

6/7/2021 CITY COUNCIL MEETING AGENDA

THE STATE OF TEXAS §
COUNTY OF BRAZORIA §
CITY OF MANVEL §



LARRY AKERY, COUNCIL PLACE 1
LORRAINE HEHN, COUNCIL PLACE 2
NICCOLE TYSON, COUNCIL PLACE 3
DAN DAVIS, COUNCIL PLACE 4
JASON ALBERT, COUNCIL PLACE 5
JEROME HUDSON, COUNCIL PLACE 6

DEBRA DAVISON, MAYOR
KYLE JUNG, CITY MANAGER
TAMMY BELL, CITY SECRETARY

NOTICE OF A TELECONFERENCE CITY COUNCIL MEETING OF THE CITY OF MANVEL June 7, 2021

NOTICE IS HEREBY GIVEN 7:00 P.M. REGULAR SESSION

Pursuant to Chapter 551, Title 5 of the Texas Government Code, the Texas Open Meetings Act, notice is hereby given that the City of Manvel will convene a regular meeting Via Teleconference for the purpose of discussing and if appropriate, take action with respect to the following items:

This meeting will be open to the public via teleconference

City Hall will be CLOSED to the public.

A temporary suspension of the Open Meetings Act to allow telephone or videoconference public meetings has been granted by Governor Greg Abbott. These actions are being taken to mitigate the spread of COVID-19 by avoiding meetings that bring people into a group setting and in accordance with Section 418.016 of the Texas Government Code.

Members of the public are entitled to participate remotely via Microsoft Teams Teleconferencing.

Citizens may join the Meeting (in listen mode only) by calling 210-469-0207 or Toll Free 1-877-257-2190

and entering the Meeting ID: 235 696 748#

To view the agenda packet for this meeting visit our website at www.cityofmanvel.com.

A recording of the telephone meeting will be made and available to the public in accordance with the Open Meetings Act upon written request.

***Members of the public who wish to submit written comments on a listed agenda item must submit their comments via the Public Comment Request Form found on the city website www.cityofmanvel.com or by emailing tbell@cityofmanvel.com or by calling 281-489-0630 x6 for staff assistance.

***All Public Comment Requests must be received before 5:00 p.m., on June 7, 2021.

NOTE: The City Council of the City of Manvel reserves the right to discuss any items in Closed Session whenever authorized under the Texas Open Meetings Act, chapter 551, of the Texas Government Code. The City Council may discuss the items on this agenda in any order.

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpreter services must be made 48 hours prior to this meeting. Please contact the City Secretary at 281-489-0630 for further information.

Regular Session

Call To Order

Inspirational Reading -Council Member Niccole Tyson

Pledge

Pledge of Allegiance and Texas Pledge: "Honor the Texas flag; I pledge allegiance to thee Texas, one state under God, one and indivisible.

Citizen Comments: "Comment Card" Required

****Members of the public who wish to submit written comments on a listed agenda item must submit their comments via the Public Comment Request Form found on the city website www.cityofmanvel.com or by emailing tbell@cityofmanvel.com or by calling 281-489-0630 x6 for staff assistance.*

Presentation

Proclamations

June 19, 2021 - Juneteenth

June 2021 - Pride Month

Public Hearing

TO HEAR INPUT FROM THE PUBLIC REGARDING AN ORDINANCE OF THE CITY OF MANVEL, TEXAS, AMENDING THE ZONING CLASSIFICATION OF APPROXIMATELY 24.7282 ACRES LOCATED IN THE SOUTHWEST CORNER OF CROIX ROAD AND STATE HIGHWAY 288, MANVEL, TEXAS, FROM SINGLE FAMILY RESIDENTIAL DISTRICT (SFR) TO HEAVY COMMERCIAL DISTRICT (HC); PROVIDING FOR THE AMENDMENT OF THE CITY'S OFFICIAL ZONING MAP; PROVIDING FOR SEVERABILITY; AND PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF.

TO HEAR INPUT FROM THE PUBLIC REGARDING AN ORDINANCE OF THE CITY OF MANVEL, TEXAS, AMENDING THE ZONING CLASSIFICATION OF APPROXIMATELY 437.869 ACRES GENERALLY BOUNDED BY DEL BELLO BOULEVARD RIGHT-OF-WAY (NORTH), POLLARD DRIVE RIGHT-OF-WAY (EAST), MANVEL PARKWAY/IOWA LANE RIGHT-OF-WAYS (WEST), AND STATE HIGHWAY 6 (SOUTH), MANVEL, TEXAS, FROM OPEN-SINGLE FAMILY RESIDENTIAL DISTRICT (O-SFR) TO PLANNED UNIT DEVELOPMENT DISTRICT (PUD); PROVIDING FOR THE AMENDMENT OF THE CITY'S OFFICIAL ZONING MAP; PROVIDING FOR SEVERABILITY; AND PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF.

City Manager Update

Update on current events and city issues.

Regular Agenda

1. Consideration and possible action to nominate and appoint a Mayor Pro-Tem.
2. Consideration and possible action to approve the first of two readings of Ordinance 2021-O-17;
AN ORDINANCE OF THE CITY OF MANVEL, TEXAS AMENDING THE ZONING ORDINANCE OF THE CITY, BY CHANGING THE ZONING CLASSIFICATION OF A TRACT OF LAND 24.7282 ACRES LOCATED AT THE SOUTHWEST CORNER OF CROIX ROAD AND STATE HIGHWAY 288, SITUATED IN THE A.C.H. & B. CO. SURVEY, A-459 OF BRAZORIA COUNTY, TEXAS, AND BEING A PART OF SIXTY-FIVE (65) ACRE TRACT OF LAND AS RECORDED IN VOLUME 283, PAGE 617 OF THE DEED RECORDS OF BRAZORIA COUNTY, TEXAS, FROM SINGLE FAMILY RESIDENTIAL (SFR) DISTRICT TO LIGHT COMMERCIAL (LC) DISTRICT; PROVIDING FOR THE AMENDMENT OF THE CITY'S OFFICIAL ZONING MAP; PROVIDING FOR SEVERABILITY; AND PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF.
3. Consideration and possible action to approve Resolution 2021-R-10;
A RESOLUTION OF THE CITY OF MANVEL, TEXAS ADOPTING A REVISED DESIGN CRITERIA MANUAL CONTAINING SUBDIVISION IMPROVEMENT STANDARDS FOR ALL DEVELOPMENT WITHIN THE CITY OR ITS EXTRATERRITORIAL JURISDICTION, PURSUANT TO AUTHORITY CONTAINED IN CHAPTER 62, SUBDIVISION ORDINANCE, OF THE CODE OF ORDINANCES OF THE CITY OF MANVEL, TEXAS, CHAPTER 212 OF THE TEXAS LOCAL GOVERNMENT CODE, AND OTHER PROVISIONS OF THE CODE OF ORDINANCES OF THE CITY OF MANVEL, AS AMENDED OR TO BE AMENDED; AND CONTAINING OTHER MATTERS ON THE SUBJECT.
4. Consideration and possible action to approve Resolution 2021-R-11;
A RESOLUTION OF THE CITY OF MANVEL, TEXAS, EXTENDING THE LOCAL STATE OF DISASTER, DUE TO COVID-19 PANDEMIC.
5. Consideration and possible action to approve a Preliminary Plat for Meridiana Section 25A;
BEING A SUBDIVISION OF 19.49 ACRES, BEING A PARTIAL REPLAT OF LOTS 17 & 18, BLOCK 1, OF LULLING STONE SECTION 1, AS RECORDED AT VOLUME 21, PAGES 267-270, BRAZORIA COUNTY PLAT RECORDS, CITY OF MANVEL, BRAZORIA. (Failed with a 0-5 vote by PD&Z on 5/24/2021)
6. Consideration and possible action to appoint a Charter review commission composed of eleven (11) citizens of the city.

6/7/2021 CITY COUNCIL MEETING AGENDA

7. Update by Chief Traylor on gun crimes, violent crimes, open cases, closed cases, and plans to curtail violence and action by City Council to direct staff if needed. (Requested by Council Member Albert).

Consent Agenda

All Consent Agenda items listed are considered to be routine by the City Council and will be approved by one motion. There will be no separate discussion of these items unless a City Council Member so requests, in which event the item will be removed from the Consent Agenda and considered in sequence on the Agenda.

- A) Acceptance of the infrastructure improvements for Meridiana Section 29 to begin the One Year Maintenance Period.
- B) Acceptance of the infrastructure improvements for Meridiana Section 30A to begin the One Year Maintenance Period.
- C) Acceptance of the infrastructure improvements for Cumulus Drive Phase 1 in Meridiana to begin the One Year Maintenance Period.
- D) Acceptance of the meeting minutes to date.

Executive Session

City Council will convene into Executive Session pursuant to Texas Government Code, Section 551.071: Consultation with attorney, and Texas Government Code, Section 551.087: "Deliberation Regarding Economic Development Negotiations" to discuss the following:

Discuss economic development incentives on the Sowell Property

Mayor and Council Comments

Update on current events and city issues.

Additionally, pursuant to Texas Government Code § 551.0415, City Council Members and city staff may make a report about items of community interest during a meeting of the governing body without having given notice of the report.

Items of community interest include:

- Expressions of thanks, congratulations, or condolence;
- Information regarding holiday schedules;
- An honorary or salutary recognition of a public official, public employee, or other citizen, except that a discussion regarding a change in the status of a person's public office or public employment is not an honorary or salutary recognition for purposes of this subdivision;
- A reminder about an upcoming event organized or sponsored by the governing body;
- Information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; and
- Announcements involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda.

Adjourn

6/7/2021 CITY COUNCIL MEETING AGENDA

CERTIFICATION

I, Tammy Bell, City Secretary for the City of Manvel, do hereby certify that the foregoing Agenda of the City of Manvel is true and correct; and that I posted such notice on the bulletin board at the Manvel City Hall. A place convenient and readily accessible to the public on June 4, 2021 in accordance with the Texas Open Meetings Act (Tex. Gov't. Code §551.001 et.seq). Said notice remained posted for at least 72 hours preceding the scheduled time of the meeting.



TAMMY BELL, CITY SECRETARY CITY OF MANVEL, TEXAS



Proclamation
OFFICE OF THE MAYOR
CITY OF MANVEL

Whereas, our country is made up of people from every nation on Earth, who are declared equal not only in freedom but also in justice, both of which are essential for a healthy human civilization; and

Whereas, our nation was conceived on July 4th, 1776 with the Declaration of Independence, the classic statement being: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness"; and

Whereas, at 2:00 p.m. on New Year's Day, January 1, 1863, using his war powers as President, Abraham Lincoln signed the Emancipation Proclamation, providing that all persons held as slaves within any State or designated part of a State "shall be then, thenceforward, and forever free;" and

Whereas, the Emancipation Proclamation made the permanent abolition of slavery a Union war aim and provided the legal framework for the emancipation of nearly all four million slaves as the Union armies advanced; and

Whereas, on June 19, 1865, almost 2 ½ years later, Major General Gordon Granger arrived in Galveston, Texas, and announced the end of both the Civil War and slavery, with this announcement: "The people of Texas are informed that, in accordance with a proclamation from the Executive of the United States, all slaves are free. This involves an absolute equality of personal rights and rights of property, between former masters and slaves and the connection heretofore existing between them, becomes that between employer and hired labor. The Freedmen are advised to remain at their present homes and work for wages. They are informed that they will not be allowed to collect at military posts; and they will not be supported in idleness either there or elsewhere"; and

Whereas, the first official Juneteenth celebrations took place in Texas and have continued across the United States throughout the years.

Now. Therefore, I, Debra Davison, by virtue of the authority vested in me as Mayor of the City of Manvel, Texas, do hereby proclaim June 19, 2021 as



"JUNETEENTH"

in the City of Manvel, Brazoria County, Texas, and I call this observance to the attention of all citizens.

*In witness thereof, on June 7, 2021 I have hereunto set my hand
and caused the seal of the City of Manvel to be affixed.*

Debra Davison, Mayor

Proclamation

OFFICE OF THE MAYOR CITY OF MANVEL

Whereas, the City of Manvel cherishes the value and dignity of each person and appreciates the importance of equality and freedom; and

Whereas, all are welcome in the City of Manvel to live, work, play, and every family, in any shape, deserves a place to call home where they are safe, happy, and supported by friends and neighbors; and

Whereas, all people regardless of age, gender identity, race, color, religion, marital status, national origin, sexual orientation, or physical challenges have the right to be treated on the basis of their intrinsic value as human beings; and

Whereas, the City of Manvel accepts and welcomes people of diverse backgrounds and believes a diverse population leads to a more vibrant community; and

Whereas, while we as a society at large are slowly embracing new definitions of sexuality and gender we must also acknowledge that the need for education and awareness remains vital to end discrimination and prejudice; and

Whereas, it is imperative that everyone in our community, regardless of sexual orientation, gender identity, and expression, feel valued, safe, empowered, and supported by their peers and community leaders; and

Now, Therefore, I, **Debra Davison**, by virtue of the authority vested in me as Mayor of the City of Manvel, Texas, do hereby proclaim June 2021 as



"Pride Month"

in the City of Manvel, Brazoria County, Texas, and urge residents to actively promote the principles of equality, liberty, and justice.

*In witness thereof, I have hereunto set my hand and
caused the seal of the City of Manvel to be affixed.*

Debra Davison, Mayor



MANVEL PD&Z DATA SHEET

MEETING DATE: May 24, 2021

TOPIC: Public hearing regarding amending the zoning ordinance by changing the zoning classification of 437.869 acres of land generally bounded by Del Bello Boulevard right-of-way (north), Pollard Drive right-of-way (east), Manvel Parkway/Iowa Lane rights-of-way (west), and State Highway 6 (south), Manvel, Texas, from Open-Single Family Residential (O-SFR) District to Planned Unit Development (PUD) District.

BACKGROUND: On May 4, 2021, the developer submitted the PUD document to City staff for review. City staff provided comments back to the developer on May 18, 2021. When the PUD document is ready for presentation to the Commission, it will be brought back for a consideration and action to the City Council.

RECOMMENDATION: City staff does not have a recommendation to provide at this time. The PUD document is still under review.

ATTACHMENTS: Proposed PUD Document (does not address City staff comments)

FUNDING ISSUES

- ☒ Not applicable
- ☐ Not budgeted
- ☐ Full amount already budgeted
- ☐ Funds to be transferred from Acct.#

SUBMITTING STAFF MEMBER
Jessica Rodriguez

FINANCE DIRECTOR APPROVAL _____

CITY MANAGER APPROVAL _____

Sowell
Planned Unit Development

Prepared for:
Hillwood Residential, L.P.

Prepared by:



3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042

May 2021

I. INTRODUCTION	Page 3
II. PROJECT DESCRIPTION	Page 4
1. Land Use / Regulatory Compliance	Page 4
2. Justification	Page 4
3. Single-Family Residential	Page 4
4. Drill Site	Page 4
5. Elementary School Site	Page 4
6. Parks and Open Space	Page 4
a. Compliance with Parks Ordinance	Page 5
7. Other Land Uses	Page 5
III. ZONING	Page 6
1. Proposed Zoning	Page 6
2. Acreage per Land Use Summary	Page 6
3. Single-Family Residential Lot Distribution Table.....	Page 7
4. Land Use / Regulatory Compliance	Page 7
IV. DEVELOPMENT REGULATIONS	Page 8
1. Architectural Regulations	Page 8
2. Street and Circulation System	Page 8
3. Traditional Single-Family	Page 8
4. Single-Family Specialty Product	Page 9
5. Streets	Page 10
6. Mixed-Use	Page 11
7. Signage	Page 11
8. Trails	Page 11
9. Utilities	Page 12
V. PHASING / DEVELOPMENT SCHEDULE	Page 12

EXHIBITS

Exhibit A - Area Location Exhibit
 Exhibit B – Project Aerial Exhibit
 Exhibit C – Survey
 Exhibit D - Legal Description
 Exhibit E - Conceptual Land Use Exhibit
 Exhibit F - Zoning Categories Exhibit
 Exhibit G - Conceptual Roadway Exhibit
 Exhibit H - Conceptual Amenities and Open Space Exhibit
 Exhibit I - Phasing Exhibit
 Exhibit J – Conceptual Project Signage Exhibit
 Exhibit K – Conceptual Signage Location Exhibit

I. INTRODUCTION

This application was prepared on behalf of Hillwood Residential, L.P. pursuant to the City of Manvel's zoning ordinance Sec. 77-29 Planned Unit Development District (PUD) district. The purpose of a PUD District is to provide a high level of amenities, encourage a pedestrian friendly environment, and provide flexibility in the development of land subject to the development standards coordinated with the necessary public services and facilities.

The Sowell PUD is primarily a residential project that consists of approximately 438.393 acres of land and is located immediately east of State Highway 288, north of Highway 6, south of County Road 58, and generally west of Farm-to-Market 1128. The Area Location Map (Exhibit A) located in the Exhibits section of this document illustrates the location of the property.

The property is generally flat with elevations ranging from 44 feet to 60 feet and is largely comprised of prairie land and agricultural fields. The property is encumbered by several existing east-west pipeline easements and Chocolate Bayou which runs in a north-south in the western portion of the property. The MUD 43 Drainage Easement and a portion of the Brazos River Authority controlled drainage easement, at approximately 125' in width, runs north-south along the western property boundary.

Generally, the surrounding land use is a mix of undeveloped acreage to the southwest, some large lot residential to the north, and standard single-family residential developments to the northwest, southeast, and south. The single-family residential developments are Bluewater Lakes to the south, Lakeland to the southeast, and Del Bello Lakes to the west. To the southeast lies Manvel Junior High and High School located at the intersection of State Highway 6 and McCoy Road. The future location of the Manvel City Center directly abuts the northwestern boundary of a portion of the development, south of Del Bello Boulevard.

The surrounding area can be seen on the Area Map and the Project Aerial map (Exhibit A and B).

II. PROJECT DESCRIPTION

1. Compliance with Comprehensive Plan

The Sowell PUD complies with the Manvel Comprehensive Plan by adhering to the development principles as outlined in the plan. This is accomplished by encouraging well-planned quality commercial and residential development; providing open space for recreation and protecting the natural environment; and offering a variety of housing choices. The Sowell PUD has a well-defined network of both vehicular and pedestrian circulation systems that provide connectivity, not only to the project itself, but to existing developments to the south and west as well as to the future Manvel City Center. The diversity of housing types varies from the traditional single-family subdivision to higher density single-family specialty products that ensure residents of all ages can fulfill their housing needs. The development of an internal parks system includes a recreation center, smaller parks, and significant open space areas that will help to provide for the City's future open space needs.

2. Justification

The intent of the PUD District is to encourage high quality development in the City by providing additional flexibility to take advantage of special site characteristics, location, or land uses. This document establishes various development standards that exceed the minimum requirements for properties specifically located within the boundaries of the Sowell PUD.

The PUD will meet or exceed the minimum requirements of Manvel's ordinances through specific,

architectural design and engineering standards such as:

- Creating a PUD district which will respond to market conditions and maintain the flexibility necessary to address changes in the future;
- Incorporating unique single-family specialty products that will provide a variety of housing stock to ensure residents of all ages and needs can fulfill their housing requirements;
- Providing a recreation center, parks, amenitized detention areas, and a well-defined trail system;
- Facilitating and complying with the amended Major Thoroughfare plans to provide sufficient connectivity throughout the project for vehicular and pedestrian activity.

3. Single-Family Residential

The traditional single-family residential component that will be found throughout the Sowell PUD will be a collection of individual neighborhood cells that take their access from Dogwood Avenue, Charlotte Street and Pollard Boulevard, and/or an internal local street system that provides connections within the neighborhood and to the surrounding areas. The traditional single-family residential cells will be developed with varying lot sizes and product types to respond to market conditions.

The single-family specialty products will provide unique types of residential development that is less than fifty feet in width that may include front loaded products, rear loaded or alley products, townhome alley products, and/or “zipper” lots (single-family lots with detached garages in alternating depths). The single-family specialty products cells will be developed with varying lot sizes and product types to respond to market conditions.

4. Drill Site

A 4.2-acre drill site is located on the southeast side of the intersection of Pollard Boulevard and the future Charlotte Street extension. The drill site will be used as open space area unless or until the mineral rights owners elect to exercise their drilling rights. The size and location of any drilling facility associated with the extraction of oil and gas shown in any plans of this document shall be conceptual until a permit is issued by the City of Manvel in accordance with Chapter 35, of the City of Manvel Code of Ordinances. This open space area shall not be calculated towards the Land Park Dedication requirement. Should Hillwood Residential, L.P. acquire the mineral rights and request removal of a drill site designation, the site may be converted to a park or single-family residential uses (See Section II.2, Single-Family Residential Lot Distribution Table). If it is converted to a park, that acreage shall be applied to the parkland dedication requirements.

5. Potential School Site

The project is located within the Alvin Independent School District. The size and the location of the proposed school site will be coordinated between the developer and the school district. In the event that Alvin Independent School District does not purchase the proposed school site, the developer may convert the site to single-family residential uses (See Section II.2, Single-Family Residential Lot Distribution Table).

6. Parks and Open Space

The Sowell PUD Conceptual Amenities and Open Space Plan (Exhibit H), shows a recreation center, parks, lakes, and various open space areas all connected via a pedestrian trail system. The proposed recreation center, located to the west of Pollard Boulevard, may contain active amenities such as water based recreational activities with commonly associated facilities, an active play area for children, a

parking area, and other passive amenities. In the event that a “splash pad” type amenity is installed, a water recirculation system will also be installed for the purpose of water conservation. The two parks will have more passive facilities. Two of the lakes, designated B-06 and D-03, may have active amenity features such as a kayak launch and fishing facilities. All land which is dedicated for the purpose of fulfilling the parks requirement will be developed with some form of either passive or active facilities. The various parks, recreation center, and trails will be developed as the adjacent residential sections are developed.

The pedestrian trail system will be comprised of a hierarchy of trail widths ranging from twelve feet (12') in width to five feet (5') in width; all other sidewalks located in front of homes will be four feet in width.

The lakes within the Sowell PUD will maintain a constant water level while also serving as detention facilities for the project and provide a significant amount of open space. The detention areas will not only enhance the aesthetic quality of the development but will provide numerous opportunities for the enjoyment of the residents.

a. Compliance with Parks Ordinance

Per the City of Manvel parks requirement, there shall be a minimum of one (1) acre of park land for every 100 proposed dwelling units dedicated for the use of parks. Based upon the estimated number of dwelling units, the Sowell PUD will be required to provide approximately ± 11 acres of park space. The parks requirement will be fulfilled with the dedication of a ± 3.0 acre recreation center, ± 2.8 acres of parks, ± 25.4 acres of lakes (lakes B-06 and D-03 at 25% credit or ± 6.3 acres), as well as a well-defined trail system located throughout the development.

7. Other Land Uses

The Sowell PUD has three commercial sites located throughout the development; ± 4.5 acre and ± 2.6 acre commercial sites located at the southeast and southwest corners of Del Bello Boulevard and Pollard Boulevard, and a ± 2.2 acre commercial site located at the northwest corner of Pollard Boulevard and Dogwood Avenue. It is anticipated that the commercial developments will largely be neighborhood retail in nature.

The ± 9.1 acre mixed-use tract, found on the north side of Del Bello Boulevard, will be developed as a mixed-use site and will likely have a mix of retail, office uses, and single-family specialty products.

A ± 9.1 acre flex tract which is located to the east of the above referenced mixed-use tract can be purchased by the city to enhance and expand the future Manvel City Center. If the City does not exercise its option to purchase the tract, the flex tract may be developed as a mixed-use development (as defined in Section IV.4) by the developer.

III. ZONING

To implement the Conceptual Land Use Plan, the base zoning district will be SFR with a PUD overlay with each of the proposed land uses being assigned a zoning district as shown on the Composition of Land Use Table. The various land uses will follow the development requirements for their assigned zoning district as described in the Zoning Ordinance, as of the Effective Date, unless otherwise noted throughout this PUD.

The land uses may be relocated within the boundaries of the PUD, as necessary to address economic and market conditions or future modification of roadway and drainage alignments. The Land Use Comparison table below provides a detailed tabulation of each land use within the development.

1. Acreage per Land Use Summary

Land Use	Zoning District	Approximate Acreage	% Gross Acreage
Constraints			
Major Thoroughfare & Collector Roadways	SFR	34.9	
Existing Utility & Canal Easements	SFR	22.3	
Detention & Lakes	SFR	76.0	
Chocolate Bayou	SFR	7.2	
Drill Site	SFR	4.2	
Subtotal		144.6	33.0%
Community Elements			
Recreation Center & Parks	SFR	5.8	
Elementary School	SFR	15.1	
Landscape/Open Space	SFR	9.2	
Flex Tract	LC	9.1	
Subtotal		39.2	10.0%
Commercial			
Commercial & Mixed-Use	LC	18.4	
Subtotal		18.4	3.1%
Single-Family Residential			
Single-Family Residential	SFR	236.2	
Subtotal		236.2	53.9%
Totals		438.4	100.0%

2. Single-Family Residential Lot Distribution Table

Land Use	Allowable Percentage
50' X 120' (Typical)	30%
60' X 120' (Typical)	30%
70' X 130' (Typical)	10%
Specialty Product	30%
Gross Residential Total	100%

Refer to Section IV.3, of this document for a listing of lot sizes and applicable standards for the single-family specialty product category. The 50' lots and Specialty Products shall not exceed a total of 60% of the total lot count in the project; the 60' lots and 70' lots may each be increased by an additional 10% of the total lot percentage. There shall be an allowance of 2% variability in the percentages to allow for issues arising from physical and development constraints. Additionally, if the drill site and/or the school site is converted to a residential use (See Section II.4 and II.5), any of the lot sizes shown on the table above may be used provided that the percentage ratio of the various lot sizes shall not be modified.

3. Land Use / Regulatory Compliance

In order to implement the conceptual master plan as currently proposed, each of the proposed land uses has been assigned zoning categories consistent with the current City of Manvel zoning regulations. The assigned zoning designations and the total acreage for each are as follows (see Zoning Categories Exhibit, Exhibit F):

Zoning Designation	Acreage	% of Gross Acreage
Light Commercial (LC)	27.5	6.3%
Single-Family Residential (SFR)	411.0	93.7%
Total	438.5	100.0%

Land use shall be regulated on a total acreage basis. Each Land Use may be increased or decreased in acreage by up to 15% of the total gross acreage. The percentage land use area change is required to ensure the success of the Sowell PUD by maintaining the flexibility to modify land use sizes in response to changes in economic and market conditions. This will allow Sowell PUD to remain competitive in the real estate market over the life of the project and the ability to adjust as necessary to accommodate specific end users in a timely manner.

IV. DEVELOPMENT REGULATIONS

Unless otherwise outlined in this document, all City of Manvel Subdivision and Zoning regulations in place at the time this document is adopted shall apply to this PUD. This PUD shall remain the governing document of the development. Consistent with provisions specified in the PUD ordinance, the future development of the subdivision will be governed by the layout, design, and general conditions as approved in this document and exhibits. Additional roadways, roadway alignments, or land uses shall not be required of this development as a result of future changes to the City's comprehensive plan or ordinances.

1. Architectural Standards

Builder Guidelines may be included with the Master Plan submittal to help protect the integrity of the residential and commercial development.

2. Street and Circulation System

The Sowell PUD will have sufficient mobility through the construction of several proposed roadways:

- a. Pollard Boulevard, a 120' wide thoroughfare running north-south through the property from its connection to Del Bello Boulevard in the north to its existing location in Bluewater Lakes;
- b. Del Bello Boulevard, a 120' wide thoroughfare that lies along the northern side of the future Manvel City Center. The existing thoroughfare connects to State Highway 288 to the west.
- c. Dogwood Avenue, an 80' collector road that runs east-west just to the south of the future Manvel City Center;
- d. Charlotte Street, a 60' collector road that runs east-west in the southern portion of the Sowell PUD.

The thoroughfare and circulation plan for Sowell PUD and the surrounding vicinity is illustrated on the Conceptual Roadway Exhibit (Exhibit G).

3. Traditional Single-Family

Lot Sizes and Standards:

- a. Minimum lot size area: 5,750
- b. Minimum width – 50' (measured at the front building line)
- c. Front building line – 20' minimum
- d. Side yard setback – 5' minimum
- e. Corner side yard setback – 10' minimum
- f. Garage front building line – 25' minimum
- g. Rear building line – 15' minimum

4. Single-Family Specialty Product

It is not required that the single-family specialty products be developed at the same time or by the same developer.

Lot Sizes and Standards:

- a. Front loaded detached lots:
 - i. Minimum width – 42' (measured at the building line)
 - ii. Minimum depth – 120'
 - iii. Front building line – 20' minimum
 - iv. Garage front building line – 25' minimum
 - v. Rear building line – 15' minimum
- b. Rear loaded (alley) detached lots:
 - i. Minimum width – 35' (measured at the building line)
 - ii. Minimum depth – 100'
 - iii. Front building line – 15' minimum
 - iv. Rear building line – 10' minimum
 - v. Alley width – 20'
- c. Rear loaded (alley) attached lots:
 - i. Minimum width – 28' (measured at the building line)
 - ii. Minimum depth – 90'
 - iii. Front building line – 15' minimum
 - iv. Rear building line – 10' minimum
 - v. Alley width – 20'
 - vi. Common walls allowed on one side
- d. Rear loaded (alley) townhome lots:
 - i. Minimum width – 25' (measured at the building line)
 - ii. Minimum depth – 90'
 - iii. Front building line – 15' minimum
 - iv. Rear building line – 10' minimum
 - v. Alley width – 20'
 - vi. Common walls allowed on both sides
- e. Zipper lots (single-family lots with alternating depth detached garages):
 - i. Minimum width – 25' (measured at the building line)
 - ii. Minimum depth – 120'
 - iii. Front building line – 20' minimum
 - iv. Rear building line – 10' minimum
 - v. Side setback – 5' minimum

- vi. Garage building line – 25' minimum
 - 1. If the garage is set to the minimum of 25', then the adjacent lot shall have a minimum setback of 50'.
 - vii. Garage side setback – 0' with a minimum of 10' of separation from structures on the adjacent lot. Garage structures located less than four feet from the lot line shall have a "private four-foot perpetual drainage and maintenance easement" provided on the adjacent property.
- f. Patio & Zero Lot Line Homes
- i. Minimum width – 50' (measured at the building line)
 - ii. Minimum depth – 120'
 - iii. Front building line – 20' minimum
 - iv. Garage front building line – 25' minimum
 - v. Rear building line – 15' minimum
 - vi. A minimum of 0' to 5' on one side yard and 5' to 10' on the other side yard, with an aggregate minimum side yard setback of 10' between the two lots.
 - vii. In no case shall units on adjoining lots be separated by less than 10 feet in width unless fire rated walls are used, then a 6' setback can be used.
 - viii. Patio home structures located less than four feet from the lot line shall have a "private four-foot perpetual drainage and maintenance easement" provided on the adjacent property.

5. Streets

The development will provide points of access as required by Streets, Section 62-104(5) Multiple access points with the following modifications:

- a. Two point of access. There shall be a minimum two points of access from a collector street into a subdivision or subdivision phase, up to a maximum of 75 platted lots. A boulevard may be used as a second point of access to satisfy this requirement with the condition that an additional point of access is provided to a future residential section.
- b. Three points of access. There shall be a minimum of three points of access from a collector street in a subdivision or subdivision phase for 76 to 175 platted lots.
- c. Four points of access. There shall be a minimum of four points of access from a collector street in a subdivision or subdivision phase for 176 platted lots or greater.
- d. Boulevard entries. A boulevard entry may only be considered as two points of access when a third or fourth point of access is triggered under subsection b., Three points of access or c. Four points of access, above;

6. Mixed-Use

The Mixed-Use area is intended to provide neighborhood-scaled, pedestrian-oriented mixed-use development with single-family specialty products, retail, service, and office uses. The allowed uses within this area shall include any uses listed in the Light Commercial (LC) and Single-Family Residential (SFR) zoning districts in conjunction with the single-family specialty product standards listed in Section IV.3.

