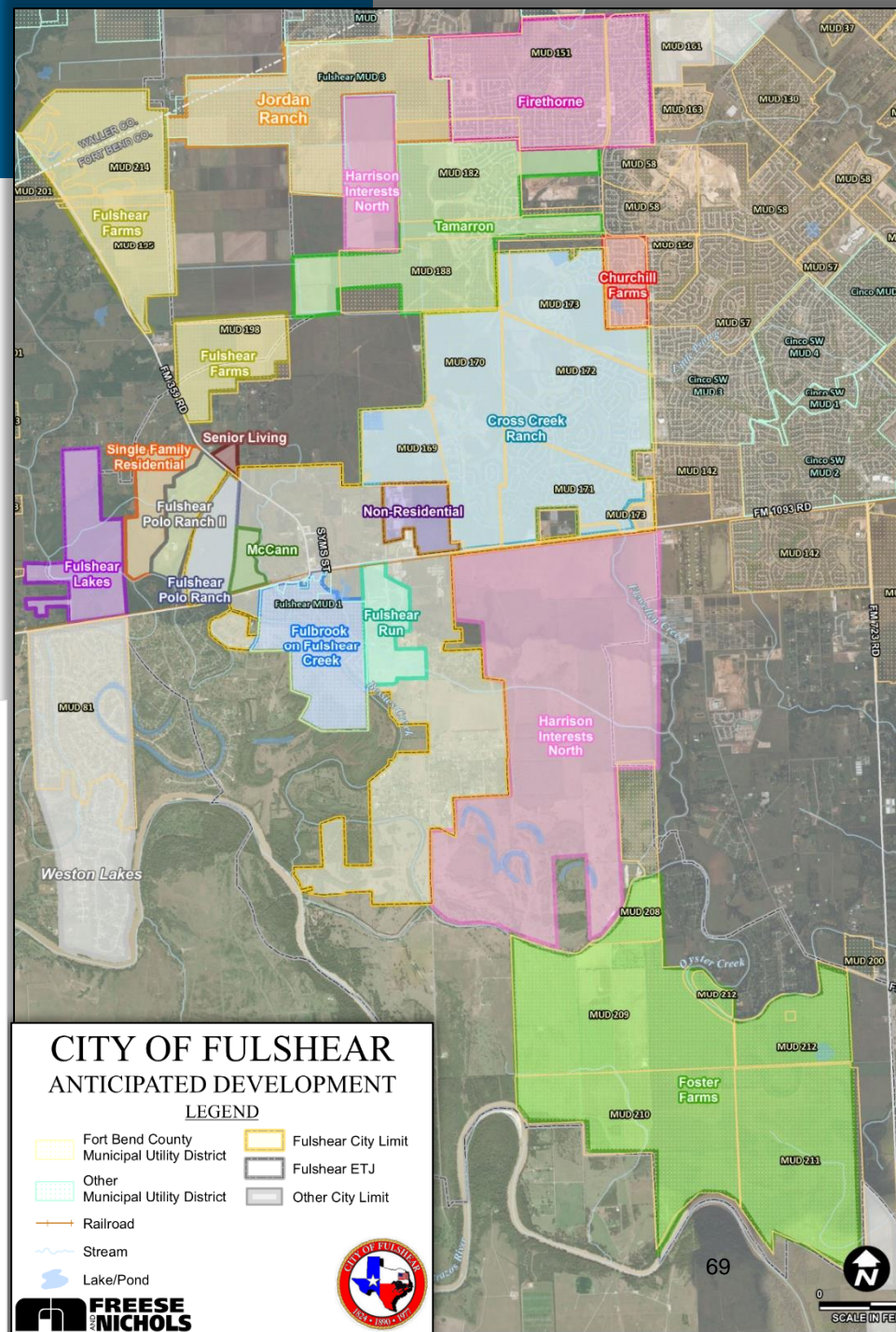
- Water demand / Wastewater flow projections
- Identification of existing and future system deficiencies
- Prioritized, phased CIP with cost estimates and business case for recommended projects
- Very clear, easy to read CIP maps that show location and phasing of projects
- Comprehensive Master Plan Report
- Model tool for dealing with future development



- Introductions/Overview
- **Population Projections**
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Population Projections

Year	Service Area Population	
	Water	Wastewater
2017	10,202	10,202
2021	26,415	29,469
2026	49,642	58,148
2036	74,494	88,794



Population Data Sources



City of Fulshear Demographic Update

Summer 2017

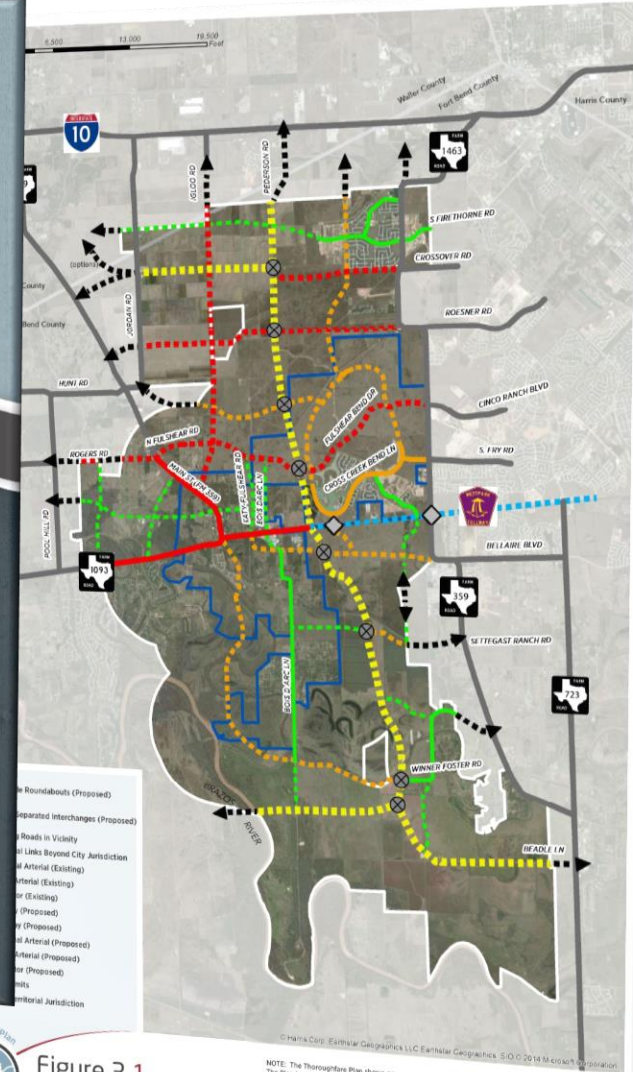


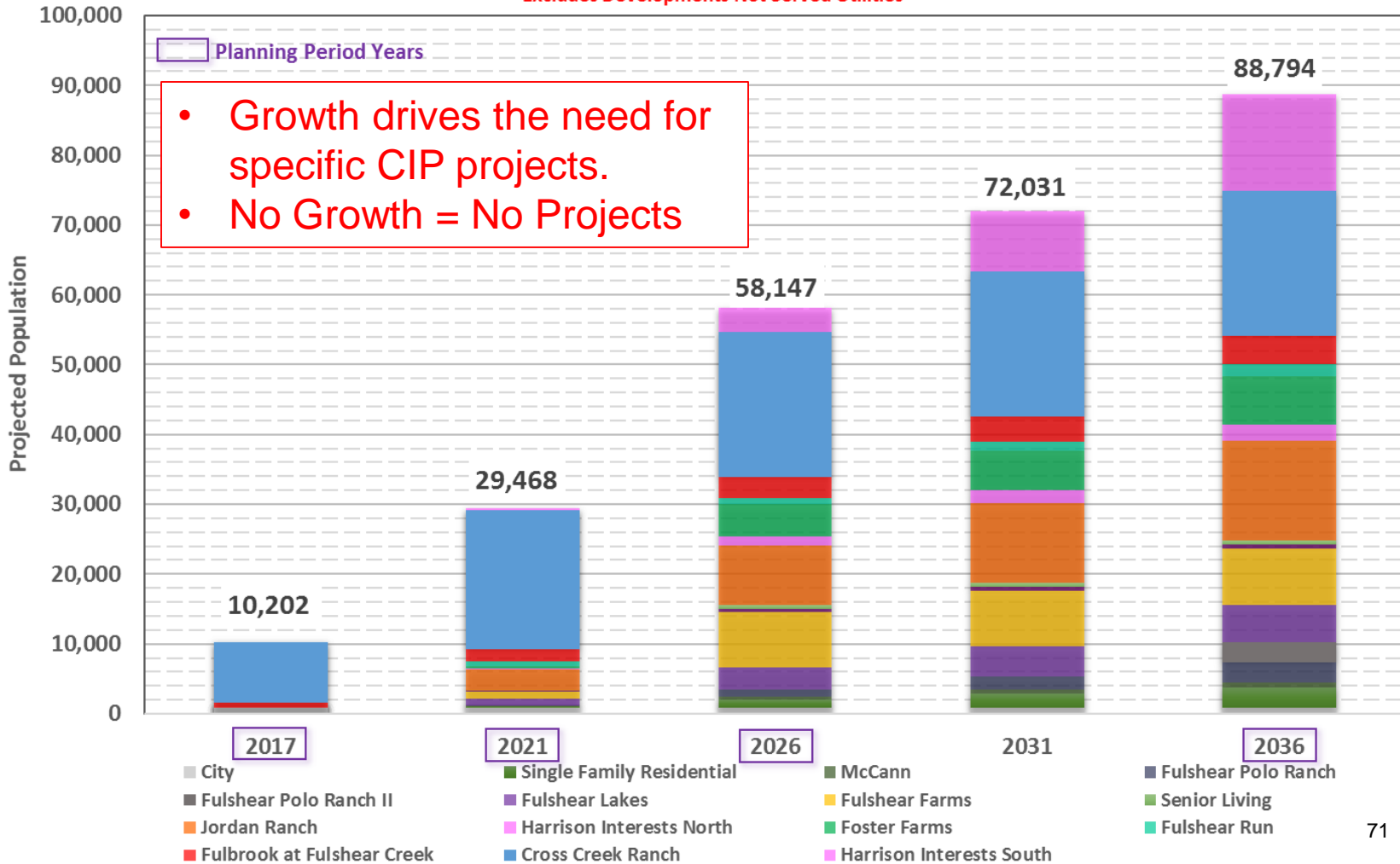
Figure 3.1
Major Thoroughfare Plan

NOTE: The Thoroughfare Plan shows general alignments for existing and planned roadways. While the Plan alignments indicate planned roadway extensions, connections and improvements, actual alignments are subject to change based upon design and implementation considerations. Any future extension of the Westbank Tollway, beyond the pending construction of an extension to an associated tollway, is subject to funding availability, as well as area development trends and further extension will be subject to detailed planning and implementation. The City of Fulshear has no jurisdiction over roadway planning and alignments outside its ETJ.

Service Area Population Projections



City of Fulshear Water and Wastewater Master Plan Projected Population Served by City *Excludes Developments Not Served Utilities*

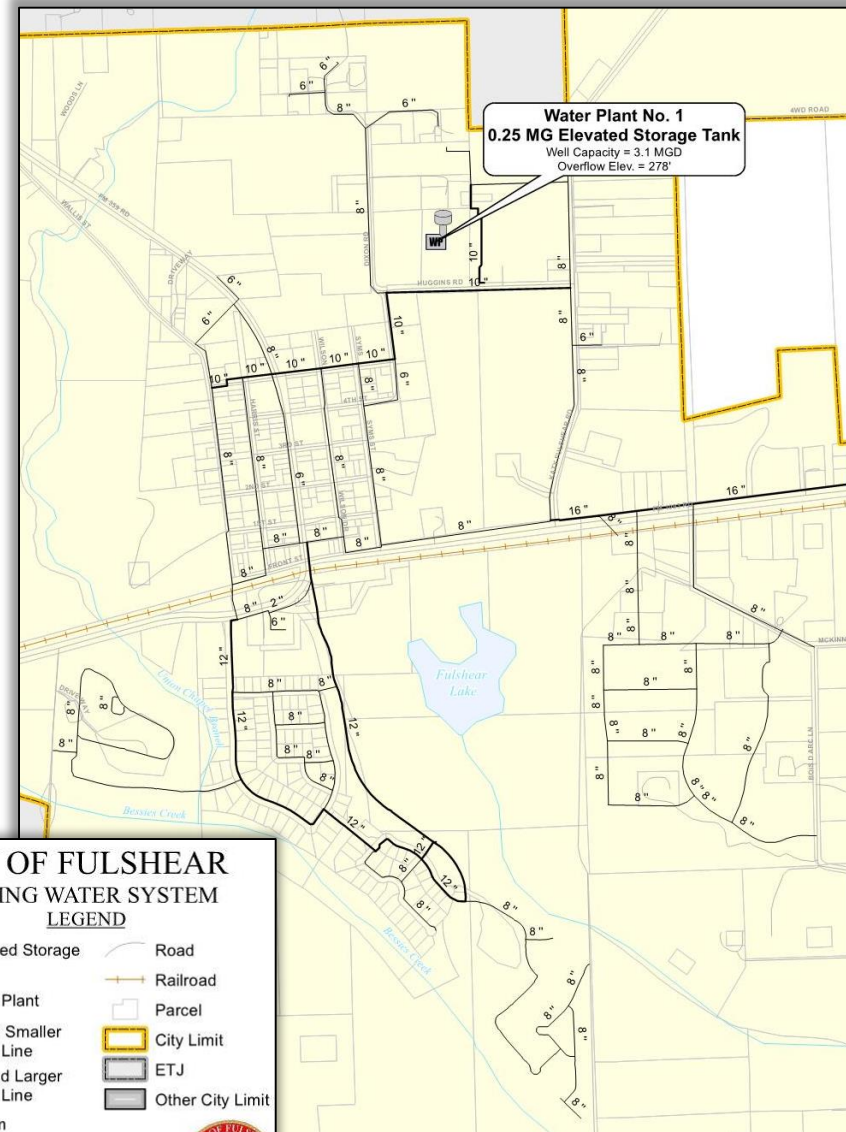


- Introductions/Overview
- Population Projections
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Existing Water System

City of Fulshear Water Plant #1

- 0.25 MG Elevated Storage Tank
- 0.085 MG Standpipe
- 0.15 MG Ground Storage Tank
- 2,150 gpm Well Capacity
- 680 gpm Booster Pumping Capacity



CITY OF FULSHEAR
EXISTING WATER SYSTEM
LEGEND

Elevated Storage Tank	Road
Water Plant	Railroad
8" and Smaller Water Line	Parcel
10" and Larger Water Line	City Limit
Stream	ETJ
Lake/Pond	Other City Limit

Existing Water System













Cross Creek Ranch Water Plant #1

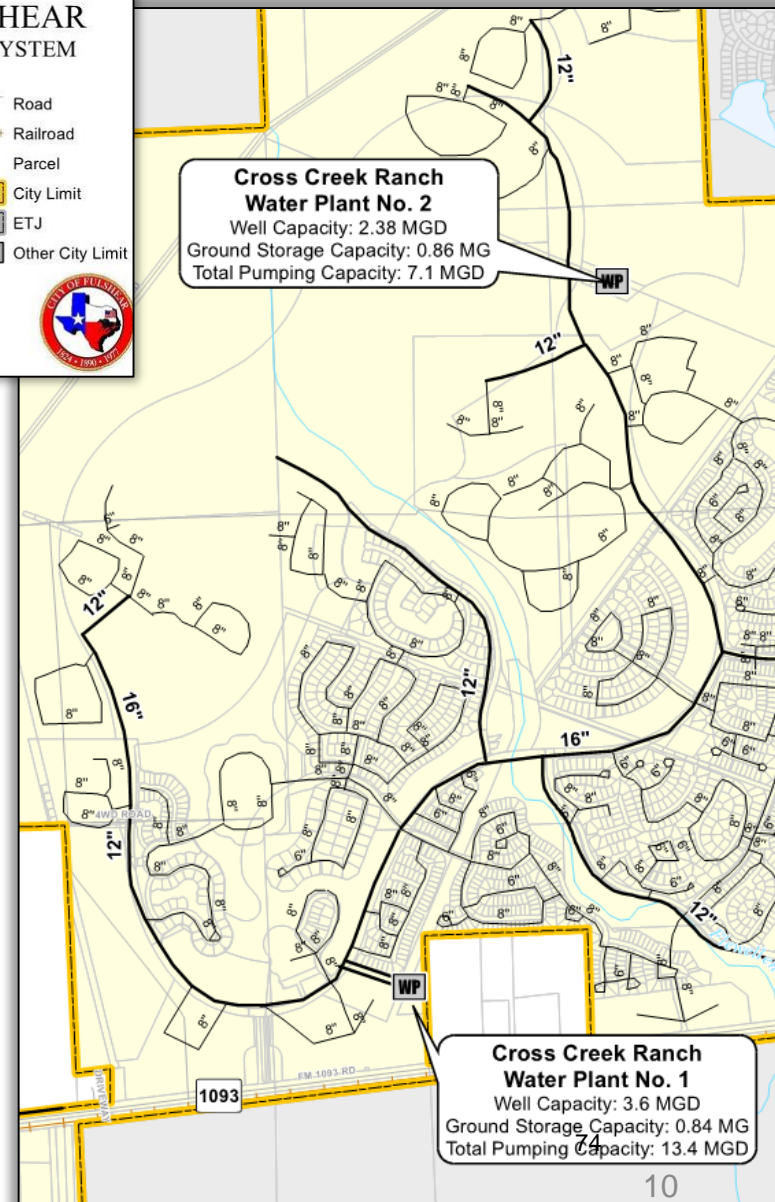


- Two 0.42 MG Ground Storage Tanks
- Hydropneumatic Tank
- 2,500 gpm Well Capacity
- 9,300 gpm Booster Pumping Capacity

Cross Creek Ranch Water Plant #2

- 0.42 MG Ground Storage Tank
- 0.44 MG Ground Storage Tank
- Hydropneumatic Tank
- 1,650 gpm Well Capacity
- 4,900 gpm Booster Pumping Capacity

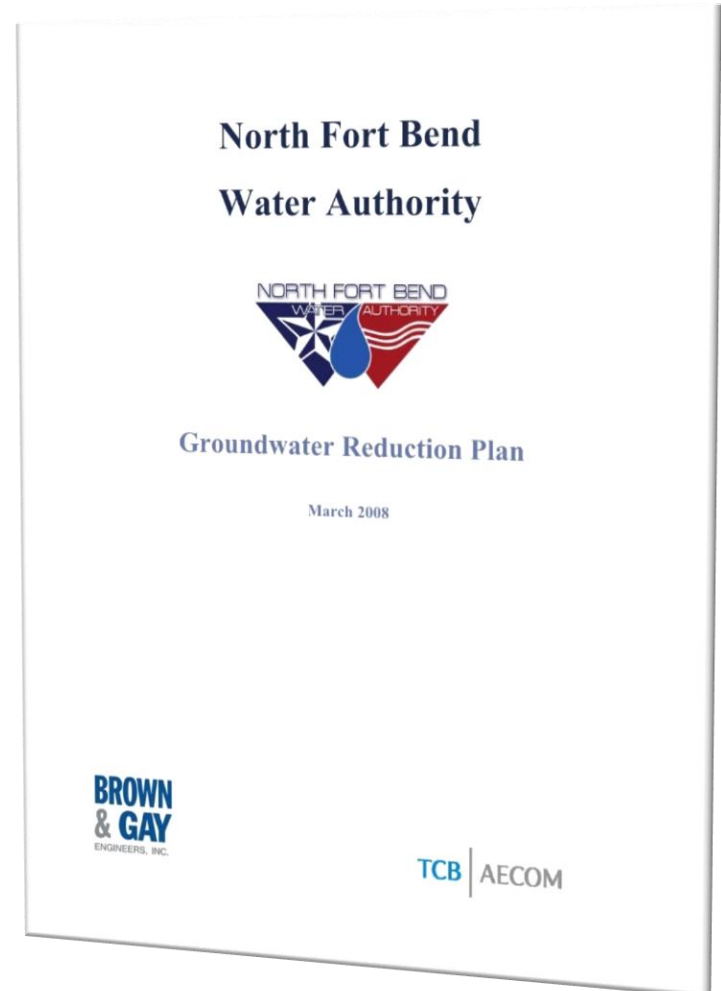
CITY OF FULSHEAR
EXISTING WATER SYSTEM
LEGEND

 Elevated Storage Tank	 Road
 Water Plant	 Railroad
 8" and Smaller Water Line	 Parcel
 10" and Larger Water Line	 City Limit
 Stream	 ETJ
 Lake/Pond	 Other City Limit