7. Signage

The proposed locations for the project signage can be found in the Conceptual Project Signage Exhibit (Exhibit K). All signage within the development will be in accordance with the Manvel City Sign Ordinance except for the items listed below. When there is a conflict between the requirements in the sign ordinance and this PUD Document, this PUD document will govern.

- a. Primary Entry Monument: Twenty-five feet (25') tall with two, twenty-foot by twenty-foot (20'x20') towers footprint and an attached or isolated sign blade wall with a maximum size of ten feet tall by one hundred feet in length (10'x100'). These signs will be placed at the major entry points to the project.
- b. Secondary Entry Monument: Twelve feet (12') tall with a twelve-foot by twelve-foot (12'x12') tower footprint and an attached or isolated sign blade wall with a maximum size of eight feet tall by thirty-five feet in length (8'x35'). These signs will be placed at the secondary entry points to the project.
- c. Section Monument: Eight feet (8') tall with a six-foot by six-foot (6'x6') tower footprint and an attached or isolated sign blade wall with a maximum size of eight feet tall by twenty feet in length (8'x20'). These signs will be placed at the entry points to various residential sections or significant commercial/mixed-use developments within the project.
- d. Internal Identifier Monument: Eight feet (8') tall with a six-foot by six-foot (6'x6') tower footprint. These signs will be placed at various locations on the perimeter of the project.
- e. Temporary Construction Signs: To be used during construction of the development. These signs recognize builders, architects, engineers, leasing representatives, lenders, etc., and shall be displayed on one (1) 4' x 8' vertical sign per parcel of land. All temporary signs must be removed when the principle building on the applicable building site is occupied.
- f. Temporary Builder Signs: Used to direct potential home buyers to various neighborhoods and/or model homes. These temporary signs may be installed within the development and on two offsite corridors: one along Pollard Boulevard from State Highway 6 and the other along Del Bello Boulevard from State Highway 288 to Pollard Boulevard. (See Conceptual Signage Location Exhibit, Exhibit K). These signs may remain for the duration of the single-family residential home building construction within the project.

8. Trails

The pedestrian pathway system, which is illustrated on the Conceptual Amenities and Open Space Plan (Exhibit H), will use a combination of twelve foot (12') wide and eight foot wide (8') primary trails with six-foot wide (6') secondary trails to serve the residents of the project and provide multiple pedestrian connections. The trails system will provide easy and safe pedestrian access to the various parks, the

recreation center, commercial tracts, single-family residential areas, and the school located within the project.

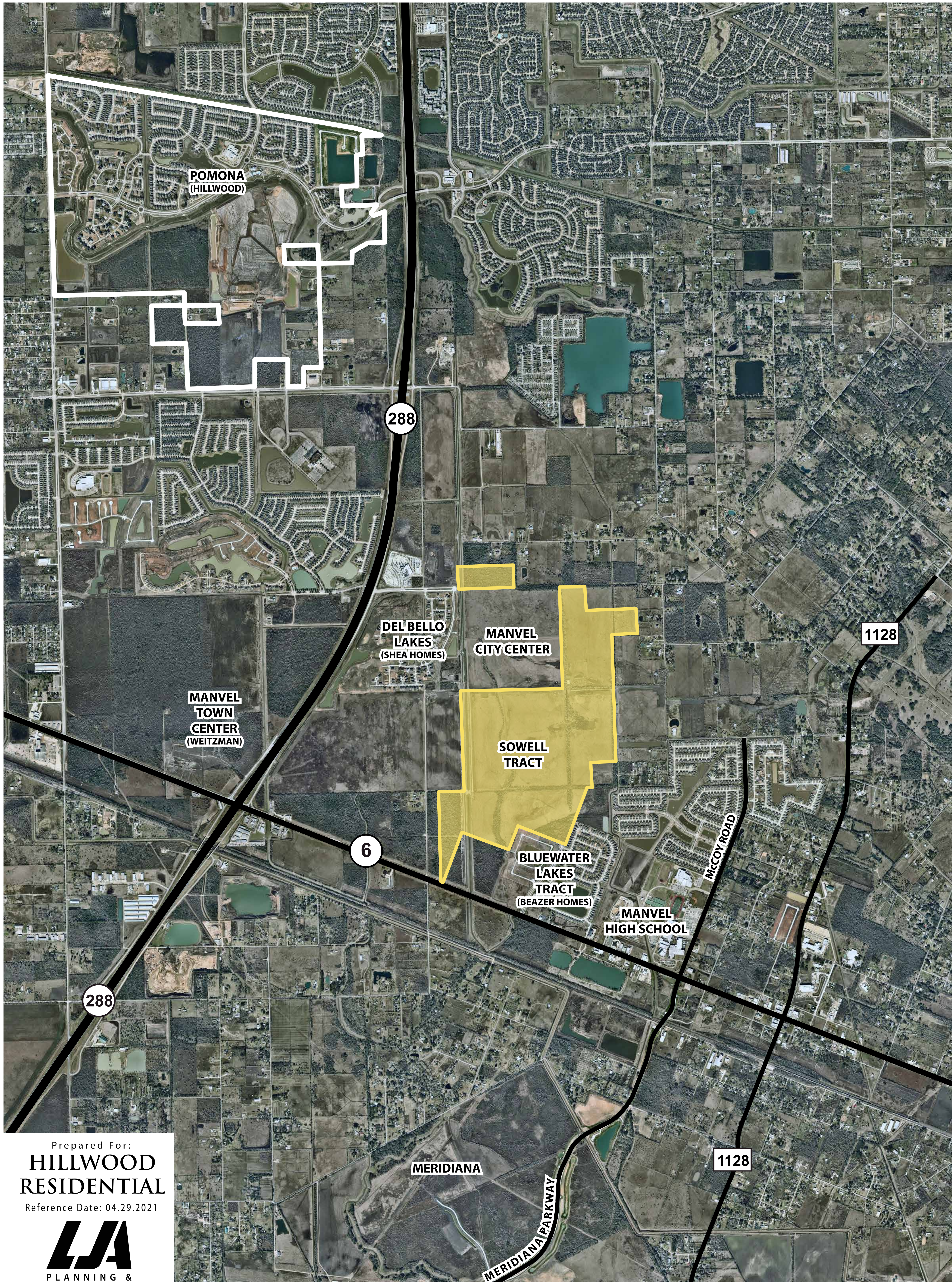
9. Utilities

Utilities will be provided by a Municipal Utility District pursuant to a Utility Agreement with the City of Manvel.

V. PHASING / DEVELOPMENT SCHEDULE

The first phase of the project will be south of Del Bello Boulevard and Pollard Boulevard, working from the north to south as the project proceeds, as shown on the Phasing Exhibit (Exhibit J). The location and timing of future phases will be dependent upon market conditions and is subject to change. Commercial development will be driven by market conditions.

The construction of certain nonresidential buildings, including sales offices, builder/developer construction offices, and trailers for voter homes, shall be allowed to be located on the site throughout the duration of the project. A recorded final plat and/or permanent access shall not be required. Construction of model homes and community recreation buildings prior to the recordation of the final plat, but after permanent access is available, shall be allowed.



Prepared For:
**HILLWOOD
RESIDENTIAL**
Reference Date: 04.29.2021

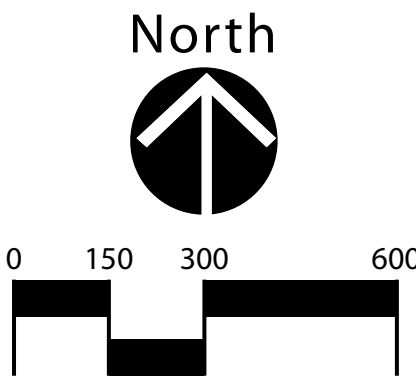


3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042
713.953.5200

© Copyright 2021 LJA Engineering, Inc. Drawings, written material, and design concepts provided is considered property of LJA & shall not be reproduced in part or whole in any form or format without written consent of LJA.

This exhibit is an illustrative representation for presentation purposes only and should not be used for computation or construction purposes. The information provided within should be considered a graphic representation to aid in determining plan components and relationships and is subject to change without notice. All property boundaries, easements, road alignments, drainage, flood plains, environmental issues and other information shown is approximate and should not be relied upon for any purpose. No warranties, express or implied, concerning the actual design, accuracy, location, and character of the facilities shown on this exhibit are intended.

EXHIBIT A
Planned Unit Development
Area Location Exhibit
SOWELL TRACT
±438.4 Acres of Land
Manvel, Texas





Prepared For:
**HILLWOOD
RESIDENTIAL**
Reference Date: 04.29.2021

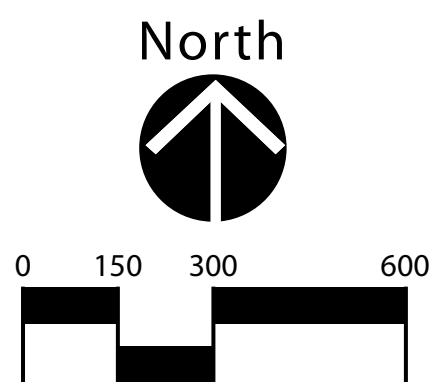


3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042
713.953.5200

This exhibit is an illustrative representation for presentation purposes only and should not be used for computation or construction purposes. The information provided within should be considered a graphic representation to aid in determining plan components and relationships and is subject to change without notice. All property boundaries, easements, road alignments, drainage, flood plains, environmental issues and other information shown is approximate and should not be relied upon for any purpose. No warranties, express or implied, concerning the actual design, accuracy, location, and character of the facilities shown on this exhibit are intended.

EXHIBIT B

Planned Unit Development
Project Aerial Exhibit
SOWELL TRACT
±438.4 Acres of Land
Manvel, Texas



EXHBIIT D

METES AND BOUNDS DESCRIPTION OF TRACT 1

A 418.318 acre (18,221,949 square feet) tract, being all of Lots 5, 6, 7, 8, 13, 14, 15, 16, 21, 22, 23, 24, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47 and 50 of the Allison-Richey Gulf Coast Home Company Suburban Gardens Subdivision of Section 73, H.T. & B. Railroad Company Survey, Abstract 301, according to the map or plat thereof, recorded in Volume 2, Page 91 and 92, of the Plat Records of Brazoria County, Texas (B.C.P.R.) and being all of those certain tracts conveyed to Westbank Bayou, LP, called 19.919 acres (Lots 5-6), recorded in Brazoria County Clerk's File Number (B.C.C.F. No.) 2007021508, called 9.929 acres (Lot 8), recorded in B.C.C.F. No. 2007017868 and called 9.972 acres (Lot 16), recorded in B.C.C.F. No. 2007018701 and being all of that certain tract conveyed to Charles L. Sowell called 9.988 acres (Lot 7), recorded in Volume 1177, Page 396, deed records of Brazoria County, Texas (B.C.D.R.), and being all of those certain tracts conveyed to Eastbank Bayou, LP, called 10 acres (Lot 33), recorded in B.C.C.F. No. 2007022032, called 19.944 acres (Lots 42-43), recorded in B.C.C.F. No. 2008004369 and called 10 acres (Lot 47), recorded in B.C.C.F. No. 2008004367 and being all of that certain tract conveyed to Four Forty-Three Annex No. 1, LTD., called 10.00 acres (Lot 50), recorded in B.C.C.F. No. 2006045403 and being a part of that certain tract conveyed to Four Forty-Three Ltd. (called 433.09 acres), recorded in Volume 1048, Page 760, B.C.D.R., with said 18,221,949 square foot tract of land being more particularly described by metes and bounds as follows:

COMMENCING at a 1/2 inch iron rod found at the Northeast corner of said Section 73 and an interior corner of the H.T. & B. Railroad Company Survey, Section 74, Abstract 493, recorded in Volume 2, Page 66, B.C.P.R.) and being at the centerline intersection of 60 foot Pollard Drive (as occupied) (Platted as 40 feet - Volume 2, Page 91 and 92, B.C.P.R.) and 60 foot Del Bello Boulevard (as occupied)(Platted as 50 feet - Volume 2, Page 66, B.C.P.R.), marking the northeast corner of the Michael D. Roland and Marcy D. Roland tract (called 5.46 acres), recorded in B.C.C.F. No. 2004072423 and 2007030104, the northwest corner of the Michael C. Black tract (called 4.00 acres), recorded in B.C.C.F. No. 96-015514 and the Northeast corner of said Section 73;

THENCE S 86°50'29" W, along and with the common line of Section 73 and 74 and centerline of said 40 foot platted road, at 658.00 feet pass a point marking the southwest corner of Lot 1 of said Section 74 and the southeast corner of the Mary V O'Donnell Survey, Division "O", Abstract 469, recorded in Volume 2, Page 91 and 92, B.C.P.R., from which a 5/8 inch iron rod bears, S 38°48'33" W, 3.08 feet, continuing along and with the common line of Section 73 and Division "O" and centerline of said 40 foot platted road, a total distance of 1974.26 feet (called 1980.00 feet) to a 5/8 inch iron rod with cap stamped "FMS" set in the north line of Section 73, the north line of a 60 foot American Canal Company Easement, recorded in Volume 638, Page 127, B.C.D.R., the south line of said Division "O", Abstract 469, the south line of the Sylvia Buffy Orndorff and Dustin Aaron Different tract (called 13.93 acres), recorded in B.C.C.F. No. 2015054435, and the centerline of said 40' platted road, marking the northwest corner of the Katherine Ott Miles tract (called 5 acres), recorded in Volume 1459, Page 1, B.C.D.R., the northeast corner of said Eastbank Bayou, LP tract (Lot 33), and being the common corner of Lot 33 and 41 of said Section 73 at the most northerly Northwest corner and **POINT OF BEGINNING** of herein described tract:

THENCE S 03°24'40" E, along and with the common line of said Lot 33 and 41, a distance of 660.58 feet (called 660.00 feet) to a 1/2 inch iron rod with cap stamped "Adams RPLS 3666" found, marking the southeast corner of said Eastbank Bayou, LP tract (Lot 33), the southwest corner of said Miles tract, the northwest corner of said Eastbank Bayou, LP tract (called 19.944 acres), an interior corner of herein described tract and being the common corner of Lots 33, 41, 42 and 34 of said Section 73;

THENCE N 86°49'54" E, along and with the common line of Lots 41, 42, 49 and 50 of said Section 73, a distance of 1314.38 feet (called 1320.00 feet) to a 5/8 inch iron rod with cap stamped "FMS" set, marking the southeast corner of the Jane Hetherington Brown and Norman Paul Brown tract (called 5 acres), recorded in B.C.C.F. No. 2014042893, the southwest corner of the Suzanne Renae Scopel tract (called 5 acres), recorded in B.C.C.F. No. 2005013089, the northwest corner of the Jeffery Wayne Scopel tract (called 1.157 acres), recorded in B.C.C.F. No. 2005013109, the northeast corner of said Four Forty-Three Annex No. 1, LTD. Tract (called 10.00 acres) and the most easterly northeast corner of herein described tract and being the common corner of Lots 49, 55, 56 and 50 of said Section 73;

THENCE S 03°25'11" E, along and with the common line of Lots 50 and 56 and east line of said Four Forty-Three Annex No. 1, LTD. tract, a distance of 660.67 feet (called 660.00 feet) to a 5/8 inch iron rod with cap stamped "FMS" set, marking the southwest corner of the Douglas Varner Tract (called 1.157 acres), recorded in Volume (91) 906, Page 253, of the official records of Brazoria County, Texas (B.C.O.R.), the northwest corner of the Laura Loterbauer tract (called Minor Plat of 2.50 acres), recorded in B.C.C.F. No. 2018006317, the northeast corner of the Louis Lira tract (called 20 acres), recorded in Volume 1694, Page 653, B.C.D.R. and an angle point for corner of herein described tract and being the common corner of Lots 50, 56, 57 and 51 of said Section 73;

THENCE S 86°50'32" W, along and with the common line of Lots 50 and 51, same being the common line of said Four Forty-Three Annex No. 1, LTD. Tract and said Lira tract, a distance of 657.24 feet (called 660.00 feet), to a 5/8 inch iron rod with cap stamped "FMS" set, in the east line of said Eastbank Bayou, LP tract (called 19.944 acres), marking the southwest corner of said Four Forty-Three Annex No. 1, LTD. tract, the northwest corner of said Lira tract, an interior corner of herein described tract and being the common corner of Lots 50, 51, 43 and 42 of said Section 73;

THENCE S 03°24'55" E, along and with the common line of Lots 43, 51, 44, 52, 45, 46 and 61 at 1320.21 feet (called 1320.00 feet) pass a point in the centerline of a 40 foot platted road, recorded in Volume 2, page 91 and 92, B.C.P.R. marking the northwest corner of the Coastal Bend Land Investments, LP tract (called 40.0060 acres)(called Lot 61), recorded in B.C.C.F. No. 2006049617 and being the common corner of Lots 44, 52, 61 and 45, continuing for a total distance of 3299.48 feet (called 3300.00 feet) to a 5/8 inch iron rod with cap stamped "FMS" set, marking the southwest corner of the Jose T. Villanueva and Trinidad Villanueva tract (called 5 acres), recorded in B.C.C.F. No. 2004036528, the northwest corner of the Roger Hernandez Gandarillas and Sheila M. Rosario Crespo tract (called 1.000 acre), recorded in B.C.C.F. No. 2015020827, the northeast corner of said Aspect Energy, LLC tract (called 10 acres), the southeast corner of the said Eastbank Bayou, LP tract (called 10 acres)(Lot 47), the most easterly southeast corner of herein described tract and being the common corner of Lots 53, 54, 48 and 47 of said Section 73;

THENCE S 86°49'54" W, along and with the common line of Lots 48 and 47, same being the common line of said Eastbank Bayou, LP tract (Lot 47) and said Aspect Energy, LLC tract, a distance of 657.49 feet (called 660.00 feet) to a 1/2 iron rod with cap stamped "Adams RPLS 3666" found in the east line of the of said 443.09 acre tract, marking the southwest corner of said Eastbank Bayou, LP tract and the northwest corner of said Aspect Energy, LLC tract, and interior corner of herein described tract and being the common corner of Lots 48, 40, 39 and 47 of said Section 73;

THENCE S 03°24'40" E, along and with the common line of Lots 48 and 40, same being the common line of said Aspect Energy, LLC tract and said 443.09 acre tract, a distance of 660.05 feet (called 660.00 feet) to a 5/8 inch iron rod with cap stamped "FMS" set in the centerline of a 40 foot platted road, recorded in Volume 2, Page 91 and 92, B.C.P.R., in the called south line of Section 73 and the north line of the H.T. & B. Railroad Company Survey, Section 64, Abstract 483 and the north line of the Dr. A.A. Luther Subdivision of Manvel, recorded in Volume 1, Page 71 and 72 and Volume 3, Page 139 and 140, B.C.P.R. and the north line of Outlot 181 of said Dr. A.A. Luther Subdivision, marking the northwest corner of the Coastal Bend Land Investments, LP tract (remainder of a called 167.073 acre tract), recorded in B.C.C.F. No. 2004058628, the southwest corner of said Aspect Energy, LLC tract, an angle point in the east line of said 443.09 acre tract and an angle point for corner of herein described tract and being the common corner of Lots 48 and 40 of said Section 73, from which a 5/8 inch iron rod with cap stamped "Base Line" found marking the southeast corner of said Section 73 bears, S 86°50'11" W, 1975.03 feet;

THENCE S 86°50'11" W, continuing along and with the common line of said Section 73, Section 64 and the Dr. A.A. Luther Subdivision, same being the common line of said Outlot 181 and Lot 40, and centerline of said 40 foot platted road, a distance of 147.66 feet to a 5/8 inch iron rod with cap stamped "FMS" set in said common line, marking the northeast corner of the Four Forty-Three, LTD. Tract (called 24.00 acres)(Outlot 195), recorded in Volume 1048, Page 760, B.C.D.R. and an interior corner of herein described tract and being the westerly line of a 40 foot platted road, recorded in Volume 1, Page 71 and 72 and Volume 3, Page 139 and 140, B.C.P.R.;

THENCE S 19°30'25" W, along and with the easterly line of said Outlot 195 and the westerly line of said 40 foot platted road, at 909.98 feet pass a 1/2 inch iron rod found, marking the southeasterly corner of said Outlot 195 and the northeasterly corner of the Four Forty-Three, LTD. Tract (called 20.00 acres)(North ½ of Outlot 180), continuing for a total distance of 1569.69 feet to a 1 inch iron pipe found, marking the southeasterly corner of said 20.00 acre tract, the northeasterly corner of the Beazer Homes Texas, LP tract (called 19.99 acres)(south ½ Outlot 180), recorded in B.C.C.F. No. 2016050422 and an angle point in the westerly line of the Beazer Homes Texas, LP tract (called 5.40 acres), recorded in B.C.C.F. No. 2016050422 and the most easterly southeast corner of herein described tract;

THENCE N 70°27'42" W, along and with the common line of said North ½ of Outlot 180 and the South ½ of Outlot 180, a distance of 1319.95 feet (called 1320.00 feet) to a 1/2 inch iron rod with cap stamped "Adams RPLS 3666" found, in the easterly line of the Four Forty-Three, LTD. Tract (called 46.35 acres)(Outlot 175), marking the common corner of the South ½ and North ½ of Outlot 180 and an interior corner of herein described tract;

THENCE S 19°29'54" W, along and with the common line of said 46.35 acre tract and said 19.99 acre tract, same being the common line of Outlot 180 and 175, a distance of 660.47 feet to a 1/2 inch iron rod with cap stamped "LJA Eng" found, in the north line of a 40 foot platted road, recorded in Volume 1, Page 71 and 72 and Volume 3, Page 139 and 140, B.C.P.R., marking the most westerly northwest corner of said 5.40 acre tract, the southeasterly corner of said 46.35 acre tract and the southwesterly corner of said 19.99 acre tract and an interior corner of herein described tract;

THENCE N 70°26'20" W, along and with the south line of 46.35 acre tract and the north line of said 40 foot platted road, a distance of 1321.08 feet to a 1/2 inch iron rod with cap stamped "Adams RPLS 3666" found, in the easterly line of the Four Forty-Three, LTD. Tract (called 27.7947 acres)(Outlot 174) and the westerly line of said 40 foot platted road, marking the southwesterly corner of said 46.35 acre tract and an interior corner of herein described tract;

THENCE S 19°28'54" W, along and with the common line of said 27.7947 acre tract and westerly line of said 40 foot platted road, a distance of 1390.63 feet to a TxDot Brass Disk found in the northwesterly right-of-way (r.o.w.) line of State Highway No. 6 (a.k.a. Morris Avenue)(200' R.O.W.), recorded in B.C.C.F. No. 2013053500, marking the southeasterly corner of said 27.7947 acre tract and the most southerly southeast corner of herein described tract;

THENCE N 70°30'10" W, along the northwesterly r.o.w. line of said State Highway No. 6, a distance of 33.83 feet to a TxDot Brass Disk found, marking the southeasterly corner of the Russell T. Rudy and Randall D. Rudy tract (called 18 acres), recorded in Volume 1408, Page 806, B.C.D.R., the southwesterly corner of said 27.7947 acre tract and the most southerly southwest corner of herein described tract, from which a TxDot Brass Disk found, at the intersection of easterly r.o.w. line of County Road 82 (a.k.a. Iowa Lane)(60' R.O.W. as occupied), recorded in B.C.C.F. No. 2006021816 and the northwesterly r.o.w. line of said State Highway No. 6, marking the southwesterly corner of a 0.217 acre tract, recorded in B.C.C.F. No. 2013053500 bears, N 70°30'10" W, 365.23 feet;

THENCE N 03°19'19" W, along and with the common line of said 27.7947 acre tract and said 18 acre tract, a distance of 2310.10 feet to a 1/2 inch iron rod with cap stamped "Adams RPLS 3666" found, marking the northwest corner of said 27.7947 acre tract and an angle point for corner of herein described tract, from which a 3/4 inch pinched top pipe bears, N 09°17' W, 1.1 feet and from which an iron rod with cap stamped "Kalkomey" found in the easterly r.o.w. line of said County Road 82, marking the northwest corner of said 18 acre tract, bears S 87°00'54" W, 328.14 feet and a 5/8 inch iron rod found in the easterly r.o.w. line of said County Road 82, marking the southwest corner of a called 41.4819 acre tract, recorded in B.C.C.F. No. 2003061748 bears, N 02°13'14" W, 38.07 feet;

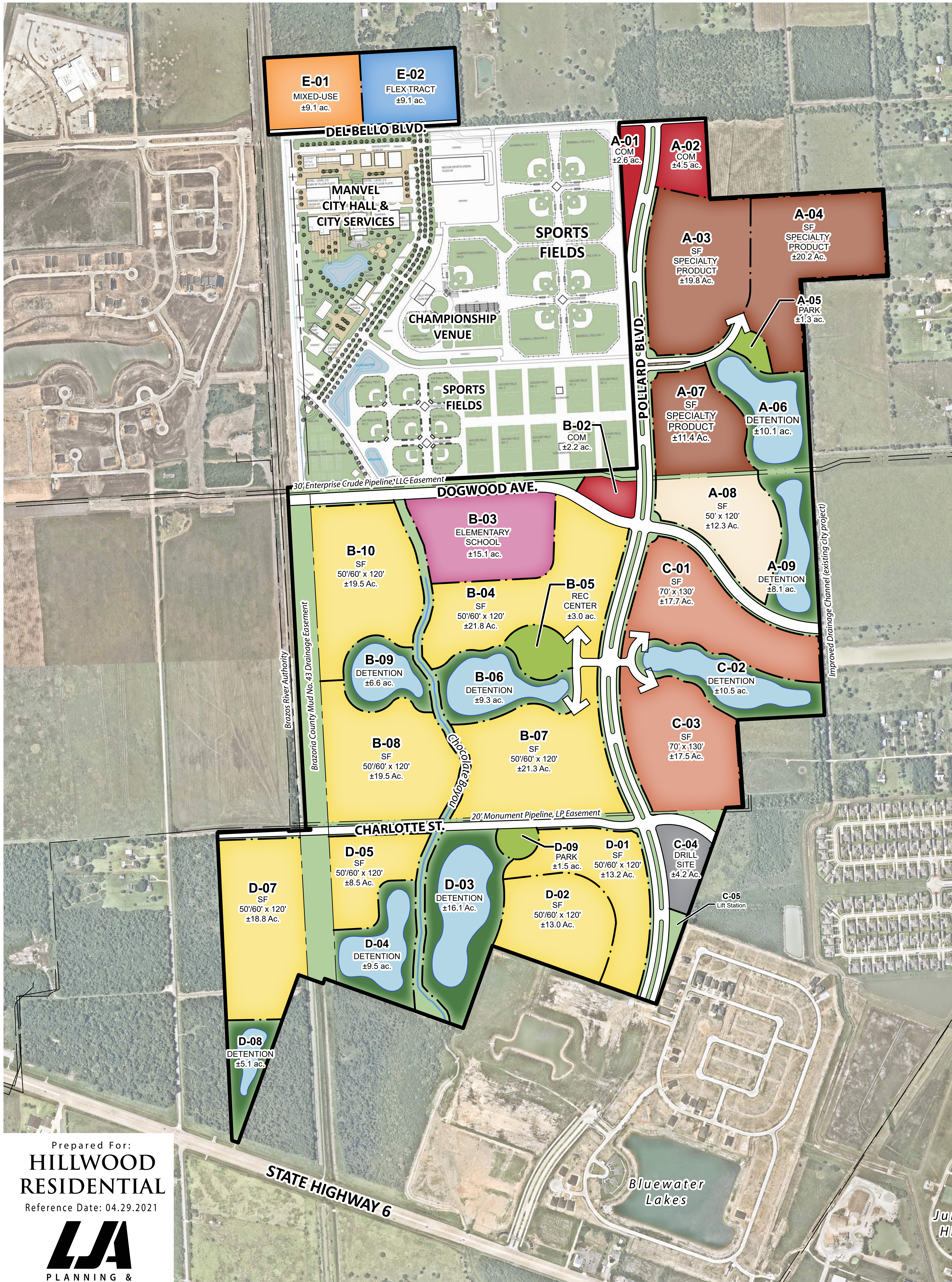
THENCE N 86°57'38" E, along and with the north line of said 18 acre tract, a distance of 729.52 feet to a 5/8 inch iron rod with cap stamped "FMS" set, at the southwest corner of Section 73 and being in the centerline intersection of two 40 foot platted roads and being the common corner of said Section 73 and the H.T. & B. Railroad Company Survey, Section 72, Abstract 460, marking the southeast corner of the Brazos River Authority tract (called 6.676 acres)(cause no. 54,761A), recorded in Volume 33, Page 154, district clerk records of Brazoria County, Texas (B.C.D.C.R.), the southwest corner of the Brazoria County MUD No. 43 Drainage Easement (called 1.675 acres, recorded in B.C.C.F. No. 2016026159, the southwest corner of said 9.929 acre tract and an interior corner of herein described tract;

THENCE N 03°28'57" W, along and with the common line of said Section 73 and Section 72 and centerline of said 40 foot platted road, at 40.00 feet pass a point marking the southwest corner of a 0.34 acre tract (Parcel 1) out of said called 41.4819 acre tract, continuing for a total distance of 2640.38 feet (called 2640.00 feet) to a 1 inch iron pipe found, marking the northwest corner of a 0.25 acre tract (Parcel 2), the northwest corner of said 19.919 acre tract, the northwest corner of a 3.430 acre drainage easement, recorded in B.C.C.F. No. 2016026156, the northeast corner of said Brazos River Authority tract (called 6.676 acres), the southeast corner of the Brazos River Authority Parcel "D" tract (called 3.18 acres), recorded in Volume 1070, Page 315, B.C.D.R., the southwest corner of the Brazos River Authority Parcel "B" tract (called 0.61 acres), recorded in Volume 1070, Page 318, B.C.D.R., the southwest corner of the Brazoria County Municipal Utility District (M.U.D.) No. 43 Drainage Easement tract (called 1.739 acres), recorded in B.C.C.F. No. 2016011559 and the common corner of Lots 4 and 5, Section 73, from which a 1/2 inch iron rod found in the east r.o.w. line of County Road 82 (a.k.a. Iowa Lane)(60' R.O.W. as occupied), recorded in B.C.C.F. No. 2006021816, marking the southwest corner of the Joan Banneyer tract (called 1.367 acres), recorded in B.C.C.F. No. 2005003981 and the northwest corner of the Sonmar of Scottsdale, LLC tract (called 53.948 acres), bears S 86°37'46" W, 900.42 feet;

THENCE N 86°51'03" E, along and with the common line of herein described tract and said lot 4 and the centerline of a 40 foot platted road, at 657.75 feet (called 660.00 feet) pass a 3/4 inch iron pipe found, marking the northeast corner of said 19.919 acre tract and the southwest corner of the 102929 Brazoria Inc. tract (called 34.90 acres), recorded in B.C.C.F. No. 2005033429 and being the common corner of Lots 4, 12, 13 and 5, and at 1973.99 feet (called 1980.00 feet) pass a 1/4 inch iron pipe found, marking the southeast corner of said 34.90 acre tract and being the common corner of Lots 20, 28, 29 and 21, continuing for a total distance of 2632.44 feet (called 2640.00 feet) to a 5/8 inch iron rod with cap stamped "FMS" found in the west line of a 60 foot American Canal Company Easement, recorded in Volume 638, Page 127, B.C.D.R., marking an interior corner of said remainder of a 433.09 acre tract and an interior corner of herein described tract and being the common corner of Lots 28, 36, 37 and 29 of said Section 73;

THENCE N 03°27'06" W, along and with the common line of Lots 28, 36, 27, 35, 26, 34, 25 and 33 and the west line of said 60 foot American Canal Company Easement, a distance of 2641.03 feet (called 2640.00 feet) to a 5/8 inch iron rod with cap stamped "FMS" found in the north line of Section 73, the north line of a said 60 foot American Canal Company Easement, the south line of the Mary V O'Donnell Survey, Division "O", Abstract 469, recorded in Volume 2, Page 91 and 92, B.C.P.R. the south line of the John and Edith Lebourgeois tract (called 6.978 acres), recorded in B.C.C.F. No. 98-053061, the north line of the Eastbank Bayou, LP tract (called 19.950 acres), recorded in B.C.C.F. No. 2007022032 and the centerline of said 40 foot platted road, marking the most northerly northwest corner of herein described tract and being the common corner of Lot 25 and 33 of said Section 73, from which a 1/2 inch iron rod found bears, S 82°35" E, 14.3 feet;

THENCE N 86°50'29" E, along and with the common line of Section 73, Division "O", the centerline of said 40 foot platted road and the north line of said 60 foot American Canal Company Easement, a distance of 659.60' (called 660.00 feet) to the **POINT OF BEGINNING** and containing a calculated area of 418.318 acres of land.



Prepared For:
**HILLWOOD
RESIDENTIAL**
Reference Date: 04.29.2021



3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042
713.953.5200

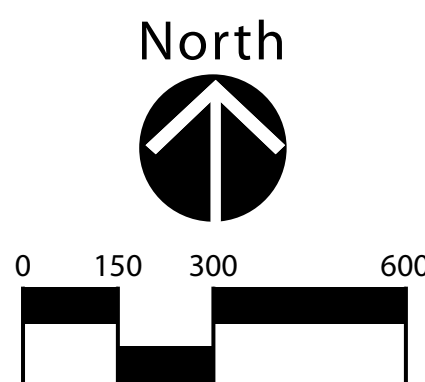
This exhibit is an illustrative representation for presentation purposes only and should not be used for computation or construction purposes. The information provided within should be considered a graphic representation to aid in determining plan components and relationships and is subject to change without notice. All property boundaries, easements, road alignments, drainage, flood plains, environmental issues and other information shown is approximate and should not be relied upon for any purpose. No warranties, express or implied, concerning the actual design, accuracy, location, and character of the facilities shown on this exhibit are intended.

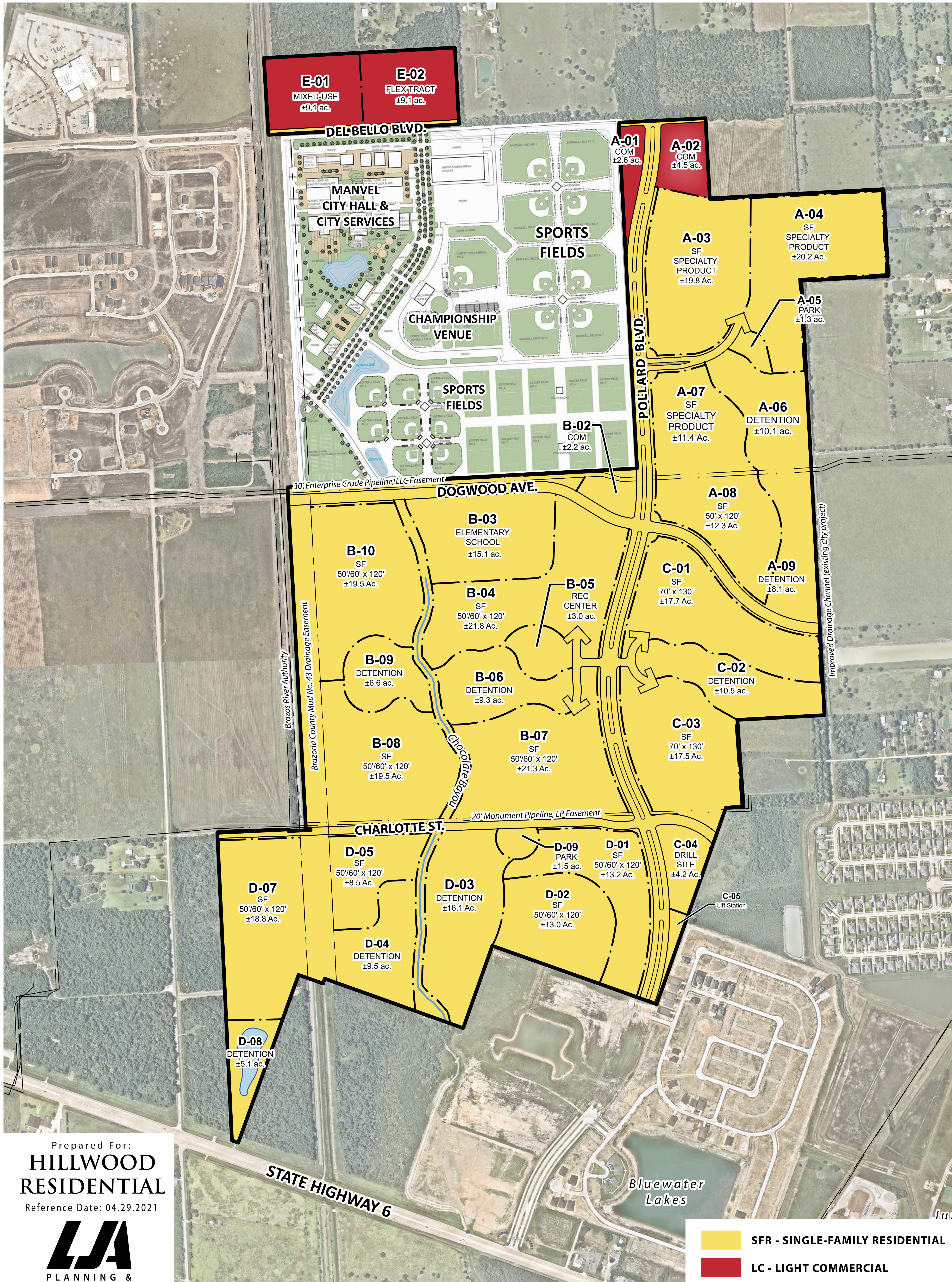
EXHIBIT E

Planned Unit Development
Conceptual Land Use Exhibit

SOWELL TRACT

±438.4 Acres of Land
Manvel, Texas





Prepared For:
**HILLWOOD
RESIDENTIAL**
Reference Date: 04.29.2021

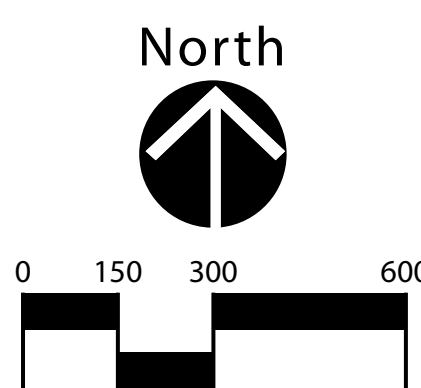
LJA
PLANNING &
LANDSCAPE
ARCHITECTURE

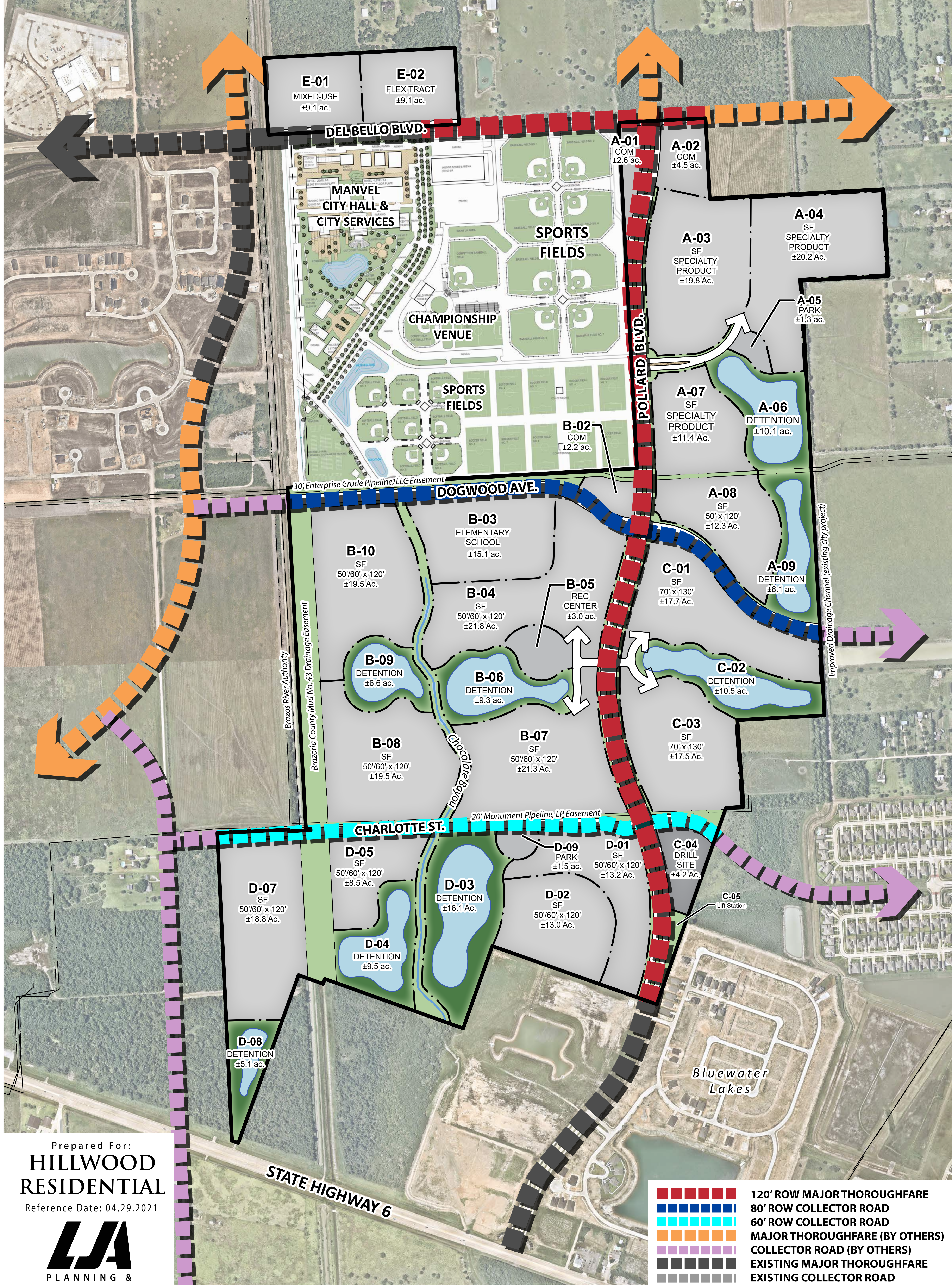
3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042
713.953.5200

© Copyright 2021 LJA Engineering, Inc. Drawings, written material, and design concepts provided is considered property of LJA & shall not be reproduced in part or whole in any form or format without written consent of LJA.

This exhibit is an illustrative representation for presentation purposes only and should not be used for computation or construction purposes. The information provided within should be considered a graphic representation to aid in determining plan components and relationships and is subject to change without notice. All property boundaries, easements, road alignments, drainage, flood plains, environmental issues and other information shown is approximate and should not be relied upon for any purpose. No warranties, express or implied, concerning the actual design, accuracy, location, and character of the facilities shown on this exhibit are intended.

EXHIBIT F
Planned Unit Development
Zoning Exhibit
SOWELL TRACT
±438.4 Acres of Land
Manvel, Texas





Prepared For:
**HILLWOOD
RESIDENTIAL**
Reference Date: 04.29.2021

LJA
PLANNING &
LANDSCAPE
ARCHITECTURE

3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042
713.953.5200

This exhibit is an illustrative representation for presentation purposes only and should not be used for computation or construction purposes. The information provided within should be considered a graphic representation to aid in determining plan components and relationships and is subject to change without notice. All property boundaries, easements, road alignments, drainage, flood plains, environmental issues and other information shown is approximate and should not be relied upon for any purpose. No warranties, express or implied, concerning the actual design, accuracy, location, and character of the facilities shown on this exhibit are intended.

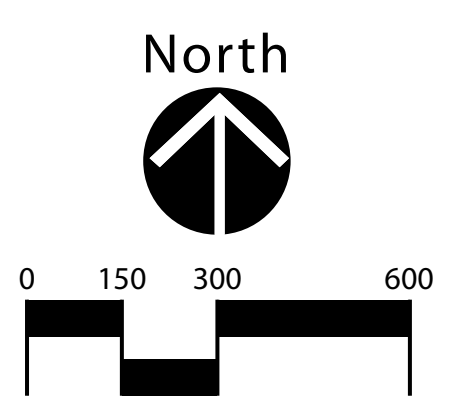
EXHIBIT G

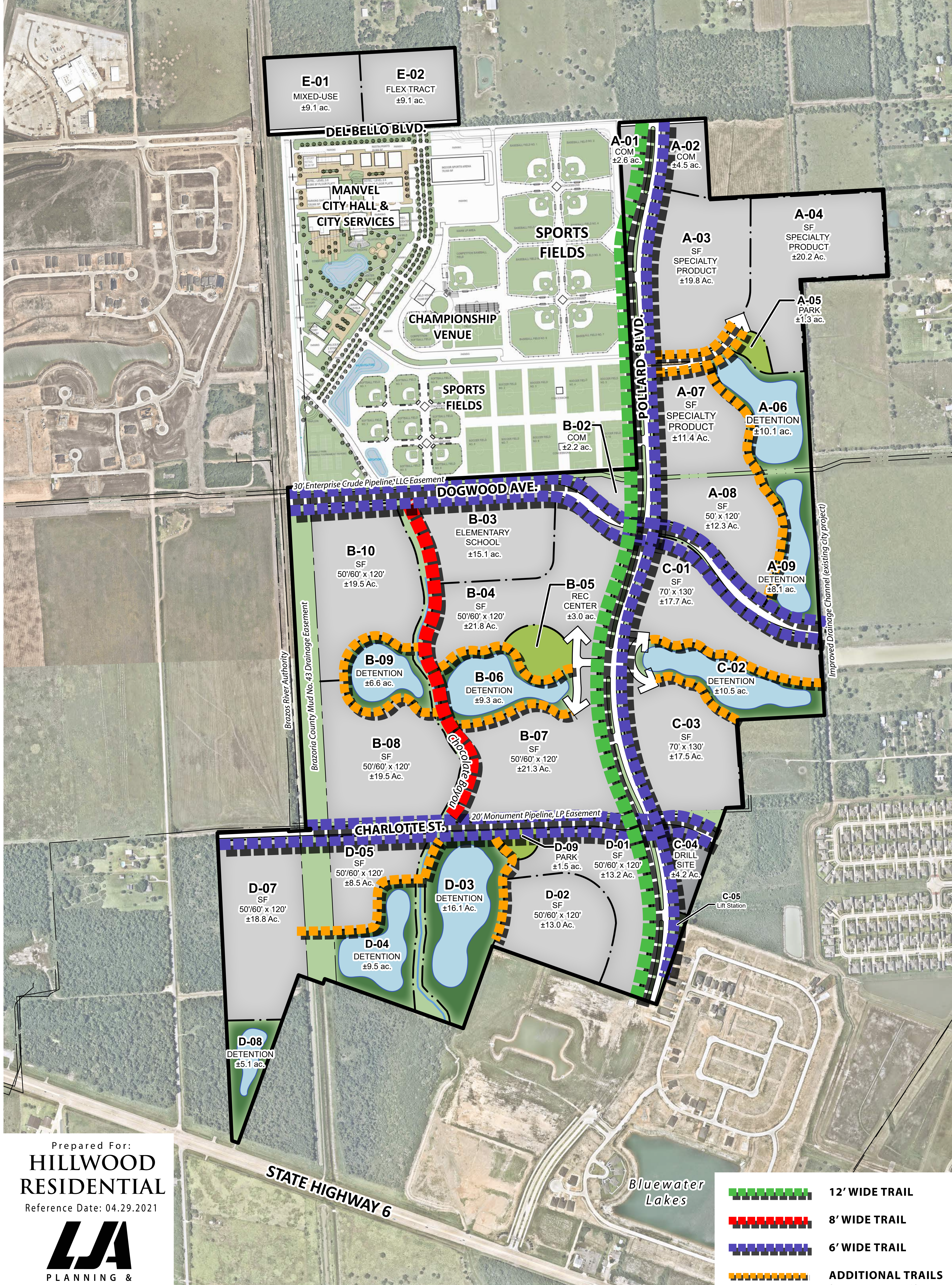
Planned Unit Development
Conceptual Amenities and Open Space Exhibit

SOWELL TRACT

±438.4 Acres of Land
Manvel, Texas

- 120' ROW MAJOR THOROUGHFARE
- 80' ROW COLLECTOR ROAD
- 60' ROW COLLECTOR ROAD
- MAJOR THOROUGHFARE (BY OTHERS)
- COLLECTOR ROAD (BY OTHERS)
- EXISTING MAJOR THOROUGHFARE
- EXISTING COLLECTOR ROAD





Prepared For:
**HILLWOOD
RESIDENTIAL**
Reference Date: 04.29.2021

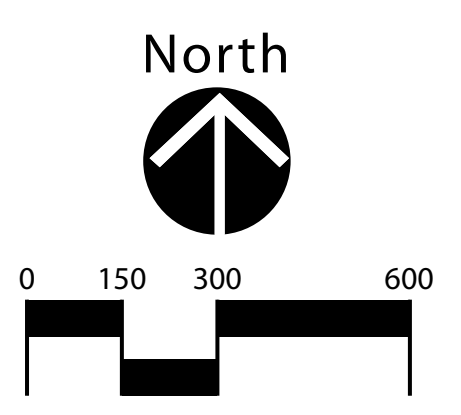


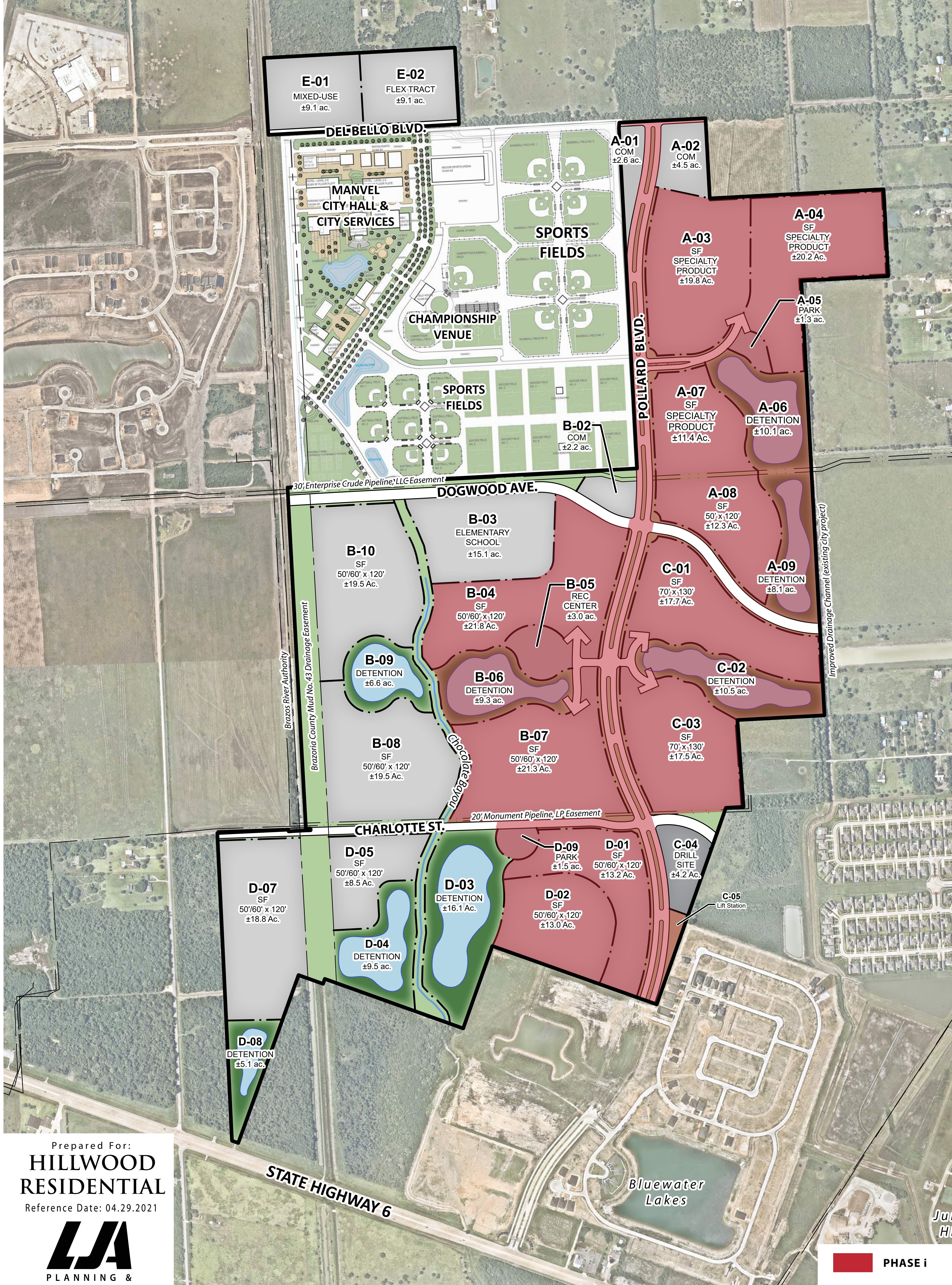
3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042
713.953.5200

This exhibit is an illustrative representation for presentation purposes only and should not be used for computation or construction purposes. The information provided within should be considered a graphic representation to aid in determining plan components and relationships and is subject to change without notice. All property boundaries, easements, road alignments, drainage, flood plains, environmental issues and other information shown is approximate and should not be relied upon for any purpose. No warranties, express or implied, concerning the actual design, accuracy, location, and character of the facilities shown on this exhibit are intended.

EXHIBIT H

Planned Unit Development
Conceptual Amenities and Open Space Exhibit
SOWELL TRACT
±438.4 Acres of Land
Manvel, Texas





E-01
MIXED-USE
±9.1 ac.

E-02
FLEX TRACT
±9.1 ac.

DEL BELLO BLVD.

**MANVEL
CITY HALL &
CITY SERVICES**

**SPORTS
FIELDS**

**CHAMPIONSHIP
VENUE**

**SPORTS
FIELDS**

B-02
COM
±2.2 ac.

A-01
COM
±2.6 ac.

A-02
COM
±4.5 ac.

A-03
SF
SPECIALTY
PRODUCT
±19.8 Ac.

A-04
SF
SPECIALTY
PRODUCT
±20.2 Ac.

A-05
PARK
±1.3 ac.

A-07
SF
SPECIALTY
PRODUCT
±11.4 Ac.

A-06
DETENTION
±10.1 ac.

A-08
SF
50' x 120'
±12.3 Ac.

A-09
DETENTION
±8.1 ac.

C-01
SF
70' x 130'
±17.7 Ac.

C-02
DETENTION
±10.5 ac.

C-03
SF
70' x 130'
±17.5 Ac.

B-07
SF
50' x 60' x 120'
±21.3 Ac.

B-04
SF
50' x 60' x 120'
±21.8 Ac.

B-06
DETENTION
±9.3 ac.

B-10
SF
50' x 60' x 120'
±19.5 Ac.

B-03
ELEMENTARY
SCHOOL
±15.1 ac.

B-09
DETENTION
±6.6 ac.

B-08
SF
50' x 60' x 120'
±19.5 Ac.

CHOCOLATE BAYOU

CHARLOTTE ST.

D-05
SF
50' x 60' x 120'
±8.5 Ac.

D-03
DETENTION
±16.1 Ac.

D-09
PARK
±1.5 ac.

D-01
SF
50' x 60' x 120'
±13.2 Ac.

C-04
DRILL
SITE
±4.2 Ac.

C-05
Lift Station

D-02
SF
50' x 60' x 120'
±13.0 Ac.

D-04
DETENTION
±9.5 ac.

D-07
SF
50' x 60' x 120'
±18.8 Ac.

D-08
DETENTION
±5.1 ac.

STATE HIGHWAY 6

*Bluewater
Lakes*

PHASE i

Prepared For:
**HILLWOOD
RESIDENTIAL**
Reference Date: 04.29.2021

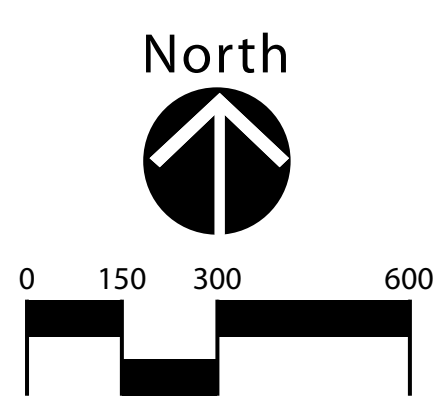
LJA
PLANNING &
LANDSCAPE
ARCHITECTURE

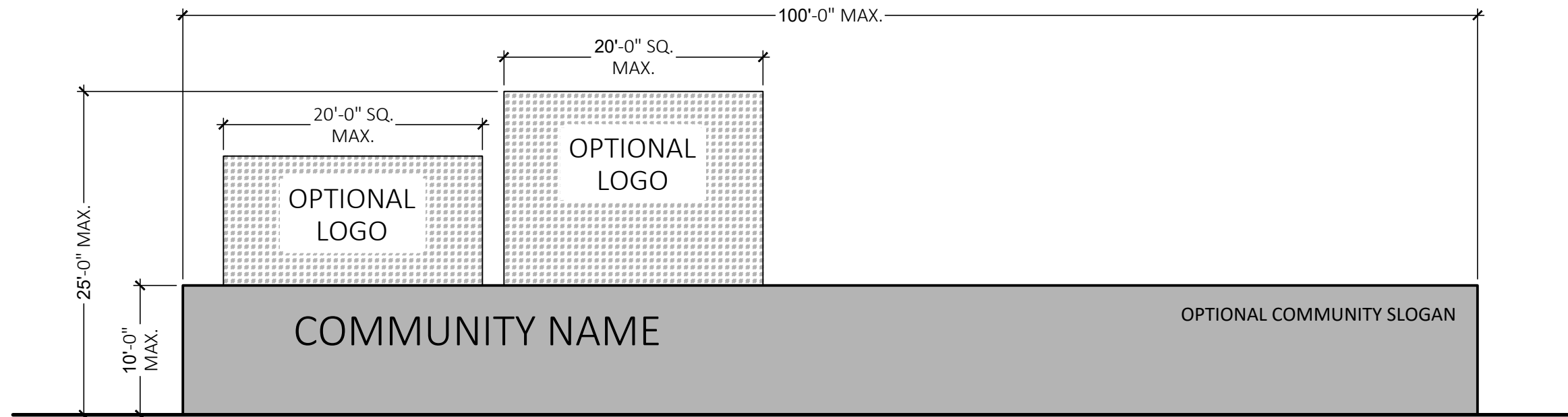
3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042
713.953.5200

© Copyright 2021 LJA Engineering, Inc. Drawings, written material, and design concepts provided is considered property of LJA & shall not be reproduced in part or whole in any form or format without written consent of LJA.

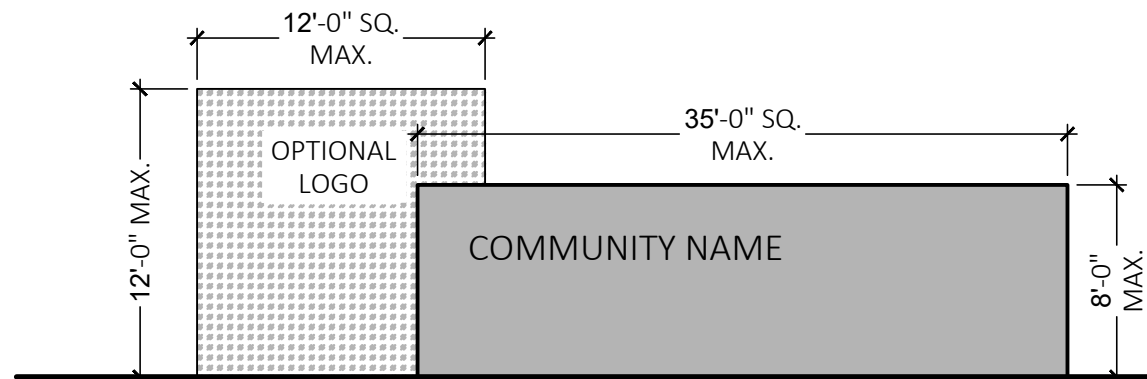
This exhibit is an illustrative representation for presentation purposes only and should not be used for computation or construction purposes. The information provided within should be considered a graphic representation to aid in determining plan components and relationships and is subject to change without notice. All property boundaries, easements, road alignments, drainage, flood plains, environmental issues and other information shown is approximate and should not be relied upon for any purpose. No warranties, express or implied, concerning the actual design, accuracy, location, and character of the facilities shown on this exhibit are intended.

EXHIBIT I
Planned Unit Development
Phasing Exhibit
SOWELL TRACT
±438.4 Acres of Land
Manvel, Texas

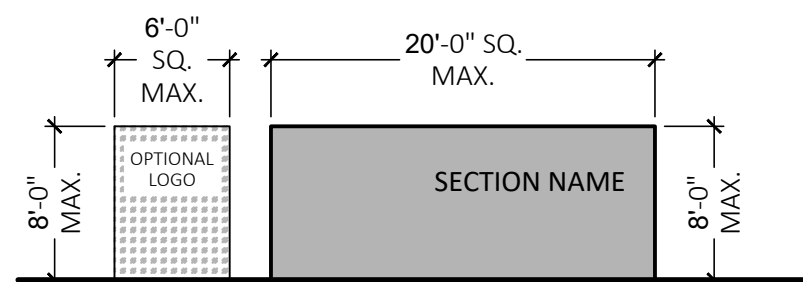




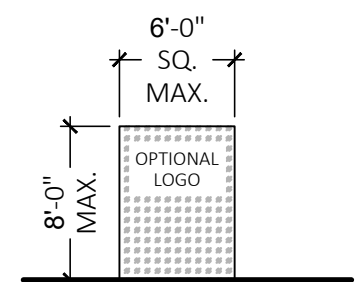
PRIMARY ENTRY MONUMENTS



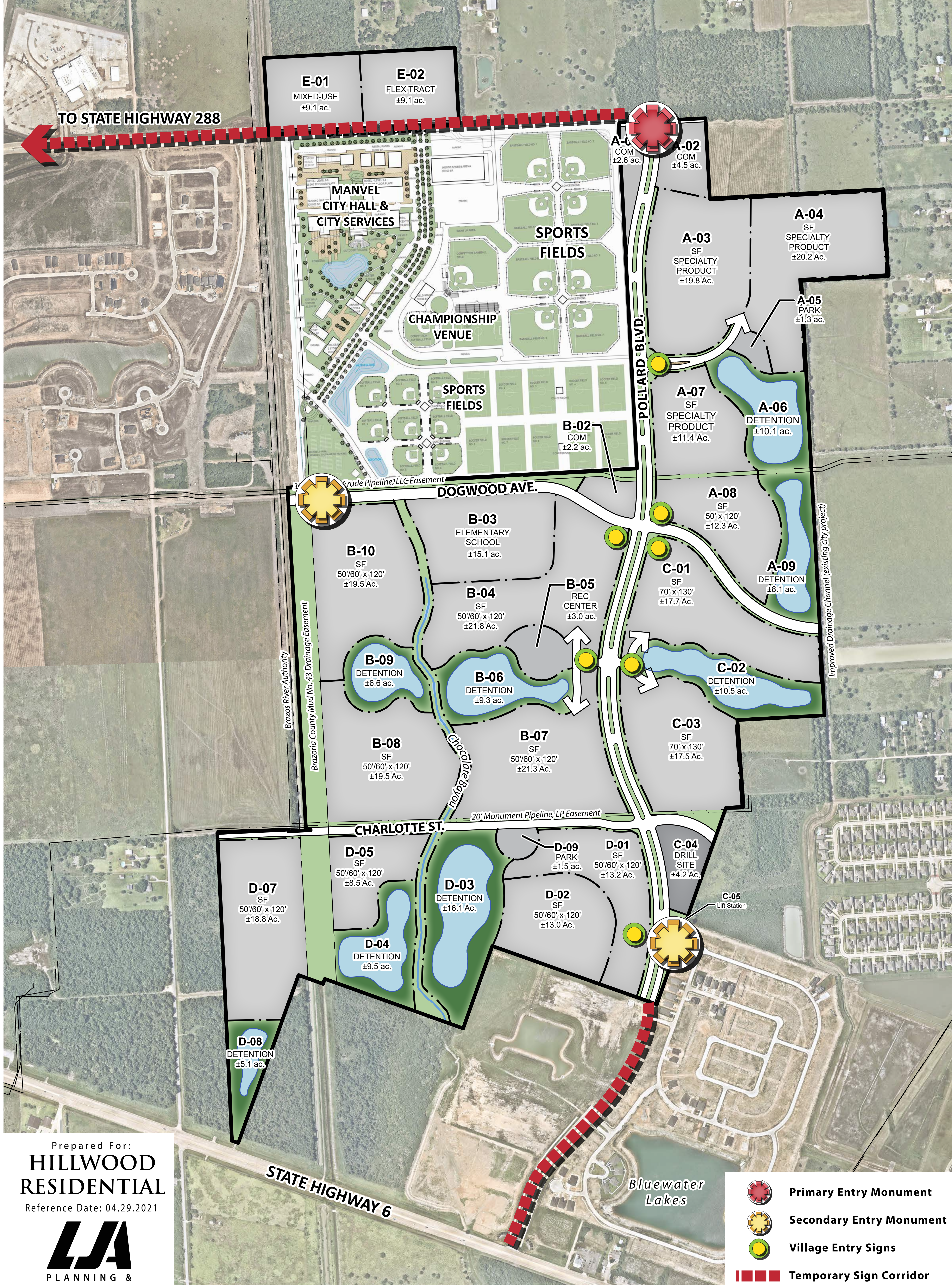
SECONDARY ENTRY MONUMENTS



SECTION MONUMENTS



INTERNAL I.D. MONUMENTS



Prepared For:
**HILLWOOD
RESIDENTIAL**
Reference Date: 04.29.2021

LJA
PLANNING &
LANDSCAPE
ARCHITECTURE

3600 W. Sam Houston Pkwy S, Suite 600
Houston, Texas 77042
713.953.5200

This exhibit is an illustrative representation for presentation purposes only and should not be used for computation or construction purposes. The information provided within should be considered a graphic representation to aid in determining plan components and relationships and is subject to change without notice. All property boundaries, easements, road alignments, drainage, flood plains, environmental issues and other information shown is approximate and should not be relied upon for any purpose. No warranties, express or implied, concerning the actual design, accuracy, location, and character of the facilities shown on this exhibit are intended.