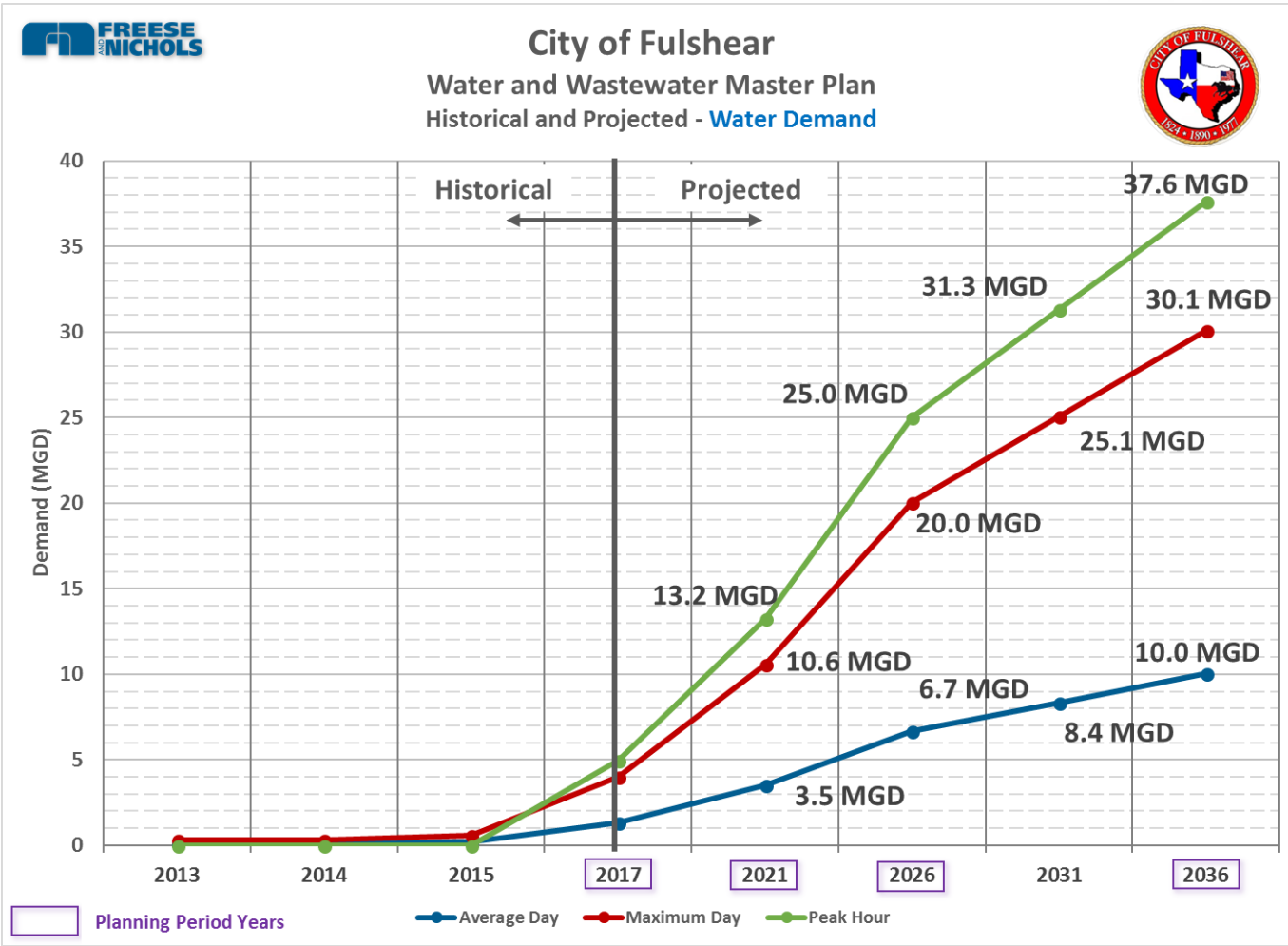


Coordination with North Fort Bend Water Authority

- NFBWA plans to provide 90% of the average annual day water demand
- Plans to provide surface water to Fulshear in 2023/2024
- Requires minimum additional groundwater well production capacity of 0.25 gpm/connection
- Requires chloramine disinfection at all connected water plants
- Surface Water Rate = \$3.70/1,000 gal
- Groundwater Rate = \$3.35/1,000 gal



Projected Water Demands



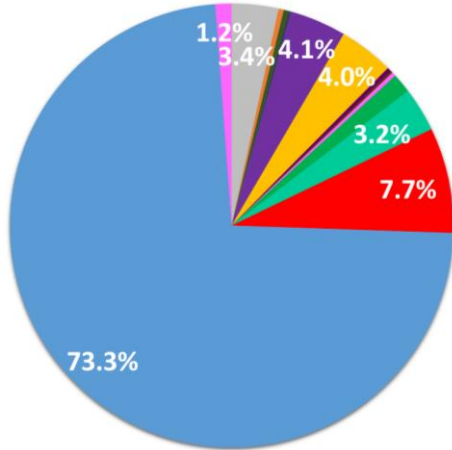
Except where development agreements require more.

Design Criteria

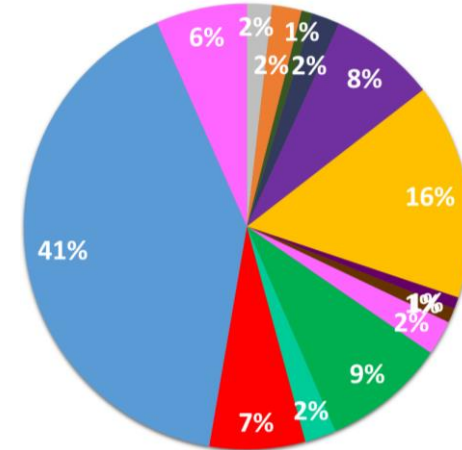
Average Day Demand = 130 gallons/Capita/Day
 Maximum Day to Average Day Peaking Factor = 3.0
 Peak Hour to Maximum Day Peaking Factor = 1.25

Projected Maximum Day Demands

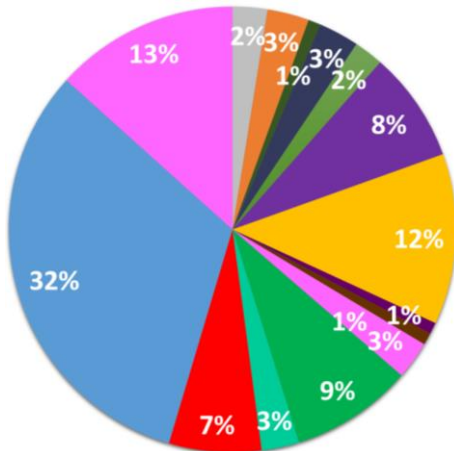
2021 Maximum Day Water Demand = 10.6 MGD



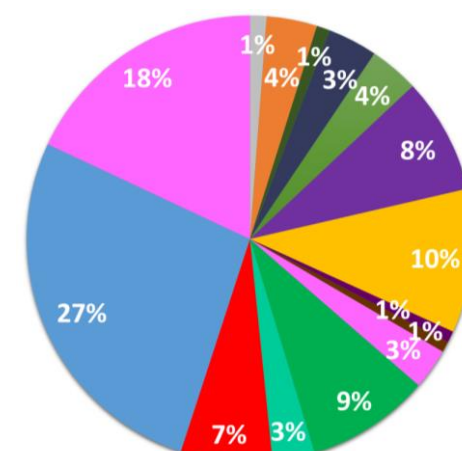
2026 Maximum Day Water Demand = 20.0 MGD



2031 Maximum Day Water Demand = 25.3 MGD



2036 Maximum Day Water Demand = 30.1 MGD



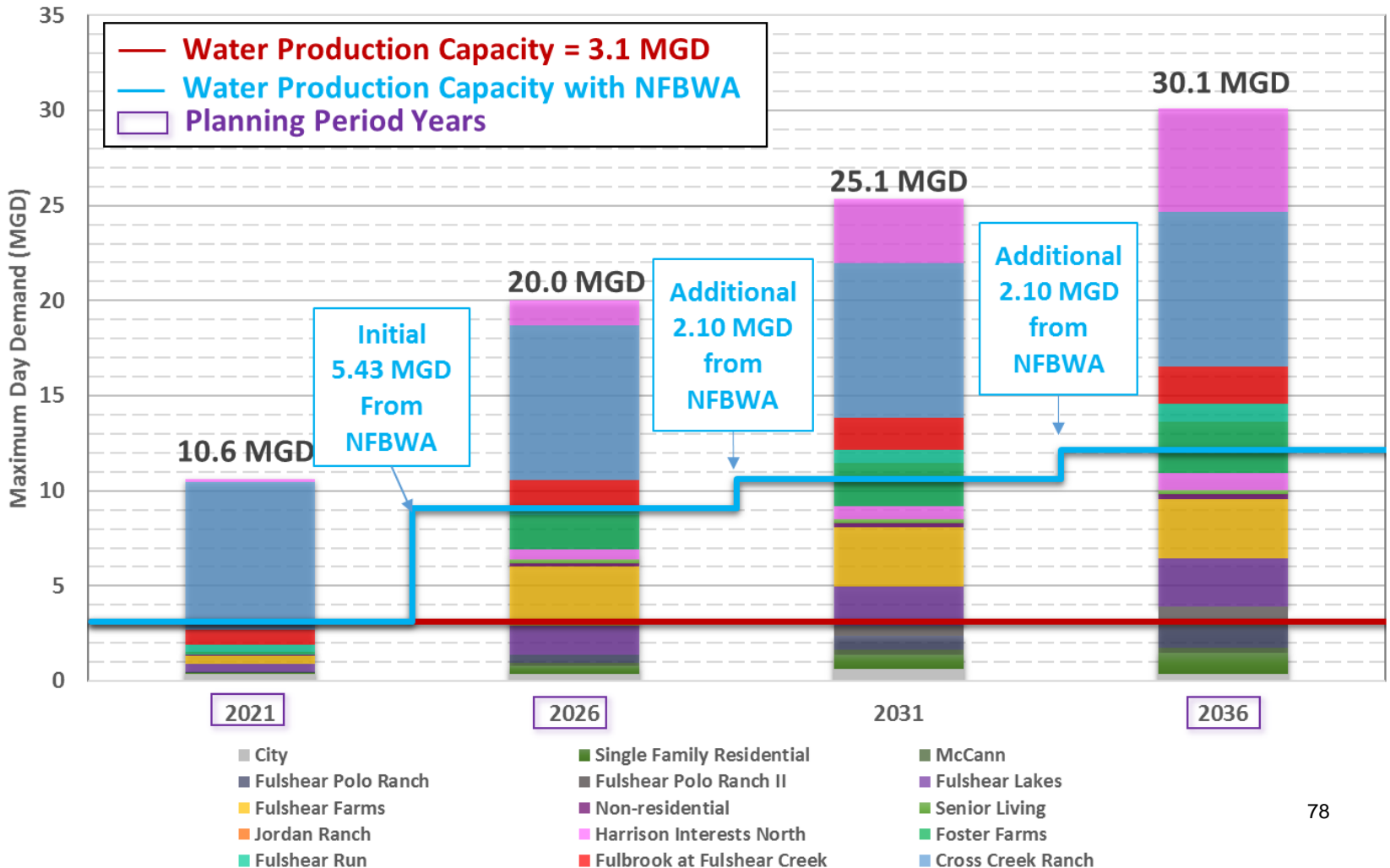
- City
- Single Family Residential
- McCann
- Fulshear Polo Ranch
- Fulshear Polo Ranch II
- Fulshear Lakes
- Fulshear Farms
- Non-residential
- Senior Living
- Harrison Interests North
- Foster Farms
- Fulshear Run
- Fulbrook at Fulshear Creek
- Cross Creek Ranch
- Harrison Interests South

Projected Maximum Day Demands



City of Fulshear

Water and Wastewater Master Plan Projected Maximum Day - Water Demand



Water System Design Criteria

- Texas Commission on Environmental Quality
 - Chapter 290 of Texas Local Government Code
- Minimum System Pressure > 35 psi under normal conditions
- Water Supply
 - TCEQ minimum = 0.60 gpm/connection
 - City of Fulshear maximum day demand = 0.9 gpm/connection
- Elevated Storage > 100 gallons/connection
- Booster pump capacity must supply sufficient pressure during peak hour demand
- Fire Flows
 - Minimum residual pressure of 20 psi
 - Range of fire flow = 1,000 to 5,000 gallons per minute depending on land use type

Effective: June 02, 2016

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Permanent Rule Adoption

Chapter 290
Public Drinking Water
Subchapter E



Summary of Water System CIP Recommendations

5-year Projects

- One 1 MG elevated storage tank
- 11 miles of water lines

10-year Projects

- Water Plant No. 2
- One 1 MG elevated storage tank
- 16 miles of water lines

20-year Projects

- Water Plant No. 3 and 4
- One 1.5 MG elevated storage tank
- 9 miles of water lines

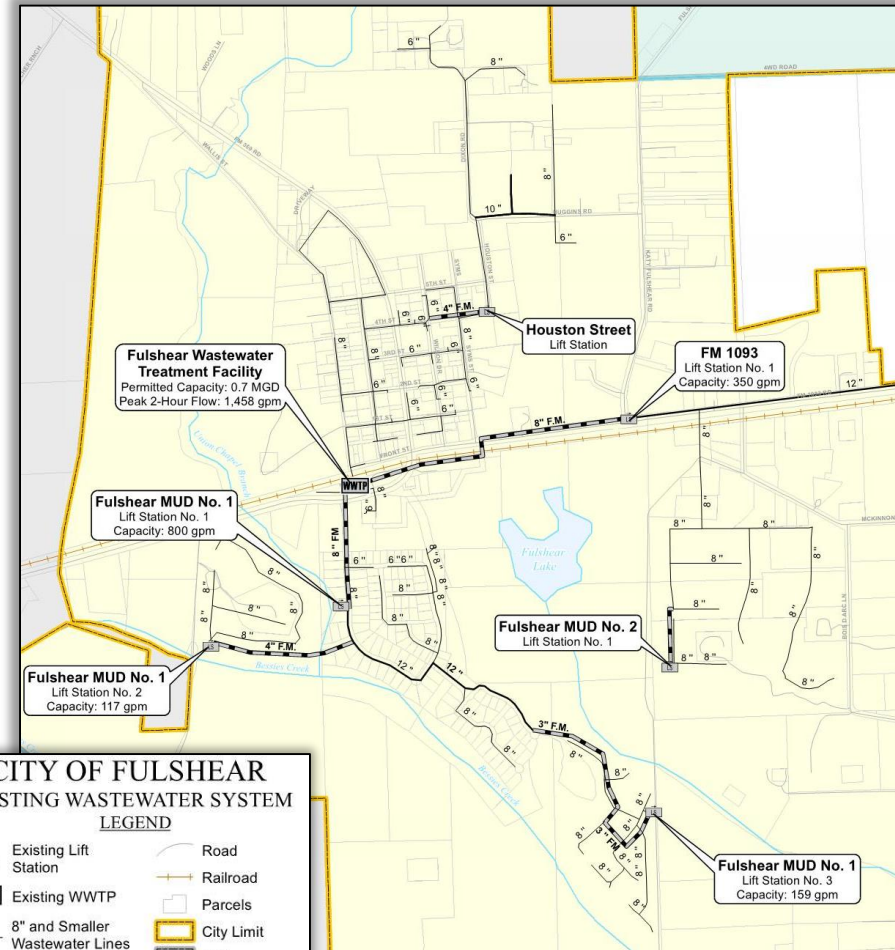
Each water plant consists of a 4 MGD well, 3 MG ground storage tank and 5.75 MGD pump station.

- Introductions/Overview
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- **Wastewater Overview**
 - Wastewater Flows
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Existing Wastewater System

City of Fulshear WWTP

- **Permitted Capacity:**
 - Interim II: 0.5 MGD Average / 1,042 gpm Peak
 - Expansion completed in 2017
 - Interim III: 0.7 MGD Average / 1,458 gpm Peak
- **New WWTP Site Needed**



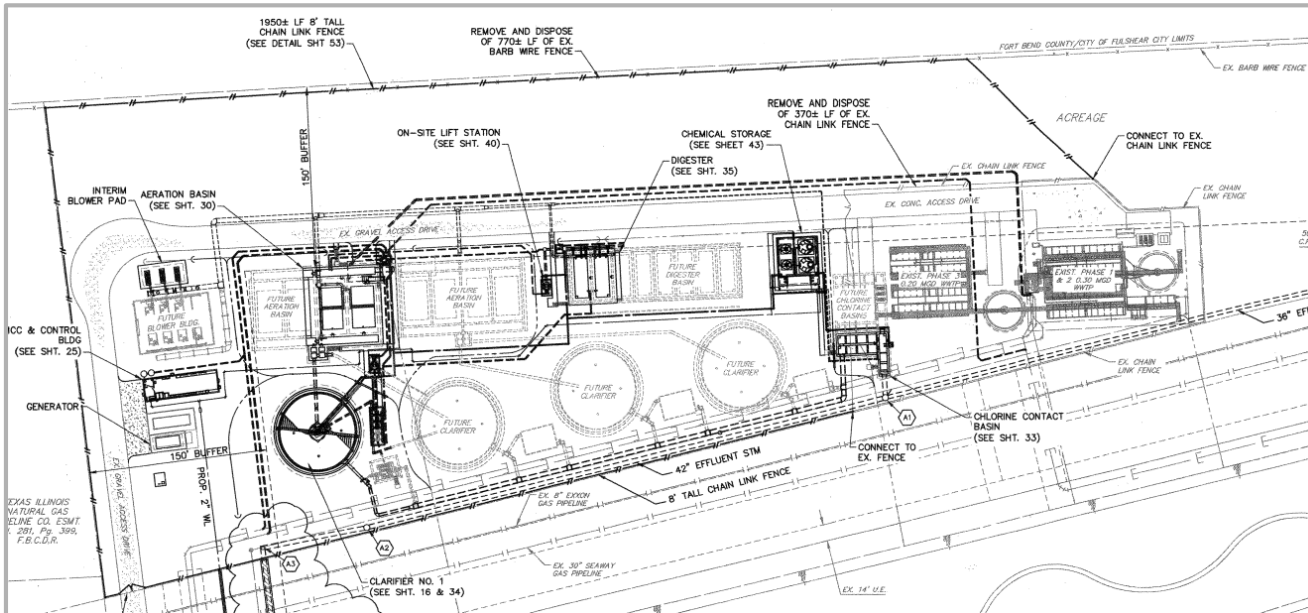
**CITY OF FULSHEAR
EXISTING WASTEWATER SYSTEM
LEGEND**

Existing Lift Station	Road
Existing WWTP	Railroad
8" and Smaller Wastewater Lines	Parcels
10" and Larger Wastewater Lines	City Limit
Existing Forcemain	ETJ
Stream	Other City Limit
Lake/Pond	

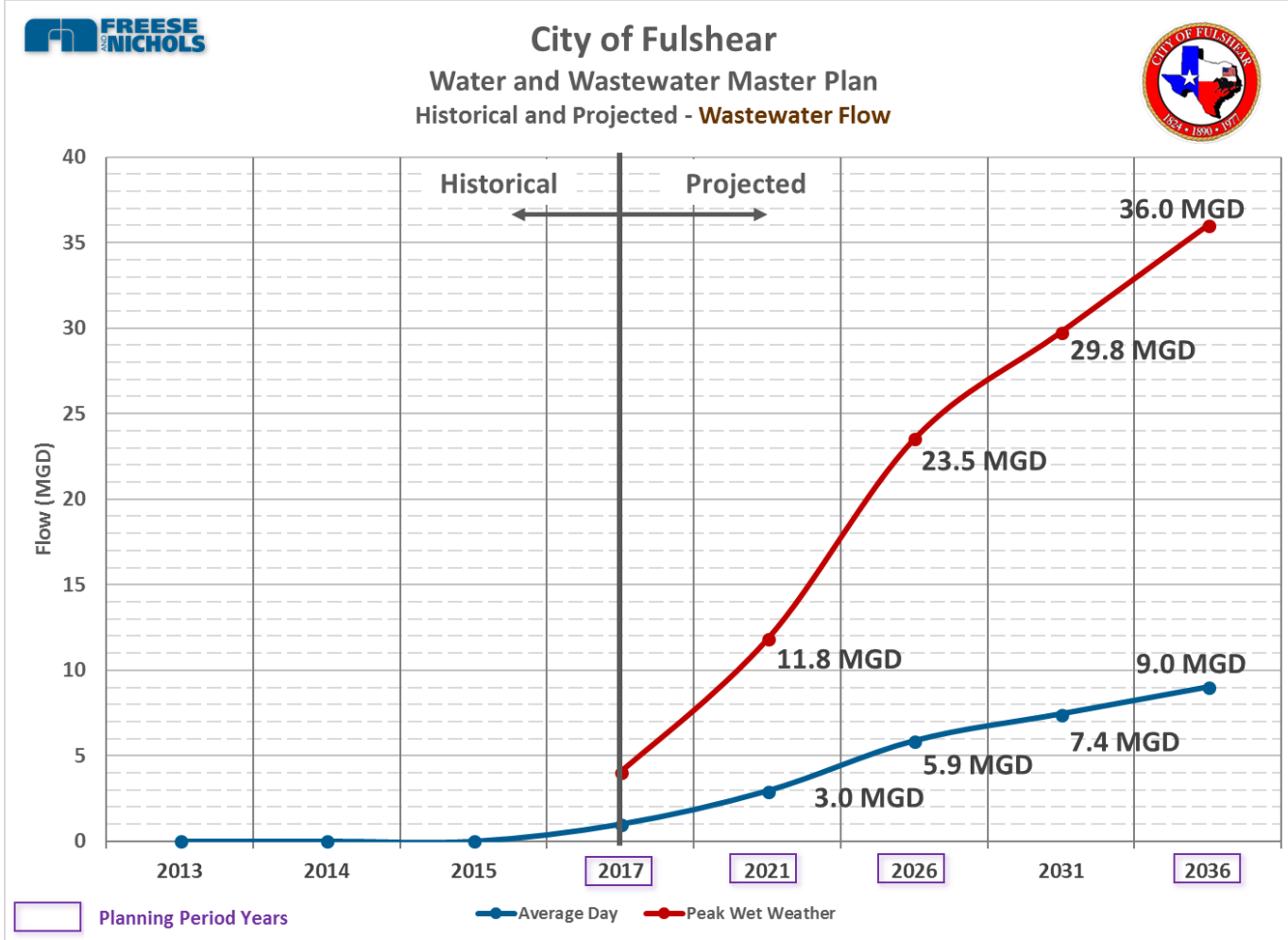
Existing Wastewater System

Cross Creek Ranch WWTP

- **Permitted Capacity:**
 - Interim I: 0.5 MGD Average / 1,389 gpm Peak
 - Interim II: 1.5 MGD Average / 4,167 gpm Peak
 - Interim III: 2.5 MGD Average / 6,944 gpm Peak
- **Currently in service**
 - 0.5 MGD Package WWTP
 - 1.0 MGD Permanent WWTP



Projected Wastewater Flows



Except where development agreements require more.

Design Criteria

Residential Average Flow = 100 gallons/Capita/Day

Commercial Average Flow = 420 gallons/Acre/Day

Wet Weather Peaking Factor = 4.0

Projected Wastewater Flows to Cross Creek Ranch WWTP



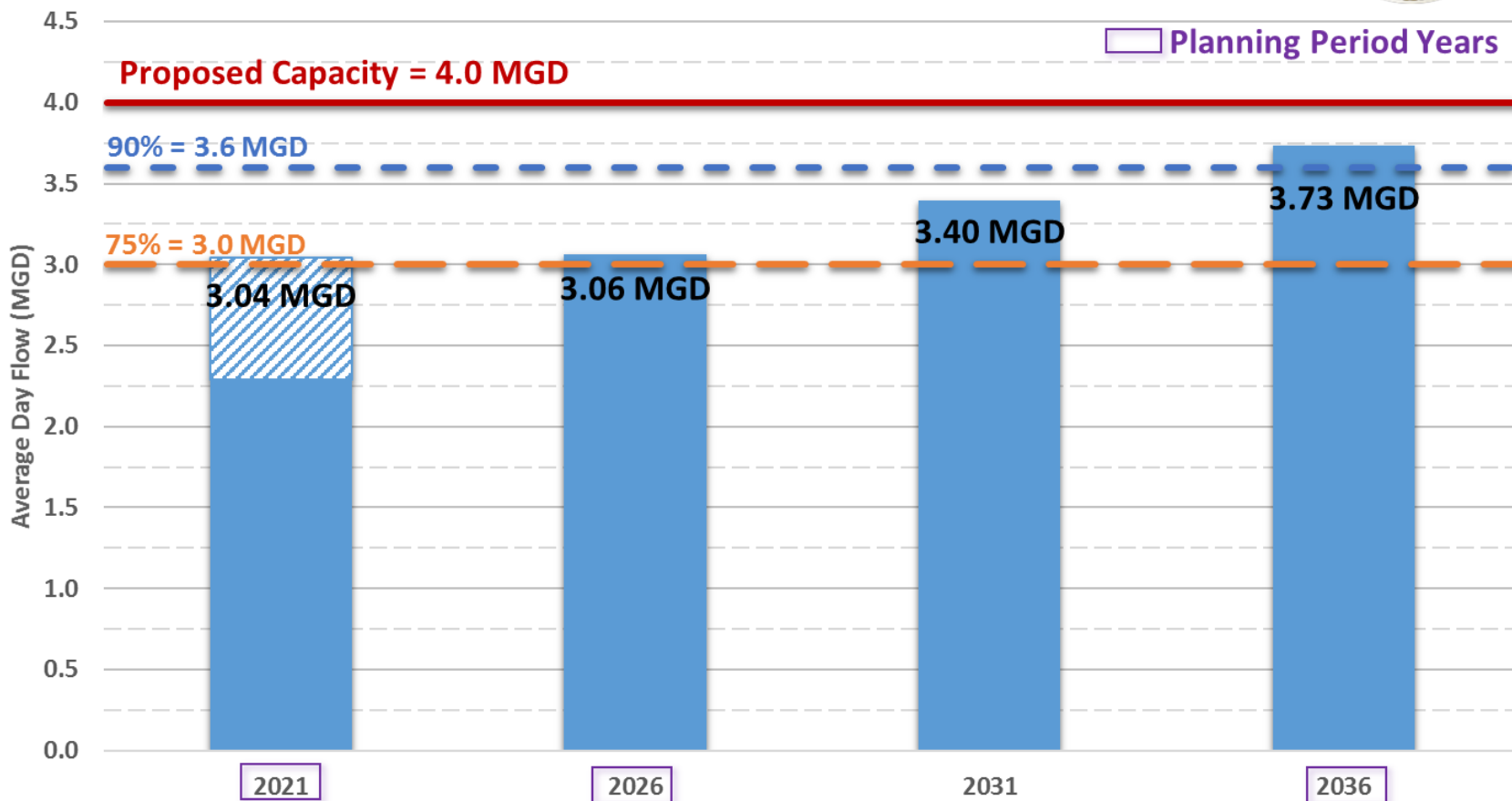
Existing Total Capacity

Permitted = 1.50 MGD

90% = 1.35 MGD

75% = 1.125 MGD

City of Fulshear Water and Wastewater Master Plan Cross Creek Ranch WWTP Projected Average Day - Wastewater Flows



Maximum Capacity of Cross Creek Ranch WWTP = 4 MGD

■ Flow into Cross Creek Ranch WWTP
- - 90% of Total Capacity

▨ Diverted from City of Fulshear
— 75% of Total Capacity

Projected Wastewater Flows to City of Fulshear Regional WWTP



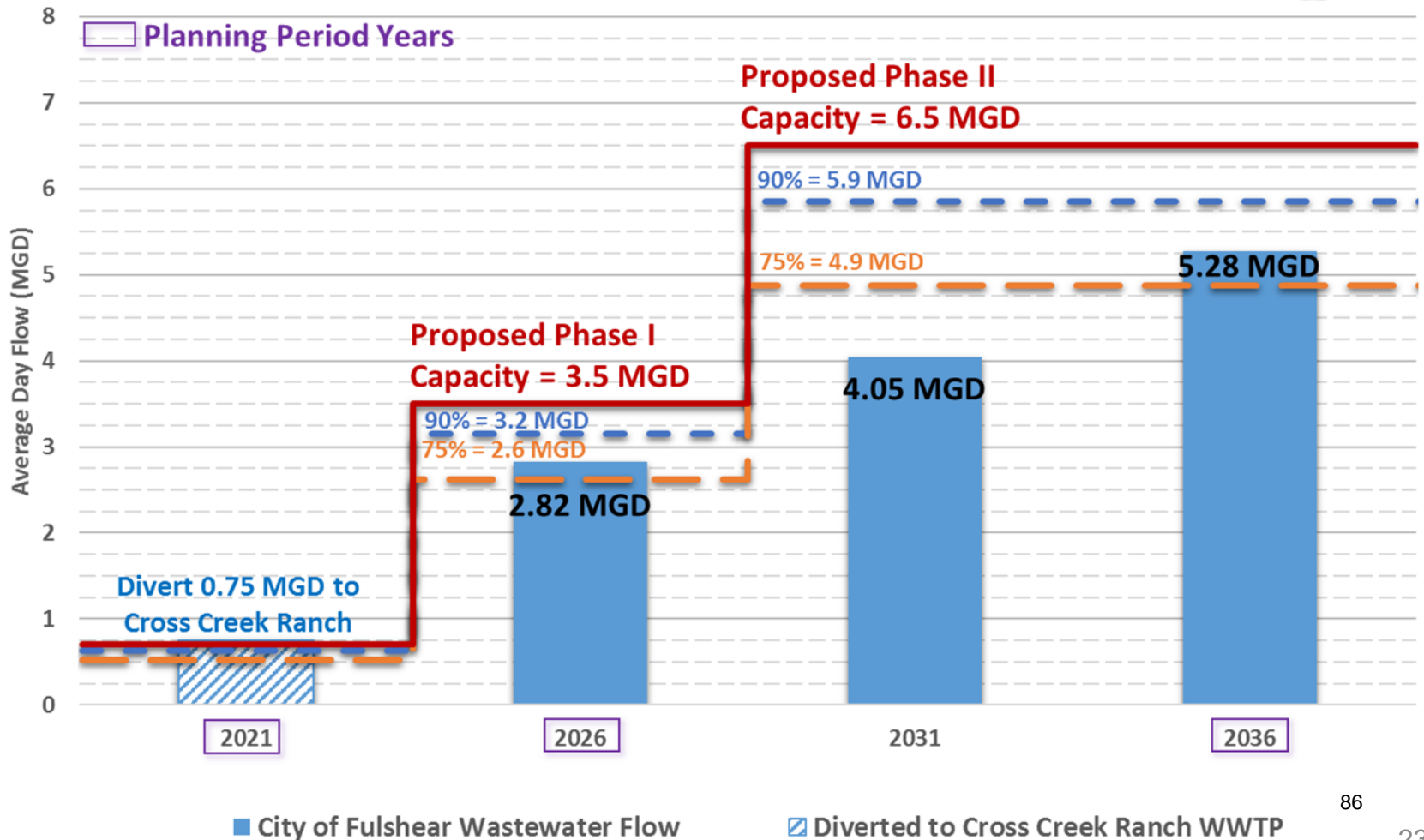
Existing Total Capacity

Permitted = 0.70 MGD

90% = 0.63 MGD

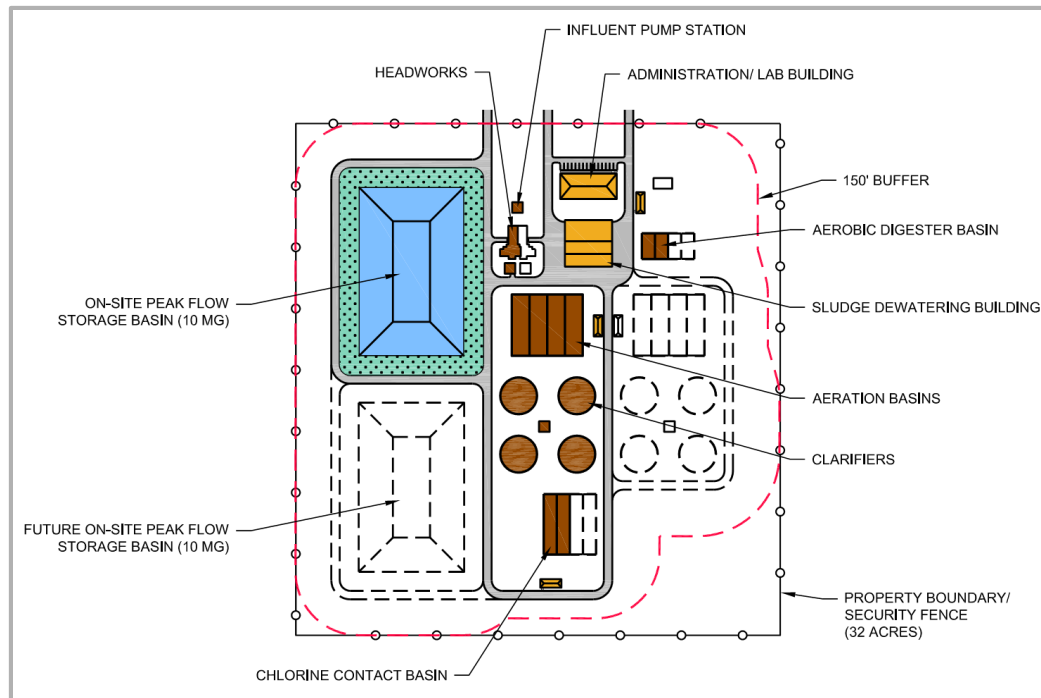
75% = 0.525 MGD

City of Fulshear Water and Wastewater Master Plan City of Fulshear Regional WWTP Projected Average Day - Wastewater Flows



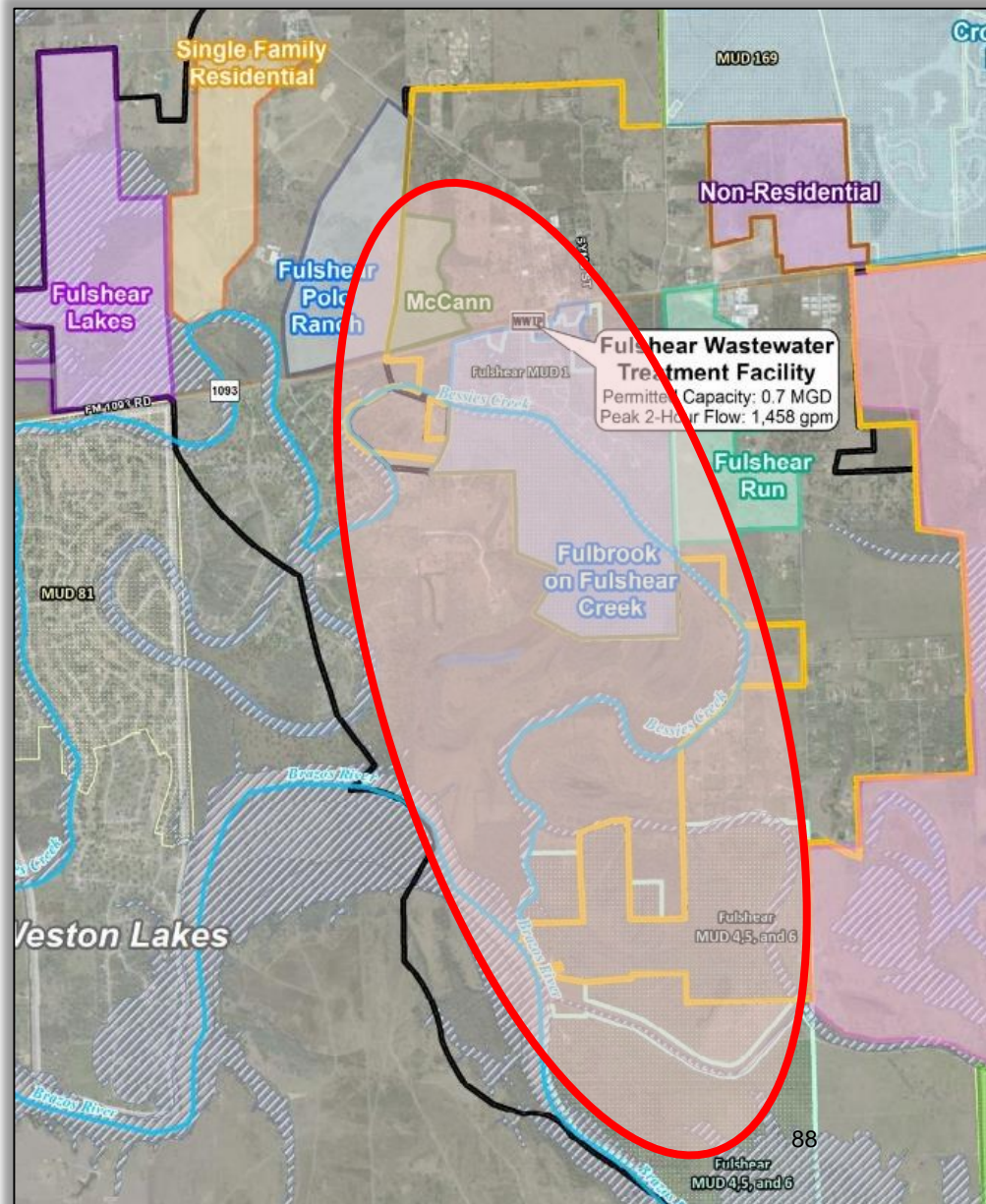
Regional WWTP Siting Evaluation

- FNI recommends the City purchase a WWTP footprint area for 6.5 MGD capacity
 - Phase 1: 3.5 MGD ; Phase 2: 6.5 MGD
 - Assumed conventional activated sludge treatment process
- Approximate 30 acre WWTP footprint area
 - Unit process sizing based on current TCEQ design criteria
 - Includes 150' buffer zone required for treatment plant
 - Includes two on-site peak flow storage basins



Factors Considered

- 30 Contiguous Acres
- Proximity to GCWA Raw Water Intake – Potential for Higher Discharge Limits
- Floodplain, Potential Wetlands
- Access – Power and Vehicle
- Proximity to Bessie's Creek or Brazos River
- Approximate Land Value
- Surrounding Existing Land Use
- Soil Conditions
- Approximate Site Clearing
- Existing City Limit



- Texas Commission on Environmental Quality
 - Chapter 217 of Texas Local Government Code
- Chapter 217 says:
 - §217.53 (j) (3) that “An owner must ensure that the collection system has capacity to prevent a surcharge.”
 - §217.61 (c) that “the firm pumping capacity of a lift station must handle the peak flow.”
- The peak flow includes the domestic wastewater contribution plus the wet weather infiltration and inflow (I/I)
- **Surcharging** occurs when a gravity pipe is full of wastewater and could cause an overflow
- An **Overflow** is an unauthorized discharge of untreated wastewater from the wastewater system

Effective: December 4, 2015

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Permanent Rule Change

Rule Project No. 2012-040-217-OW
Amendment to Chapter 217: Design Criteria

Chapter 217
Design Criteria for Domestic Wastewater Systems
Subchapters A, B, C, D, E, F, G, H, J, K, L, M



Summary of Wastewater System CIP Recommendations

5-year Projects

- Expand Cross Creek Ranch WWTP to 4.0 MGD
- Construct new 9.3 MGD WWTP Diversion Lift Station
- Construct new 2.6 MGD West Fulshear Lift Station
- 12 miles of regional wastewater lines