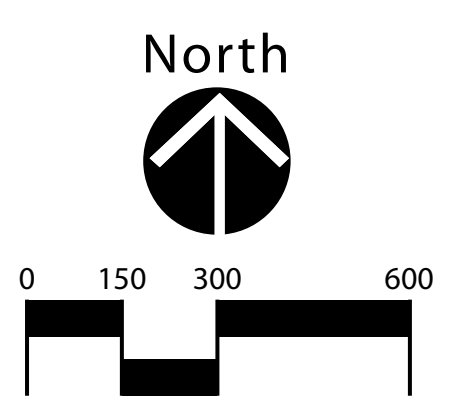
EXHIBIT K

Planned Unit Development
Conceptual Project Signage Exhibit

SOWELL TRACT

±438.4 Acres of Land
Manvel, Texas

-  **Primary Entry Monument**
-  **Secondary Entry Monument**
-  **Village Entry Signs**
-  **Temporary Sign Corridor**



ORDINANCE NO. 2021-O-17

AN ORDINANCE OF THE CITY OF MANVEL, TEXAS AMENDING THE ZONING ORDINANCE OF THE CITY, BY CHANGING THE ZONING CLASSIFICATION OF A TRACT OF LAND 24.7282 ACRES LOCATED AT THE SOUTHWEST CORNER OF CROIX ROAD AND STATE HIGHWAY 288, SITUATED IN THE A.C.H. & B. CO. SURVEY, A-459 OF BRAZORIA COUNTY, TEXAS, AND BEING A PART OF SIXTY-FIVE (65) ACRE TRACT OF LAND AS RECORDED IN VOLUME 283, PAGE 617 OF THE DEED RECORDS OF BRAZORIA COUNTY, TEXAS, FROM SINGLE FAMILY RESIDENTIAL (SFR) DISTRICT TO LIGHT COMMERCIAL (LC) DISTRICT; PROVIDING FOR THE AMENDMENT OF THE CITY'S OFFICIAL ZONING MAP; PROVIDING FOR SEVERABILITY; AND PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF.

* * * * *

WHEREAS, MM&S Ltd. is the owner (the "Owner") of a certain tract of land 24.7282 acres located at the southwest corner of Croix Road and State Highway 288, situated in the A.C.H. & B. Co. Survey, A-459 of Brazoria County, Texas, and being a part of a sixty-five (65) acre tract of land as recorded in Volume 283, Page 617 of the deed records of Brazoria County, Texas, as shown on said a map and description of which is attached hereto as Exhibit "A"; and

WHEREAS, the Planning, Development, and Zoning Commission and the City Council have conducted, in the time and manner required by law and the Zoning Ordinance of the City, a public hearing on such request; and

WHEREAS, the Planning, Development, and Zoning Commission has recommended approval of such request and the City Council deems it appropriate to approve said rezoning; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MANVEL, TEXAS:

Section 1. The facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

Section 2. The zoning classification of the certain tract of land 24.7282 acres located at the southwest corner of Croix Road and State Highway 288, situated in the A.C.H. & B. Co. Survey, A-459 of Brazoria County, Texas, and being a part of a sixty-five (65) acre tract of land as recorded in Volume 283, Page 617 of the deed records of Brazoria County, Texas, as shown on a map and description of which is attached hereto as Exhibit "A" attached hereto and for all things made a part hereof, shall be changed from the Single Family Residential (SFR) District to Light Commercial (LC) District for uses as permitted within such zone classification.

Section 3. The Zoning District Map of the City of Manvel shall be revised and amended to show the designation of said tracts, as described and as provided in Section 2 above, with the appropriate reference thereon to the number and effective date of this Ordinance and a brief description of the nature of the change.

Section 4. The City Council hereby finds and determines that said rezoning comports to the City's Comprehensive Land Use Plan. This Ordinance shall in no manner amend, change, supplement, or revise any provision of any ordinance of the City of Manvel, save and except the change in zoning classification of said tract(s) as described above.

Section 5. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Manvel, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 6. Any person who shall intentionally, knowingly, recklessly or with criminal negligence violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and upon conviction, shall be fined in an amount not to exceed \$2,000.00. Each day of violation shall constitute a separate offense.

PASSED AND APPROVED on first reading this _____ day of _____, 2021.

PASSED, APPROVED, AND ADOPTED on second and final reading this _____ day of _____, 2021.

Debra Davison, Mayor

ATTEST:

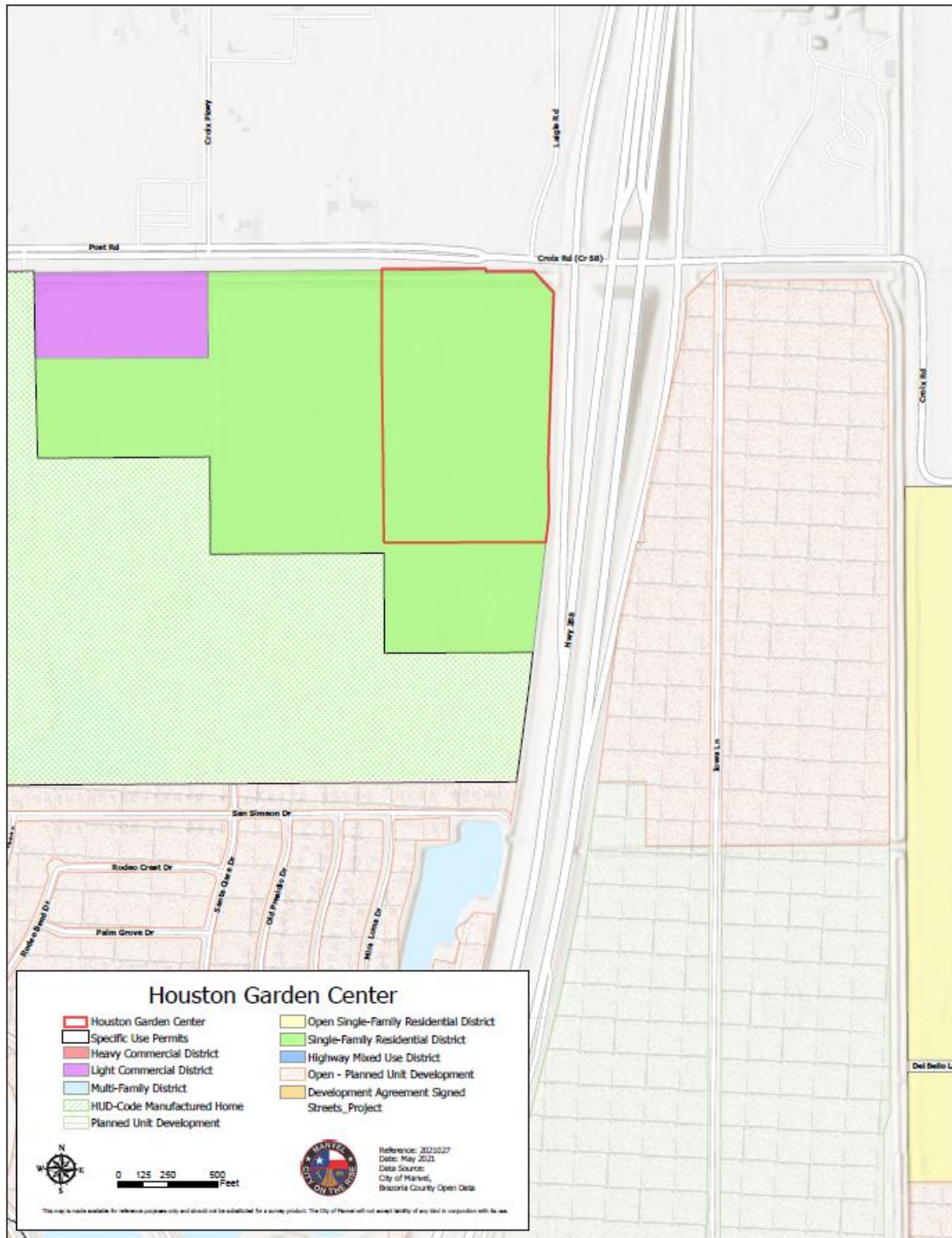
Tammy Bell, City Secretary

APPROVED AS TO FORM:

Robert Gervais, City Attorney

EXHIBIT A

A 24.7282 acre (1,077,160 square feet) tract of land, situated in the A.C.H. & B. Co. Survey, A-459 of Brazoria County, Texas, and being a part of a sixty-five (65) acre tract of land as recorded in Volume 283, Page 617 of the deed records of Brazoria County, Texas.





MANVEL CITY COUNCIL DATA SHEET

MEETING DATE: June 7, 2021

TOPIC: Public hearing regarding amending the zoning ordinance by changing the zoning classification of 24.7282 acres of land located at the southwest corner of SH 288 and Croix Road, from Single-Family Residential (SFR) District to Heavy Commercial (HC) District.

BACKGROUND: The owner is requesting a rezoning in order to construct a Houston Garden Center on 24.7282 acres. The current SFR zoning does not allow NAICS Use No. 444220 "Garden Centers". This use is permitted in the HC zoning district; however, City staff recommends a rezoning to Light Commercial (LC) zoning district since it is less intensive compared to Heavy Commercial (HC) zoning district. The Planning, Development and Zoning Commission held a public hearing at their May 24, 2021, meeting. There were no speakers during the public hearing. The Commission's discussion focused on rezoning to LC rather than HC due to proximity of residential land uses and HC allowing more intense uses.

PD&Z RECOMMENDATION: The Planning, Development and Zoning Commission recommends reclassifying subject property from Single-Family Residential (SFR) District to Light Commercial (LC) District to the City Council. The vote was five yeas to zero nays at their May 24, 2021, meeting.

STAFF RECOMMENDATION: City staff recommends reclassifying subject property from Single-Family Residential (SFR) District to Light Commercial (LC) District.

ATTACHMENTS: Staff Report and Ordinance

FUNDING ISSUES

- ☒ Not applicable
- ☐ Not budgeted
- ☐ Full amount already budgeted
- ☐ Funds to be transferred from Acct.#

SUBMITTING STAFF MEMBER Jessica Rodriguez	FINANCE DIRECTOR APPROVAL _____ CITY MANAGER APPROVAL _____
--	---





City Council Rezoning Request

Agenda of:	June 7, 2021	Initiated By:	Jessica Rodriguez Dir. Development Services
Department:	Development Services	Presented By:	Jessica Rodriguez Dir. Development Services

Subject/Proceeding

A rezoning from Single-Family Residential (SFR) District to Heavy Commercial (HC) District for 24.7282 acres located in the southwest corner of Croix Road and State Highway 288

Exhibits

Zoning Vicinity Map, Staff Report, Site Photographs, Aerial Vicinity Map, City's Major Thoroughfare Plan Map, Property Survey, Applicant Letter, Application, Authorization Letter, and Public Hearing Notice

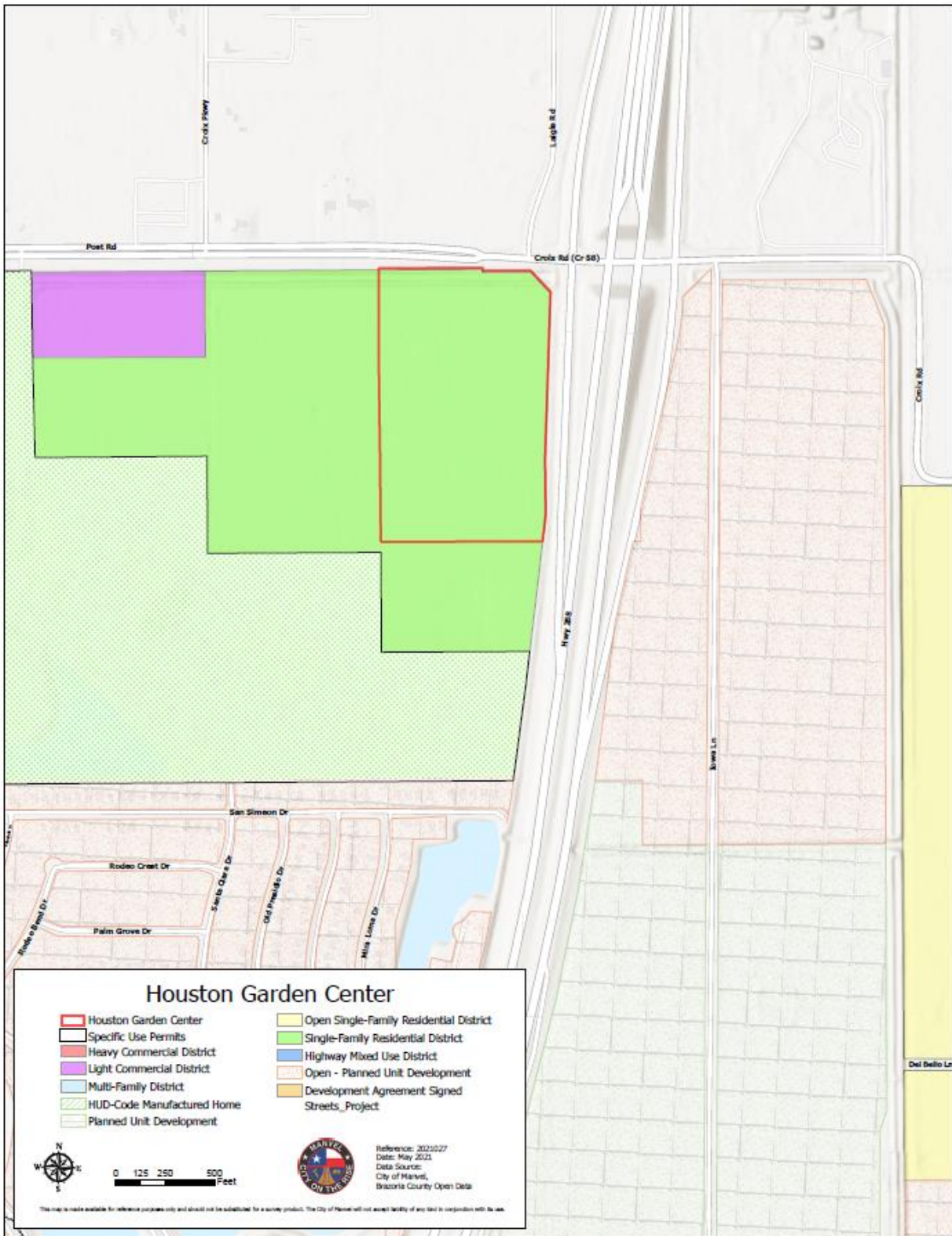
Recommended Action

A Public Hearing following by Consideration and Action from City Council

Executive Summary

The proposed rezoning is for 24.7282 acres of land located in the southwest corner of Croix Road and State Highway 288 from Single-Family Residential (SFR) District to Heavy Commercial (HC) District. The owner is requesting a rezoning to construct a Houston Garden Center. The use of "garden centers" is classified at NAICS Use No. 444220. "Garden Centers" are not permitted in the SFR zoning district so the applicant has filed a rezoning to HC where it is permitted. Staff overview of the proposed rezoning is contained in the attached Staff Report section.

Zoning Vicinity Map



Staff Report

Overview

The owner has requested a rezoning for 24.7282 acres of land located in the southwest corner of Croix Road and SH 288 from Single-Family Residential (SFR) District to Heavy Commercial (HC) District. The owner would like to construct a Houston Garden Center on this site. The SFR zoning district does not permit NAICS Use No. 444220 "Garden Centers". The requested HC zoning district permits NAICS Use No. 444220 "Garden Centers" as well as the Light Commercial (LC) zoning district. The HC zoning district is a more intense zoning district compared to LC. For example, most manufacturing uses are permitted in HC zoning district, whereas, the LC zoning district does not. Uses permitted in HC zoning district would permit but are not limited to paper manufacturing (NAICS Use no. 322), textile mills (NAICS Use No. 313), warehouse and storage (NAICS Use No. 493), etc. These uses are not permitted in the LC zoning district. Since LC is a less intense zoning district, staff is recommending a rezoning to LC rather than the requested HC. Other reasons to recommend a rezoning of the property to Light Commercial (LC) zoning district include: 1) close proximity to SH 288 on Croix Road, 2) Croix Road is identified as a "parkway" on the City's Major Thoroughfare Plan, and 3) proximity of other Light Commercial zoned property.

The subject site is located in the southwest corner of SH 288 and Croix Road. SH 288 is a major north/south freeway in the Houston metro area, and Croix Road is identified as a 120-foot right-of-way parkway in the City's Thoroughfare Plan. Croix Road is an existing four-lane median road with freeway access on the site eastern boundary. Due to the close proximity and vehicular access to both of these roads, the property lends itself to commercial development. A rezoning to LC provides an opportunity for the nearby residential (existing and planned) to access neighborhood commercial services without traveling outside of the City. Another factor to consider to rezone this property to Light Commercial zoning district, is the close proximity to other LC zoned property. Subject property is located approximately 880-feet east of property already zoned Light Commercial. This property was rezoned from Single Family Residential (SFR) district to Light Commercial (LC) district by Ordinance No. 2017-O-01. The existing LC property remains vacant; however, it has been recently platted for strip commercial development.

General Site Information

Surrounding Property Zoning	North: City of Manvel ETJ South: Single-Family Residential District (SFR) East: Planned Unit Development District (PUD) West: Single-Family Residential District (SFR) and Light Commercial District (LC)
Surrounding Land Use	North: Vacant/Undeveloped, Commercial, and Single-Family Residential South: Rodeo Palms Subdivision (single-family) East: Vacant/Undeveloped West: Vacant/Undeveloped and Church

Land Use

In the Heavy Commercial (HC) District, uses are either allowed by right, with the approval of a Specific Use Permit (SUP), or only an office function. The City of Manvel utilizes the North American Industrial Classification System (NAICS) to categorize all land uses.

Currently Allowed Uses in the Heavy Commercial (HC) Zoning District:

The following uses are allowed by right in the HC zoning district.

115	Support activities for agriculture and forestry
236	Construction of buildings
237	Heavy and civil engineering construction
238	Specialty trade contractors
311	Food manufacturing
311811	Retail bakeries
3121	Beverage manufacturing
313	Textile mills
314	Textile product mills
315	Apparel manufacturing
316	Leather and allied product manufacturing
321	Wood products manufacturing
321999	All other misc. wood
322	Paper manufacturing
323	Printing and related support activities
334	Computer and electronic product manufacturing
335	Electrical equipment, appliance and component manufacturing
337	Furniture and related product manufacturing
339	Miscellaneous manufacturing
42	Wholesale
442	Furniture and home furnishing stores
443	Electronics and appliance stores
444	Building material, garden equipment and supplies dealers
445	Food and beverage stores
446	Health and personal care stores
448	Clothing and clothing accessories stores
451	Sporting goods, hobby, book and music stores
452	General merchandise stores
453	Miscellaneous store retailers
454	Non-store retailers
48	Transportation and warehousing
491	Postal service
492	Couriers and messengers
493	Warehouse and storage
51	Information
52	Finance and insurance
522291	Consumer lending
531	Real estate

53112	Lessors of nonresidential buildings (except mini warehouses)
53113	Lessors of mini warehouses and self-storage units
5321	Automotive and equipment rental
5322	Consumer good rental
532292	Recreational goods rental
5323	General rental centers
5324	Commercial and industrial machinery and equipment rental
54	Professional, scientific, and technical services
5412	Accounting, tax preparation, bookkeeping and payroll
54194	Veterinary services
55	Management of companies and enterprises
561	Administrative and support services
562	Waste management and remediation services
6117	Educational support services
624	Social assistance
6244	Child day care services
713940	Fitness and sports centers
722	Food services and drinking places
7224	Drinking places (alcoholic beverages)
8111	Automotive repairs and maintenance
811122	Automotive glass replacement shop
8112	Electronic and precision equipment repair and maintenance
8113	Commercial and industrial machinery and equipment (except automotive and electronic repair)
8114	Personal and household goods repair and maintenance
812	Personal and laundry services
812210	Funeral homes and funeral services
813410	Civil and social organizations
92	Public administration

The following uses are allowed with an approved SUP in the HC zoning district.

21	Mining, quarrying and oil and gas extraction
22	Utilities
237130	Power and communication line and related structures construction
237	Heavy and civil engineering construction
237130	Power and communication line and related structures construction
324	Petroleum and coal products manufacturing
325	Chemical manufacturing
326	Plastics and rubber products manufacturing
327	Nonmetallic mineral products manufacturing
331	Primary metal manufacturing
332	Fabricated metal product manufacturing
333	Industrial machinery manufacturing
336	Transportation equipment manufacturing
441	Motor vehicle and parts

445120	Convenience stores
447	Gasoline stations
452990	All other general merchandise stores
45393	Manufactured (mobile) home dealers
453991	Tobacco stores
522298	All other non-depository credit intermediation
53113	Lessors of mini warehouses and self-storage units
6111	Elementary and secondary schools
6112	Junior colleges
6113	Colleges, universities, and professional schools
6114	Business schools and computer and management training
6115	Technical and trade schools
6116	Other schools and instruction
621	Ambulatory health care services
622	Hospitals
623	Nursing and residential care facilities
623990	Other residential care facilities
71	Arts, entertainment, and recreation
713	Amusement, gambling, recreation industries
713990	All other amusement and recreational industries
721	Accommodations
7212	RV parks and recreational camps
721191	Bed and breakfast
72233	Mobile food services
812113	Nail salons
81219	Other personal care services
812220	Cemeteries and crematories
813110	Religious organizations
	Adult entertainment business
	Game room

Staff Recommendation

City Staff recommends reclassifying subject property from Single-Family Residential (SFR) District to Light Commercial (LC) District to the Planning, Development, and Zoning Commission.

*After the Planning, Development and Zoning Commission meeting on May 24, 2021, staff emailed the applicant informing them the recommendation is to Light Commercial (LC) district rather than Heavy Commercial (HC) district. The applicant and owner have no objection to the Light Commercial (LC) district.

Planning, Development and Zoning Commission Public Hearing

A public hearing was held at the May 24, 2021, Planning, Development and Zoning Commission meeting. There were no comments from the public during the public hearing. Later, outside the public hearing someone asked a question regarding Heavy Commercial (HC) zoning but was referred to speak to staff. The following day, staff received an email inquiry but the owner made an inquiry regarding the rezoning of their property. It appeared a neighboring property owner thought the City

was trying to rezone their property to Heavy Commercial. I responded by email that the City was not rezoning their property but this was for an abutting property.

Planning, Development and Zoning Commission Consideration and Discussion

During the May 24, 2021, Planning, Development and Zoning Commission meeting, the Commission discussed the proposed recommendation to rezone to Light Commercial (LC) District rather than Heavy Commercial (HC) District. The HC District was requested by the owner. At the time of the meeting, staff had not informed the applicant of such recommendation. Staff explained the LC District would allow the Houston Garden Center as a “garden center” use as well as HC. However, staff recommended LC district since it allows less intensives uses compared to the HC district. The Commission made the same recommendation based on proximity to single-family land uses and greater use intensity in the HC district.

Planning, Development and Zoning Commission Recommendation

The Planning, Development and Zoning Commission recommends reclassifying subject property from Single-Family Residential (SFR) District to Light Commercial (LC) District to the City Council. The vote was five yeas to zero nays to recommend Light Commercial (LC) District.

City Council Public Hearing

The Notice of Public Hearing was published in the newspaper of general circulation. All property owners within 200 feet of the property were notified. At the time of writing this report, one information inquiry was emailed to City staff. After the PD&Z public hearing, someone asked a question regarding Heavy Commercial (HC) zoning but was referred to speak to staff. The following day, staff received an email inquiry. The inquiry was regarding the rezoning of their property (not this site). It appeared a neighboring property owner thought the City was trying to rezone their property to Heavy Commercial. Staff responded by email that the City was not rezoning their property but this was for an abutting property. Staff has not received and is not aware of opposition to this rezoning.

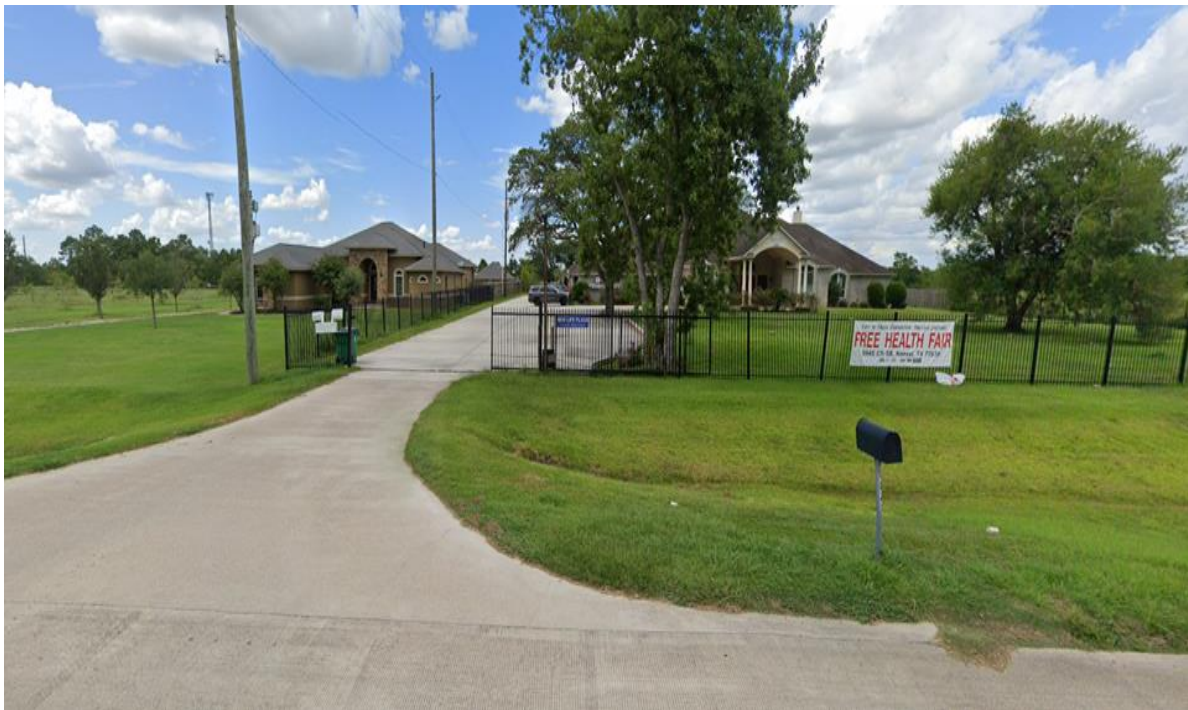
Points for Consideration

- Close proximity to SH 288 on Croix Road lends the property to commercial development.
- Croix Road is an existing four-lane median road that is identified as a 120-foot ultimate right-of-way width on the City’s Major Thoroughfare Plan.
- In 2017, other property approximately 880-feet west of subject site was changed from Single Family Residential (SFR) district to Light Commercial (LC) district by Ordinance No. 2017-O-01.
- The Light Commercial (LC) district uses are more conducive to the surrounding area compared to Heavy Commercial (HC) district.

Site Photographs



Looking south across Croix Road at the proposed Houston Garden Center site.



Looking north from Croix Road at the commercial and single-family residential.