10-year Projects

- Construct new 3.5 MGD Regional WWTP
- Expand WWTP Diversion Lift Station to 14.6 MGD
- 6 miles of regional wastewater lines

20-year Projects

- Expand Regional WWTP to 6.5 MGD
- 2 miles of regional wastewater lines

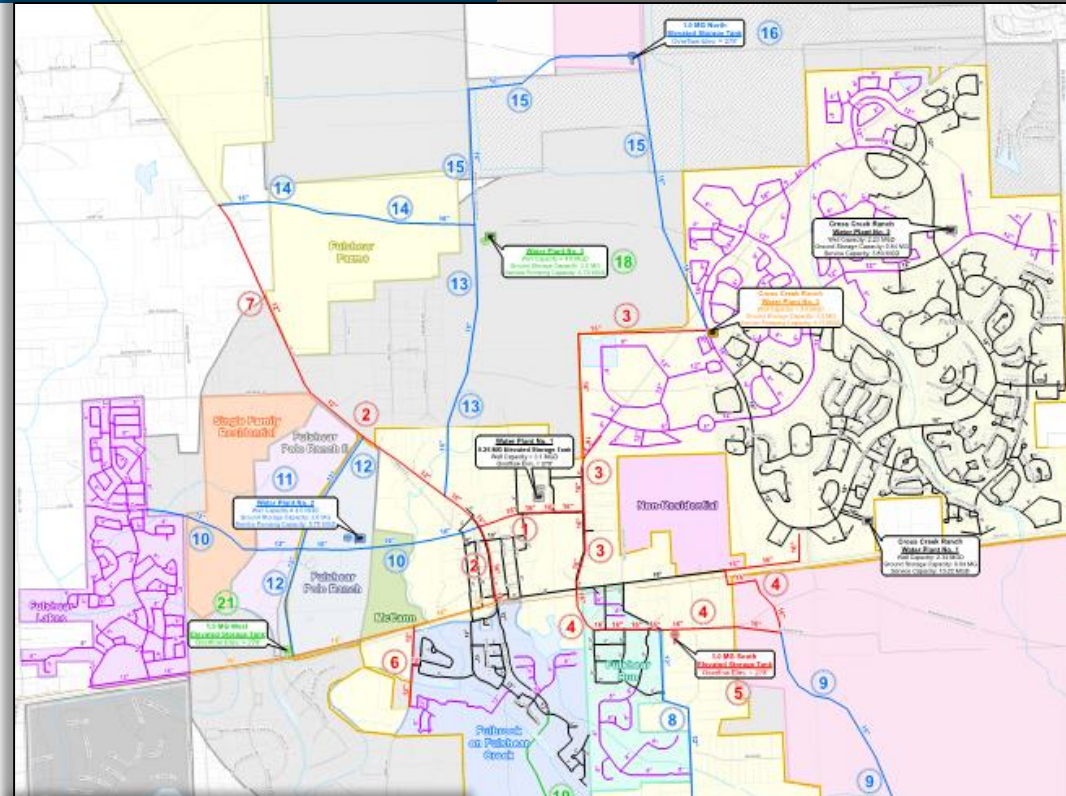
- Introductions/Overview
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- Wastewater Overview
 - Wastewater Flows
 - WWTP Siting
 - Wastewater System Design Criteria
- **Water and Wastewater Capital Improvement Plans**
- Next Steps

- All identified projects anticipate specific needs
 - If development is delayed, projects supporting development are delayed
- Development of Project “Triggers”
 - The final version of the Water & Wastewater Master Plan will include specific development benchmarks that must be met in order to start the design process
 - Collection & Distribution Lines – Serves specific development in areas currently not served or underserved
 - Water Production & Wastewater Treatment – Based on the number of connections and regulatory requirements for capacity
- Ongoing Program Management
 - Water/Wastewater Master Plan should be updated regularly
 - Project needs and implementation approach will require constant review
 - Alignment of development needs, goals, and funding options is crucial

Water System Capital Improvements Plan

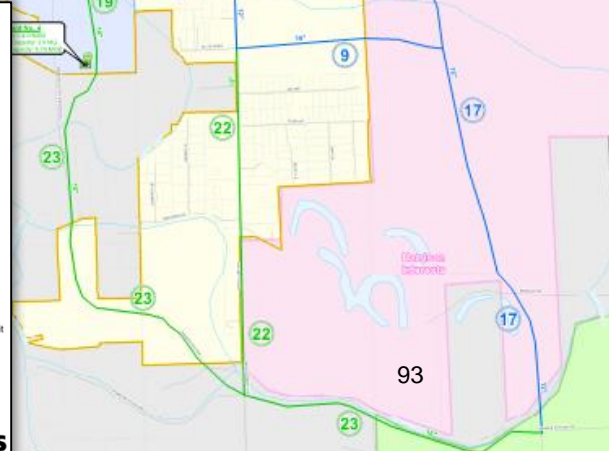
Phase	CIP	Cost
0-5 Year	Supply	\$0
	Distribution	\$21,189,000
	Sub-total	\$21,189,000
5-10 Year	Supply	\$16,021,200
	Distribution	\$31,411,800
	Sub-total	\$47,433,000
10-20 Year	Supply	\$32,042,400
	Distribution	\$16,975,100
	Sub-total	\$49,017,500
Total		\$117,639,500

All costs are in 2018 dollars.



**DRAFT FIGURE 9.1
CITY OF FULSHEAR
WATER SYSTEM
CAPITAL IMPROVEMENTS PLAN
LEGEND**

- Proposed 2021 Ground Storage Tank
- Proposed 2021 Elevated Storage Tank
- Proposed 2021 Water Plant
- Proposed 2021 Water Line
- Proposed 2026 Ground Storage Tank
- Proposed 2026 Elevated Storage Tank
- Proposed 2026 Water Plant
- Proposed 2026 Water Line
- Proposed 2036 Ground Storage Tank
- Proposed 2036 Elevated Storage Tank
- Proposed 2036 Water Plant
- Proposed 2036 Water Line
- Proposed Developer Water Line
- Existing Elevated Storage Tank
- Existing City Water Plant
- Proposed 8" and Smaller Water Line
- Proposed 10" and Larger Water Line
- Proposed Water Line
- Road
- Railroad
- Stream
- Lake/Pond
- Parcel
- City Limit
- ETJ Boundary
- Other City Limit



Note: CIP Cost Estimates include 30% Contingency and 15-20% Engineering Services

5-year Water CIP Projects

Project	Project Description	Cost
1	16-inch Huggins Transmission Line	\$1,080,500
2	12/16-inch FM 359 Transmission Line - Phase I	\$2,086,000
3	16-inch FM Katy-Fulshear Rd Transmission Line	\$3,304,000
4	16-inch Katy-Fulshear/McKinnon Rd Transmission Line	\$3,851,500
5	1.0 MG South Elevated Storage Tank	\$2,000,000
6	12-inch James Ln Transmission Line	\$678,000
7	12-inch FM 359 Transmission Line - Phase II	\$1,086,000
	Subtotal	\$14,086,000
	30% Construction Contingency	\$4,225,900
	Subtotal	\$18,311,900
	15-20% Engineering Services	\$2,877,100
	Total	\$21,189,000

10-year Water CIP Projects

Project	Project Description	Cost
8	16-inch Bois D'Arc Lane Transmission Line	\$2,193,000
9	16-inch Texas Heritage Parkway South Transmission Line - Phase I	\$2,957,000
10	12/16-inch West Fulshear Transmission Line	\$2,272,800
11	Water Plant No. 2	\$10,270,000
12	12-inch Future Polo Ranch Transmission Line	\$1,608,000
13	16-inch North Fulshear Transmission Line – Phase I	\$2,122,500
14	16-inch Fulshear Farms Transmission Line Loop	\$1,554,000
15	16-inch Transmission Line Loop	\$4,158,500
16	1.0 MG North Elevated Storage Tank	\$2,000,000
17	16-inch/12-inch Texas Heritage Parkway South Transmission Line - Phase II	\$2,058,000
Subtotal		\$31,193,800
30% Construction Contingency		\$9,358,300
Subtotal		\$40,552,100
15-20% Engineering Services		\$6,880,900
Total		\$47,433,000

All costs are in 2018 dollars.

20-year Water CIP Projects

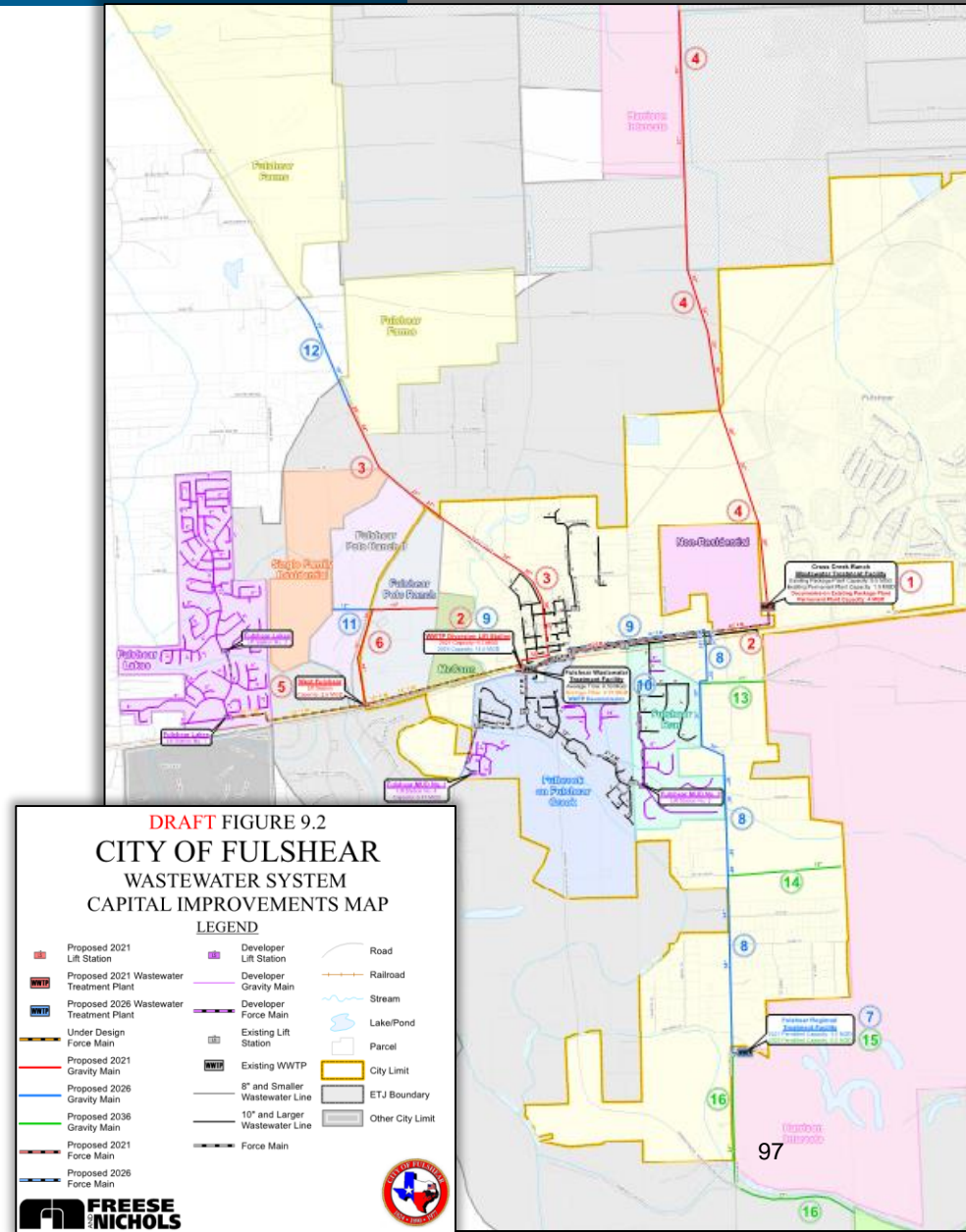
Project	Project Description	Cost
18	Water Plant No. 3	\$10,270,000
19	16-inch South Fulshear Transmission Line – Phase I	\$1,090,000
20	Water Plant No. 4	\$10,270,000
21	1.5 MG West Elevated Storage Tank	\$3,000,000
22	12-inch Bois D'Arc Lane Transmission Line	\$2,196,000
23	16-inch South Fulshear Transmission Line	\$4,938,000
Subtotal		\$31,764,000
30% Construction Contingency		\$9,529,200
Subtotal		\$41,293,200
15-20% Engineering Services		\$7,724,300
Total		\$49,017,500

Wastewater System Capital Improvements Plan

Phase	CIP	Cost
0-5 Year	Collection	\$31,679,200
	Treatment	\$37,440,000
	Sub-total	\$69,119,200
5-10 Year	Collection	\$16,318,800
	Treatment	\$46,120,800
	Sub-total	\$62,439,600
10-20 Year	Collection	\$5,496,700
	Treatment	\$37,440,000
	Sub-total	\$42,936,700
Total		\$174,495,500

All costs are in 2018 dollars.

Note: CIP Cost Estimates include 30% Contingency and 15-20% Engineering Services



5-year Wastewater CIP Projects



Project	Project Description	Cost
1	3.0 MGD Cross Creek Ranch WWTP Expansion to 4.0 MGD	\$24,000,000
2	9.3 MGD WWTP Diversion Lift Station and 20-inch Force Main	\$7,432,000
3	24/27/30/36-inch FM 359 Interceptor - Phase I	\$4,591,800
4	30-inch Texas Heritage Parkway Interceptor	\$6,702,000
5	2.6 MGD West Fulshear Lift Station	\$1,040,000
6	15/18-inch West Fulshear Interceptor Phase I	\$1,101,000
	Subtotal	\$44,866,800
	30% Construction Contingency	\$13,460,100
	Subtotal	\$58,326,900
	15-20% Engineering Services	\$10,792,300
	Total	\$69,119,200

All costs are in 2018 dollars.

10-year Wastewater CIP Projects

Project	Project Description	Cost
7	3.5 MGD Regional Wastewater Treatment Facility	\$28,500,000
8	30/36/48/54-inch Bois D'Arc Interceptor - Phase I	\$7,884,400
9	Expansion of the Diversion Lift Station from 9.3 MGD to 14.6 MGD	\$2,714,000
10	Existing City of Fulshear WWTP Decommission	\$300,000
11	12-inch Fulshear Polo Ranch and McCann Interceptor Phase II	\$199,000
12	18-inch FM 359 Interceptor - Phase II	\$810,800
Subtotal		\$40,408,200
30% Construction Contingency		\$12,122,600
Subtotal		\$52,530,800
15-20% Engineering Services		\$9,908,800
Total		\$62,439,600

20-year Wastewater CIP Projects



Project	Project Description	Cost
13	21-inch Harrison Interests Interceptor - Phase I	\$509,600
14	18-inch Harrison Interests Interceptor - Phase II	\$881,200
15	Regional WWTP Expansion from 3.5 MGD to 6.5 MGD	\$24,000,000
16	21/24-inch Foster Farms Interceptor	\$2,285,700
	Subtotal	\$27,676,500
	30% Construction Contingency	\$8,303,100
	Subtotal	\$35,979,600
	15-20% Engineering Services	\$6,957,100
	Total	\$42,936,700

All costs are in 2018 dollars.

Benefits of Regionalization for City of Fulshear Water and Wastewater Systems



1. Ability to leverage existing facilities to delay major capital projects
 - Wastewater *with* Regionalization: 5-year CIP cost \$71M
 - Wastewater *without* Regionalization: 5-year CIP cost \$115M
2. Lower operation and maintenance costs due to fewer facilities
3. Regional infrastructure readily available for new development connections
4. Regional infrastructure constructed with expandability in mind to serve future growth

- Introductions/Overview
- Population Projections
- Water System Overview
 - Water Demands
 - Water System Design Criteria
- Wastewater Overview
 - Wastewater Flows
 - WWTP Siting
 - Wastewater System Design Criteria
- Water and Wastewater Capital Improvement Plans
- **Next Steps**

- Possible workshop with City Council to discuss findings & implementation approach
 - Who pays for the projects?
 - How does this align with current conditions?
 - How do we engage necessary stakeholders?
- Receive Water and Wastewater Master Plan report
- Review water and wastewater rate study findings
 - Master Plan and other CIP
 - Future Maintenance and Operation considerations
- Consider adoption of Water and Wastewater Impact Fees
- Review initial implementation steps
 - New Cross Creek Ranch WP No. 3
 - Expansion of Cross Creek WWTP
 - Site study for new Regional WWTP

Questions?



AGENDA MEMO
BUSINESS OF THE CITY COUNCIL
CITY OF FULSHEAR, TEXAS

AGENDA OF:	July 12, 2018	ITEM:	D
DATE SUBMITTED:	June 11, 2018	DEPARTMENT:	Public Works/CIP
	Sharon Valiante, Public Works Director, Wes Vela		Sharon Valiante
PREPARED BY:	Finance Director Brant Gary - ACM	PRESENTER:	Public Works Director
SUBJECT:	Consideraton and Possible Action regarding CIP Project – Right of Way (ROW) Acquisition for Katy Fulshear Widening and Huggins Extension/Widening		
ATTACHMENTS:	<ol style="list-style-type: none"> 1. Map Location – 2015 MTP 2. ROW Alignments 3. CIP Project Info 		
Est. Expenditure Required:	\$245,000; \$2.2M		
Amount Budgeted:	\$245,000 FY 2018; FY 2017		
Funding Account:	Existing 300 Fund Balance/601/701 Fund Balance		
Additional Appropriation Required:			
Funding Account:			

EXECUTIVE SUMMARY

In Fiscal Year (FY) 2016-2017 City Council approved a Capital Improvement Plan (CIP) item for right-of-way acquisitions for a project that is proposed for construction regarding the widening of Katy Fulshear north of FM 1093 to Huggins Rd, and the extension/widening of Huggins Rd to the west to FM 359. The project is proposed to be a coordinated effort between Fort Bend County Commissioner Andy Meyers’ office/Fort Bend County Engineering Department (County) and the City of Fulshear (City).

The purpose of this workshop item is to provide some background and update City Council on the status of the project.

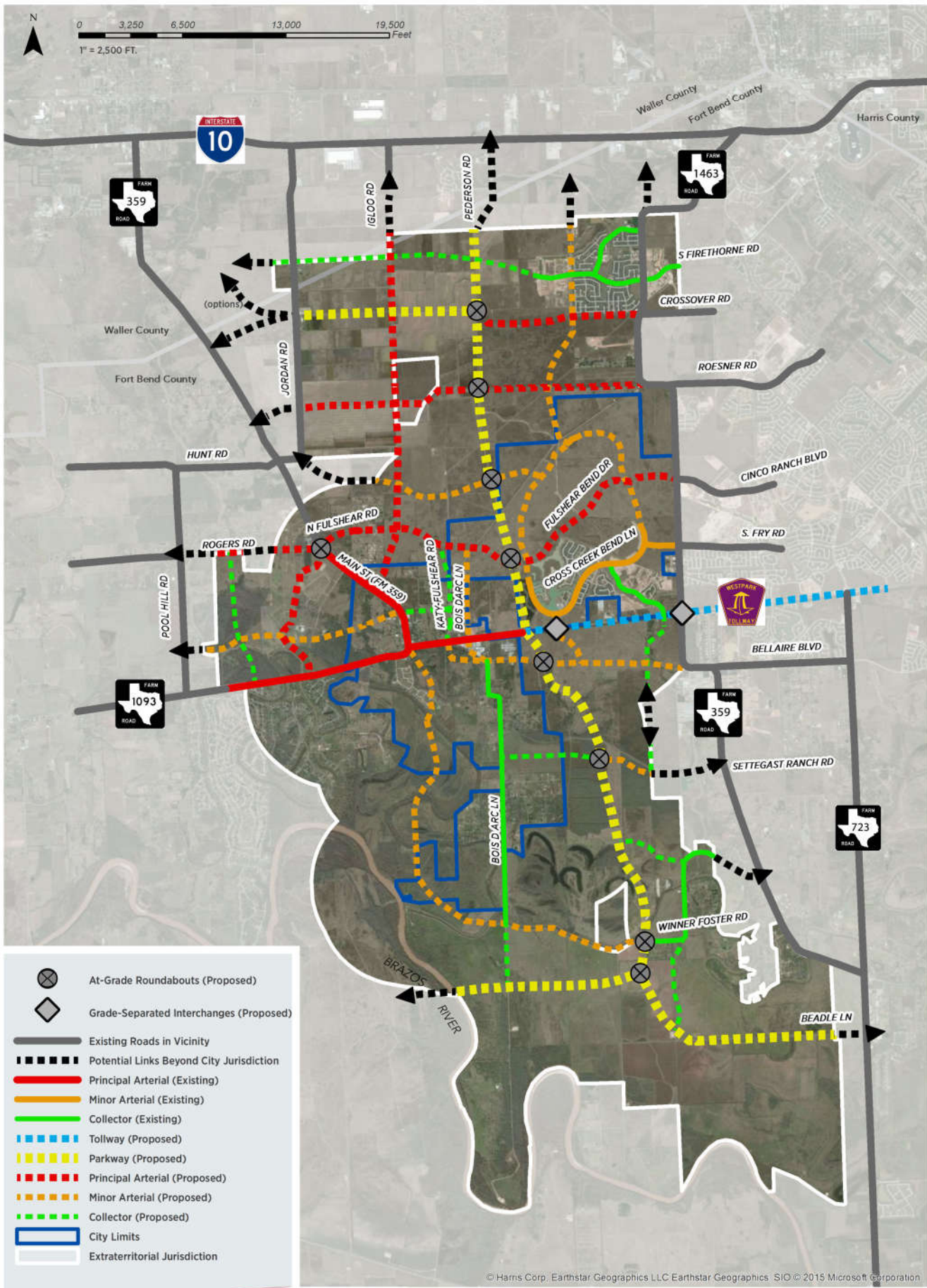
1. Conversations between County and City to create proposed project began a few years prior to the FY 2016-2017 budget process.
2. An understanding between County and City developed to scope the project:
 - a. Katy Fulshear – Widen from 1093 north to Huggins Road
 - b. Huggins Road – Widen and extend from Katy Fulshear west to FM 359
 - c. County responsible for design & construction
 - d. City responsible for right-of-way acquisition
3. County hired consulting Engineering staff to create new alignment, right of way needs, and design for both roadway sections; developed cost estimate for acquisitions and construction

4. Initially, City anticipated a good portion of the ROW to be donated, but none has been formalized/finalized; City staff estimated needing \$285,000 for any acquisition not donated; going rate for right of way at that time = \$5/SF; if City paid for all ROW = \$1.23M
5. Construction Estimated Costs: Katy Fulshear = \$3.1M; Huggins = \$1.7M
6. City staff proposed funding in FY 2016-2017; City council approved in budget of \$285,000 to begin ROW acquisition
7. City Staff proposed keeping the project funded in FY 2017-2018; City Council approved the budget of \$285,000
8. February – April 2018 – County presented final alignment/cross-sections; delineation of necessary right of way for project; City staff visited with a ROW Acquisition firm to get a scope of ROW acquisition services: Update to cost estimate based on discussions with consultant and County for ROW acquisition = \$2.2M) with no donated ROW. (Katy Fulshear – 85,000SF = \$765,000; Huggins Road – 160,000 SF = \$1,440,000; current estimated per SF cost = \$9
9. No formal agreement between County and City at this time

Where do we go from here?

Options:

1. Begin formulation of formal agreement with County to delineate responsibilities for project to be constructed; Wait until formalized and then Select consultant (\$245,000 for services) and determine what ROW is necessary to pay for; which property owners are willing to donate.; budget funds to purchase = worst case scenario = \$2.2M based on current cost per sf @ \$8/SF or move this part forward while agreement is formalized
2. Begin formulation of formal agreement with County to delineate responsibilities for project to be constructed **AND, introduce conversations with County regarding a financing option to see if County will upfront the dollars to purchase ROW with City paying back over time;** Wait until formalized and then Select consultant (\$245,000 for services) and determine what ROW is necessary to pay for; which property owners are willing to donate.; budget funds to purchase = worst case scenario = \$2.2M based on current cost per sf @ \$8/SF or move this part forward while agreement is formalized
3. Opt out



© Harms Corp., Earthstar Geographics LLC Earthstar Geographics SIO © 2015 Microsoft Corporation



Figure 3.1
MAJOR THOROUGHFARE PLAN

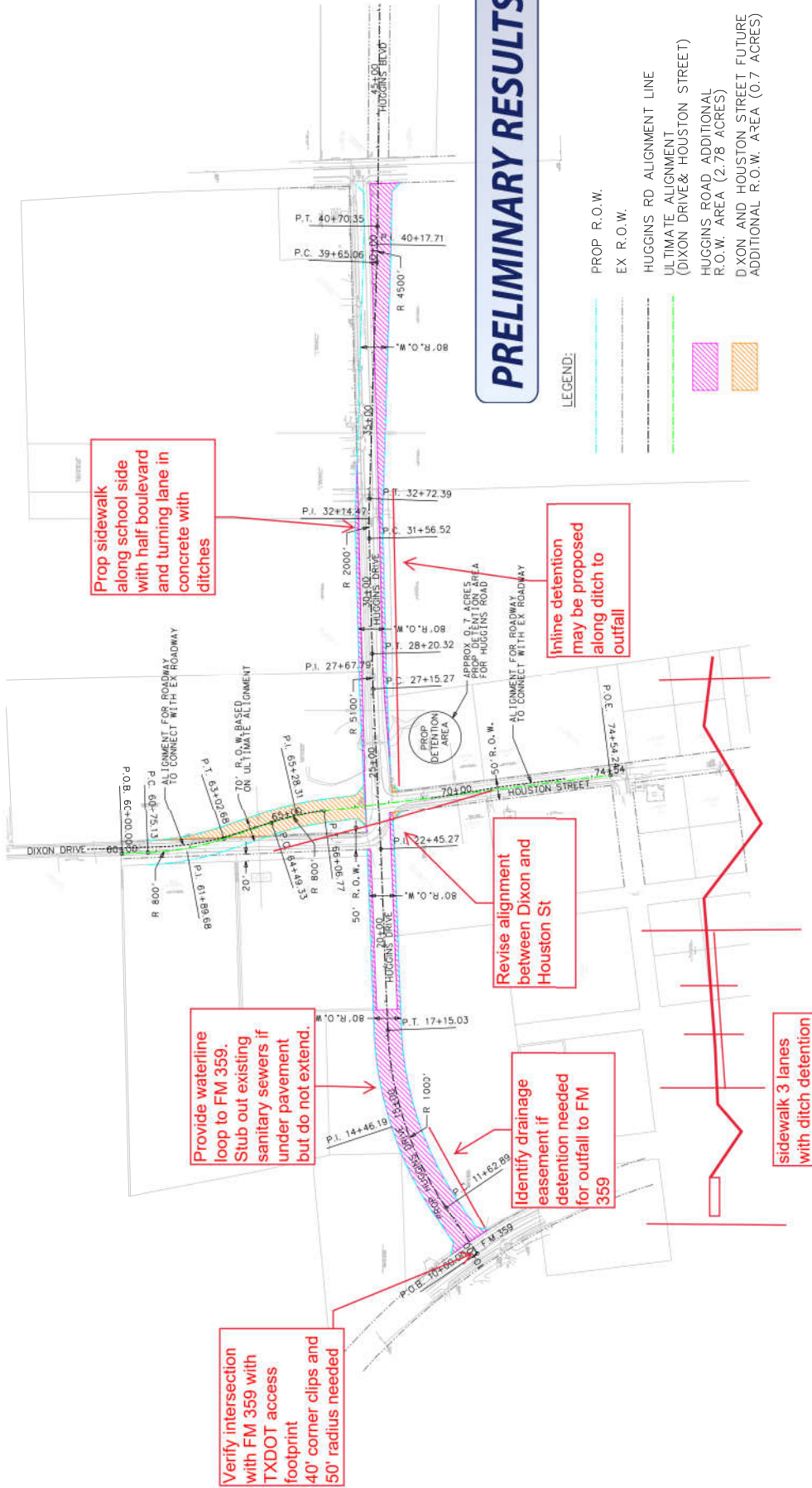
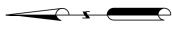
Adopted 01.20.2015



NOTE: The Thoroughfare Plan shows general alignments for existing and planned roadways. The Plan is a guide for general transportation planning and right-of-way preservation and acquisition. While the Plan alignments indicate planned roadway extensions, connections and improvements, actual alignments are subject to change based upon design and implementation considerations.

Any future extension of the Westpark Tollway, beyond the pending construction of an extension to a point just west of Cross Creek Ranch Boulevard, will depend upon area development trends and associated traffic growth, as well as funding availability. Additionally, the potential alignment of any further extension will be subject to detailed planning and design.

The City of Fulshear has no jurisdiction over roadway planning and alignments outside its ETJ.



PRELIMINARY RESULTS

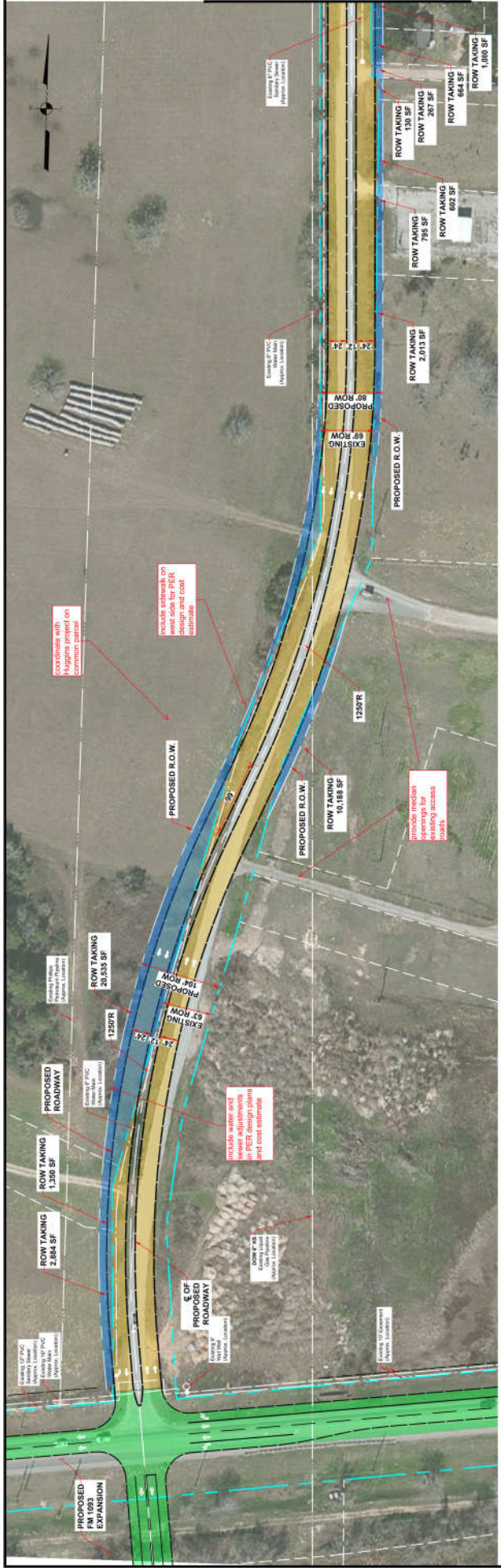
- LEGEND:**
- PROP. R.O.W.
 - EX. R.O.W.
 - HUGGINS RD ALIGNMENT LINE
 - ULTIMATE ALIGNMENT (DIXON DRIVE & HOUSTON STREET)
 - HUGGINS ROAD ADDITIONAL R.O.W. AREA (2.78 ACRES)
 - DIXON AND HOUSTON STREET FUTURE ADDITIONAL R.O.W. AREA (0.7 ACRES)

PROJECT NO.	HUGGINS DRIVE - FROM FM 359 TO FULSHEAR KATY RD
DESIGNED BY	SH/J/K/S
DRAWN BY	SBD
SCALE	H: 1" = 300'
DATE	05/28/2017
PREPARED BY	
FILE NAME	HUGGINS DR - 80' ROW
FILE NO.	
SHEET NO.	
TOTAL SHEETS	1 / XX

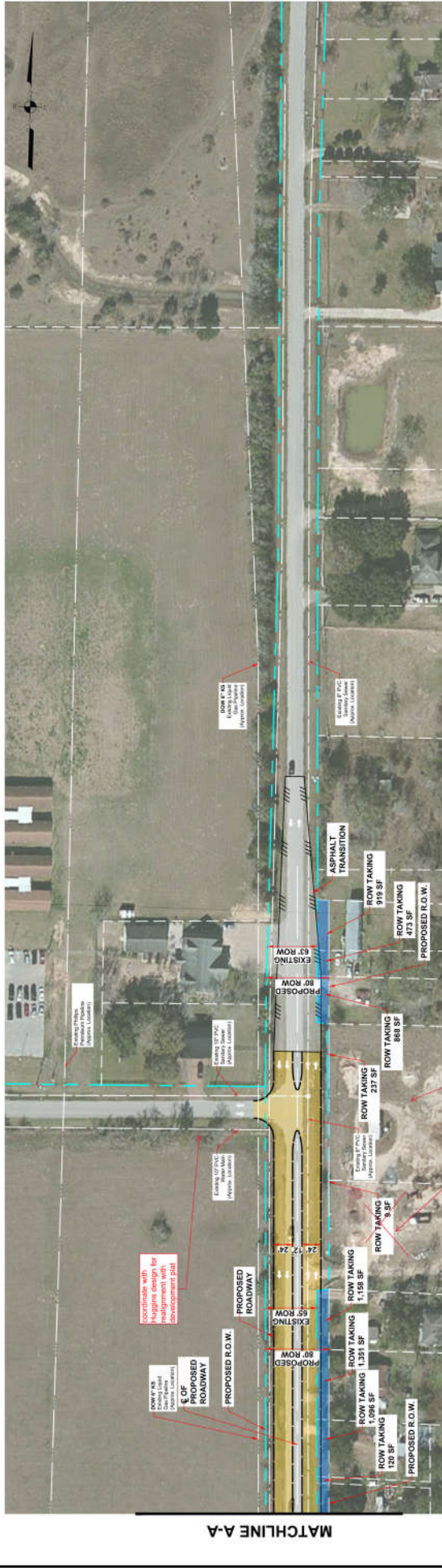


FORT BEND COUNTY
ENGINEERING DEPARTMENT

REVIEWED
By Hieu M. Nguyen at 10:20 am, Apr 05, 2017



MATCHLINE A-A



MATCHLINE A-A

**KATY-FULSHEAR RD.
EXPANSION EXHIBIT**

McDONOUGH
Civil Engineers & Project Managers
TBE13 Firm Registration No. 30103300
TBE16 Firm Registration No. P-005340
5625 Schumacher Lane
Houston, Texas 77057
www.mcdonough.com

INTERIM REVIEW ONLY
This report is INCOMPLETE and is released for the purpose of INTERIM REVIEW ONLY. It is not to be used for BIDDING, PERMIT or CONSTRUCTION. Engineer: Connor McDevitt, P.E. License No. 122323 TX Firm Registration No. F-005340

PRELIMINARY RESULTS

Disclaimer: GIS data is prepared and made available for general reference purposes only and should not be used, or relied upon for specific applications, without independent verification. MEC neither represents, nor warrants GIS data or any other information, nor will accept liability in any way in conjunction with its use.

REVIEWED
By: *Michael J. Magyari* at 2:45 pm, Feb 16, 2017
include Comments of Fulshier abt

Katy Fulshier Approx. SF needed = 85,000 = \$765,000



CITY OF FULSHEAR, TEXAS FY 2016-2017 BUDGET

CAPITAL PROJECTS FUND

In Fiscal Year 2015-2016 the General Fund transferred in approximately \$1.7 Million into the Capital Projects Fund for the execution of Non-Water/ Waste Water projects. Thankfully every one of these projects has come in well under budget leaving a substantial reserve available to use on this Fiscal Year's slate of projects.

Those slightly more than \$1 Million and include:

- \$160,000 for Concrete Repair and Maintenance;
- \$360,000 for the construction an Emergency Access Route into and out of the flood prone Red Bird Neighborhood;
- \$285,000 in funding for the Acquisition of Right of Way associated with the County Bond funded expansions to Katy-Fulshear Road and Huggins Road;
- \$50,000 for Asphalt Repair and Maintenance. It should be noted that the City had budgeted more than \$900,000 for the completion of three (3) years' worth of resurfacing and reconditioning under contract with the County. Thanks to lower oil prices and other cost efficiencies they were able to complete the work for just over \$525,000.
- \$50,000 to expand the Drainage Improvements currently being conducted in the Lower Bois D'Arc area. This project also came in well under budget in FY 2015-2016 saving the City some \$115,000.
- Finally, thanks to net savings from FY 2015-2016 this Budget anticipates returning a little more than \$143,000 to the General Fund.

City of San
Capital Projects Fund Budget FY 2016-2017

Capital Projects Fund General Fund	FY 2015-2016 Budget	YTD Totals as of 7/31/2016	Percentage of Budget	Projected Final Actual	Proposed Budget FY 2016-2017	Year v Year Percentage
Resources:						
Total Beginning Fund Balance	\$0.00	\$0.00	0.00%	\$0.00	\$1,048,014.00	
Revenues:						
Landowner Participation	\$116,000.00	\$0.00	0.00%	\$0.00	\$0.00	0.00%
Transfer in from CCR Enterprise Fund	\$1,700,000.00	\$1,700,000.00	100.00%	\$0.00	\$0.00	0.00%
Transfer in from COF Enterprise Fund	\$1,868,006.00	\$0.00	0.00%	\$0.00	\$0.00	0.00%
Transfer in from Regional Park Fund	\$2,978,254.00	\$2,978,254.00	100.00%	\$1,707,514.00	\$0.00	0.00%
Transfer in from Regional Park Fund	\$600,000.00	\$0.00	0.00%	\$0.00	\$0.00	0.00%
Transfer in from 4A Development Corporation	\$150,000.00	\$0.00	0.00%	\$0.00	\$0.00	0.00%
Transfer in from 4B Development Corporation	\$150,000.00	\$0.00	0.00%	\$0.00	\$0.00	0.00%
Debt Issuance	\$0.00	\$0.00	#DIV/0!	\$0.00	\$0.00	#DIV/0!
Interest	\$500.00	\$1,024.93	204.99%	\$500.00	\$0.00	0.00%
Total Revenues:	\$7,562,760.00	\$4,679,278.93	61.87%	\$1,708,014.00	\$0.00	-100.00%
Total Resources Available	\$7,562,760.00	\$4,679,278.93	61.87%	\$1,708,014.00	\$1,048,014.00	
Expenditures:						
General Fund Projects	\$2,607,760.00	\$458,982.00	17.60%	\$660,000.00	\$1,048,014.00	40.19%
> Asphalt Repair and Maintenance	\$807,760.00	\$415,580.00	45.28%	\$525,000.00	\$50,000.00	5.51%
> Concrete Repair and Maintenance	\$100,000.00	\$0.00	0.00%	\$0.00	\$160,000.00	160.00%
> Streetlight Conversion	\$250,000.00	\$0.00	0.00%	\$0.00	\$0.00	0.00%
> Drainage Improvements	\$250,000.00	\$22,247.00	8.90%	\$85,000.00	\$50,000.00	20.00%
> Board Participation	\$0.00	\$0.00	#DIV/0!	\$0.00	\$50,000.00	#DIV/0!
> Emergency Access Route	\$0.00	\$0.00	#DIV/0!	\$0.00	\$360,000.00	#DIV/0!
> Facilities Planning/ Construction/ Renovation	\$100,000.00	\$21,145.00	21.15%	\$50,000.00	\$0.00	0.00%
> Land Acquisition - Park	\$1,000,000.00	\$0.00	0.00%	\$0.00	\$143,014.00	#DIV/0!
> Transfer Out to General Fund						
Water/ Waste Water Projects	\$4,955,000.00	\$2,005,227.00	40.47%	\$0.00	\$0.00	0.00%
> COF Water Plant #1 Expansion - Well	\$508,400.00	\$139,320.00	27.40%	\$0.00	\$0.00	0.00%
> COF Water Plant #1 Expansion - Elevated Tank	\$625,100.00	\$552,195.00	88.34%	\$0.00	\$0.00	0.00%
> COF Water Plant # Expansion - Pumps	\$546,500.00	\$274,014.00	50.14%	\$0.00	\$0.00	0.00%
> COF Interim WWTTP Expansion	\$0.00	\$25,200.00	#DIV/0!	\$0.00	\$0.00	#DIV/0!
> COF Water/ Wastewater Line Extension	\$1,275,000.00	\$0.00	0.00%	\$0.00	\$0.00	0.00%
> COF Land Acquisition - WWTTP	\$0.00	\$0.00	#DIV/0!	\$0.00	\$0.00	#DIV/0!
> Joint Water Meter Conversion	\$2,000,000.00	\$1,014,498.00	50.72%	\$0.00	\$0.00	0.00%
> Joint Facility	\$0.00	\$0.00	#DIV/0!	\$0.00	\$0.00	#DIV/0!
> Joint Land Acquisition - Facility	\$0.00	\$0.00	#DIV/0!	\$0.00	\$0.00	#DIV/0!
Total Combined Project Expenditures:	\$7,562,760.00	\$2,464,209.00	32.58%	\$660,000.00	\$1,048,014.00	13.86%
Total Ending Resources:						
Total Resources/ Expenditures	\$0.00	\$2,215,069.93	#DIV/0!	\$1,048,014.00	\$0.00	#DIV/0!
Restricted Balance						
Committed Balance						