Site Photographs

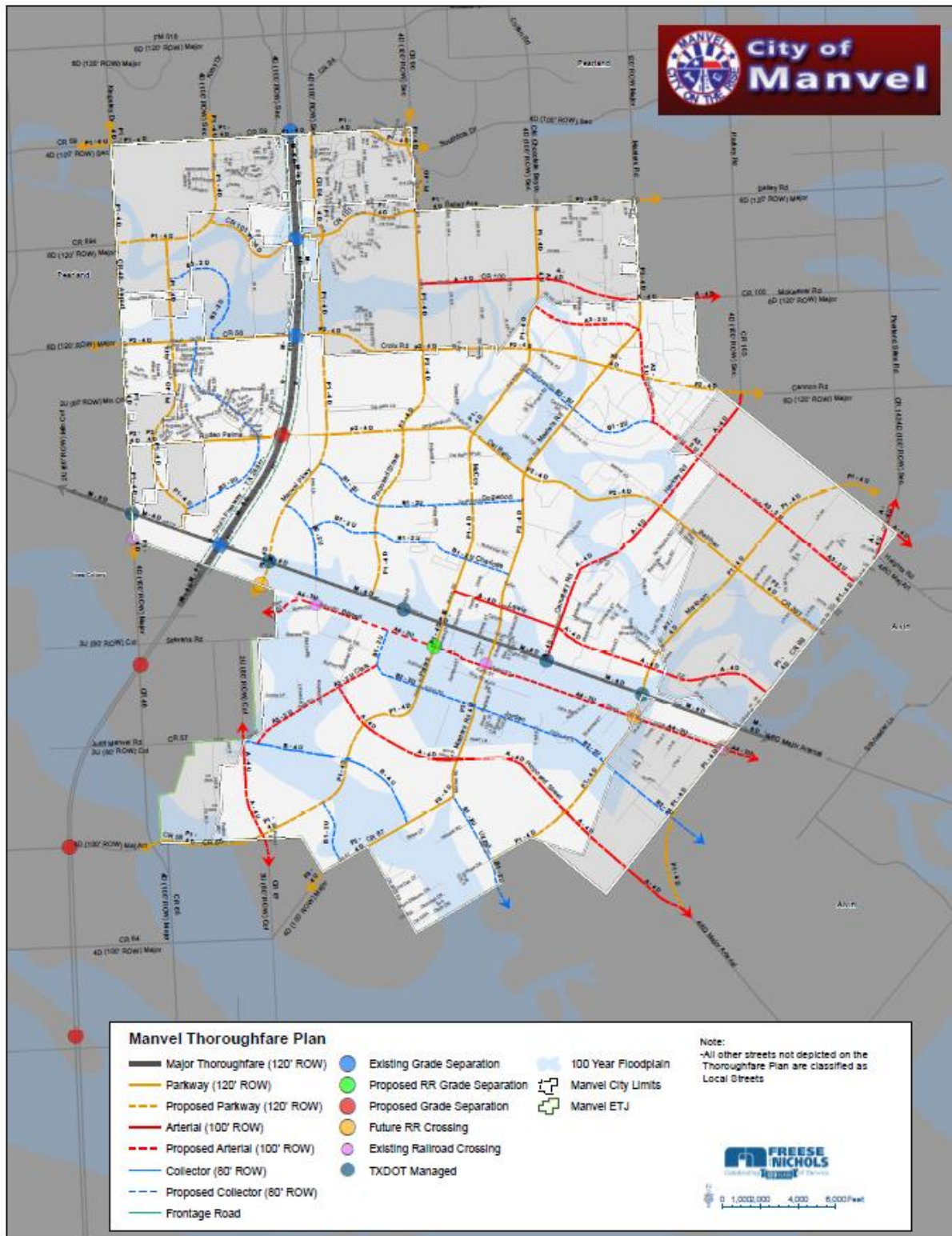


Looking north from Croix Road at vacant/undeveloped property.

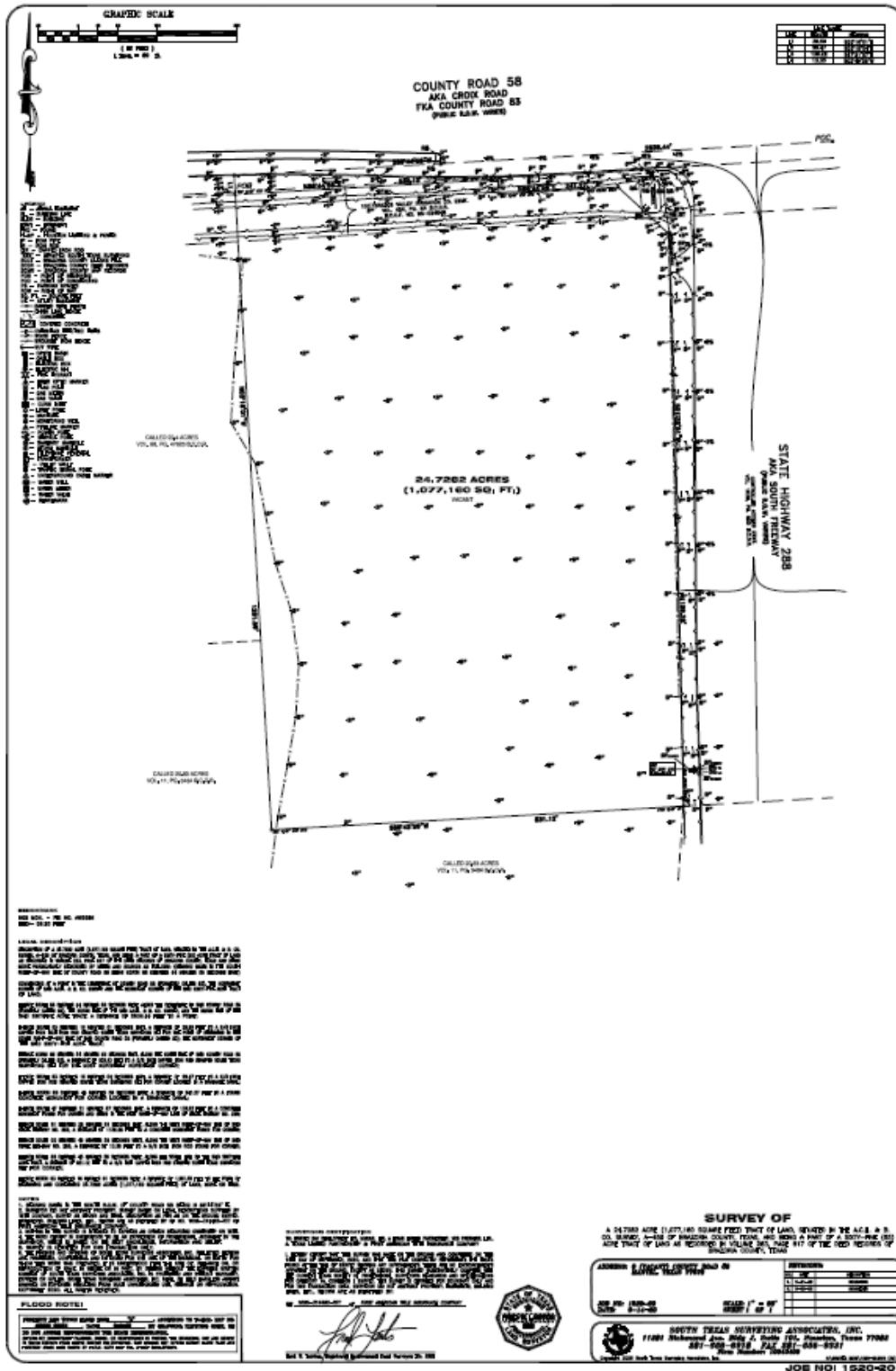
Aerial Vicinity Map



City's Major Thoroughfare Plan Map



Property Survey



Applicant Letter



ESDM, INC.

April 15, 2021

City of Manvel
Development Services Dept.
20025 Highway 6
Manvel, TX 77578

RE: Rezoning Letter of Request
CR 58 & Hwy. 288 S
24.78282 Acre tract of land, situated in A.C.H.&B Co. Survey A-459 out of Brazoria Co.,
Being a part of 65 acre tract in Vol. 283, page 617 of the deed records of Brazoria Co.

Dear City of Manvel;

On behalf of Houston Garden Center, this letter and enclosed application package is to request the above referenced property be rezoned from residential to "Light Commercial" use.

Should you have any additional questions, concerns, and/or instructions regarding this matter, please contact us at your earliest convenience.

Sincerely Yours,

A handwritten signature in cursive script, appearing to read "Hadi Elmi", with a long horizontal flourish extending to the right.

Hadi Elmi, P.E., R.E.M.
President

Cc: Mr. Matthew R. Hooper, Houston Garden Centers
Ms. Kim Hooper, Houston Garden Centers

Environmental Systems Design and Management, Inc.

12715 Cutten Rd., Houston, Texas 77066
P.O. Box 9599, The Woodlands, Texas 77387
Tel: 281-444-3300 Fax: 281-444-3305 E-Mail: esdm@esdminc.com www.esdminc.com

Application



DEVELOPMENT SERVICES DEPARTMENT
20025 HIGHWAY 6
MANVEL, TX 77578
P: 281-489-0630
F: 281-489-0634

REZONING APPLICATION

PROJECT INFORMATION

Project Name: Houston Garden Center
Project Location/Address: CR 58 & Hwy. 288 S
Legal Description: 24.7282 acre tract of land, situated in A.C.H. & B. Co. Survey A-459 of Brazoria Co., TX, being a part of 65 acre tract in Vol. 283, pg. 617
Current Zoning: SFR Proposed Zoning: HC
Parcel/Tax ID# (s): 693153 Total Acreage: 24.7282 Proposed Land Use: Retail/nursery

APPLICANT INFORMATION

Applicant Name: Hadi Elmi
Company Name: ESDM, Inc.
Address: 12715 Cutten Rd. City: Houston State: TX Zip: 77066
Phone #: 281-444-3300 Email: esdm@esdminc.com

This is to certify that the information on this form is COMPLETE, TRUE, and CORRECT, and I, the undersigned, am authorized to make this application on behalf of the owner(s). I understand that this application will expire one year from the date submitted.

Hadi Elmi
Applicant Signature (REQUIRED)

4-15-2021
Date

PROPERTY OWNER INFORMATION

Owner(s) Name: MNK&S Ltd.
Address: 5345 W. Loop South City: Houston State: TX Zip: 77081
Phone #: 713-218-0860 Email: mhooper@houstongardencenters.com

PROPERTY OWNER'S AUTHORIZATION (Required - If owner is also the applicant, must sign as both):
I am the owner of the property for which this application is being made. I authorize the above person (Applicant) to submit this application and to correspond with the City of Manvel regarding this application on my behalf.

MNK&S Ltd.
Owner's Signature (REQUIRED)

4/15/2021
Date

Application



DEVELOPMENT SERVICES DEPARTMENT

20025 HIGHWAY 6
MANVEL, TX 77578
P: 281-489-0630
F: 281-489-0634

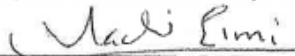
SUBMITTAL CHECKLIST

So that we may efficiently review your project in a timely manner, it is important that all required documents and fees listed on the "Submittal Checklist" below are submitted with your application. One or more of the required documents may be waived due to the nature of the development; however, it is incumbent upon the applicant to inquire about these exceptions for your project before submitting an application. Answers to rezoning applications can be obtained by attending a pre-development meeting with our Development Review Committee (DRC) prior to submitting a formal application. Please call the phone number on the application to schedule an appointment. Submit application and accompanying documents to the Permits and Inspections at the address above Monday through Thursday between the hours of 7:30 a.m. and 5:30 p.m. and Friday between the hours of 7:30 a.m. and 11:30 a.m.

REZONING SUBMITTAL CHECKLIST ITEMS	REQUIRED (PLEASE CHECK)
Completed Rezoning Application (with all signatures)	✓
One (1) Legal Description of Property (metes & bounds description if not platted)	✓
One (1) Copy of Recorded Plat (if platted)	
One (1) Applicant Letter of Request	✓
Traffic Impact Analysis, if applicable	
Paid Application Fee	

APPLICANT CERTIFICATION

By signing below, I acknowledge that I have reviewed the Submittal Checklist and have included the required submittal items and reviewed them for completeness and accuracy. I also acknowledge that my application will be rejected if it is deemed incomplete.



Applicant Signature

1-15-2021

Date

Authorization Letter



DEVELOPMENT SERVICES DEPARTMENT
20025 HIGHWAY 6
MANVEL, TX 77578
P: 281-489-0630
F: 281-489-0634

LETTER OF AUTHORIZATION

Have property owner complete and sign, if applicant differs from property owner.

Matthew R. Hooper

Owner Name

5345 West Loop South

Owner Address

Houston, TX 77081

Owner City, State Zip

Date

4/15/2021

Development Services
20025 Highway 6
Manvel, TX 77578

Dear City of Manvel Development Services,

I, Matthew R. Hooper, certify that I am the owner of the project property located at CR 58 & Hwy. 288, Manvel, TX and that the forgoing statements and answers made and all data, information, and evidence herewith submitted are in all respects to the best of my knowledge and belief, true, and correct. I appoint Hadi Elmi with the company ESDM, Inc. (if applicable) to act as my representative for this project. I agree to be responsible for payment of bills due to the City of Manvel related to this application. Furthermore, I understand that any material misrepresentation of this application, failure to comply with ordinances, and/or failure to remit payment for services can lead to delays in this project – up to and including rejecting the project and forfeiting any fees paid.

Please contact me directly at 713-218-0860 if you have any questions.

Sincerely,

Owner Name Matthew R. Hooper

Owner Signature

Public Hearing Notice

Public Hearing Notice to run on Sunday 05/09/2021

A TELECONFERENCE PUBLIC HEARING WILL BE HELD BY TELEPHONE BEFORE THE MANVEL PLANNING, DEVELOPMENT & ZONING COMMISSION AT 7:00 P.M. ON MONDAY, MAY 24, 2021, FOR THE PURPOSE OF HEARING COMMENTS FOR OR AGAINST AN ORDINANCE OF THE CITY OF MANVEL, TEXAS, AMENDING THE ZONING CLASSIFICATION OF APPROXIMATELY 24.7282 ACRES LOCATED IN THE SOUTHWEST CORNER OF CROIX ROAD AND STATE HIGHWAY 288, MANVEL, TEXAS, FROM SINGLE FAMILY RESIDENTIAL DISTRICT (SFR) TO HEAVY COMMERCIAL DISTRICT (HC).

The Planning, Development & Zoning Commission public hearing will be accessible by telephone for the purpose of hearing comments for or against granting a Specific Use Permit. This meeting may be accessed by calling; 210-469-0207 or toll-free at 877-257-2190 and entering conference ID 643 222 715#

A TELECONFERENCE PUBLIC HEARING WILL BE HELD BY TELEPHONE BEFORE THE MANVEL CITY COUNCIL MEETING AT 7:00 P.M. ON MONDAY, JUNE 7, 2021, FOR THE PURPOSE OF HEARING COMMENTS FOR OR AGAINST AN ORDINANCE OF THE CITY OF MANVEL, TEXAS, AMENDING THE ZONING CLASSIFICATION OF APPROXIMATELY 24.7282 ACRES LOCATED IN THE SOUTHWEST CORNER OF CROIX ROAD AND STATE HIGHWAY 288, MANVEL, TEXAS, FROM SINGLE FAMILY RESIDENTIAL DISTRICT (SFR) TO HEAVY COMMERCIAL DISTRICT (HC).

The City Council public hearing will be accessible by telephone for the purpose of hearing comments for or against granting a Specific Use Permit. This meeting may be accessed by calling; 210-469-0207 or toll-free 877-257-2190 and entering conference ID 235 696 748#

THE PUBLIC HEARING WILL BE TO HEAR INPUT FROM THE PUBLIC REGARDING AN ORDINANCE OF THE CITY OF MANVEL, TEXAS, AMENDING THE ZONING CLASSIFICATION OF APPROXIMATELY 24.7282 ACRES LOCATED IN THE SOUTHWEST CORNER OF CROIX ROAD AND STATE HIGHWAY 288, MANVEL, TEXAS, FROM SINGLE FAMILY RESIDENTIAL DISTRICT (SFR) TO HEAVY COMMERCIAL DISTRICT (HC); PROVIDING FOR THE AMENDMENT OF THE CITY'S OFFICIAL ZONING MAP; PROVIDING FOR SEVERABILITY; AND PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF.

A TEMPORARY SUSPENSION OF THE OPEN MEETINGS ACT TO ALLOW TELEPHONE OR VIDEOCONFERENCE PUBLIC MEETINGS HAS BEEN GRANTED BY GOVERNOR GREG ABBOTT. THESE ACTIONS ARE BEING TAKEN TO MITIGATE THE SPREAD OF COVID-19 BY AVOIDING MEETINGS THAT BRING PEOPLE INTO A GROUP SETTING AND IN ACCORDANCE WITH SECTION 418.016 OF THE TEXAS GOVERNMENT CODE.

For further assistance, please contact Jessica Rodriguez at jrodriguez@cityofmanvel.com or 281-692-2703. The meeting agenda can be viewed on the City of Manvel website at www.cityofmanvel.com under “Boards Agendas & Minutes.”/s/ Tammy Bell, City Secretary.

RESOLUTION NO. 2021-R-10

A RESOLUTION OF THE CITY OF MANVEL, TEXAS ADOPTING A REVISED DESIGN CRITERIA MANUAL CONTAINING SUBDIVISION IMPROVEMENT STANDARDS FOR ALL DEVELOPMENT WITHIN THE CITY OR ITS EXTRATERRITORIAL JURISDICTION, PURSUANT TO AUTHORITY CONTAINED IN CHAPTER 62, SUBDIVISION ORDINANCE, OF THE CODE OF ORDINANCES OF THE CITY OF MANVEL, TEXAS, CHAPTER 212 OF THE TEXAS LOCAL GOVERNMENT CODE, AND OTHER PROVISIONS OF THE CODE OF ORDINANCES OF THE CITY OF MANVEL, AS AMENDED OR TO BE AMENDED; AND CONTAINING OTHER MATTERS ON THE SUBJECT.

* * * * *

WHEREAS, the city has determined that there is a need for comprehensive and concise guidelines covering improvements constructed during the subdividing and development of property within the City of Manvel and its extraterritorial jurisdiction, and such is authorized by provisions of the Code of Ordinances of the City of Manvel and Texas Local Government Code Chapter 212; and

WHEREAS, the City of Manvel has determined that all related improvement standards and requirements should be incorporated into one document, entitled Design Criteria Manual, that is separate from the Subdivision Ordinance itself, to allow for more timely modification if necessary; and

WHEREAS, attached hereto is a revised Design Criteria Manual containing the minimum subdivision improvement standards and minimum standards for development within the City of Manvel and its extraterritorial jurisdiction. These are only minimum requirements, and additional requirements may be imposed as determined by the city;

BE IT RESOLVED BY THE CITY OF COUNCIL OF THE CITY OF MANVEL, TEXAS:

Section 1. Pursuant to the City of Manvel Subdivision Ordinance, Chapter 62 of the City Code of Ordinances, Chapter 212 of the Texas Local Government Code, and other provisions of the Code of Ordinances of the City of Manvel, as amended or to be amended, the City Council hereby adopts the revised “Design Criteria Manual,” attached hereto as Exhibit “A” dated June 7, 2021 and incorporated herein by this reference, and directs that the standards and related documents contained and referred to therein shall control and determine the minimum standards for improvements constructed during the subdividing and development of property within the City of Manvel, Texas.

Section 2. The City Secretary or her designee is hereby directed to maintain copies of the Design Criteria Manual and related documents and make them available upon request, for a reasonable fee, to any individual who requests one.

PASSED, APPROVED, AND RESOLVED by the City Council of the City of Manvel, Texas this _____ day of June 2021.

Debra Davison, Mayor

ATTEST:

Tammy Bell, City Secretary

CITY OF MANVEL DESIGN CRITERIA MANUAL

June 7, 2021



Approved by:

**Manvel City Council
Subdivision Ordinance**

Originally adopted as
Resolution 2008-R-04 on April 28, 2008
and Revised:

1. December 15, 2008
2. August 23, 2010
3. September 26, 2011
4. December 10, 2012
5. December 9, 2013
6. January 12, 2015
7. January 25, 2016
8. April 11, 2016
9. April 24, 2017
10. January 29, 2018
11. April 2, 2018
12. August 5, 2019

CITY OF MANVEL DESIGN CRITERIA MANUAL

Table of Contents

Section	Title
1	Graphic Requirements
2	Wastewater
3	Water
4	Paving
5	Drainage
6	Site Development
7	Modifications

SECTION 1 GRAPHIC REQUIREMENTS

1.0 GENERAL

1.01 CHAPTER INCLUDES:

Graphic requirements for all construction drawings including City of Manvel (public) projects, non-City of Manvel (private) projects, and all utility projects without a current Franchise Agreement.

1.02 REFERENCES – Refer to the City of Manvel Website for additional information.

1.03 DEFINITIONS

CADD (Computer Aided Drafting Design) - the preparation of documents utilizing computer facilities for the production of drawings, plans, prints and other related documents.

1.04 DESIGN REQUIREMENTS

- A. Provide a cover sheet for all projects involving three or more design drawings (excluding standard detail sheets). Plan sheet numbers shall be shown on the cover sheet or area key map. Include a vicinity map to identify project locations. Also provide approval block for the City of Manvel with a note stating that approval is valid for 2 years from date of signatures.
- B. Drawings shall be prepared on nominal 24 inch x 36 inch overall drawings.
- C. Show service area on cover sheet or area map.
- D. The engineer shall also submit, at the time of plan approval, an electronic version (*in .pdf, and .dwg, and .mpl format*) of the CADD drawings on CD of the development showing all lot lines and associated lot information, rights-of-way, easements, contours, utilities, and all drainage and paving improvements.
- E. Details of special structures (not covered by approved standard drawings, such as stream or gully crossings, special manholes, or junction boxes, etc.) shall be drawn with vertical and horizontal scales equal to each other.
- F. Each set of construction drawings shall contain paving and utility key drawings indexing specific plan and profile sheets. Standard City drawings, where applicable, shall be included. All sheets shall have standard title blocks. Where applicable, show Brazoria County key drawings and numbers.
- G. Draw key overall layouts to a minimum scale of 1 inch = 100 feet.
- H. Plan stationing must run from left to right, except for short streets or lines originating from a major intersection, where the full length can be shown on one sheet.

- I. A north arrow is required on all sheets and should be oriented either toward the top or to the right. This requirement is waived under the following conditions:
 - 1. A storm or wastewater sewer whose flow is from west to east or from south to north.
 - 2. A primary outfall ditch drainage facility whose flow is from west to east or from south to north.
 - 3. Stationing is intended to start from the cardinal points of the compass and proceed in the direction of construction.
- J. Standard scales permitted for plans and profiles of paving and utility construction drawings are as follows:
 - 1. Major thoroughfares, streets with esplanades over 400 feet in length, or special intersections:
1 inch = 20 feet horizontal, 1 inch = 2 feet vertical
 - 2. Minor or residential single-family streets:
1 inch = 20 feet horizontal, 1 inch = 2 feet vertical
1 inch = 40 feet horizontal, 1 inch = 4 feet vertical
1 inch = 50 feet horizontal, 1 inch = 5 feet vertical
 - 3. Scales above are minimum; larger scales may be used to show details of construction.
- K. Each sheet shall have a benchmark elevation and description defined, and a current flood zone determination statement.
- L. The seal, date, and original signature of the Registered Professional Engineer responsible for the drawings shall be required on each sheet developed by the engineer. The engineer may use a stamped or embossed imprint for his/her seal; however, the embossed imprint must be shaded such that it will reproduce on prints.
- M. A copy of the final plat for new developments shall be included with the final drawings when submitted for final approval.
- N. If a roadway exists where drawings are being prepared to improve or construct new pavement or a utility, label the existing roadway width, surface type, and thickness, if available without destruction of pavement. Pavement thickness can be ascertained by coring with the core hole grout filled to protect pavement prior to construction.
- O. Show all streets and road alignment on drawings.
- P. Develop drawings to accurate scale showing proposed pavement, typical cross sections, details, lines and grade, and all existing topography within street right-of-way, and any easement contiguous with the right-of-way. At the intersection, the cross-street details shall be shown at sufficient distance (20-foot minimum distance outside the primary roadway right-of-way) in each direction along cross street for designing adequate street crossings.
- Q. Match lines between plan and profile sheets shall not be placed or shown within cross street intersections including cross street right-of-way.

- R. Natural ground profiles shall be shown as follows:
1. For non-City of Manvel (privately-funded) projects, center line profiles are satisfactory except where a difference of 0.50 feet or more exists from one right-of-way or easement line to the other, in which case, dual profiles are required.
 2. For City of Manvel (publicly funded) projects, provide natural ground profiles for each right-of-way line. Easement profiles shall conform to S below.
- S. Basic plan and profile sheets shall contain the following information:
1. Identify all lot lines, property lines, easements, right-of-way, and drainage outfalls.
 2. Label each plan sheet as to street/easement widths, pavement widths, pavement thickness where applicable, type of roadway materials, curbs, intersection radii, curve data, stationing, existing utilities (type and location), and any other pertinent feature affecting design.
 3. Show all utility lines 4 inches in diameter or larger within the right-of-way or construction easement in profile view. Show all utility lines, regardless of size, in the plan view including fiber optic cables.
 4. Graphically, show flow line elevations and direction of flow for all existing ditches.
 5. Label proposed top of curb grades except at railroad crossings. Center line grades are acceptable only for paving without curb and gutters.
 6. Curb return elevations for turnouts shall show in profiles.
 7. The center line elevation at the property line of all existing driveways shall be shown in profile.
 8. Station all esplanade noses or the center line of all esplanade openings with esplanade width shown - both existing and proposed.
 9. The design of both roadways is required on all paving sections with an esplanade.
 10. Station all PCs, PTs, radius returns, and grade change PIs in plan view. Station all radius returns and grade change PIs in profile with their respective elevations.
 11. Show Hydraulic Grade Line (HGL) and identify Ponding Depth on profile drawings.
- T. Provide a pollution prevention plan with legend. See Site Development (Section 6) under Design Requirements.
- U. Submit 3 printed sets of construction plans on 24" x 36" paper for review: (1) Engineering, (2) Public Works, and (3) Fire Marshal.

- V. Approved plans will be valid for a period of 2 years and a note shall be included on the cover sheet indicating same. No extension will be granted. If work has not commenced by the 2-year expiration date, the plans will need to be resubmitted and reviewed and new plan review fees paid. The “commencement of work” shall be defined by the following milestones:
1. Preconstruction Meeting has occurred with the selected contractor
 2. Civil Site Improvement Permits have been acquired by the selected contractor
 3. Construction Equipment has been mobilized to the Site.
- W. Identify sidewalks, water meters, sewer taps, manholes, fire hydrants, and water valves on Site Plans for residential and commercial projects.

SECTION 2 WASTEWATER

1.0 GENERAL

1.01 CHAPTER INCLUDES:

Criteria for the design of wastewater collection systems.

1.02 REFERENCES

Texas Commission on Environmental Quality (TCEQ) - "Design Criteria for Domestic Wastewater Systems" - Texas Administration Code - Chapter 217 and "Design Criteria for Sewerage Systems" Chapter 317 (current revision).

1.03 DEFINITIONS

This Chapter addresses the design of the wastewater collection systems within the public right-of-way or a dedicated public easement. Sanitary sewers located on private property that are not in a dedicated easement, are under the jurisdiction of the Plumbing Code, and will be addressed/reviewed by the Building Official. Where used in these regulations, the following terms shall be construed to carry the meanings given below:

- A. Public Sewer - A closed conduit that conveys wastewater flow and which is located within the public right-of-way or dedicated public easement. A public sewer (or public sewer system) is intended to serve more than one (1) "owner" or occupant.
- B. Private Sewer - A closed conduit that conveys wastewater flow and is constructed and maintained by a private entity (ies) (i.e., homeowner's association). Private sewers may be located in areas such as a private street or common area. Private sewers are subject to the design and construction requirements of the Plumbing Code and must discharge to a public sewer.
- C. Sewer Main - A sewer that receives the flow from one or more lateral sewers.
- D. Lateral Sewer - A sewer running laterally down a street, alley, or easement, which receives only the flow from the abutting property.
- E. Service Lead - A sewer that branches off a public sewer and extends to the limits of the public right-of-way. It shall be construed as having reference to a public sewer branching off from a main or lateral sewer to serve one or more houses, single-family lots, or other types of small land tracts situated in the same block with the said main or lateral sewer, but not directly adjacent thereto. Such a line shall never exceed 150 feet in length. If the sewer is designed to serve more than two houses, or the equivalent of two single-family residences along a street, a lateral sewer as defined above shall be constructed.
- F. Service Connection - A private sewer from a single source to the main or lateral sewer in the street, alley, or easement adjacent thereto. Service connections are covered by the Building code. It will be owned and maintained by the owner of the property being served by said sewer.
- G. Project Area - The area within the immediate vicinity of the public sewer to be constructed.

- H. Stack - A riser pipe constructed on main or lateral sewers which are deeper than 8 feet to facilitate construction of service leads or service connections.
- I. Force Main - A pressure-rated conduit (~~i-e-i.e.~~ ductile iron pipe, pressure-rated PVC, etc.) that conveys wastewater from a pump station to a discharge point.

1.04 DESIGN REQUIREMENTS

A. Easements for wastewater lines.

1. Wastewater lines shall be located within street right-of-way, permanent access easements with overlapping public utility easements, easements adjacent to street rights-of way or recorded wastewater easements.
2. When outside of a public street right-of-way or permanent access easement with an overlapping public utility easement, easements must be dedicated and restricted for wastewater lines only.
3. When possible, easements should be adjacent to public rights-of-way.
4. Easements containing wastewater lines must be at least 20-feet wide and the wastewater line must be centered in the easement.
5. Wastewater lines along State rights-of-way shall be installed outside of the right-of-way in a separate 20-foot minimum adjacent easement.
6. No back-lot easements will be allowed for the installation of wastewater lines.

B. Drawings

1. Before any main or lateral sewer is constructed and before a permit will be issued for the construction of same, plans and profiles of the proposed sewer shall be prepared and submitted to the City for approval.
2. The plan view will show the exact location of the proposed line in the street, alley or easement with respect to the edge of the particular right-of-way, the transit base line, and any nearby utilities, major landscaping, and other structures affecting construction.

C. Main and Lateral Sewers

1. Sewers in curved easements, easements defined by property lines and combined easements containing other public utilities must be shown both in detailed plan and profile views.
2. The profile should show other underground and surface utilities and facilities, both in parallel and at crossings; the size, grade of the proposed line, the elevation of same to hundreds of a foot at all manholes, changes of grade and dead-ends; and the proposed finished grade over the sewer. It should show the actual ground line as it exists prior to construction of the sewer. Where proposed fill or cut is contemplated, the proposed new ground line should be shown as a separate line from the actual ground line. Type of pipe and bedding shall comply with City of Manvel Standard Specifications and Standard Details.

3. Where sewers are to be placed between existing pavement and the street right-of-way (or interior easement line) or under existing pavement or topping, show the existing ground line at both sides (or the closest side or sewers near the edge) of the right-of-way or adjacent sewer easement.

D. Sewer mains - plan and profile required

1. Sanitary sewer layouts for residential subdivisions should use a minimum horizontal scale of 1 inch = 40 feet with a vertical scale of 1 inch = 4 feet, or as allowed per Section 1, 1.04, J. A scale of 200 feet per inch may be used provided the following information is shown on the layout:
 - a. All easements containing or buffering sanitary sewers are shown at points of size change; all manhole locations are shown.
 - b. The sewer alignment shall accurately reflect the relative location of the sewer as shown on the detailed plan view.
 - c. All service leads that cross-street pavement or serve adjacent property are to be shown on the layout. The detail plans and profiles shall show the flow lines of all service leads at the street or easement right-of-way.
 - d. The number and size of the lots depicted on both the overall sewer layout sheet and the individual plan and profile sheets shall match the number and size of the lots depicted on the final plat after recordation.
 - e. On the overall sanitary sewer layout ~~sheet~~sheet, the size and direction of flow for all existing and proposed sewers shall be shown.
 - f. The location of the proposed sewer within the public right-of-way, a dedicated easement adjacent to the public right-of-way, or side lot easement (if allowed by the City).
 - g. The overall sanitary sewer layout sheet shall show the area, in acres, which the proposed sewer(s) is (are) designed to serve. Include a location map that references the average to nearby major thoroughfare and boulevard streets. The scale of the location map shall be 1 inch = 2,000 feet or less.
2. Commercial subdivision sanitary sewer layouts for large areas and with a scale of 400 feet or more per inch must have an additional set of layouts at not more than 200 feet per inch, with match lines and a small index map showing which portion of the overall layout that each sheet's layout represents.
3. Acceptable horizontal scales for the detailed plan and profile views are 10 feet, 20 feet, 40 feet and not more than 50 feet maximum per inch. Horizontal scale for major thoroughfares and boulevards shall be 1 inch = 20 feet or less.
4. Acceptable vertical scales for detailed profile views are 2 feet, 4 feet, and not more than 5 feet maximum per inch unless otherwise approved. Vertical scale for major thoroughfares and boulevards shall be 1 inch = 2 feet or less.

5. The plan view shall show, at a minimum, the following information for the project area:
 - a. All topographical features;
 - b. Stationing for the proposed sewers;
 - c. All existing utilities (~~t-e-i-e~~, telephone, gas, power, etc.);
 - d. Any significant landscaping and/or other structures which might impact construction and/or construction related activities;
 - e. The width and type of all existing and proposed easements;
 - f. All proposed service leads;
 - g. The limits of bore and/or tunnel;
 - h. Locations where pressure pipe is to be installed for water line crossings;
 - i. Drawings for residential subdivisions shall show the proposed location, by stations, of all service leads, service connections, and stacks. The distance from the sewer or transit base line station to the nearest existing manhole shall be shown in the plan view or on an additional sewer layout sheet with a scale no more than 1 inch = 100 feet.

6. The profile view shall show, at a minimum, the following information for the project area:
 - a. Underground and/or surface utilities/facilities which are either parallel to the proposed sewer or cross the proposed sewers;
 - b. The proposed sewer's diameter and grade for each manhole section;
 - c. The flow line elevation for all sanitary sewers at each manhole;
 - d. The rim elevation of all existing and proposed manholes;
 - e. The flow line elevation at each sheet "break" (i.e., from one sheet to another);
 - f. Type of pipe bedding/backfill shall be noted on each plan/profile sheet;
 - g. The finished grade for proposed and existing pavement where "fill" and/or "cut" is proposed, the proposed new ground line should be shown as a separate line from the existing ground line;
 - h. The existing ground line for the "near side" of the public right-of-way where a sewer is to be placed between the edge of existing pavement and the edge of the public right-of-way;
 - i. The existing ground line at the centerline of the proposed sanitary sewer where a sanitary sewer is to be placed within an existing easement. Show any proposed and/or existing pavement.
 - j. The flow line elevation of all service leads where it crosses the edge of the public right-of-way or the dedicated easement adjacent to the public right-of-way;
 - k. The limits of bore and/or tunnel;
 - l. Locations where pressure pipe is to be installed for water line crossings;
 - m. The location of special backfill and/or proposed stacks shall be identified by "stations" indicated on the design plans.
 - n. The location of stacks shall be labeled with stations.

E. Service leads

1. Service leads shall be at the property line between two (2) adjoining lots, or as directed by the City. A single 6-inch service lead located at the property line between two (2) adjoining lots would serve two (2) single-family residences with a wye placed at the end of the service lead. Do not extend the wye clean-outs beyond the edge of either the public right-of-way or dedicated easement.
2. Any service lead extension of more than 50 feet parallel to the street right-of-way shall be treated as a lateral sewer.
3. Service leads from developments with more than 17,500 gallons-per-day flows shall discharge into a proposed or existing manhole. Where the flow line of the service is 24 inches or greater above the flow line of the manhole, provide a standard external drop to manhole.
 - a. Service leads shall be provided to serve each lot within proposed development inside the City limits.
 - b. Service leads shall be 6 inches in diameter (minimum). If the length of a service lead exceeds 100 feet or the width of the public right-of-way by more than 20 feet, the minimum diameter shall be 8 inches and a manhole shall be utilized for connection to the public sewer.
 - c. Service leads with a diameter of 6 inches shall utilize "full body" fitting (extruded or factory-fabricated) for connection to the proposed public sewer or an approved saddle-type connector for connection to an existing public sewer.
 - d. Saddle-type connectors shall be installed with the "stub" oriented between the "spring line" (3 o'clock and 9 o'clock positions) and 45 degrees from the "spring line" ("1:30" and "10:30" positions). Tees (aka, "full body fittings") shall be oriented in the same manner.
 - e. The service lead shall be designated to minimize the use of bends, as site conditions will permit.
 - f. Service leads exceeding the limits defined in 1.04.E.2. shall have a manhole at each end; as well as, a plan/profile drawing for each right-of-way crossing. All, or part, of these service leads which are located in a public right-of-way, alley or dedicated sanitary sewer or public utility easement may be treated as a public sewer; depending upon the location of the terminal manhole and any intermediate manholes.
 - g. For all existing lots (which are not served in accordance with these guidelines) that need a service lead, if the distance to the nearest existing sewer is less than 50 feet, the service lead is under the jurisdiction of the Plumbing Code.
4. Service leads shall not be connected to a force main. (Grinder pumps are not allowed.)

F. General Requirements

1. Sanitary sewers within the City of Manvel's jurisdiction shall allow for orderly expansion of the system and shall conform to the Master Wastewater Plan for the City of Manvel.
2. Sewers shall be sized based on the minimum requirements set out in this standard and the standard wastewater flow rates as established by the City of Manvel and shall be no less than 315 gallons per connection per day.

3. All sewers shall conform to the minimum requirements of the Texas Department of Health, "Design Criteria for Sewerage Systems".
4. Sewers shall be separated from water lines by a minimum of nine (9) feet. Sewers crossing utilities other than water, a minimum of six (6) inches of clearance must be maintained.
5. The public sanitary sewer, as maintained by the City of Manvel, shall be defined as all sewers, including stacks and service leads, that serve more than one sewer connection, that are located in public easements or street right-of-ways, and that are installed in accordance with these Standards.
6. Sanitary lines greater than 6 inches require stacks with 5 feet minimum cover. (Stacks are to be shown on plans with stations). Place stacks and wyes or tees as shown. Where no stacks are shown, it is the responsibility of the licensed plumber to place a City approved saddle for connection to the line and the responsibility of the City Inspector to determine that such saddle is water tight and properly installed.
7. Materials and construction to conform to latest City of Manvel specifications with all amendments thereto, including standard leak test.
8. Unless noted otherwise, all public sewers and service leads shall be embedded in cement stabilized sand; to 6 inches below the pipe, 12 inches above the pipe and to 6 inches on each side. All such bedding shall be compacted to 95% standard proctor density. The cross-section so described herein shall be termed the "embedment zone."
9. Backfill all excavation areas/trenches under or within 1-foot of existing or proposed pavement with cement-stabilized sand from the top of the pipe "embedment zone" to the bottom of the subgrade. Cement-stabilized sand must develop 100-psi compression at 48 hours. Backfill shall be compacted to 95% standard proctor density.
10. The location of all proposed stacks shall be shown by stations in the drawings.
11. Construction notes shall designate the kind and class of pipe with exceptions to the construction notes to be shown on the plan and profile sheets.
12. Non-sanitary sewer easements or fee strips such as pipeline, power company, drainage district, railroad, etc., are in and of themselves insufficient and unacceptable to permit laying to sanitary sewers and/or force mains across or along the underlying private property or restricted non-sanitary use type of public property.
13. All public sanitary sewers shall be located within a public right-of-way (ROW) or easement.
14. Where an easement for a public sewer ends at a public right-of-way, the last manhole shall be extended into the public right-of-way at a minimum of 2 feet beyond the property line; or as close to the public right-of-way as possible due to acceptable clearances required for other utilities (i.e., water line and storm sewers).

15. The drawings for the sewer shall show the location of any existing known pipe or duct that might interfere with the construction of the sewer and call to the attention of the City any known obstacles that might be encountered in constructing the sewer in any location under consideration. The Professional Engineer shall determine the existence of pipes, ducts and/or obstacles from a visual survey on the ground plus research of all public records and private records when available.
16. All sanitary sewer mains shall be constructed utilizing pressure rate pipe SDR 26.
17. Sanitary sewer lines shall be centered in sanitary sewer line easements.
18. In subdivisions platted or created after January 1, 1988, for single-family dwellings where each lot maintains an individual water well supply and an on-site sewage facility (OSSF) the sewage disposal plan shall show the approved water well location and sanitary control easement around the well within a 100 feet radius in which no subsurface sewage system may be constructed.
19. No back-lot easements will be allowed for the installation of sanitary sewer lines.
20. All new wastewater lines to be installed with tracer wire for future line locates, unless lines are deeper than 10 feet.

G. Line Size

1. The minimum pipe diameter for a public sanitary sewer shall be 8 inches.
2. Four-inch service leads shall be confined to the limits of the lot, which they serve and shall serve only the equivalent of one single-family lot. No 4- inch sewer shall be laid in any street, alley, or right-of-way.
3. Six-inch service leads shall not serve more than the equivalent of two single-family lots or other types of small land tracts.
4. Four-inch and six-inch service leads for single-family residential lots shall have a minimum grade of 0.70 percent.
5. For commercial service leads such as street bores, submit a copy of the approved plumbing drawings to establish the required size of the line. The minimum size lead shall be 6 inches.
6. All main and lateral sewers will end in manholes, except for special and/or unusual situations and subject to specific approval by the City.
7. All sewer lines shall be laid at a size and depth to conform to designs permitting an orderly expansion of the sewer system of the City and so as to avoid a duplication of lines in the future.
8. The City shall be the final judge as to sizes and depths required and exceptions to "lateral service leads" as previously defined.

H. Line Depth

1. The sewer should be laid with the top of the pipe a minimum of 3 feet below finished grade or top of curb, whichever is lower.
2. Sewer laid in street rights-of-way with curb and gutter paved streets shall have a minimum cover of 4 feet from the top of the pipe to the top of the curb to anticipate future sewer extension.
3. Sewers laid in street right-of-way with crowned roads and side ditches shall have a minimum cover of 5 feet from the average ground line at the adjacent street right-of-way to the top of pipe.
4. Where the minimum cover as specified in paragraphs H, 1, 2, and 3 above is not possible, the sewer shall be laid in Class 150 (150 psi) pressure pipe or rigid ~~factory-made~~factory-made pipe with cement stabilized sand as shown in standard detail. Ductile iron pipe shall be lined with either a polyethylene or polyurethane coating as approved by the pipe manufacturer and applied by either the pipe manufacturer or an approved application. The minimum liner thickness shall be 40 mil.
5. Maximum depth for sanitary sewer lines shall be 20 feet from average ground surface to pipe invert.

I. Line Grades

The following table lists the minimum grades for 6-27 inch public sewers. The minimum grade is based on a minimum full pipe velocity of 2.0 feet per second (fps). The maximum grade is based on a maximum full pipe velocity of 10.0 feet per second (fps). In both cases, the Manning Formula has been used with an "n" of 0.013. The use of different pipe materials will not alter the use of 0.013 for the purpose of the Design Manual.

<u>Inside Dimension (I.D.) of Pipe in Inches</u>	<u>Minimum Slope (in Percent) to Develop V=2.3 ft./sec.</u>
6	0.70
8	0.33
10	0.25
12	0.20
15	0.15
18	0.11
21	0.09
24	0.08
27	0.06

For sewers larger than 27 inches in diameter, the Professional Engineer of record shall determine the appropriate grade utilizing the Manning Formula, $n = 0.013$ and a full pipe velocity of 3.0 fps.

J. Manholes

1. All manholes shall be precast concrete, unless the Professional Engineer submits a "cast in place" manhole design for review and approval by the City Engineer. All precast manholes to incorporate a "boot" type connector for sewer diameters up to 24". For sewer diameters greater than 24 inches, utilize either the "boot" type connector (if available) or an integral gasket. All precast manholes shall conform to the latest ASTM requirements.
2. For all public sewers, manholes shall be placed at all changes in alignment, changes in grade, junction points, and either at street, alley, or easement intersections as designs may require.
 - a. Sewers laid in easements shall have a manhole in each street crossed by the sewer.
 - b. The maximum distance between manholes shall be 350 feet.
 - c. Sewers with the same, or approximate flow line elevation shall intersect each other at a 90-degree angle. However, where a true perpendicular intersection cannot be obtained, and where the "entering" sewer intersects the receiving sewer at, or about, the same flow line, one or more manholes shall be utilized to maintain a minimum angle of 80 degrees at the point of intersection. When the "entering" sewer is on the upstream side of the manhole, the minimum angle between the sewers may be reduced to a 45-degree angle; provided:
 - (1) A distinct flow channel can be maintained within the manhole when the flowline elevations of the sewers are at, or within, one (1) pipe diameter of the smaller pipe; or
 - (2) When the flow line elevation of the "entering" pipe is above the crown of the "primary" sewer and clearance can be provided between the sewers.
 - d. Manholes shall be placed at all dead-end mains and laterals.
 - e. Criteria for connections to, and utilization of, manholes.
 - (1) Where manholes are utilized to facilitate connections between public sewers, when possible the sewers shall match the manhole's flow line, match the elevation of each other's crown or utilize an "outside" manhole drop.
 - (2) Connections between public sewers at the manhole shall adhere to the following criteria when possible:
 - (a) The elevation of the crown of the discharging sewer shall either match the elevation of the crown of the receiving sewer or be approved as special cases by the City.
 - (b) A standard drop connection is required when the difference in elevation between discharging sewer flowline and receiving flowline is greater than 24 inches.
 - (3) The routing of service connection directly to manholes will be allowed only where the flowline elevation of the existing sanitary sewer is more than 10 feet below grade and there is no available stack and either
 - (a) The lot to be so connected is a single-family, owner-occupied, single lot residence connection to an existing manhole; or
 - (b) The lot to be so connected is a single-family, owner-occupied, single lot residence connecting to a proposed manhole at the end of a cul-de-sac.
 - (4) When routing an approved service connection to a manhole (see Item "3"), the wall penetration shall not be greater than 10 inches in diameter and shall be cored and sealed using grout as approved by the Standard Wastewater Products Committee.

- (5) When routing an approved service connection to a manhole (see Item "3"), the connections shall utilize an external drop and shall adhere to the following criteria:
 - (a) The manhole wall penetration shall be a minimum of 10 feet below the manhole rim elevation and shall not be greater than 10 inches in diameter;
 - (b) The drop shall be 6 inches in diameter and shall be constructed of SDR 26 PVC pipe (ATSM D 3034-94);
 - (c) The drop shall be located 45 degrees from the upstream side of the main sewer;
 - (d) The wall penetration (core) shall be sealed using a "grout" as approved by the City Engineer.
- (6) All public sewers shall terminate in a manhole. Clean-outs will not be utilized except at the end of each service lead.
 - (a) The manhole cover shall have a minimum diameter of 32 inches.
 - (b) All sanitary sewer manholes shall have stainless steel inflow protectors.
- f. Manholes to be coated with Raven 405.
- g. Manholes shall not be located within a driveway, street, or sidewalk.

K. Lift Stations and Wastewater Treatment Plants

1. Lift station design shall comply with the City of Manvel specifications, with a storage volume in the wet well equal to 1.5 times the peak design flow to the lift station. Add 10% to account for volume displaced by pumps.
2. Minimum site size shall be 40 feet by 40 feet. Smaller sites that are adjacent to public rights-of-way are contiguous to green space or similar land use areas, may be approved when adequate odor control provisions are provided.
3. Pumps shall be sized to operate at optimum efficiency. Minimum acceptable efficiency at the operating point will be sixty percent (60%).
4. Operation and maintenance should be considered in the design of the station and the location of the station.
5. Wet well working volume should be sized to allow for the recommended pump cycle of six (6) minutes for each pump.
6. Prior to installation controls and equipment shall be approved by Public Works.
7. Emergency operations shall be considered. Provide fittings and a blind flange that will be readily accessible for emergency bypass pumping.
8. The inlet structure shall be designed to minimize turbulence.
9. The velocity in the Force Main and riser pipes shall be between 3 and 8 fps.
10. The wet well shall be sized to provide adequate clearance between the pumps (refer to manufacturers recommended clearances).

11. A peak factor of four (4) shall be used for Lift Station design.
12. A minimum of two (2) feet of clearance shall be provided between pumps and between pump and wall.
13. Low water levels shall be at least six (6) inches above impeller.
14. Complete immersion of submersible pump motor at low water level is preferred.
15. Tie steel in Lift Station bottom to wall (includes caisson construction situation) to provide watertight wet well.
16. Nuts, bolts, chains and all other metal components within wet well shall be stainless steel.
17. Vent pipe shall be six (6) inches minimum diameter equipped with odor control system.
18. The following Hazen-Williams Coefficient shall be used for various pipe types:

PVC	New	C = 160
	10-year	C = 140
DIP	New	C = 140
	10-year	C = 100
19. Provide minimum 8' board fence (either masonry, cedar or heart redwood) with steel posts in concrete, and a treated 2"x6" (or wider) rot board along the bottom.
20. Entrance drive to be at least fourteen (14) feet wide concrete pavement. Provide enough room to park inside lift station site. Provide rolling gate with minimum 10' wide gate.
21. Indicate method of drainage ~~of site~~ on site plan. Internal drainage, sheet flow and valley gutter driveways are acceptable. Drain to street or storm sewer, never onto adjacent private property.
22. Locate control panel and wet well hatch above 100-year flood plain. Call out the 100-year flood plain elevation on the plans.
23. Dual stainless steel guide rails (or other pump removal method that avoids entering wet well) are required for submersible pumps.
24. A tee, plug valve (or gate valve), and blind flange assembly is required on the force main on the downstream side of the discharge valves and header. This is required so truck-mounted pumps can bypass the lift station pumps and piping while work is being done.
25. Bedding for PVC force main is bank sand a minimum of 6 inches from all sides of pipe.
26. PVC force mains must be ~~SDR 26C-900~~.
27. DIP force mains are to be bedded in bank sand and polyethylene wrapped.
28. When calculating headloss in force main and piping, use of K factors on fittings, with the Hazen-Williams formula, is preferred.
29. Backfill structural excavations (wet well, etc.) with cement stabilized sand.

30. Lift station site plans shall be submitted in scales of 1-inch = 5-feet or 1-inch = 10-feet.
31. Provide a protective coating or concrete additive to interior walls of wet well. The Public Works Department shall approve coating or additive used.
32. Lift station shall be equipped with a telemetry system, approved by City and compatible with existing system. A bubbler system shall be installed and connected to telemetry system to monitor status of lift station.
33. Permanent power supply to lift stations and wastewater treatment plants shall be 3-phase (and 480 volts where possible) and installed prior to City Council acceptance.
34. A system of floats shall be provided to control pumps.
35. A pressure gauge suitable for application shall be installed on each discharge pipe.
36. Emergency backup generator (natural gas or diesel) to be installed on site and hard-wired to the electrical panel, with an automatic transfer switch (permanent installation; not a portable or trailer-mount style). Additionally, a quick-connect style plug to be installed on the panel, as a backup precaution, upon preapproval from Public Works. Generators must be new when installed (not refurbished or previously used).

1.05 APPURTENANCES - Reserved

1.06 SUBMITTALS

- A. Preliminary design - submit the following for review and comment:
 1. Copies of any documents which grant approval of exceptions to the City design criteria.
 2. Design calculations for line sizes and grades
 3. Contour map for overall area.
 4. Plan and profile sheets showing proposed improvements (City projects only).
 5. Geotechnical soils report for the project (City projects only).
- B. Final design - submit the following for approval:
 1. Final documents of the above plus plan and profile sheets and Geotechnical soils reports.
 2. Review prints.
 3. Original drawings.

1.07 QUALITY ASSURANCE

- A. Prepare calculations and construction drawings under the supervision of a Professional Engineer trained and Licensed under the disciplines required by the drawings. The final construction drawings must be sealed, signed, and dated by the Professional Engineer responsible for the development of the drawings.
- B. Prior to release of the maintenance bond (and in conjunction with the final walk-thru), the developer shall have all sanitary sewer lines (within the project boundary) inspected with television equipment. Any pipe settlement which causes excess ponding of water in pipeline, any misaligned joints, or other defects shall be cause for rejection. The developer shall provide the City with one copy of the TV videotape and one copy of the TV inspection report. For each segment, the video tape and corresponding written report shall clearly identify:
 - 1. Each line segment being inspected.
 - 2. The size and type of pipe being inspected.
 - 3. Accurate footage of the line segment inspected.
 - 4. Deficiencies in materials, alignment, pipe grade, or any other apparent deficiencies; and
 - 5. Locations of all service connections.

2.0 EXECUTION

2.01 RESEARCH REQUIREMENTS

- A. Research existing utility and right-of-way information.
- B. Verify that no restrictions exist that will deny approval of the project concept.

2.02 DESIGN ANALYSIS

Calculations of design flow for overall development project. All wastewater components in the City of Manvel and its ETJ shall be designed for a minimum of 315 gallons per equivalent ~~single-family~~single-family connection.

2.03 DRAWINGS

Drawings shall include layout sheets with contours, plan and profile sheets, and detail sheets for special items and treatment plants.

SECTION 3 WATER

1.0 GENERAL

1.01 CHAPTER INCLUDES:

Criteria for the design of water distribution systems.

1.02 REFERENCES

- A. Texas Commission on Environmental Quality (TCEQ), Water Utilities Division "Rules and Regulations for Public Water Systems," latest revision.
- B. American Water Works Association (AWWA).
- C. National Sanitation Foundation (NSF).
- D. Texas Department of Health.
- E. Texas State Board of Insurance.

1.03 DEFINITIONS

Water Line - Closed conduits designed to distribute potable water for human consumption to various areas and provide fire protection. Line size and fire protection accessory locations are dependent on distance from primary source and quantity of demand.

1.04 DESIGN REQUIREMENTS

- A. Easements for water lines
 - 1. Lines shall be located within street right-of-way, permanent access easements with overlapping public utility easements, easements adjacent to street rights-of way or recorded water line easements.
 - 2. When outside of a public street right-of-way or permanent access easement with an overlapping public utility easement, easements must be dedicated and restricted for water lines only.
 - 3. When possible, easements should be adjacent to public rights-of-way.
 - 4. When possible, water line easements shall be contiguous to a paved access.
 - 5. For water lines 12 inches or smaller located outside of street rights-of-way, the minimum width of easement shall be 10 feet.
 - 6. For water lines larger than 12 inches located outside of street rights-of-way, the minimum width of easement shall be 20 feet.

7. For water mains located within 5 feet from the right-of-way line, the outside edge of a water line easement shall be located 10 feet from the right-of-way line.
8. Water lines along State rights-of-way shall be installed outside of the right-of-way in a separate 20-foot minimum contiguous easement.
9. No back-lot easements will be allowed for the installation of water lines.
10. Commercial Developments inside the City requiring on-site fire hydrants must provide a minimum 20-foot water line easement for the water line and fire hydrant.
11. Water lines shall be centered in water line easements.
12. When using side lot easements, such easements shall be a minimum of 20 feet in width, located on one lot or centered between lots. If centered between lots, the water line maybe centered within the five feet of one lot, or centered in the easement.
13. Location of a water main in an easement not adjoining a public right-of-way shall be prohibited. When approved, these water mains will be centered in a 20-foot wide exclusive easement restricted to water only.

B. Location of water lines

1. Locate water lines within a street right-of-way whenever possible.
2. In the event that a proposed water line cannot be located within the street right-of-way, locate water lines in the center of a dedicated water line easement.
3. When a water line is placed parallel to another utility line, other than a sanitary sewer, the water line shall have a minimum of 4 feet horizontal clearance from outside wall of the water line to the outside wall of the existing utility.
4. All new water lines to be installed with tracer wire for future line locates.

C. Water line size

1. ~~6-inch~~6-inch lines may be used within cul-de-sacs or if the line is less than 1,000 feet in length and interconnected between two lines which are 8 inches in size or larger. The maximum number of fire hydrants or flushing valves on any length of 6-inch line is one.
2. ~~8-inch~~8-inch lines may be used for lines over 1,000 feet long or when 2 or more fire hydrants or flushing valves are required.
3. 12 inch and larger lines - lines to be determined by the Professional Engineer (P.E.) and City of Manvel.

D. Dead-end lines shall be avoided.

E. Depth of cover

1. 14 inch and smaller mains and fire lines shall have a minimum cover of 4 feet from top of curb. For open ditch roadway sections, 12 inch and smaller shall be installed at least 3 feet below the ultimate flowline of the ditch or 6 feet below natural ground at the right-of-way line, whichever is deeper.
2. 16 inch and larger mains shall have minimum cover of 5 feet from top of curb. For open ditch roadway sections, 16 inch and larger mains shall be installed at least 3 feet below the flow line of the ditch or 7 feet below natural ground at the right-of-way line, whichever is deeper.
3. Changes in grade to clear other utilities or underground features may be made by deflecting pipe joints. The maximum designed deflection shall be one-half ($\frac{1}{2}$) of the ~~manufactures~~manufacturer's allowable deflection. If a depth greater than 8 feet to the top of the pipes is required, a welded steel section will be used. The standard depth of cover maintained on the water main and the grade change shall be made using the welded steel section. The installation of fittings for vertical deflections or changes in grade shall not be allowed except with specific approval of the City of Manvel.

F. Water line crossings

1. Where a water line crosses another utility (public or private) other than a sanitary sewer, a minimum of 6 inches of clearance must be maintained between the outside wall of the water line and the outside wall of the utility.
2. Elevated Stream and Ditch Crossings Crossings
 - a. All water lines shall be steel or restrained joint metallic pipe and shall extend a minimum of 15 feet beyond the last bend or to the right-of-way line, whichever is greater.
 - b. Elevated crossings are preferred to underground crossings.
 - c. Support water lines on existing or proposed bridges. The following criteria may be used when approved in advance by the City Engineer:
 - (1) Have adequate structural capacity.
 - (2) Have sufficient clearance above the bent cap elevation for installation under the bridge.
 - (3) Design elevated crossings with the elevation of the bottom of the water line above the low chord of the nearest adjacent bridge or a minimum of 1 $\frac{1}{2}$ feet above the 100-year flood plain elevation, whichever is higher.
 - (4) Extend pipe from right-of-way to right-of-way for crossings.
 - (5) Provide sufficient span length to accommodate the cross section of future widening of the stream or ditch, if available.
 - (6) Support the line on columns spaced to accommodate the structural capacity of the pipe considering deflection and loading.
 - (7) Base column support design on soil capacity, spacing, loading, and structural requirements.

G. Underground crossings

1. Provide a minimum 3-foot clearance above the top of the pipe to the ultimate flow line of the ditch.
2. Provide sufficient length to exceed the ultimate development of the stream or ditch.
3. All water lines shall be steel or restrained joint pipe and shall extend a minimum of 15 feet beyond the last bend or to the right-of-way, whichever is greater and have valves located on both sides of the crossing.

H. State highway and County Road crossings

1. Extend carrier pipe from right-of-way to right-of-way.
2. Use welded steel pipe or restrained joint pipe in steel casing under existing and future roadways from a point 15 feet outside of the service road or outside of pavement toward the right-of-way, to a similar point on the other side of the highway across the right-of-way. For highway or roadway crossings with open ditch sections, extend the casing from right-of-way to right-of-way.
3. State highway crossings shall be constructed in conformance with the requirements of the Texas Department of Transportation.
4. When additional right-of-way has been acquired or will be required for future widening, the casing, should be carried to within 10 feet of each future right-of-way line.

I. Street crossings

1. All street crossings shall be perpendicular to the right-of-way.
2. All water mains, services and sprinkler line crossings under major thoroughfare boulevards shall be encased using a minimum of PVC pipe, SDR, as shown on the construction detail for "Water Main Encasement." Welded steel pipe may be substituted on street crossings, when specifically approved by the City Engineer.
3. Crossings under existing concrete streets, other than major thoroughfares, shall be constructed by boring and jacking. PVC pipe shall be jacked into place with equipment designed for that purpose. Water may be used to facilitate boring and jacking operations. Jetting the pipe main into place will not be permitted. When conditions exist that warrant an open cut across an existing street, the City may specifically approve the crossing.
4. All open cut installations under existing or proposed streets shall be backfilled as shown in the construction details.
5. All street crossings shall be constructed in accordance with construction plans approved by the City. The City shall inspect all street crossings. All street crossings shall meet the requirements of these standards.
6. All street, road, and creek crossings shall be cased with a larger diameter pipe.

J. Oil and gas pipeline crossings

Do not use metallic pipe when crossing oil or gas transmission lines unless a cathodic system is implemented with City approval. Other pipe may be used, regardless of depth, subject to approval by the City. Maintain minimum 2-foot separation between pipeline and water line.

K. On-site fire loops within commercial and multi-family developments

For developments requiring on-site fire hydrants, comply with the following requirements to allow maintenance and future repair operations:

1. Do not allow placement of structures or equipment pads over easement.
2. Provide 10-foot wide longitudinal pavement joint along easement lines where the water line is located under driveway, parking or street pavement.
3. Locate public fire line within 20' easement, or provide fire line meter at the property line.

L. Additional requirements

1. The carrier pipeline shall extend a minimum of 1 foot beyond the end of the casing to allow flanged joints to be constructed.
2. For welded steel bends, extend steel pipe a minimum of 5 feet beyond the bend.
3. PVC sleeves to be installed under all concrete driveways and streets for future expansion.
4. PVC sleeves to be installed in medians for irrigation lines.
5. Coordinate sleeve size with Public Works and Engineering Departments.

M. Auger (bore) construction

Use the following general criteria for establishing auger or bore sections:

1. Auger or bore sections shall be clearly shown on drawings.
2. Improved streets - use auger construction to cross the street regardless of surface. Auger length shall be computed as roadway width at proposed bore location plus 5 feet to either side of the roadway, where applicable.
3. Sidewalks - when the water line crosses under a sidewalk ~~4 feet or more in width and~~ in good condition, the sidewalk shall either be bored and jacked or the sidewalk shall be removed and replaced to the City of Manvel criteria, whichever is cost effective. Bore and jack length shall be at least the width of the sidewalk. The proposed type of construction shall be noted on the plans.
4. Bore Pits - Bore pits shall be at least 3 feet from back of curb and 5 feet from the back of curb on a major thoroughfare. All bore pits shall be shored in accordance with OSHA requirements. Bore pits and/or receiving pits to be located in street or driveway paving, shall be shown on plans.

N. Water quality

The layout of the overall water distribution system shall provide maximum circulation of water to prevent future problems of odor, taste, or color due to stagnant water.

1. Provide a source of fresh water at each end or at multiple points of a subdivision. Provide ways to create circulation and place valves and fire hydrants to allow simple flushing of all lines.
2. Avoid dead-ends. When necessary, isolate dead-ends with a line valve, fire hydrant at the line's end, along with an Eclipse 9800i-Genesis Auto Flusher.
3. Where stubs are provided for future extensions, isolate the stubs with a valve and do not allow service connections to stubs until extended. Place one full pipe joint between the valve and stub.
4. Water mains shall be looped unless physically impossible.
5. All materials, which come in contact with public drinking water in any stage, must conform with ANSI/NSF Standard 60.
6. Layout and size of all water mains shall be consistent with the overall layout and phasing plan of the City's water system. The overall water system shall be designed to maintain required TCEQ minimum pressure throughout the system.
7. In an unavoidable dead-end situation, reduce the sizes of pipe successively. Carry an 8-inch pipe to the next to last fire hydrant; use a 6-inch PVC to the end of the line. Provide a fire hydrant at the end of the main.

O. Clearance of water line from other utilities.

1. New water lines parallel to sanitary sewers and force mains
 - a. Locate water lines a minimum of 9 feet horizontally, outside wall to outside wall, when parallel to sanitary sewers or force mains. Use the following procedure when 9 feet of separation cannot be achieved:

When a new water line is to parallel an existing sanitary force main or gravity sanitary sewer and the 9-foot minimum separation distance cannot be maintained, the existing sanitary sewer shall be replaced with lined ductile iron or PVC pipe meeting ASTM specifications, having a minimum working pressure rating of 150 psi or greater and equipped with pressure type joints. The water lines and sanitary sewer shall be separated by a minimum vertical distance of 2 feet, and a minimum horizontal distance of 4 feet, measured between the nearest outside walls of the pipe, and in all cases, the water line shall be located above the sewer. When a water main crosses a utility other than sanitary sewer, a minimum of 6 inches of clearance must be maintained, and the water main shall have one joint of pipe, a minimum 18 feet long, centered on the other utility.