*Kathy Fushlock
Burgess Road*



STREETS & TRAFFIC 5-Year Capital Improvement Plan City of Fulshear, Texas

Project Summary


Project Code & Name	Funding Source	Description
ST17A - Lower Bois d'Arc Emergency Access	CIP 300 Fund Balance	This is a reallocation of funds for a project designed to facilitate emergency access to and from the Lower Bois d'Arc area during flooding conditions.
ST18A - Pavement Management Program	CIP 300 Fund Bal./ Undesignated	This will be an annual heavy maintenance program that will identify specific improvements for the Street and Traffic Systems. FY18 will be funded from CIP Fund Balance, future years have not yet been assigned a funding source.
ST18B - Street System Maintenance Equipment	Undesignated/ Op Funds	It is anticipated that as the City's street network and maintenance needs grow, additional equipment will be needed on an as needed basis in the near future.
ST18C - Regional Road Project Participation	CIP 300 Fund Balance/ CIP 601/701 Fund Bal.	This project will track the City's participation in regional road projects. At this point, it is assumed that the ROW acquisitions for Katy-Fulshear and Huggins Rd. improvements will be funded by this project. The project will be funded on a 50/50 basis from existing CIP funds and 601/701 funds.
ST18D - ROW Study-Downtown Area	CIP 300 Fund Balance	A study will be conducted to identify existing and needed minimum ROW widths for streets in the downtown area and certain others where ROW widths are not clearly defined. Future ROW purchases will be identified and prioritized as needed.
ST18E - FY18-FY20 Mobility Enhancements Project	TBD Mobility Bonds	An initial bond program for any City/regional mobility and related needs for the City's streets and traffic infrastructure. Project assumes design in year one and construction split out over the next two fiscal years. Scope can be redefined as needed.
ST19A - Biennial Roadway Evaluation	CIP 300 Fund Balance	An assessment of the City's roadway network will be conducted every 2-3 years to track trends in the condition of the streets in the City's Roadway System

Please Note: All figures below are estimates as of 2017 and are in 2017 dollars not adjusted for inflation.

Project Code	FY18	FY19	FY20	FY21	FY22	Beyond FY22	TOTALS
ST17A	\$ 50,000	\$ 310,000	\$ -	\$ -	\$ -		\$ 360,000
ST18A	\$ 250,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 400,000		\$ 1,850,000
ST18B	\$ -	\$ 100,000	\$ 100,000	\$ 100,000	\$ -		\$ 300,000
ST18C	\$ 285,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 285,000
ST18D	\$ 25,000	\$ -	\$ -	\$ -	\$ -		\$ 25,000
ST18E	\$ 1,000,000	\$ 2,750,000	\$ 2,750,000	\$ -	\$ -		\$ 6,500,000
ST19A	\$ -	\$ 50,000		\$ 50,000	\$ -		\$ 100,000
TOTALS	\$ 1,610,000	\$ 3,610,000	\$ 3,250,000	\$ 550,000	\$ 400,000	\$ -	\$ 9,420,000

Annual Operating Costs:

Project Code	FY18	FY19	FY20	FY21	FY22	
ST17A	\$ -	\$ -	\$ -	\$ -	\$ -	no additional annual costs
ST18A	\$ -	\$ -	\$ -	\$ -	\$ -	no additional annual costs
ST18B	\$ -	\$ -	\$ 5,000	\$ 5,000	\$ 5,000	maintenance on equipment
ST18C	\$ -	\$ -	\$ -	\$ -	\$ -	no additional annual costs
ST18D	\$ -	\$ -	\$ -	\$ -	\$ -	no additional annual costs
ST18E	\$ -	\$ -	\$ -	\$ -	\$ -	no additional annual costs
ST19A	\$ -	\$ -	\$ -	\$ -	\$ -	no additional annual costs
TOTALS	\$ -	\$ -	\$ 5,000	\$ 5,000	\$ 5,000	



**Capital Improvement Plan
Capital Project Detail Sheet**

Project Name: Regional Road Project Participation Project Number: ST18C

Project Manager: Brant Gary, Executive Director of Planning & Development (or designee) Project Owner: Brant Gary, Exec. Dir. of Planning & Development

Project Start Date: Q1-FY18 Project Est. Completion Date: Q4-FY18 (This Phase)


Project Details: This project will track the City's participation in regional road projects. Current scope is for ROW acquisitions for the Katy-Fulshear and Huggins Rd. projects to be completed by Fort Bend County.

Project Status: The ROW acquisitions are being done by the City as a result of an agreement with Fort Bend County relative to these projects.

Does this project replace/enhance an existing asset?
This project along with the county's related projects will provide improve and enhance the existing roadways identified.

Project Estimated Total Costs:

	Funding Source	Design Phase/ Planning Svcs	Construction Phase	Other Costs: Study ROW/Land/Equip	Project Contingency	Total Estimated Annual Costs	General Remarks
2018	CIP Fund Bal.			\$285,000		\$285,000	Downtown/As Needed
2019							
2020							
2021							
2022							
Future Years						\$0	TBD
Total Estimated Project Cost:						<u>\$285,000</u>	



**Capital Improvement Plan
Capital Project Detail Sheet**

Project Name: Right-Of-Way Study-Downtown Area Project Number: ST18D

Project Manager: Brant Gary, Executive Director of Planning & Development (or designee) Project Owner: Brant Gary, Exec. Dir. of Planning & Development

Project Start Date: Q1-FY18 Project Est. Completion Date: Q4-FY18

Project Details: This project is intended to identify existing and needed minimum ROW widths for streets in the downtown area and others where ROW widths are not clearly defined.

Project Status: The initial need was identified during previous planning efforts in the Downtown area.

Does this project replace/enhance an existing asset?
This project and future phases will provide information relative to the City's pavement system primarily in the Downtown area.

Project Estimated Total Costs:

	Funding Source	Design Phase/ Planning Svcs	Construction Phase	Other Costs: Study ROW/Land/Equip	Project Contingency	Total Estimated Annual Costs	General Remarks
2018	CIP Fund Bal.	\$25,000				\$25,000	Downtown/As Needed
2019							
2020							
2021							
2022							
Future Years						\$0	TBD
Total Estimated Project Cost:						<u>\$25,000</u>	

AGENDA MEMO
BUSINESS OF THE CITY COUNCIL
CITY OF FULSHEAR, TEXAS

AGENDA OF: July 12, 2018	AGENDA ITEM: BUS - E
DATE SUBMITTED: July 9, 2018	DEPARTMENT: Planning & Development
PREPARED BY: Sharon Valiante, Director of Public Works Brant Gary, Asst. City Manager	PRESENTER: Sharon Valiante, Director of Public Works Brant Gary, Asst. City Manager
SUBJECT: DISCUSSION AND UPDATE REGARDING THE ONGOING DEVELOPMENT OF THE CITY'S PARKS AND PATHWAYS MASTER PLAN	
ATTACHMENTS: 1. Overview Presentation by Burditt, Inc.	

EXECUTIVE SUMMARY

Earlier this year, work began on the City's Parks and Pathways Master Plan. This presentation is being provided to City Council to give information on that process.

Burditt, Inc. will be presenting this information to the Parks & Recreation Board on Friday, July 13th to receive feedback and continue this process.

RECOMMENDATION

There is no action recommended at this time. City Council is encouraged to provide any feedback as this effort continues.



PARKS AND PATHWAYS PLAN UPDATE

7-12-2018

Master Plan Process

Plan Approach

- **Standards-Based Approach** – utilizing traditional park standards and evaluation of current trends.
- **Demand-Based Approach** - utilizing input from staff, focus groups, sports leagues, and Lockhart residents to identify current and future needs and desires.
- **Resource-Based Approach** - leveraging available land, natural features, rights-of-way, and City facilities to enhance park and recreation opportunities.

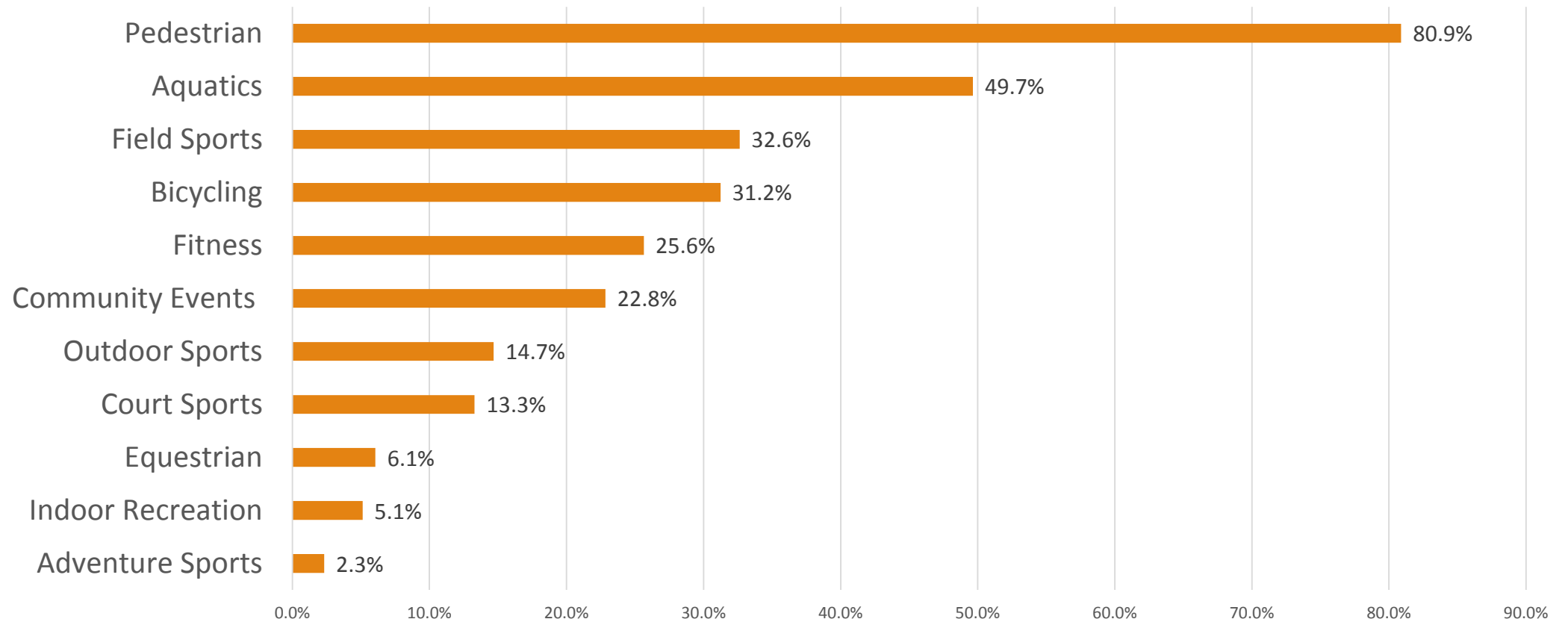
Plan Components

- **Inventory & Analysis**– of existing city and non-city recreation amenities and opportunities.
- **Demand Assessment** – stakeholder input
- **Connecting the Community**- pathway opportunities
- **Programs and Events** – inventory of existing recreation programs, festivals, etc
- **Natural Resources** – recommendations for enhancing outdoor recreation and conservation of natural resources
- **Priority Projects** – concepts and costs for recommended enhancements to parks system
- **Implementation** – land acquisition, funding, O&M

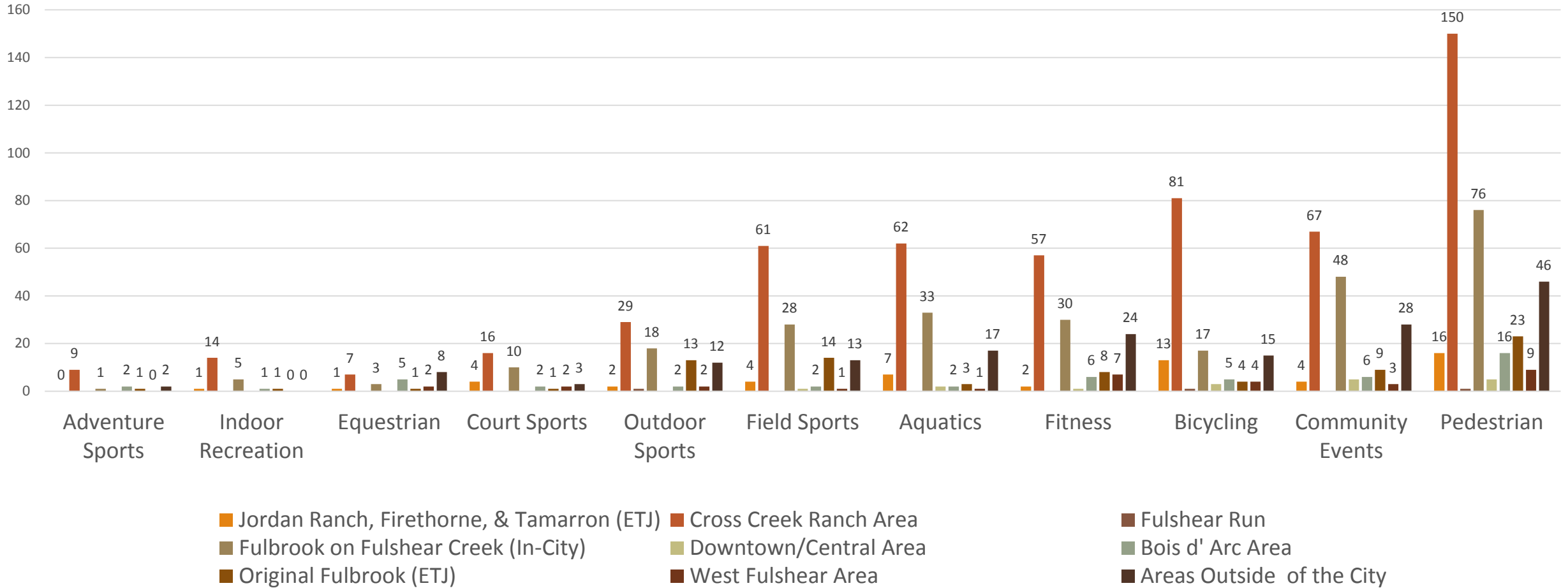
Demand Analysis – Identifying Park and Recreation Needs

- Online Survey
- Focus Group Meetings 4-4-2018
- Public Meeting (this summer)

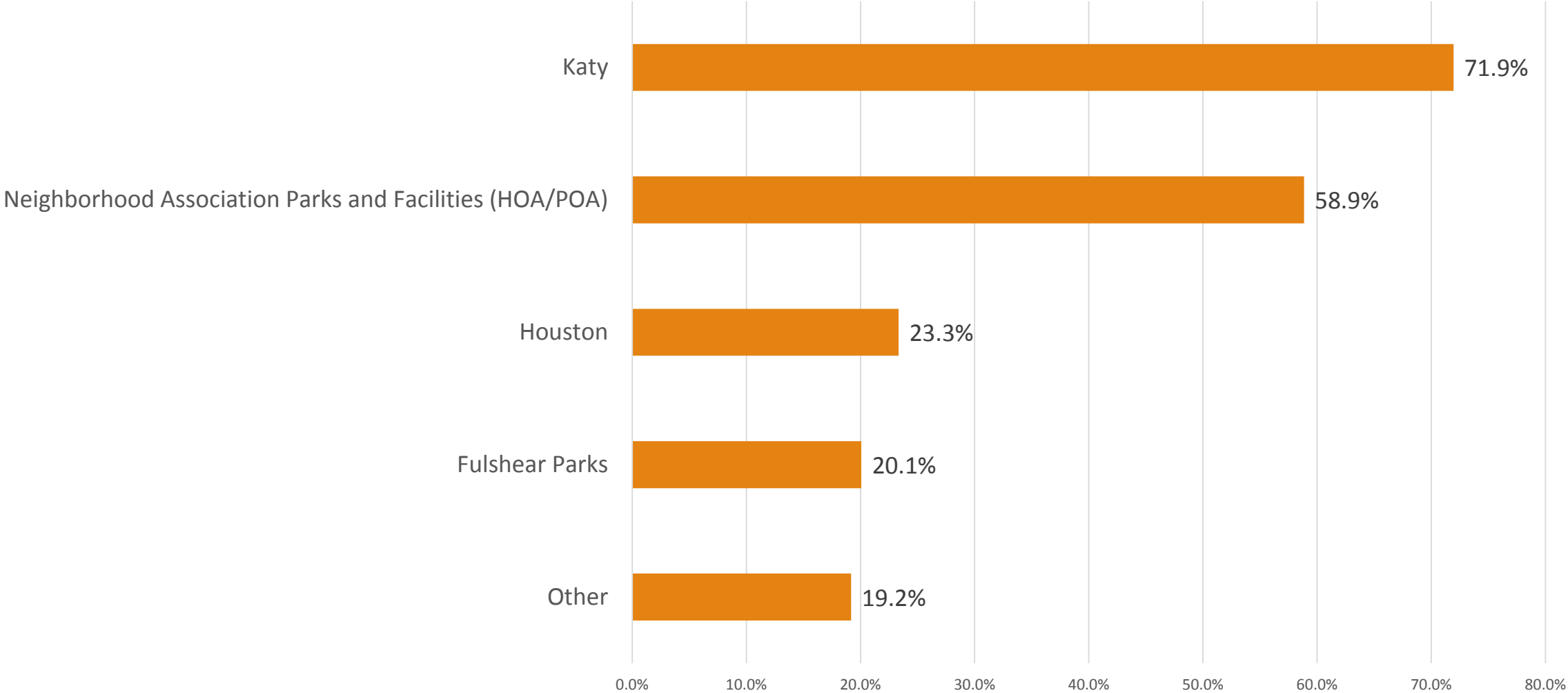
Current Recreation Participation Fulshear, Texas (weighted by neighborhood)