- b. Where a sanitary sewer crosses the water main, and that portion of the sewer within 9 feet of the water is constructed as described in Section 290.44(e) of the TCEQ Rules and Regulations, the water line may be placed no closer than 6 inches from the sewer. The separation distance must be measured between the nearest outside pipe diameters. The water line shall be located at a higher elevation than the sewer, wherever possible and one joint, a minimum of 18 feet long, of the new pipe must be centered on the existing line.
- 2. When water lines are installed in areas, which have existing sanitary sewers, every effort should be made to maintain 9 feet of separation between the outside pipe diameters of the two lines. Where this separation cannot be achieved because of local conditions, which must be fully documented in any planning material submitted, the following spaces shall be observed:
 - a. Where a new water line is to cross, or be installed in parallel with an existing sanitary sewer, and the sewer is constructed as described in Section 290.44(e) of the TCEQ Rules and Regulations, the separation distances specified in those rules shall apply as though the sewer were new.
 - b. Where a new water line is to be installed in parallel to existing clay, truss, or concrete gravity sewer showing no evidence of leakage vertically and 4 feet horizontally, the sanitary sewer need not be disturbed. Should excavation for the water line produce evidence that the sewer is leaking, and then the sewer must be repaired.
 - c. Where a new water main is to cross an existing clay, truss, or concrete gravity sewer showing no evidence of leakage, the sewer need not be disturbed if the water line is to be installed at least 24 inches above the existing sewer. A full joint of the water line, at least 18 feet long, should be centered over the sewer crossing, in this case, so as to provide maximum protection against contamination.
 - d. Existing clay, truss or concrete sewer pipe which shows no evidence of leakage and because of physical limitations must remain at a higher elevation than the proposed intersecting water line or closer than 2 feet may remain undisturbed if the water line is inserted in a joint of pressure type encasement pipe at least 18 foot long and 2 nominal sizes larger than the water line. The encasement pipe should be centered on the sewer crossing and both ends sealed with cement grout. In lieu of this procedure, that portion of the sewer within 9 feet of the water line may be replaced with cast iron or ductile iron pipe with watertight joints as described in Section 290.44(e) of the TCEQ Rules and Regulations, above.
- 3. Sanitary manholes - provide a minimum 9-foot horizontal clearance from outside wall of existing or proposed manholes unless manholes and connecting sewers can be made water tight and tested for no leakage. If a 9-foot clearance cannot be obtained, the water line may be located closer to the manhole when prior approval has been obtained from the City of Manvel by using one of the procedures below; however, in no case shall the clearance be less than 4 feet.
 - a. Water line may be encased in a carrier pipe. Encasement shall be a steel water line in a steel carrier pipe. Open cut and backfilled with cement stabilized sand compacted backfill.
 - b. The water line may be augured past the manhole with one 20-foot section of C-900 PVC pipe 150 psi, installed centered about the existing sanitary manhole with pressure grout using a bentonite/clay mixture.

4. Fire hydrants. Do not install fire hydrants within 9 feet vertically or horizontally of sanitary sewer mains, service leads, and force mains regardless of construction.
- P. Water Plants
1. All new storage tanks to be elevated; not ground level. Developer to provide proposed timeline, plan, and funding mechanism for Elevated Storage Tank subject to review and approval by the City.
 2. Emergency backup generator (natural gas or diesel) to be installed on site and hard-wired to the electrical panel, with an automatic transfer switch (permanent installation; not a portable or trailer-mount style). Additionally, a quick-connect style plug to be installed on the panel, as a backup precaution, upon preapproval by Public Works. Permanent power supply to water plants shall be installed prior to City Council acceptance. Generators must be new when installed (not refurbished or previously used).

1.05 APPURTENANCES

- A. Valves - Set at maximum distances along line as follows:
1. Six inch (6") through fourteen inch (14") - 1000 feet.
 2. Sixteen inch (16") through twenty inch (20") - 2000 feet.
 3. The total number of valves at any intersection shall equal the total number of lines leading out from the intersection point minus one, three (3) valves for a cross, and two (2) valves for a tee, unless otherwise specified.
- B. Valve Types - All valves shall open counterclockwise and have mechanical joints:
1. Six inch (6") through fourteen inch (14") shall be gate valves.
 2. Sixteen inch (16") through twenty inch (20") shall be butterfly valves.
- C. Valve Locations
1. All mains shall be valved within the street right-of-way or within a dedicated water line easement. Valves shall not be placed under or within 2 feet of ultimate pavement.
 2. Valves are normally located on the projection of intersecting street right-of-way lines or at the curb return adjoining a paved street across the main. Tapping sleeves and valves are excluded from this requirement.
 3. Isolate fire hydrants and flushing valves from the service line with a valve located in the fire hydrant or flushing valve branch. This valve shall not be located in the slope or flowline of ditches on roadside ditch roadways.
 4. Intermediate valves, not located on the projection line of the right-of-way line, shall be located on lot lines or 5 feet from fire hydrants but not set in driveways.
 5. Locate valves a minimum of 9 feet horizontally from sanitary sewer crossings.

6. Valves shall not be located within a driveway, sidewalk, or street.
- D. Fire hydrants and flushing valves.
1. Spacing
 - a. Single Family Residential Development - 300 foot maximum spacing and at all street intersections
 - b. Non-Residential, Commercial Developments and/or Multi-Family Developments - 300 foot maximum spacing and at all street intersections. Fire hydrants shall be placed to locate a hydrant within 100-300 feet of all commercial, retail, and office buildings points of each building.
 2. Location in or along street right-of-ways
 - a. Fire hydrants shall be primarily located at street intersections where possible.
 - b. Locate fire hydrants at P.C.s of the intersection curb radius, 3 feet behind the curb or projected future curb.
 - c. On all State highways and roadside ditch roadways, set the fire hydrants within 3 feet of right-of-way lines. Fire hydrants lead valves shall not be located in the slopes or flowlines of ditches.
 - d. Set intermediate fire hydrants on lot lines, as extended to pavement, when located between right of way intersections. These locations may be adjusted 5 feet either way to miss driveways or other obstructions. In either case, do not locate fire hydrants closer than 3 feet from curbed driveways or 5 feet from non- curbed driveways.
 - e. Fire hydrants and flushing valves shall not be installed within 9 feet of a sanitary sewer system under any condition.
 3. Location of fire hydrants or flushing valves outside the street right-of-way
 - a. The City Fire Marshal will establish and approve the location of fire hydrants and flushing valves in apartment complexes and platted private street developments within the City.
 - b. Locate fire hydrants and flushing valves in protected, easily accessible areas behind curb lines.
 - c. For fire hydrants or flushing valves which are located adjacent to water lines constructed in 10-foot-wide water line easements, the fire hydrant or flushing valve shall be centered in a minimum 10'x10' separate easement.
 - d. For commercial and multi-family developments inside the City, provide isolation valves at each end of fire loops requiring on-site fire hydrants.
 4. Fire Flow
Fire hydrants must be able to meet current NFPA and adopted Fire Code regulations.
 5. Fire hydrants shall be audited and painted per City specifications
 - a. The barrel (base) and caps shall be baked-on paint Safety Red.
 - b. The bonnet (top) shall be baked-on paint according to the size of the line:

Red	4-inch water line
Yellow	6-inch water line
White	8-inch water line
Green	10-20 inch water line
Orange	24-inch water line and above

6. 5" built-in Storz connections and dust covers are required on all hydrants.
 7. Fire Department Connections (FDC's) when required shall be remotely located from buildings and have Storz connections. The fire department connection (FDC) shall be located at a point no further than twenty (20) feet from a fire apparatus access road, remotely located at a horizontal distance that is greater than the height of the building on the main street side, and easily accessible to the Fire Department. The location of the FDC shall be such so as to provide hose connections that shall not block access to the building or obstruct other fire apparatus from accessing the building. There shall be an approved sign as specified by the Fire Marshal designating the address served by the FDC. A fire hydrant shall be located within fifty (50) feet of the FDC measured along a fire apparatus road. If there is a conflict between this section and another section of this code, the most restrictive requirement shall apply.
 8. All new fire hydrants to be Mueller A423 Super Centurion with Storz Outlet.
 9. There shall be a minimum clearance of 3 feet around each fire hydrant.
 10. Fire Department Connections (FDC's) shall be located within 50 feet of a fire hydrant.
 11. Buildings equipped with a standpipe system shall have a fire hydrant within 50 feet of the fire department connection.
 12. All fire hydrants located in the City and its ETJ shall be identified with a blue reflector affixed to the pavement so that a hydrant is readily visible to arriving fire companies. On unpaved streets, a blue reflector shall be affixed to a post as close as practicable to the edge of the roadway so as to be visible.
- E. Fittings
1. All fittings shall be identified and described on the construction plans.
 2. Fittings are not permitted in fire hydrant leads.
 3. Normally, all water main fittings shall be ductile iron mechanical joints only.
 4. All plugs shall be provided with retention clamps.
 5. Polyethylene tube encasement shall conform with the minimum requirements of "Polyethylene Encasement for Gray and Ductile Cast-Iron Piping for Water and Other Liquids", ANSI/AWWA C105, current revision. Soils within the project shall be tested in accordance with Appendix A of ANSI/AWWA C105 to adequately determine the requirements for encasement.
 6. Thrust blocking shall be required on all bends, tees, plugs and combinations thereof.
 7. All fittings and fire hydrants to be tied together with 3/4-inch stainless steel all- threads and I-bolts or approved equal (~~i.e.~~i.e., Mega Lugs).

F. Water main service

1. Water main service for lines in or along street right-of-ways.
 - a. Meters 2 inch and smaller - located in rights-of-way, water line easements, or in a minimum 5'x5' separate water meter easement. Meters shall be located in areas with easy access and protection from traffic and adjacent to right-of-way whenever possible.
 - b. Meters 3 inches and larger - located at the property line or in a minimum 10' x 20' separate water meter easement if necessary.
 - (1) Meters shall be located in areas with easy access and protection from traffic and adjacent to rights-of-ways whenever possible.
 - (2) Meters shall not be located in areas enclosed by fences.
 - c. Separate tap and service leads shall be designed for each meter.
 - d. Long service connections to be minimum 1-inch leads within 2-inch PVC casing.
 - e. No water line service shall exceed 150 feet in length.
2. For proposed apartments or town homes in private street developments, provide one master meter sized for the entire development. Exceptions may be granted by the City of Manvel for unusual circumstances. If an exception is approved, do not interconnect multiple meters.
3. All sprinkler and irrigation lines must be equipped with a backflow prevention device according to its application as required by TCEQ. Every new and existing ~~non-single-family~~non-single-family residential user is required to install a backflow prevention assembly at any meter servicing such a user's property. The backflow assembly shall be located after the meter for an irrigation system and in a vault near the building for a sprinkler system. A certified tester shall test the backflow prevention assembly annually and submit the results to the City.

1.06 SUBMITTALS

- A. General - Conform to the following submittal requirements in addition to those of general procedure of the City of Manvel.
- B. Water Line Sizes - Submit justification, calculations, and locations for proposed 6-inch lines and for lines 12-inch and larger, for approval by the City of Manvel, unless sizes are provided by the City.
- C. Valves - Submit information for approval by the City of Manvel with justification and locations for use of 16-inch and 20-inch gate valves proposed as substitutes for butterfly valves.
- D. Water Meter Service
 1. For construction inside city limits, submit an application for meter services and metered sprinkler connections, to the Building Inspections Division, prior to construction.
 2. Submit requests for more than one service meter in proposed private street or multi-family developments to the City.
 3. All new and replacement water meters to be 3/4-inch Neptune E-Coder R900i unless approved by the City of Manvel Water and Sewer Department.

- E. Elevated stream or ditch crossings - Submit design calculations for support columns and column spacing.
- F. Master Development Plan - For multiple phase developments, submit a master development plan.
- G. Backflow Prevention
 - 1. All irrigation lines must be equipped with backflow prevention devices per TCEQ.
 - 2. A double check backflow prevention assembly is required for 3" and larger lines.
 - 3. Every new and existing ~~non-single-family~~non-single-family residential user is required to install a backflow prevention assembly at any meter servicing such a user's property.

1.07 QUALITY ASSURANCE

Prepare calculations and construction drawings under the supervision of a Professional Engineer trained and licensed under the disciplines required by the drawings. The final construction drawings must be sealed, signed, and dated by the Professional Engineer responsible for the development of the drawings.

2.0 EXECUTION

2.01 RESEARCH REQUIREMENTS

- A. Research existing utility and right-of-way information.
- B. Verify that no restrictions exist that will deny approval of the project concept.

2.02 DESIGN ANALYSIS

- A. Water line sizes - Prepare narrative justification and calculations for proposed 6-inch lines and for lines 12-inch and larger, unless sizing is provided by the City of Manvel in advance.
- B. Elevated stream or Ditch Crossings - Prepare design calculations for support columns and column spacing.
- C. Developments of 100 acres or more to provide Regionalization Plan, including interconnection(s) with adjacent properties subject to review and approval by the City.
- D. All water components in the City of Manvel and its ETJ shall be designed for a minimum of 360 gallons per day per equivalent ~~single-family~~single-family connection.

2.03 DRAWINGS

- A. General: Conform to the following drawing requirements in addition to those of "Graphic Requirements" and the City's standard water line details and standard specifications.
- B. Appurtenances - Identify, describe and enclose in rectangular box on drawings.
 - 1. Valves
 - a. Designate 6-inch through 12-inch gate valves with box as GV&B.
 - b. Provide complete description and size for other valves.
 - 2. Water meters, service leads, and metered sprinkler connections.
 - a. Show the location of service line tees, tapping sleeve and valves, valve boxes, and temporary plugs to be installed to serve future 3-inch or larger meters.
 - b. Develop plan and profile sheets for 4-inch and larger leads and all service connections that cross state rights-of-way (FM1128, SH6, etc.).
- C. Construction features
 - 1. Show all special construction features required to complete the project in a safe, convenient and economical manner.
 - 2. Auger Construction
 - a. If the construction is predominately open cut, all portions of the street that must be augured shall be clearly shown on drawings by location and length. Include designation for sections at trees with 6 inches or larger diameters located within 10 feet of water Line.
 - b. Curbs - Include a requirement on drawings for construction of wheel chair ramps at street intersections where curbs are to be removed or are damaged by water line construction. Conform to the City's standards for ramps.

SECTION 4 PAVING

1.0 GENERAL

1.01 CHAPTER INCLUDES:

Design guidelines for streets, criteria for street paving, and standard paving notes for drawing call outs.

1.02 REFERENCES

- A. AASHTO - American Association of State Highway and Transportation Officials.
- B. ASTM - American Society for Testing Materials.
- C. ACI - American Concrete Institute.
- D. MUTCD - Texas Manual on Uniform Traffic Control Devices.
- E. City of Manvel Transportation Corridor Plan

1.03 DEFINITIONS

- A. Geotechnical Engineer - An engineer certified by the American Association for Laboratory Accreditation (A2LA).
- B. HMAC - Hot Mix Asphaltic Concrete.
- C. Curb and Gutter Sections - Full width concrete pavement with doweled on 4-inch by 12-inch curbs. Curb and gutter sections require inlets and underground storm sewers.
- D. Roadway ditch sections - Ditch sections adjacent to either full width reinforced concrete pavement or asphaltic pavement. Roadside ditch sections do not require underground storm sewers; however, the ditch sections must be designed to accommodate the storm runoff.

1.04 DESIGN REQUIREMENTS

The following design requirements are applicable to all pavement within the City of Manvel, and its ETJ.

- A. General
 - 1. All paving shall be approved by the City of Manvel for all streets within the City.
 - 2. Street design should conform to all applicable planning tools, such as the Texas Manual on Uniform Traffic Control Devices, major thoroughfare plans, master plans, etc. Other considerations for design should include street function, street capacity, service levels, traffic safety, pedestrian safety, and utility locations. These additional considerations may affect the minimum requirements set forth herein. Refer to the City of Manvel Major Thoroughfare Plan and Transportation Corridor Plan.
 - 3. Design shall conform to the City of Manvel Standard Details.

B. Minimum Width Requirements and Paving

1. The minimum ROW width for all streets in the City of Manvel and its ETJ is 60 feet. The minimum pavement width for all developments is:
 - a. Curb and Gutter sections: 28 feet ~~back-to-back~~back-to-back of curb (B/B).
 - b. Open-ditch sections: 26 feet edge to edge of pavement.
2. Per the City of Manvel Thoroughfare Plan, a minimum 80 feet ROW is required for the following:
 - a. Charlotte
 - b. Chocolate Bayou
 - c. Dogwood Avenue
 - d. Iowa Lane
 - e. Jordan Road
 - f. Rodeo Drive
 - g. Uzzell Road
3. Per the City of Manvel Thoroughfare Plan, a minimum 100 feet ROW is required for the following:
 - a. Bahler Avenue (CR 100)
 - b. Bissell Road
 - c. Booth Road
 - d. Cemetery Road (Harkey Road)
 - e. Clark Road
 - f. Lewis Lane
 - g. Oil Field Road (County Road 98)
 - h. Scopel Road
4. Per the City of Manvel Thoroughfare Plan, a minimum 120 feet ROW is required for the following:
 - a. Airline Road (County Road 48)
 - b. Bailey Avenue (County Road 101)
 - c. Croix Road (Country Road 58)
 - d. Del Bello Boulevard (Rodeo Palms Parkway / Belcher / County Road 397)
 - e. Kirby Drive
 - f. Manvel Parkway (County Road 94)
 - g. Markham Road
 - h. Masters Road (FM1128 / County Road 67)
 - i. McCoy Road (Meridiana / Peters / Patterson / County Road 89 / Old Chocolate Bayou)
 - j. Pearland Sites Road (County Road 99 / County Road 143)
 - k. Pollard Boulevard (County Road 90)
 - l. Southfork Drive (County Road 59)

C. Minimum Thickness and Reinforcement Requirements for Concrete Pavement

The following requirements are the minimum allowable. Pavement thickness and reinforcement shall be designed by the Professional Engineer responsible for the project based on a current soils analysis and recommendations by a qualified geotechnical engineer.

1. For pavement widths less than or equal to 28 feet B/B of curb:
 - a. Minimum concrete slab thickness shall be 6 inches with $f_c = 4,000$ psi and reinforcement shall be Grade 60, $f_y = 60,000$ psi, #4 deformed reinforcing bars spaced at 18 inches center to center both ways and minimum lap lengths of 18 inches. Expansion joints shall be placed at the end of each curb return and at a maximum spacing of 60 feet.
 - b. Minimum stabilized subgrade thickness shall be 6 inches.
2. For pavement widths greater than 28 feet B/B and for major arterial thoroughfares:
 - a. Minimum concrete slab thickness shall be 7 inches with $f_c = 4,000$ psi and reinforcement shall be Grade 60, $f_y = 60,000$ psi, #4 deformed reinforcing bars spaced at 18 inches center to center both ways and minimum lap lengths of 18 inches. Expansion joints shall be placed at the end of each curb return and at a maximum spacing of 60 feet on residential and collector streets, and a maximum spacing of 60 feet on boulevards and major thoroughfares.
 - b. Minimum stabilized subgrade thickness shall be 8 inches.

D. Subgrade Treatment

Geotechnical Engineer shall base depth of subgrade stabilization on structural number (SN) in conjunction with pavement thickness design. Following is a general guidance for subgrade treatment:

1. For subgrade soil conditions with a clay content of 10.0% or higher and plasticity index (PI) of 10 or more, the subgrade shall be stabilized with lime. Subgrade shall be stabilized with a minimum 6% lime by weight, at required thickness and compacted to 95% standard proctor density. Alternative subgrade stabilization may be substituted when specific recommendations are made by the geotechnical engineer for the project, and when specifically approved by the City Engineer.
2. For subgrade soil conditions containing clean sand with no clay content, the subgrade shall be stabilized with cement.

E. Requirements for Intersections, Turnouts, Transitions, and Thoroughfares

1. At a "T" intersection with a street that has not been improved to its ultimate width, concrete pavement should be stopped either at the right-of-way line or the end of the curb return, whichever would require less concrete removal at a future date.
2. For roadway turnouts placed at an existing street intersection, the turnout should be designed to fit the ultimate pavement width of the intersecting cross street and then transitioned to the existing roadway.
3. The usual transition length for meeting an open-ditch street is 50 feet for street widths less than or equal to 28 feet B/B; 75 feet for 37 feet B/B width; and 100 feet for 41 feet B/B width.
 - a. Streets other than concrete shall have transitions with a minimum thickness of 8 inches of lime stabilized subgrade, 6 inches of hot-mix asphaltic concrete base, or approved equal, with 2 inches of hot-mix asphaltic surfacing.
 - b. Concrete streets shall have transitions with a minimum thickness of 6 inches of stabilized subgrade and 6 inches of concrete pavement.

4. When paving only one roadway of a proposed two-roadway thoroughfare (boulevard section) all left-turn lanes and esplanade crossovers shall be paved to the centerline of the street right-of-way.
- F. Requirements for Roadway Pavement with Open-Ditch Sections
1. No new open-ditch drainage systems are permitted.
 2. Minimum grade on ditches shall be 0.20 percent.
 3. Ditch capacity shall be designed to handle runoff as determined by the City Drainage Design Requirements.
 4. The maximum side slope shall not exceed 3:1.
 5. Culverts for roadside ditch only, shall be designed to carry ditch discharge, but not less than 18-inch diameter pipe constructed of reinforced concrete.
 6. The radius for cul-de-sac pavement shall be 50 feet in a 60' radius ROW.
- G. Requirements for Roadway Pavement with Curb and Gutter Sections
1. Inlet spacing:
 - a. Curb inlets shall be spaced and sized to intercept the calculated runoff for the design storm. The water surface elevation at the inlet shall be less than or equal to the top of curb for the design storm flow.
 - b. Maximum travel distance of water in the street to a curb inlet shall be 300 feet on a major thoroughfare and in a commercial area. The maximum travel distance of water in the street permitted in a single-family residential area shall be 500 feet.
 - c. Curb inlets should be located on the intersecting side street at an intersection with a major thoroughfare. Locations on the major thoroughfare at intersections shall be specifically approved by the City Engineer.
 - d. Curb inlets shall have grate inlets lids.
 - e. Backfill around inlets with 1.5 sacks per cubic yard of cement stabilized and to top of first stage inlets.
 2. Minimum gutter gradient shall be 0.30 percent.
 3. Maximum cut from finished grade at property line to top of curb shall be 1.75 feet.
 4. The desired slope for driveways is 2% to 8%. A maximum slope of 10% may be allowed with specific approval of the City.
 5. Minimum grade shall be 1 percent fall around intersection turnout for a maximum radius of 25 feet. Grades for larger radius shall be determined on an individual basis.
 6. Vertical curves shall be installed when algebraic differences in grades exceed 1 percent. Elevations shall be shown at 10-foot intervals through vertical curves. Maintain a minimum of 0.03-foot elevation change at 10-foot intervals by altering the calculated elevations.
 7. The radius for cul-de-sac pavement shall be 50 feet in a 60 feet radius ROW.

8. When a curb and gutter **section** intersects a drainage ditch, the grade of gutter shall be above the designed water surface of the ditch.
9. Minimum gutter grade for cul-de-sac shall be 0.60 percent.
10. Major thoroughfares shall be in accordance with AASHTO.
11. The amount of cross slope over the pavement section should be shown on the drawings. The usual cross slope is 3/8 inch per foot from curb line to quarter, and 1/4-inch per foot from quarter point to the center line, and 7/8-inch per foot for left-turn lanes.
12. A minimum gradient of 0.40 percent around the longest radius is required on an L-Type street intersection.
13. When meeting an existing curbed street, top of curb grades shall be designed to meet an elevation 6 inches above the existing gutter. At existing inlets, top of curb grades shall be designed to match existing top of curb elevations.
14. Fill lines shall be shown on the drawings. If fill is required and the pavement is adjacent to a nonparticipating property owner, fill easements from this property owner shall be obtained, filed, and a copy of the easements shall accompany the final drawings. Construction of this nature will require back-slope drainage design to prevent trapping storm runoff.
15. Grades should be labeled for all tops of curb. Centerline grades are acceptable for open-ditch sections only.

H. Requirements for Inlets with Curb and Gutter Sections:

1. Type "BB" with grate tops or type "H-2" inlets shall be used on all curb and gutter sections within the City depending on runoff requirements.
2. Inlets should be placed away from the major thoroughfare and on the side streets at street intersections.
3. Attempt to keep the proposed inlets away from esplanade openings and out of major thoroughfare intersections.
4. Inlets shall be placed at the end of pavement in order to eliminate drainage from the pavement gutter into an open-ditch.
5. On open-ditch streets, place stubs with ring grates from inlets to ditches.

I. Requirements for Curbs and Sidewalks:

1. Standard height is 4-inches and 12-inches wide for curb located along outside edges of residential streets. Curb height for streets other than residential shall be 6 inches. The curb height for all esplanades shall be 6-inches.

2. Sidewalk wheelchair ramps are required at all intersections and driveways. The design and installation of such ramps shall comply with Texas Accessibility Standards Architectural Barriers requirements.
 3. All sidewalks are to be constructed in accordance with the City of Manvel Details. The design and installation of such sidewalks shall comply with Texas Accessibility Standards Architectural Barriers requirements.
 4. Sidewalks are required along all curb and gutter streets. The developer, prior to the City's final one-year acceptance of the infrastructure, must install sidewalks along reserves and ROW. ~~When sidewalks are required, they~~ Sidewalks shall have a width of not less than ~~5-feet~~ 4-feet.
 5. The location of all proposed and existing sidewalks shall be shown on the construction drawings and plan and profile drawings.
- J. Requirements for Miscellaneous Items:
1. The type and amount of subgrade treatment shall be shown on the drawings.
 2. Paving headers shall be placed at the end of all concrete pavements.
 3. All concrete to be removed shall be saw cut before removal.
 4. Sight distance requirements based on the design speed the roadway shall be used for determining lengths of crest vertical curves for all pavements except boulevard sections which shall be designed for 45 mph.
 5. Standard City of Manvel barricades shall be placed at the end of all dead-end streets not terminating in a cul-de-sac.
 6. Submit to the appropriate drainage agency before City approval.
 7. A letter of agreement approving the construction plan crossing is required when paving is placed over a transmission pipeline.
 8. When meeting existing concrete pavement, horizontal dowels shall be used if no exposed reinforcing steel for interconnection with new pavement exists. Horizontal dowels shall be Grade 60, #6 rebar, 24-inches long, drilled and embedded 12-inches into the center of the existing slab and epoxied. Dowels shall be 18 inches center to center, unless otherwise specified.
 9. When concrete is removed for interconnections, the pavement shall be saw-cut, and existing concrete removed, to expose a minimum of 15-inches of reinforcing steel. If no reinforcing steel exists, use horizontal dowels as previously described.
 10. Dead-end streets or ends of concrete slabs designed to be extended in the future shall have paving headers and 15-inches of reinforcing steel exposed beyond the pavement, coated with asphalt and wrapped with burlap or paving headers and dowel type expansion joint for future pavement tie.

11. Pavement extensions shall connect to the existing pavement with a pavement undercut and a minimum steel overlap of 18-inches.
 12. Concrete pavement thickness design is required for all pavement within industrial areas and on major thoroughfares. Concrete pavement thickness design shall be based on AASHTO design procedures for rigid pavements.
 13. The pavement structure for each roadway shall be designed based on soil data from the site and based on the anticipated traffic volume, loading and service life of the proposed pavement structure. The design engineer is responsible for ensuring that the pavement structure is designed to withstand the anticipated loads that are expected on the roadway.
 14. Adjust manhole frames and covers within the limits of the pavement to meet the proposed final top of slab.
 15. Adjust manhole frames and covers outside the limits of the pavement to conform to the final grading plan.
 16. No more than one (1) shrinkage crack shall be allowed in each header section. A shrinkage crack is defined as extending one half or more of the full depth of the concrete (~~i.e.i.e.~~, 3" or more on 6" thick concrete) appearing within 1 year of the final concrete placement. If two (2) or more shrinkage cracks appear in a header, the entire section shall be removed and replaced at contractor's expense.
 17. If shrinkage cracks are less than one half of the depth of the concrete (~~i.e.i.e.~~, less than 3" on 6" thickness) then a recommendation letter and ~~data-sheets~~data sheets are required from the testing laboratory as to the type of sealant which will be used to seal the shrinkage cracks. This recommendation shall be approved by the City Engineer before application of sealant.
 18. Core samples for the sections will be taken no sooner than the twenty-eight (28) day break of the original concrete pour sample.
 19. All medians must be sleeved for future irrigation lines.
 20. Refer to MUTCD for pavement and curb markings near stopping points, crosswalks, etc.
 21. All under-pavement utility crossings to be sleeved.
 22. Manholes, fire hydrants and water valves shall not be located within a driveway, sidewalk, or street.
- K. Original Manvel Townsite
1. The Original Manvel Townsite (OMT) area is bounded by Cemetery Road on the east, Large Drive on the north, McCoy Road on the west, and the railroad tracks (sitting just north of Bissell Road), on the south.
 2. The special regulations in this section shall apply to lots in the OMT zoned Light Commercial or Planned Unit Development (PUD) allowing for commercial land use, where the lot is five (5) acres or less.

3. Roads in the OMT may be constructed with a minimum 26-feet wide asphalt (instead of concrete), with a minimum thickness of 8 inches of lime stabilized subgrade, 6 inches of hot-mix asphaltic concrete base, and 2 inches of hot-mix asphaltic surfacing.
4. Roadside ditches (open ditches) are permitted in the OMT.

1.05 APPURTENANCES – Reserved

1.06 SUBMITTALS – Reserved

1.07 QUALITY ASSURANCE.

- A. All construction drawings and specifications shall be prepared by or under the supervision of a currently Registered Professional Engineer of the State of Texas, and all documents shall be sealed, dated, and signed by the engineer responsible for their preparation.
- B. All geotechnical work shall be performed by or under the supervision of a currently Registered Professional Engineer of the State of Texas disciplined in the science of soil analysis. All reports and documents shall be sealed, dated, and signed by the engineer responsible for their preparation.
- C. The designated laboratory technician must be on the jobsite at all times during the placement of concrete.

2.0 EXECUTION

2.01 RESEARCH REQUIREMENTS – Reserved

2.02 DESIGN ANALYSIS

- A. All pavement design shall be supported by calculations to establish the required thickness and reinforcement.
- B. The current soils report shall be the basis for design considering the use, loading, and life span of the proposed pavement.
- C. Storm sewer inlets shall be established in such numbers and in such locations as to effectively drain storm water from paved sections. A graphical plot and calculations of the hydraulic gradient shall be furnished by the design engineer.
- D. Open-ditch drainage shall be designed to accommodate the anticipated storm runoff, and all culverts shall be designed to accommodate the expected ditch capacity. Construction drawings shall indicate the direction of flow in the ditches, and profiles of the ditches shall reflect this slope. Anticipated volumes of storm drainage shall be identified in each ditch to enable future culverts to be sized to accommodate anticipated runoff.

SECTION 5 DRAINAGE

1.0 GENERAL

1.01 CHAPTER INCLUDES:

Criteria for the design of storm drainage improvements.

- A. Design requirements - The drainage criteria administered by the City of Manvel and complemented by Brazoria County for newly designed areas provides protection from structural flooding from a 100-year storm event. This is accomplished with the application of various drainage enhancements such as storm sewers, roadside ditches, open channels, detention and overland (sheet) runoff. The combined system is intended to prevent structural flooding from extreme events up to a 100-year storm.
- B. Street Drainage - Street ponding of short duration is anticipated and designed to contribute to the overall drainage capability of the system. Storm sewers and roadside ditch conduits are designed as a balance of capacity and economics. These conduits are designed to convey less intense, more frequent rainfalls with the intent of allowing for traffic movement during these events. When rainfall events exceed the capacity of storm sewer system, the additional run-off is intended to be stored or conveyed overland in a manner that reduces the threat of flooding to structures.
- C. Flood Control - The City of Manvel is a participant in the National Flood Insurance Program. The intent of the flood insurance program is to make insurance available at low cost by providing for measures that reduce the likelihood of structural flooding.
- D. Relationship to the Platting Process - Approval of storm drainage is a part of the review process for planning and platting of new development.

1.02 REFERENCES

- A. City of Manvel Flood Damage Prevention Ordinance subsequent revisions.
- B. Brazoria County Design Criteria Manuals (including CR3, BDD4, and BDD5)
- C. TX DOT Bridge Division Hydraulic Manual, Third Edition, 1985.
- D. National Weather Service Documents - TP-40 Rainfall Frequency Atlas of the United States.
- E. TXDOT Hydraulic Design Manual 2009-1, March 1, 2009.