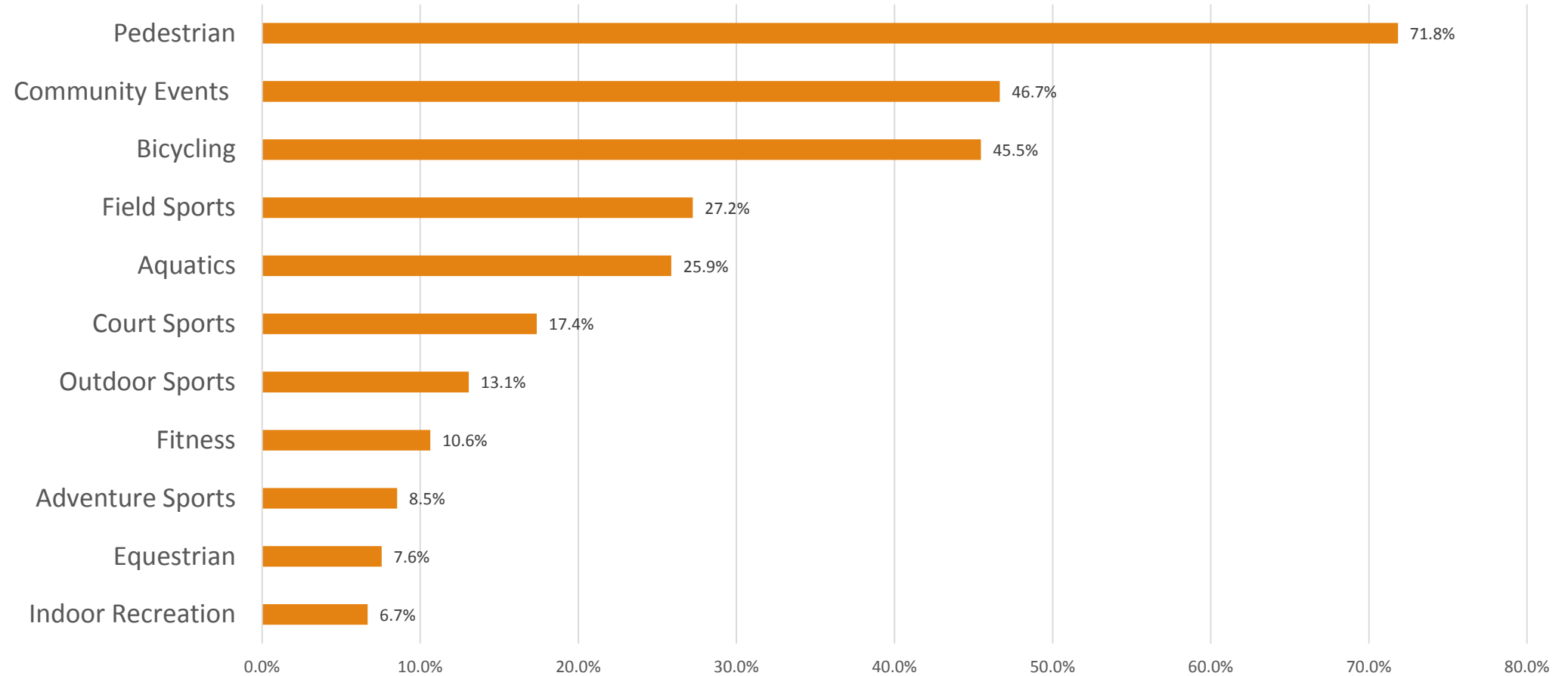
Current Recreation Participation by Neighborhood Fulshear, Texas



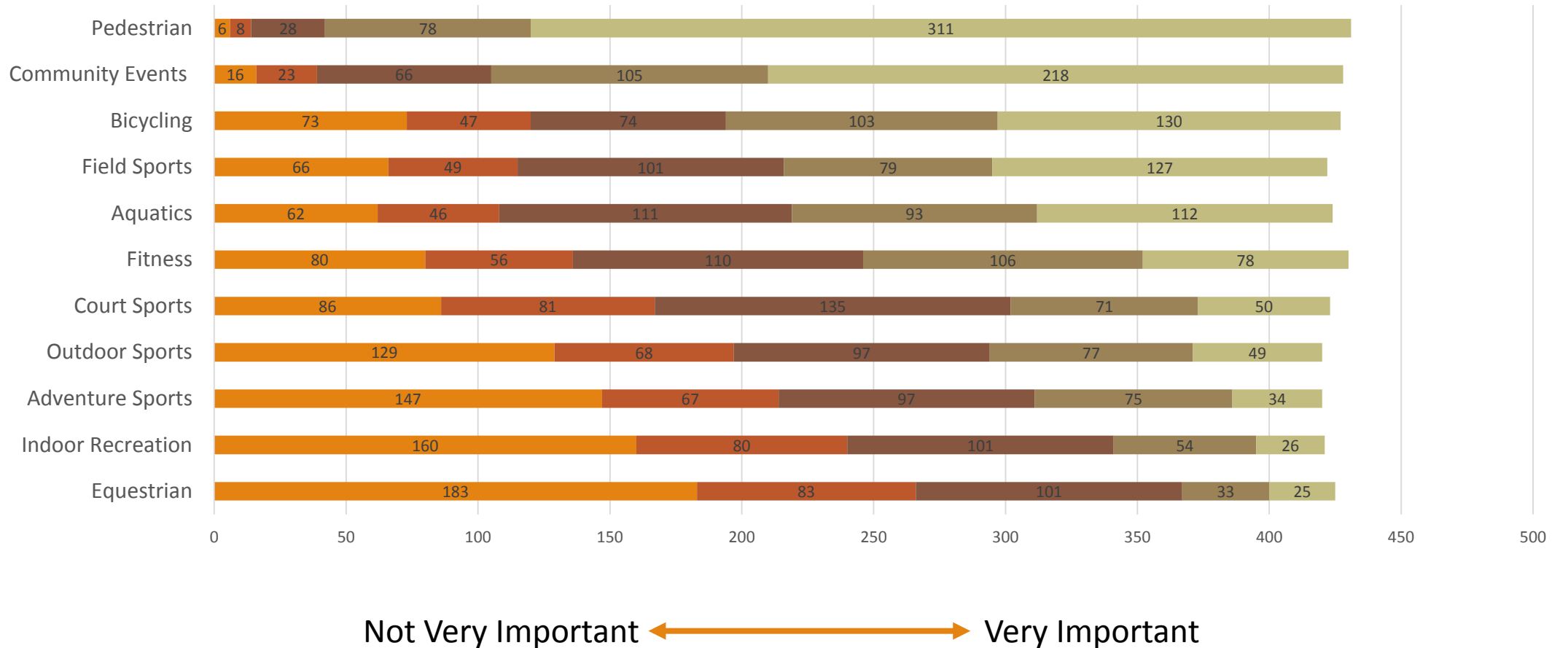
Where do you and your family usually go for recreational activities?
(weighted by neighborhood)



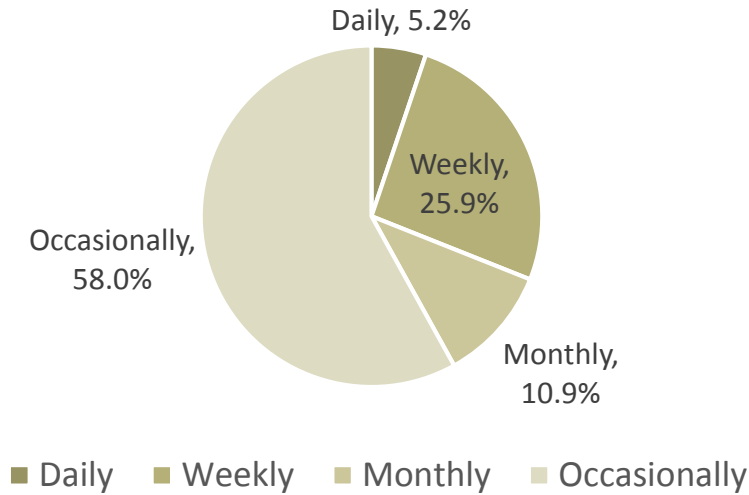
What are the top 3 features you would like to see in existing or future City parks? (weighted by neighborhood)



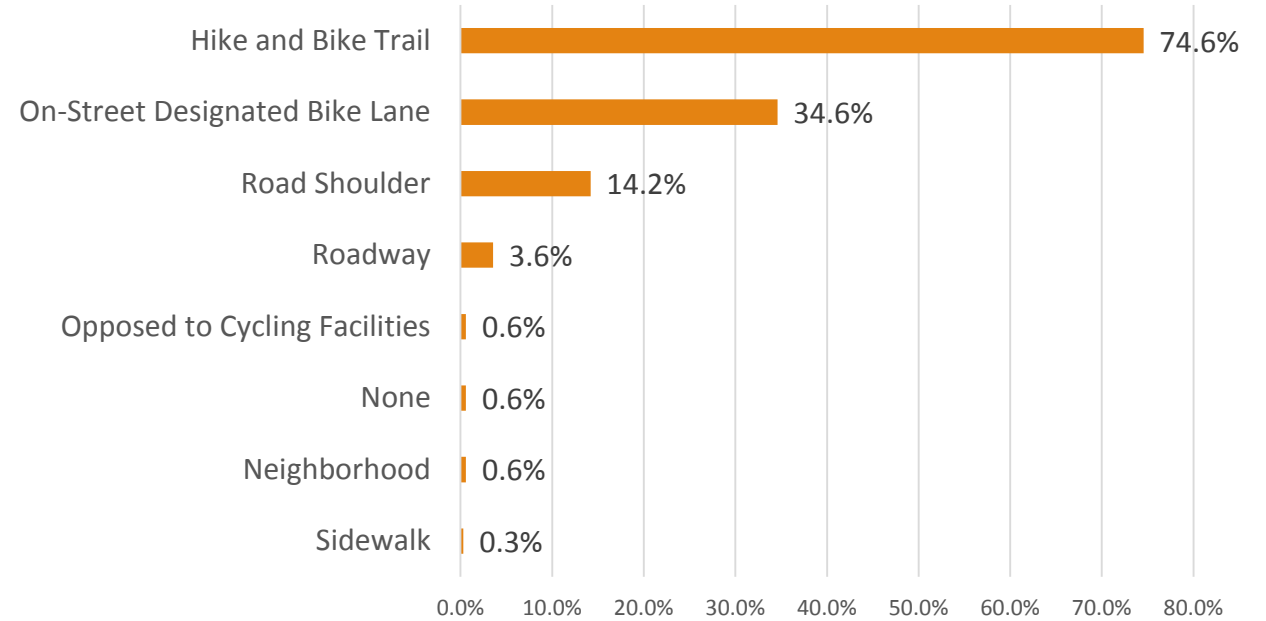
How important are following features to you ? # of Responses



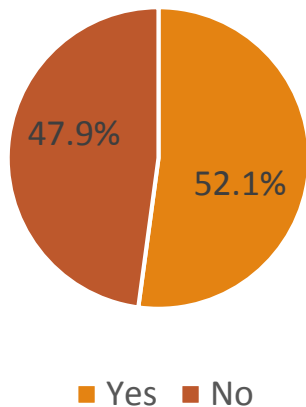
How often do you participate in cycling activities?



What type of facilities do you prefer while cycling?



Have you ever biked in Fulshear and the surrounding area?

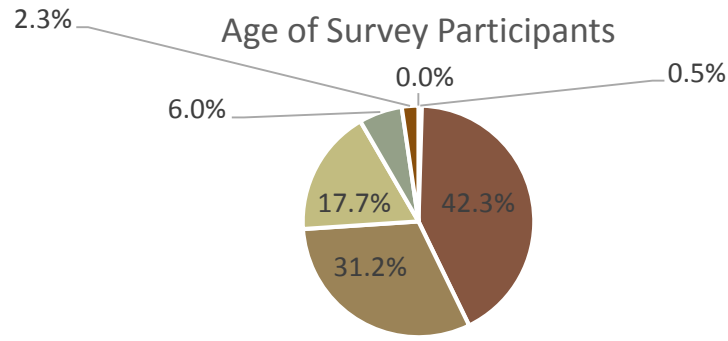


What concerns do you have regarding cycling in Fulshear?

Response Category	# of Responses	% of Responses
Traffic Issues	169	43.8%
Safety for Cyclists	238	61.7%
No Significant Concerns	19	4.9%
Other	24	6.2%

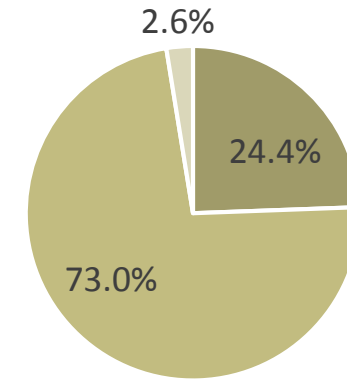
Cycling in Fulshear

Survey Participant Details



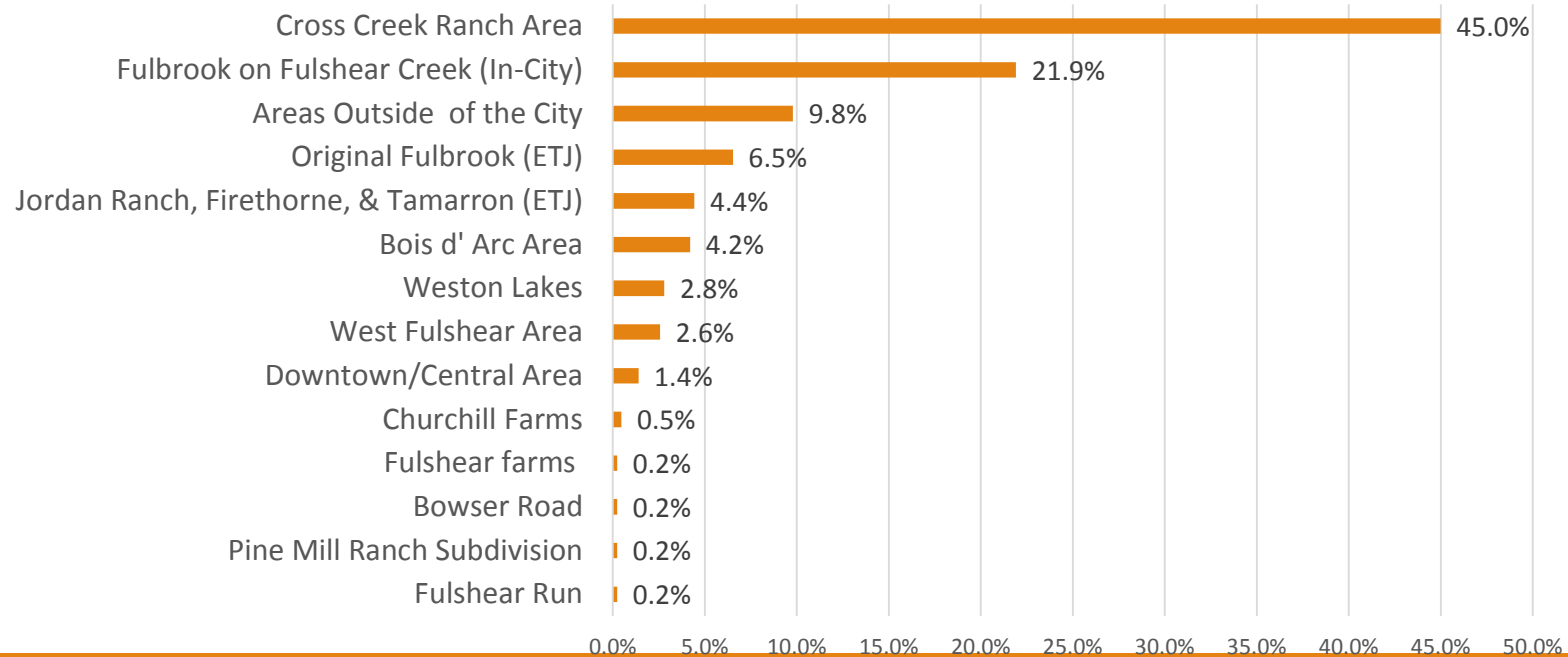
- 14 and Under
- 15 to 25
- 26 to 40
- 41 to 55
- 55 to 65
- 65+
- Do not want to disclose

Gender of Survey Participants



- Male
- Female
- Do not want to disclose

Location of Survey Respondents



*survey results were weighted by neighborhood population to account for distribution of responses.

Priority Projects

- 1. Primrose Park-** New Community/Regional Park and Sports Complex
- 2. Paseo Park**– Passive, Linear, Park within future FM 1093 Esplanade
- 3. Frances Smart Park Renovation-** Formal Event Patio and Park Improvements
- 4. Prototype 5-Acre Park** – Design prototype for 5-Acre Community Park with typical amenities
- 5. Pathway Master Plan-** Proposed pedestrian and bicycle pathways throughout Fulshear

Primrose Park

Size: 25 Acres

Proposed Amenities:

- Baseball/Softball 4-Plex
- Multi-Use Fields (football, soccer, etc.)
- Basketball Courts (2)
- Amphitheater
- Walking Trails
- Playgrounds (2)
- Amenity Pond
- Pavilion



Primrose Park

Opinion of Probable Costs

Qty.	Unit	Description	Unit Cost	Subtotal
Site				
1	allow	Clearing, Grubbing, Disposal	\$ 104,000	\$ 104,000
1	allow	Strip, Stockpile, Grade Site	\$ 150,000.00	\$ 150,000
23,516	cy	Detention/Retention Pond (10' deep) Excavation (63,495sf)	\$ 5	\$ 117,580
25	ac	Herbicide	\$ 4,500	\$ 112,500
1	allow	SWPPP Erosion Control	\$ 15,000	\$ 15,000
Parking				
115,005	sf	Pavement (parking lots & driveways, 6" conc fly ash/lime) (162 spaces)	\$ 7.00	\$ 805,035
1	allow	Parking Lot Striping & Signage (HC markings)	\$ 2,000	\$ 2,000
Structures				
2,500	sf	Restroom/Concession Building	\$ 250	\$ 625,000
2	allow	Group Pavilions	\$ 50,000	\$ 100,000
Play Amenities / Hardscape				
4	ea	200 ft Baseball Field w/ lighting, sod, earthwork, drainage, fencing, backstop and netting, dugouts, covered stadium style bleacher system	\$ 350,000	\$ 1,400,000
2	ea	Basketball Courts - full size, goals, play surface	\$ 40,000	\$ 80,000
3	allow	Batting Cages 24 ft x 70 ft	\$ 7,500	\$ 22,500
1	allow	Dog Park - fencing and gates	\$ 45,000	\$ 45,000
1	ea	Play ground(2 to 5 and 5 to 12 yr old)	\$ 60,000	\$ 60,000
1	ea	Play ground(2 to 5 and 5 to 12 yr old) w/ seats	\$ 350,000	\$ 350,000
1	ac	Multi-Use Field (game field, fine graded, sodded)	\$ 87,500	\$ 87,500
300	sf	Amphitheater Stage	\$ 250	\$ 75,000
2,222	cy	Amphitheater Berming and Turf (10,000sf, 6' height)	\$ 8	\$ 17,776
3,990	sf	Trails- 5 ft wide-decomposed granite	\$ 5	\$ 19,950
4,540	sf	Sidewalk	\$ 5	\$ 22,700
Landscape				
1	allow	Trees, Mulching, Grass Seeding, Beds	\$ 200,000	\$ 200,000
Utilities				
1	allow	Utilities Extension	\$ 100,000	\$ 100,000

Base Construction Cost	4,511,541
General Conditions, Contingency and G.C. Markup	
10% Contingency	451,154
12.5% G.C. Markup, Overhead and Profit	563,943
Total Construction	5,526,638
Pre-Development	607,930
Surveying (1%)	55,266
GeoTech (1%)	55,266
Professional Service Fees (9%)	497,397
Total Opinion of probable Costs	6,742,498



Primrose Park

Phase I Trail Development

- 1,400 LF Decomposed Granite Walking Path (8' wide) (option to be permanent)
- Gravel Parking Lot and Driveway (18 spaces) (temporary)

Primrose Park – Opinion of Probable Costs - Phase I Trail Development

Opinion of Probable Costs - 8' Wide Pathway

Qty.	Unit	Description	Unit Cost	Subtotal
1,400	LF	Primrose Park Trail (8' wide)(\$6.50/SF)	\$ 52	\$ 72,800
9,125	SF	Gravel Parking Lot and Driveway (18 spaces)	\$ 4.00	\$ 36,500

Base Construction Cost **109,300**

General Conditions, Contingency and G.C. Markup

10% Contingency 10,930
 12.5% G.C. Markup, Overhead and Profit 13,663

Total Construction **133,893**

Pre-Development **14,728**

Surveying (1%) 1,339

GeoTech (1%) 1,339

Professional Service Fees (9%) 12,050

Total Opinion of probable Costs **148,621**

Alternate 6' Wide Pathway

Qty.	Unit	Description	Unit Cost	Subtotal
1,400	LF	Primrose Park Trail (6' wide)(\$6.50/SF)	\$ 39	\$ 54,600
9,125	SF	Gravel Parking Lot and Driveway (18 spaces)	\$ 4.00	\$ 36,500

Base Construction Cost **91,100**

General Conditions, Contingency and G.C. Markup

10% Contingency 9,110
 12.5% G.C. Markup, Overhead and Profit 11,388

Total Construction **111,598**

Pre-Development **10,044**

Surveying (1%) -

GeoTech (1%) -

Professional Service Fees (9%) 10,044

Total Opinion of probable Costs **121,641**

Paseo Park – Proposed FM 1093 Esplanade Improvements

- Paved Promenade
- Wildflower/Butterfly Meadow
- Picnic Areas
- Parking (7 spaces per section)
- Picnic Shelter/Pavilions
- Lighting & Landscaping



Paseo Park – Opinion of Probable Costs

Typical 1,000 ft. Section

Qty.	Unit	Description	Unit Cost	Subtotal
Site				
4.40	ac	Clearing/grubbing/disposal	\$ 3,600	\$ 15,840.00
1	allow	Strip, Stockpile, Grade Site	\$ 10,000	\$ 10,000
Parking				
1	allow	Parking Lot Striping & Signage (HC markings)	\$ 2,000.00	\$ 2,000
3,283	sf	Pavement (parking lots & driveways, 6" conc fly ash/lime) (7 spaces)	\$ 7.00	\$ 22,981
Play Amenities / Hardscape				
27,000	sf	Concrete Walks	\$ 7.00	\$ 189,000
1	allow	Site Furniture	\$ 40,000	\$ 40,000
10	ea	Site Lighting - single arm/fixture	\$ 6,000	\$ 60,000
Structures				
3	ea	Picnic Shelter/Pavilions	\$ 15,000	\$ 45,000
Landscape				
10	ea	Trees - Large Shade Trees	\$ 450	\$ 4,500
40	ea	Trees - Medium/Small Shade Trees	\$ 300	\$ 12,000
10	ea	Trees - Flowering Trees	\$ 145	\$ 1,450
3.50	ac	Grass - Fine Grading, Seeded	\$ 3,200	\$ 11,200
1	allow	Wildflower Beds	\$ 10,000	\$ 10,000
Utilities				
1	allow	Utilities extension	\$ 60,000	\$ 60,000

Base Construction Cost	483,971
General Conditions, Contingency and G.C. Markup	
10% Contingency	48,397
12.5% G.C. Markup, Overhead and Profit	60,496
Total Construction	592,864
Pre-Development	
Surveying (1%)	5,929
GeoTech (1%)	5,929
Professional Service Fees (9%)	53,358
Total Opinion of probable Costs	658,080

Frances Smart Park Improvements

- Formal Event Plaza
- Walking Paths
- Parking Expansion



Frances Smart Park Improvements - Opinion of Probable Costs

Qty.	Unit	Description	Unit Cost	Subtotal
Site				
0.50	allow	Clearing/grubbing/disposal	\$ 3,600	\$ 1,800.00
Parking				
1	allow	Parking Lot Striping & Signage (HC markings)	\$ 2,000	\$ 2,000
7,109	sf	Pavement (parking lots & driveways, 6" conc fly ash/lime) (17 spaces)	\$ 7.00	\$ 49,763
Hardscape				
1,570	sf	Specialty Pavement (Plaza)	\$ 20	\$ 31,400
556	lf	Decomposed Granite Trails (5'wide)	\$ 20.00	\$ 11,120
1	allow	Site Furniture	\$ 10,000	\$ 10,000
5	ea	Site Lighting - single arm/fixture	\$ 6,000	\$ 30,000
1	allow	Plaza Seat Wall	\$ 12,000	\$ 12,000
Landscape				
0.68	ac	Grass - Fine Grading, Seeded	\$ 3,200	\$ 2,176
10	ea	Trees - Large Shade Trees	\$ 450	\$ 4,500
5	ea	Trees - Medium/Small Shade Trees	\$ 300	\$ 1,500
29,620	sf	Irrigation - Grass Lawns	\$ 0.80	\$ 23,696

Base Construction Cost	179,955
General Conditions, Contingency and G.C. Markup	
10% Contingency	17,996
12.5% G.C. Markup, Overhead and Profit	22,494
Total Construction	220,445
Pre-Development	24,249
Surveying (1%)	2,204
GeoTech (1%)	2,204
Professional Service Fees (9%)	19,840
Total Opinion of probable Costs	244,694

Prototypical 5-Acre Park

Typical Amenities for a Community Park

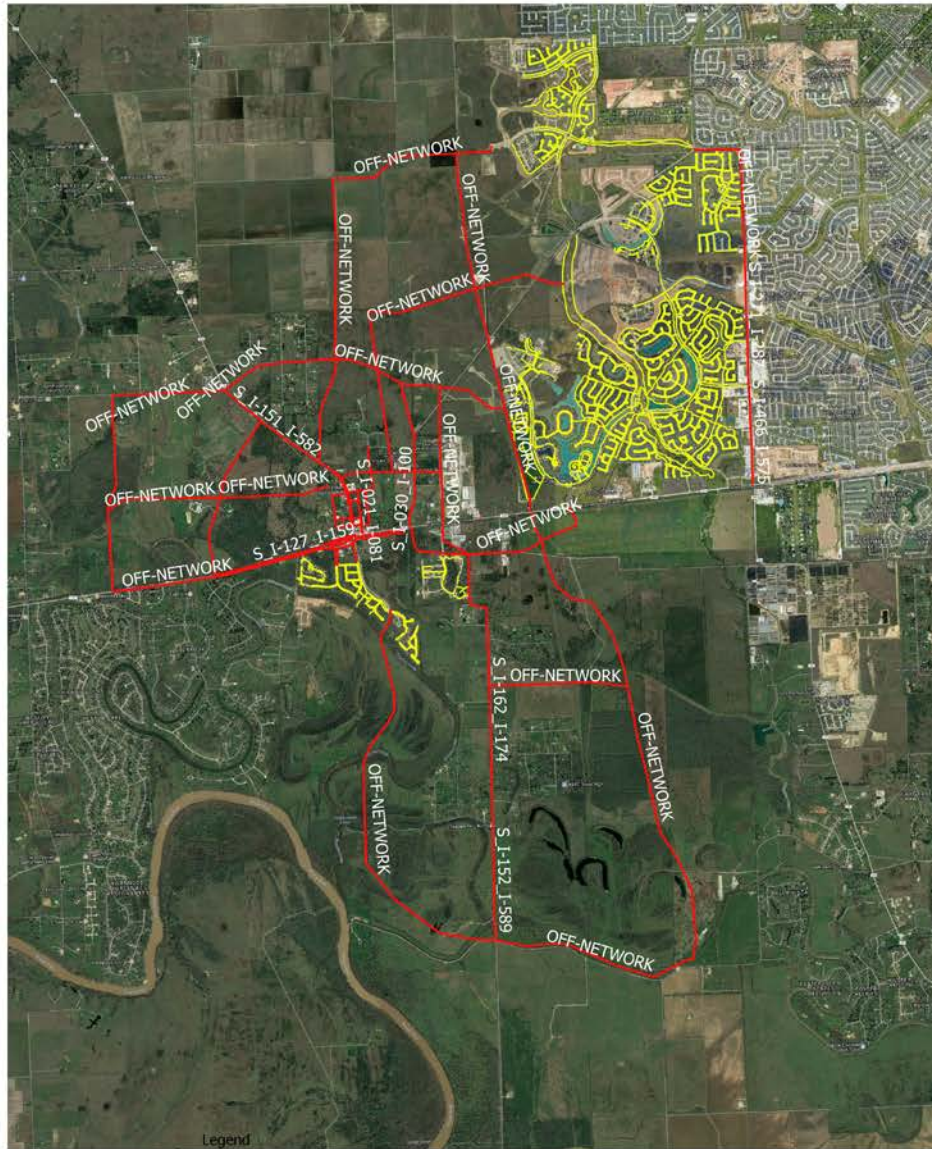
- Basketball Courts (2)
- Tennis Court
- Large Group Pavilion
- Parking (40 spaces)
- Playground (multi-age)
- Walking Path
- Multi-purpose athletic practice field (football, baseball, soccer)
- Small Pavilion
- Wildflower/Butterfly Garden/Nature Reserve



Prototypical 5-Acre Park - Opinion of Probable Costs

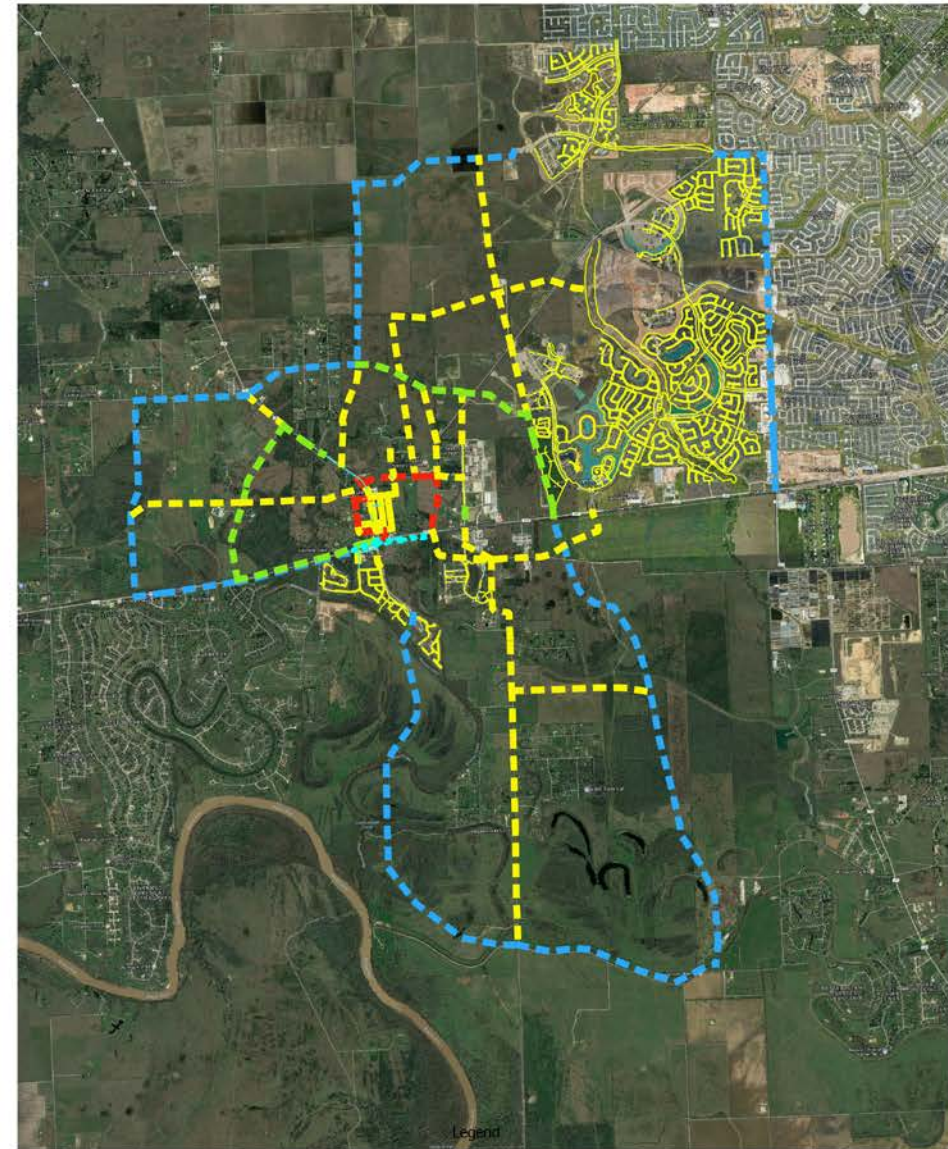
Qty.	Unit	Description	Unit Cost	Subtotal
Site				
5	ac	Clearing/grubbing/disposal	\$ 3,600	\$ 18,000.00
Structures				
3,000	sf	Large Pavilion	\$ 80	\$ 240,000
800	sf	Small Pavilion	\$ 80	\$ 64,000
1	ea	Picnic Shelter	\$ 15,000	\$ 15,000
Parking				
1	allow	Parking Lot Striping & Signage (HC markings)	\$ 2,000.00	\$ 2,000
14,920	sf	Pavement (parking lots & driveways, 6" conc fly ash/lime) (40 spaces)	\$ 7.00	\$ 104,440
Play Amenities / Hardscape				
1,812	lf	Decomposed Granite Trails	\$ 20.00	\$ 36,240
8,314	sf	Concrete Walks	\$ 7.00	\$ 58,198
1	allow	Playgrounds	\$ 300,000	\$ 300,000
1	ea	Tennis Courts	\$ 42,000	\$ 42,000
2	ea	Basketball Courts	\$ 40,000	\$ 80,000
39,600	sf	Multi-Purpose Field (practice field, fine Grading, sodded)	\$ 0.32	\$ 12,672
		Backstop		
39,600	sf	Athletic Field Irrigation	\$ 0.80	\$ 31,680
5	ea	Workout Stations		
1	allow	Educational Signage	\$ 12,000	\$ 12,000
1	allow	Site Furniture	\$ 40,000	\$ 40,000
10	ea	Site Lighting - single arm/fixture	\$ 6,000	\$ 60,000
Landscape				
1	allow	Landscape Improvements	\$ 45,000	\$ 45,000
1	allow	Wildflower Meadow/Butterfly Reserve	\$ 25,000	\$ 25,000
7	ea	Trees - Large Shade Trees	\$ 450	\$ 3,150
30	ea	Trees - Medium/Small Shade Trees	\$ 300	\$ 9,000
10	ea	Trees - Flowering Trees	\$ 145	\$ 1,450
2	ac	Grass - Fine Grading, Seeded	\$ 3,200	\$ 7,584
Utilities				
1	allow	Utilities extension	\$ 60,000	\$ 60,000

Base Construction Cost	1,267,414
General Conditions, Contingency and G.C. Markup	
10% Contingency	126,741
12.5% G.C. Markup, Overhead and Profit	158,427
Total Construction	1,552,582
Pre-Development	170,784
Surveying (1%)	15,526
GeoTech (1%)	15,526
Professional Service Fees (9%)	139,732
Total Opinion of probable Costs	1,723,366

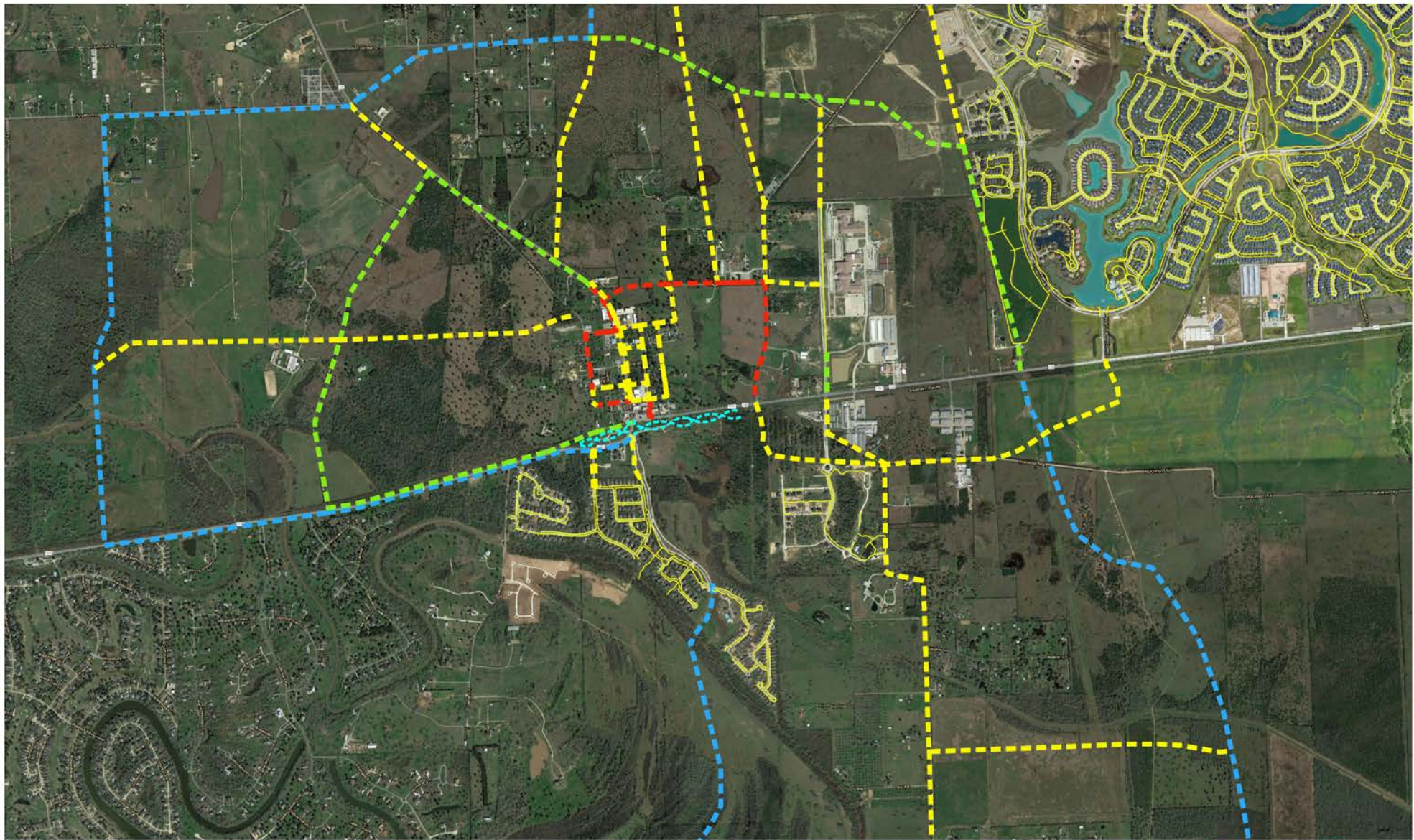


Legend
 0 5000 ft
 — Proposed Pathways by Road Segment
 — Existing

Proposed Pathways
 Fulshear Parks and Pathways Master Plan



Legend
 0 5000 ft
 — CIRCULATION 3 — PASEO
 — CIRCULATION 1 — CONNECTOR — Existing
 — CIRCULATION 2



Proposed Pathways
Fulshear Parks and Pathways Master Plan

- | | | |
|------------------------------------------------------|-----------------------------------------------------|--------------------------------------------------|
| Proposed Pathways by Function | --- CIRCULATION 3 | --- PASEO |
| --- CIRCULATION 1 | --- CONNECTOR | --- Existing |
| --- CIRCULATION 2 | | |

Proposed Pathway System- Opinion of Probable Costs

Qty.	Unit	Description	Unit Cost	Subtotal
8,932	LF	Circulation 1 (8' wide, concrete)	\$ 52	\$ 464,464
30,302	LF	Circulation 2 (8' wide, concrete)	\$ 52	\$ 1,575,704
107,455	LF	Circulation 3 (8' wide, concrete)	\$ 52	\$ 5,587,660
96,200	LF	Connectors (8' wide, concrete)	\$ 52	\$ 5,002,400

Base Construction Cost **12,630,228**

General Conditions, Contingency and G.C. Markup

10% Contingency 1,263,023

12.5% G.C. Markup, Overhead and Profit 1,578,779

Total Construction **15,472,029**

Pre-Development **1,701,923**

Surveying (1%) 154,720

GeoTech (1%) 154,720

Professional Service Fees (9%) 1,392,483

Total Opinion of probable Costs **17,173,953**



*note: probable costs considered preliminary and do not include right-of-way acquisition, adjacent infrastructure modifications, or other unknown factors at the planning level.

Questions?

Next Steps:

1. Draft Submittal
2. Public Meeting
3. Revision/Adoption
4. Consider Implementation of Projects