1.03 DEFINITIONS

Conduit - any open or closed device for conveying flowing water.

Drainage Area Map - Area map of watershed, which is subdivided to show each area served by each subsystem.

FEMA - Federal Emergency Management Agency

Hydraulic Grade Line - A line representing the pressure head available at any given point within the drainage system.

In-Fill Development - Development of open tracts of land in areas where the storm drainage infrastructure is already in place and takes advantage of the existing infrastructure as a drainage outlet.

Public storm sewers - Defined as sewers and appurtenances that provide drainage for a public right-of-way, or more than one private tract, and are located in public right-of-way or easement. Private storm sewers provide internal drainage for a reserve or other tract. Private storm sewer connections to public storm sewers shall occur at a manhole or at the back of an inlet. All private storm sewers shall be constructed in conformance with these standards.

Rainfall frequency- Probability of a rainfall event of defined characteristics occurring in any given year. The National Weather Service publishes information on rainfall frequency. For the purpose of storm drainage design, the following frequencies are applicable:

1. 5-year frequency – a rainfall intensity having a 20 percent probability of occurrence in any given year, or nominally likely to occur once every 5 years.
2. 10-year frequency – a rainfall intensity having a 10 percent probability of occurrence in any given year, or nominally likely to occur once every 10 years.
3. 25-year frequency – a rainfall intensity having a 4 percent probability of occurrence in any given year, or nominally likely to occur every 25 years.
4. 100-year frequency - a rainfall intensity having a 1 percent probability of occurrence in any given year, or nominally likely to occur every 100 years.

Redevelopment - A change in land use that alters the impervious cover from one type of development of either the same type or another type, and takes advantage of the existing infrastructure in place as a drainage outlet.

Sheet Flow - Overland storm run-off that is not conveyed in a defined conduit, and is typically in excess of the capacity of the conduit.

1.04 DESIGN REQUIREMENTS

All designs of drainage facilities should meet the requirements of the City of Manvel Standard Specifications and Standard Drawings.

A. Determination of Run-off

1. Design Storm Events - All drainage improvements shall be designed for the following storm frequencies:

Road Side Ditch	5 years
Storm Sewers	5 years
Channels/Storm Sewers/Culverts draining 100 acres or less	25 years
Bridges	100 years
Creeks/Channels/Culverts draining 100 acres or more	100 years

2. The Rational Method shall be used for determining the peak flow rate in the sizing of all drainage improvements.

- a. Time of Concentration (minutes) is the time required for peak runoff from the entire upstream contributing area to reach the point of interest. Time of concentration can be calculated based upon an analysis of the actual travel time from the most remote point in the drainage area. The travel path should be clearly denoted and a sketch included in the design calculations.

$$t_c = D/60V + 10 \text{ (minutes)}$$

$$D = \text{flow distance (ft)}$$

$$V = \text{flow velocity (ft/sec)}$$

For purposes of calculating t_c , use the following velocities:

$$V = 0.5 \text{ ft/sec for overland flow (undeveloped)}$$

$$V = 1.0 \text{ ft/sec for overland flow (developed)}$$

$$V = 1.5 \text{ ft/sec or flow across paved surfaces or along gutter flowlines.}$$

$$V = 2 \text{ ft/sec for flow in ditch or channel}$$

$$V = 3 \text{ ft/sec for flow in storm sewer}$$

- b. Rainfall Intensity (inches/hour) shall be calculated using the following formula:

$$I = \frac{b}{(d + t_c)^e}$$

Values to be used in Manvel are listed below:

Rainfall Frequency	b	d	e
5-year	71.60	11.08	0.7704
10-year	82.23	11.54	0.7644
25-year	99.12	12.86	0.7642
100-year	128.60	14.67	0.7562

b, d, and e values are derived from a single frequency rainfall intensity graph.

b = the y-intercept of the straight line

d = a constant used to adjust the relationship to plot as a straight line

e = the slope of the straight line

Source: 2016 TXDOT Hydraulic Design Manual Notice: effective July 2016

http://onlinemanuals.txdot.gov/txdotmanuals/hyd/manual_notice.htm

- c. The Rational Method is a method for calculating the peak run-off for a storm drain system. The formula for determining the peak flow rate is:

$$Q = C_f CIA$$

Q = Flow rate (cubic feet per second (cfs))

C_f = Frequency factor, if the product of C_f and C ~~should not exceeds~~ 1.0, use 1.0

C = Runoff Coefficient

I = Rainfall intensity (inches/hour) for a given storm frequency

A = Area (acres)

For the purposes of calculating C_f use the following values:

C_f = 1.00, for storm frequencies of 10 years or less

C_f = 1.10, for storm frequencies of 25 years

C_f = 1.25, for storm frequencies of 100 years

For the purposes of calculating C use the following values:

<u>Land Use Type</u>	<u>Run-off Coefficient</u>
Raw Undeveloped Acres	0.20
Improved Undeveloped Acres (i.e. , mowed, filled, re-graded, etc.)	0.30
Park Land	0.40
Residential:	
Single Family Estates (≥ 2 acres)	0.45
Single Family Estates (≥ 1 acre)	0.50
Single Family (< 1 acre)	0.55
Garden Homes	0.65
Multi Family Low	0.75
Multi Family Medium	0.80
Multi Family High	0.85
Mobile Homes	0.85
Commercial	0.90
Industrial	0.95
Pond (detention and amenity)	1.00

Alternatively, the run-off coefficient “C” in the rational method formula can be calculated from the equation:

$$C = 0.6Ia + 0.2$$

C = watershed coefficient

Ia = impervious area/total area

If the alternate form is to be submitted, the calculation of C shall be provided as part of the drainage calculations.

B. Design of storm sewers

1. Design Frequency

a. Newly Developed Areas

The design storm event for sizing storm sewers in newly developing areas will be a 5-year rainfall. In the case where new development will interfere with the natural sheet flow of the land, the storm system must accommodate the runoff. Runoff should not be allowed to run over newly developed lots or streets. Stub out streets next to underdeveloped areas are to stub out storm lines to the limits of the streets.

b. Redevelopment or In-fill Development

The existing storm drain will be evaluated using a 5-year storm, assuming no development takes place. The storm drain will be evaluated with the development in place.

(1) If the proposed redevelopment has a lower or equal impervious cover, no modifications to the existing storm drain are required.

(2) If the hydraulic gradient of the existing storm drain is below the top of the curb, no improvements to the existing storm drain are required.

c. Private Drainage Systems

Storm sewers for private drainage systems should conform to the City of Manvel Standards for public drainage systems.

(1) An approved development permit must be filed with the City of Manvel before any work shall be done on a private drainage system. Part of the development permit include a plan and profile sheets detailing the scope of the work including elevations.

(2) Open ditch areas may be converted into storm sewer lines with the approval of a development permit. Guidelines for the process are available at the City of Manvel.

2. Velocity Considerations

a. All storm drains shall be designed by the application of Manning's Equation and the Continuity Equation:

$$\text{Manning's Equation: } V = (1.486/n) R^{2/3} S^{1/2}$$

V = velocity (ft/sec)

R = hydraulic radius (area in square feet/wetted perimeter in feet)

S = slope of energy line in feet

n = coefficient of roughness

n = 0.013 for concrete pipes,

n = 0.024 for CMP

n = 0.011 for PVC

n = 0.012 for HDPE

Note: All public storm sewers must be constructed of RCP. Manning's roughness coefficients for CMP, PVC, and HDPE are to be used for private storm sewers only. All storm sewer pipes entering City of Manvel ROW shall be RCP.

$$\text{Continuity Equation: } Q = VA$$

Q = discharge (cfs)

V = velocity (ft/sec)

A = cross sectional area of conduit (ft²)

- b. Design velocities shall be 3 feet per second with the pipe flowing full.
- c. Maximum velocities shall not exceed 7 feet per second.
- d. Minimum Storm Sewer Pipe Slopes:

<u>Pipe Diameter</u>	<u>% Slope</u>
18	0.26
24	0.18
30	0.14
36	0.11
42	0.08
48	0.07
54	0.06
60	0.05

For pipe sizes not listed above, the minimum slope should be determined utilizing a design velocity of 3 fps.

3. Pipe Sizes and Placement

- a. Use the storm sewer and inlet leads with at least 24-inch inside diameter or equivalent cross section. Box culverts shall be at least 2 feet x 2 feet. Closed conduits: circular, elliptical, or box, shall be selected based on hydraulic principals and economy of size and shape.
- b. Larger pipes upstream should not flow into smaller pipes downstream unless construction constraints prohibit the use of a larger pipe downstream, or the improvements are outfalling into an existing system, or the upstream system is intended for use in detention.
- c. Match crowns of pipe at any size change unless severe depth constraints prohibit.
- d. Locate storm sewers in public street rights-of-way or in parallel and adjoining easements or in approved easements. Easements must be at least 20-feet wide and the storm sewer must be centered in the easement. Side and back lot easements are discouraged.
- e. Follow the alignment of the right-of-way or easement when designing cast in place concrete storm sewers.
- f. A straight line shall be used for inlet leads and storm sewers.
- g. Center culverts in side lot storm sewer easements.
- h. Storm boxes may substitute for pipes when workable space is an issue.

4. Starting Water Surface and Hydraulic Gradient

- a. The hydraulic gradient shall be calculated assuming the top of the outfall pipe as the starting water surface.
- b. At drops in pipe flowline, should the upstream pipe be higher than the hydraulic grade line, then the hydraulic grade line shall be recalculated assuming the starting water surface to be at the top of pipe at that point.
- c. For the design storm, the hydraulic gradient shall at all times be below the gutter line for all newly developed areas.
- d. Hydraulic grade lines shall be shown on all profile drawings.

5. Manhole Locations

Use manholes for precast conduits at the following locations:

- a. Size or cross section changes.
- b. Inlet lead and conduit intersections.
- c. Changes in pipe grade.
- d. Street intersections.
- e. A maximum spacing of 500 feet measured along the conduit run.
- f. Manholes shall be placed so as not to be located in the driveway area.

6. Inlets

- a. Locate inlets at all low points in gutter.
- b. Valley gutters across intersections are not permitted.
- c. Inlet spacing is generally a function of gutter slope. For minimum gutter slopes, the maximum spacing of inlets shall result from a gutter run of 500 feet from high point in pavement or the adjacent inlet on a continuously graded street section, with a maximum of 1000 feet of pavement draining towards any one inlet location.

- d. Use only Standard Inlets:

Inlet	Application	Capacity
Type A	Parking Lots/Small Areas	2.5 cfs
Type B-B	Residential	5.0 cfs
Type D	Parking Lots	2.0 cfs
Type E	Roadside ditches	20.0 cfs
Type H-2	Residential / Commercial	5.0 cfs

- e. Do not use "Beehive" grate inlets or other "specialty" inlets.
- f. Do not use grate top inlets in unlined roadside ditch.
- g. Place inlets at the end of the proposed pavement, if drainage will enter or leave pavement.
- h. Do not locate inlets adjacent to esplanade openings.
- i. Place inlets on side streets intersecting major streets, unless special conditions warrant otherwise.
- j. On-grade inlets shall be allowed.

C. Consideration of Overland Flow

1. Design Frequency. The design frequency for consideration of overland sheet flow shall consider extreme storm events, which exceed the capacity of the underground storm sewer system resulting in ponding and overland sheet flow through the development to the primary outlet.
2. Relationship of Structure to Street. All structures shall be constructed according to the Flood Damage Prevention Ordinance and should be higher than the highest level of ponding anticipated from the extreme event analysis.

3. Calculation of Flow
 - a. Streets will be designed so that consecutive high points in the street will provide for a gravity flow of drainage to the ultimate outlet.
 - b. The maximum depth of ponding at high points will be the top of curb or the centerline of roads without curb.
 - c. The maximum depth of ponding at low points will be 12-inches above the gutter on curb and gutter roads, or 6 inches above the centerline of roads without curb.
 - d. Sheet flow between lots can be provided only through a defined drainage easement.
 - e. A map shall be provided to delineate extreme event flow direction through a proposed development and how this flow is discharged to the primary drainage outlet.
 - f. In areas where ponding occurs and no sheet flow path exists, then a calculation showing that run-off from the 100-year event can be conveyed and remain in compliance with the other terms of this section must be provided.
 4. Overland Flow shall enter outfall drainage facilities (channels or detention pond) through a storm sewer sized to convey the 100-year event. Calculations shall be submitted for sizing the structure and determining that adequate inlet capacity exists.
- D. Design of Open Channels
1. Design Frequency
 - a. Open channels shall be designed according to methods described in the corresponding Drainage District's Design Criteria Manual.
 - b. Design standards for channel construction should follow the requirements specified in the corresponding Drainage District's Design Criteria Manual.
 - c. Design standards for the outfalls into channels should conform to those in the corresponding Drainage District's Design Criteria Manual.
 2. Determination of Water Surface Elevation.
 - a. Water surface elevations shall be calculated using Manning's Equation and the Continuity equation.
 - b. For the design storm event, the water surface should be calculated to remain within banks and below freeboard.
 3. Design of Culverts
 - a. Head losses in culverts shall conform to TxDOT Bridge Division Hydraulics Manual, Chapter 4 - Culverts.
 - b. Generally, only RCP will be approved for culverts in City right-of-way.

E. Design of Roadside Ditches

1. Design Frequency
 - a. Roadside ditch design is permissible only for single-family residential lots having widths larger than, or equal to, 120 feet.
 - b. The design storm event for the roadside ditch shall be to 0.5 feet below the edge of pavement or the natural ground at the right-of-way line, whichever is lower.
 - c. Design capacity for a roadside ditch shall be to 0.5 feet below the edge of pavement or the natural ground at the right-of-way line, whichever is lower.
 - d. The design must include an extreme event analysis to indicate that structures will not be flooded.
2. Velocity Considerations
 - a. For grass-lined sections, the design velocity shall be 2.0 feet per second during the design event. The maximum velocity shall be 5 fps.
 - b. A grass-lined or unimproved roadside ditch shall have side slopes no steeper than three horizontal to one vertical.
 - c. Minimum grades for roadside ditches shall be 0.2-foot per 100-foot.
 - d. Calculation of velocity will use a Manning's roughness coefficient of 0.040 for earthen sections and 0.025 for ditches with paved inverts.
 - e. Use erosion control methods acceptable to the City when design velocities are expected to be greater than 3 feet per second.
3. Culverts
 - a. Culverts will be placed at all driveway and roadway crossings, and other locations where appropriate.
 - b. Culverts will be designed assuming inlet control.
 - c. Roadside culverts are to be sized based on drainage area. Calculations are to be provided for each block based on design criteria presented in this manual.
 - d. Cross open channels with roadside culverts no smaller than 18 inches in diameter or equivalent. The size of culvert used shall not create a head loss of more than 0.20 feet greater than the normal water surface profile without the culvert.
 - e. Use erosion control methods acceptable to the City when design velocities are expected to be greater than 3 feet per second.
 - f. Sloped end treatments (S.E.T.) must be placed at all driveways. If S.E.T.'s cannot be used due to space constraints, the culvert must be extended 12" on each side of the driveway. A head wall may be used to replace the extension of the culverts.
 - g. HDPE may be used between driveway culverts, but not under driveways or street crossings. All driveway and street culverts to be RCP or RCB.
4. Depth and Size Limitations
 - a. Residential streets - maximum depth not to exceed 3 feet from edge of pavement.
 - b. Roadside ditch bottoms should be at least 2 feet wide.
 - c. Ditches in adjoining and parallel easements shall have the top of bank not less than 2 feet from the outside easement line.
 - d. Roadside ditch side slopes shall not exceed 3 horizontal to 1 vertical.
5. No new roadside open-ditch drainage systems will be permitted.
6. Existing roadside open-ditch drainage systems adjacent to new developments to be converted to underground storm sewer system by said developer.

F. Design of Outfalls

1. Shall conform to the corresponding Drainage District's Design Criteria Manual.
2. Detention pond and storm sewer outfalls shall be placed one foot above the flowline of the receiving channel.
3. Outfalls shall be placed 6 inches above the flowline of the receiving roadside ditch.
4. Wet detention ponds may be connected by a submerged pipe.
5. Outfalls must have a means to control erosion and washouts (~~ie i.e.~~, concrete paving, interlocking blocks). Riprap is not acceptable.

G. Storm Water Detention

The purpose of storm water detention is to mitigate the effect of new development on an existing drainage system. If 20% or less of the entire property (single SFR lot, not subdivision) will be affected by new impervious cover, then a new or revised drainage plan will not be required.

1. Application of Detention.
 - a. As a normal consideration, storm water detention is required. The use of on-site detention is required in order to mitigate potential damage to existing structures unless the current infrastructure is improved, or the City has developed a plan for a detention facility to serve the overall area.
 - b. Design calculations for sizing the detention basin and related structures must be performed by the applicable method described in the following sections.
 - c. All calculations shall be sealed and signed by a Registered Professional Engineer.
 - d. A concrete parking lot may be used as part of the detention system, provided that the maximum depth of water over the inlet does not exceed nine (9") inches and the maximum depth in the parking stall does not exceed six (6") inches.
 - e. The Rational Method can be used for determining the peak release rate and the peak inflow rate for a detention pond.
2. Calculation of Detention Volume
 - a. The Modified Rational Method may be used to determine the detention storage volume for developments that are 5 acres or smaller.
 - b. A simplified method may be used for determining the amount of detention volume required based upon a rate of 0.450.65 acre-feet per gross acre. This method may only be used for developments less than 100 acres. (~~ie i.e.~~ 5-acre site x 0.450.65 = 23.25 acre-feet)
 - c. The Triangular Hydrograph method may be used for determining the amount of detention volume required for development of 100 acres or less.
 - d. The Unit Hydrograph Method (Small Watershed Method), which calculates the required detention storage volume by determining the difference in volumes between the inflow and outflow hydrographs, may be used for developments less than 100 acres.
 - e. For developments with more than 100 acres, a detailed hydrologic analysis utilizing the HEC-HMS, HEC-RAS Flood Hydrograph method will be required.

3. Calculation of Outlet Size

Outfalls, which utilize a pipe restrictor to control outflow, shall use the orifice equation.

a. Reducer or Restrictor Pipes shall be sized as follows:

(1) Use the following equations to calculate the required outflow orifice:

$$\text{Area of pipe} = \pi d^2/4$$

$$Q = CA (2 gh)^{1/2}$$

$$D = Q^{1/2} / 2.25 h^{-1/4}$$

$$Q = \text{outflow discharge in cfs.}$$

$$C = 0.8$$

$$h = \text{water surface differential (ft)}$$

$$D = \text{orifice diameter (ft)}$$

$$A = \text{area of pipe (ft}^2\text{)}$$

$$g = \text{gravity (32.2 ft/s}^2\text{)}$$

(2) For head differential in systems outfalling into a roadside ditch or storm sewer use actual head loss or 1-foot whichever is greater. For all other discharge conditions use 2 feet or difference of ~~100-year~~100-year water surface elevation and elevation of ~~25-year~~25-year storm in receiving channel, whichever is greater.

(3) For detention systems outfalling into a public storm sewer, the restrictor shall be sized based upon the peak 5-year developed flow.

(4) For detention systems outfalling into a public roadside ditch, the restrictor shall be sized based upon the peak 5-year undeveloped flow.

(5) For detention systems outfalling into creeks, channels or storm sewers sized to carry the 25-year or 100-year storm, the restrictor shall be metered to release the 5-year, 25-year and 100-year undeveloped flows.

(6) Restrictor shall be either the required diameter or the equivalent cross-sectional area. The orifice diameter "D" shall be a minimum of 6 inches.

(7) Detention ponds less than one (1) acre in size shall have a minimum of 4 inches of freeboard. All ponds one (1) acre or larger in size shall have at least one (1') foot of freeboard. When a parking lot is used for detention per 1d. above, freeboard is not required within the parking lot. Freeboard shall be measured from the maximum 100-year water surface elevation and shall not be used in the calculation of storage or mitigation.

4. Detention Pond Structural Requirements

a. Side slopes shall not exceed a slope of 4 horizontally to 1 vertically.

b. Dry ponds with lengths over 50 feet shall have a concrete pilot channel.

c. Concrete pilot channels shall have a minimum width of 4 feet and a minimum thickness of 4 inches with #3 rebar spaced at 12 inches on center each way. The concrete channels shall be constructed of 5-sack cement concrete with a compressive strength of 2500 psi at 28 days. Provide a 1-inch depression per every 1-foot of transverse slope with redwood headers spaced every 40 feet.

d. Appropriate covering (grass, slope paving, etc.) shall be established on side slopes and pond bottom to prevent erosion during periods of maximum water velocity.

e. A concrete gravity spillway, set at the maximum ponding elevation, shall be provided at the detention pond outfall structure.

f. Wet detention ponds and ponds with vertical walls shall provide access for safety and maintenance purposes. Wet detention systems shall have a method in-place to minimize stagnation, such as an aeration system.

g. Dry detention ponds shall not be designed with less than two feet of depth.

5. Ownership and Easements
 - a. Pumped detention or floodplain mitigation facilities are not allowed.
 - b. Maintenance responsibility of the detention facility must be indicated on the plat.
 - c. All properties being served shall have drainage access to the pond.
 - d. A maintenance agreement must be provided when multiple tracts are being served.
 - e. A maintenance berm must be provided around all sides of detention and floodplain mitigation facilities.
 - (1) The minimum maintenance berm width for dry ponds is 20 feet.
 - (2) The minimum maintenance berm width for wet ponds is ~~50~~30 feet.
6. Off-Site Detention

Off-site detention, such as regional or sub-regional detention, may be used provided:

 - a. The detention facility is in the same watershed or sub-watershed as the developer's site.
 - b. The drainage area is less than 100 acres.
 - c. Excess detention capacity may not be used for mitigation of fill in the flood plain.
 - d. The Developer provides conveyance to the detention facility without having a detrimental effect on any adjacent properties.
 - e. If conveyance is directed through properties not directly owned by the developer, an executed contract or recorded deed between the parties agreeing to the said conveyance must be presented.
 - f. This procedure is approved by both the City and the corresponding drainage entity during preliminary plan review.
 - g. It is the desire of the City of Manvel that regional detention be utilized when available. If new development is within the service area of a publicly owned or operated regional storm water detention facility, connection to such regional facility shall be as required by the drainage master plan applicable to such facility.
7. Redevelopment and Additions
 - a. Additional impervious cover may be added to an existing single-family residential lot (1-time allowance), provided that the cumulative increase does not exceed 20% of the original impervious cover for that lot.
 - b. A drainage plan and detention calculations will be required for any proposed improvements, additions, or redevelopment in excess of the 20% impervious cover allotment.
 - c. All commercial and non-residential new developments, additions, or redevelopment will require a new or revised drainage plan for additional impervious cover.

1.05 RESERVED

1.06 SUBMITTALS

A. Preliminary Design - Submit for Review and Comment

One-line drawings are required as part of the platting process and include:

1. Approximate definition of lots and street patterns.
2. The approximate drainage areas for each system.
3. A definition of the proposed drainage system by single line.
4. The proposed pipe diameters.
5. Any proposed drainage easements.
6. Floodplain boundary, if any.

B. Final Design - Submit the Following for Approval

1. Copies of any documents which show approval of exceptions to the City design criteria.
2. Design calculations for storm line sizes and grades, and for detention facilities, if any.
3. Design calculations for the hydraulic grade line of each line or ditch, and for detention facilities, if any.
4. Contour map and drainage area map of the project.
5. Plan and profile sheets showing storm water design (public facilities only).
6. Projects located within a Flood Plain boundary or within a Flood Plain Management area shall show the Flood Plain boundary or Flood Plain area, as appropriate, on the one-line drawing or drainage area map.
7. Soil boring logs.
8. All drainage plans shall have a current FEMA flood zone determination statement.

C. Signature - Submit the Following for Approval

1. Review prints.
2. Original drawings.
3. Storm water detention maintenance agreement letters.

1.07 QUALITY ASSURANCE

- A. Prepare calculations and construction drawings under the supervision of a Professional Engineer trained and licensed under the disciplines required by the drawings. The final construction drawings and all design calculations must be sealed, signed, and dated by the Professional Engineer responsible for the development of the drawings.
- B. Prior to release of the maintenance bond (and in conjunction with the final walk-thru), the developer shall have all storm sewer lines (within the project boundary) inspected with television equipment. Any pipe settlement which causes excess ponding of water in pipeline, any misaligned joints, or other defects shall be cause for rejection. The developer shall provide the City with one copy of the TV videotape and one copy of the TV inspection report. For each segment, the video tape and corresponding written report shall clearly identify:
1. Each line segment being inspected.
 2. The size and type of pipe being inspected.
 3. Accurate footage of the line segment inspected.
 4. Deficiencies in materials, alignment, pipe grade, or any other apparent deficiencies.

2.0 EXECUTION

2.01 RESEARCH REQUIREMENTS – Reserved

2.02 DESIGN ANALYSIS

- A. All projects shall be tied to National Geodetic Survey (NGS) Datum adjustment, which matches the Federal Emergency Management Agency (FEMA) rate maps or the most current NGVD, which matches the FEMA rate maps. In the event GPS surveying is used to establish benchmarks, at least two references to benchmarks relating to the FEMA rate maps must be identified. Equations may be used to translate other datum adjustments to the required adjustment.
- B. Plan sets will include a drainage area map, which shall contain all storm sewer drainage calculations as determined by the Rational Method.
- C. All drainage systems for curb and gutter pavements shall be underground closed conduits; individual residential lot drainage is exempt. Drainage systems for pavements without curb and gutter shall be roadside open-ditch sections.
- D. Soil boring with logs shall be made along the alignment of all storm sewers having a cross section equal to or greater than 72 inches in diameter or equivalent cross section area. Boring should be taken at intervals not to exceed 500 linear feet and to a depth not less than 3 feet below the flow line of the sewer. The required bedding will be determined from the soil boring.
- E. Plan sets shall include the 5-year Hydraulic Grade Line for storm sewers and roadside ditches on the plan and profile sheets. They shall also include the 100-year ponding depth on the plan and profile sheets.

SECTION 6 SITE DEVELOPMENT

1.0 GENERAL

1.01 CHAPTER INCLUDES: Site Development

1.02 REFERENCES

- A. City of Manvel Zoning Ordinance.
- B. City of Manvel Subdivision Ordinance.

1.03 DEFINITIONS

Commission – Planning, Development and Zoning Commission

1.04 DESIGN REQUIREMENTS

A. Site Development Requirements

1. General Requirements

- a. Site development plans for all site developments within the City of Manvel and its ETJ shall be approved by the City prior to construction.
- b. Site developments, not including single family residential, shall include any project that affects public water, wastewater, storm drainage, or paving facilities.
- c. All site developments shall conform to the requirements of these Standards and applicable rules and regulations of the City of Manvel.
- d. All wastewater, drainage and paving site development improvements shall be privately owned, operated and maintained up to and including the connection to the public system.
- ~~e.~~ All water site development improvements shall be privately owned, operated and maintained up to, but not including, the meter and meter vault.
- ~~ef.~~ Restore the City of Manvel ROW to existing or better condition.
- ~~fg.~~ Private utilities and service lines shall be placed in an easement or on the property being served.
- ~~gh.~~ Hours of Construction are 7:00 AM to 9:00 PM, Monday through Saturday.
- ~~hi.~~ As-Built Construction Plans (Record Drawings) and a Two-Year Maintenance Bond (in the amount of 100% of the cost of the infrastructure improvements, valid two years from the date the infrastructure is accepted by City Council) shall be required for all public improvements being dedicated to the City.

2. Design Review Requirements for Site Development Plans.
 - a. All site development plans for proposed developments shall be submitted to the City for approval prior to construction. Site development plans shall show all proposed water, wastewater, paving, parking, drainage, street signage, streetlight locations, flood protection facilities, and sidewalks with approved ADA ramps locations.
 - b. A traffic impact study shall be required for any development proposal expected to generate traffic volumes that will significantly impact the capacity and/or safety of the street system. All proposed developments generating volumes of 5,000 trips per day or greater shall meet ~~this criteria~~this criterion. The trip estimate shall be based on the latest version of the Institute of Transportation Engineers, Trip Generation Manual.
 - c. The developer should first schedule a Pre-Development Meeting (PDM) with the City of Manvel. At this meeting, the developer should be able to discuss infrastructure issues and the feasibility of developing the site.
 - d. The next step is to prepare a site plan submittal to be reviewed by staff. The developer shall consult with staff until all significant issues surrounding the proposed site plan and development are resolved, prior to proceeding to the Commission.
 - e. The final site plan is prepared after all comments on staff review have been addressed. Any applicant may submit a site plan for consideration by the Commission at any time after the staff review is completed. The Commission reviews the final document for completeness and public awareness. The submittal for the final site plan requires that 10 copies of:
 1. Site Plan
 2. Landscaping Plan
 3. Elevation PlanAnd 3 copies of:
 1. Drainage Plan
 2. Utility Plan
 3. Grading Plan
 4. Storm Water Pollution Prevention PlanTo be provided to department staff at least 14 days prior to the next regularly scheduled PD&Z meeting.
 - f. Submittal to the appropriate drainage agency is required prior to Council approval. Once the site plan is approved, the developer may begin the building permitting process.
 - g. Three (3) copies of the site development plans shall be submitted to the Building Official for review. The City will typically respond within 2 to 4 weeks of the initial submittal.
 - h. When plan changes are requested, 2 copies of the revised site development plans shall be resubmitted to the City for final review and should result in the issuance of the building permit.
3. Building Slab Elevations - Minimum building slab elevations shall conform to the requirements of the City of Manvel Flood Damage Prevention Ordinance.
4. Water Service - Water service lines and meters shall be sized in accordance with requirements set out in Section 3 of the Design Criteria Manual.

5. Sanitary Sewer Service - Sanitary sewer service leads are normally installed during construction of the public sanitary sewer. When a sanitary sewer service lead is to be installed for a site development, refer to the Wastewater Collection System Design Requirements. All lots, tracts, or reserves shall be connected directly to a public sanitary sewer by a single lead. The City shall be contacted for all sanitary sewer connections for commercial projects within the City.
6. Site Drainage Requirements - All commercial, industrial, office, recreational, and multi-family tracts shall have an internal drainage system. The internal drainage system shall connect all site runoff into a storm sewer system that shall connect to the public drainage facilities in the area, except with specific approval.
 - a. The internal site storm sewer shall be connected to a public storm sewer and a manhole or at an inlet adjoining the site. The site drainage outfall shall be connected to the nearest existing drainage system with adequate capacity to serve the drainage area. Where extension of the existing drainage system is required, all costs for extension shall be the responsibility of the development.
 - b. All internal facilities shall be designed by a Registered Professional Engineer and shall be sized to drain the site in accordance with these standards.
 - c. Drainage calculations shall be submitted with all site development plans. Other supporting data may be required by the City.
 - d. When the site drains directly into a Brazoria County facility and/or into a highway right-of-way, the appropriate governmental entity (entities) shall approve the site development connection to public facilities.
7. Driveways
 - a. It is desirable to minimize the number of driveways on all streets in order to reduce the number of conflict points and facilitate traffic flow. It is recognized, however, that certain existing tracts may not be able to fully comply with the following standards due to limited frontage or other constraints.
 - b. When compliance with these criteria is precluded due to the location of driveways on adjoining properties, attempts should be made to obtain alternative access where feasible, including joint access driveways, access easements to adjoining properties or access to intersecting streets.
 - c. If it can be demonstrated to the City that sufficient attempts to secure alternative access have been made and that such access is still not possible, the City may accept a Traffic Impact Analysis performed by a Registered Professional Engineer to permit a deviation to the driveway spacing requirements indicated herein.
 - d. Residential driveways shall be a minimum of 12 feet wide (and a maximum of 24 feet) at the right-of-way line and should be placed away from the property line.
 - e. Residential lots must have a minimum of 120 feet of frontage in order to be eligible for two driveways on the same lot and they shall have 50 feet of separation between them.
 - f. Residential lots should not front on collector streets, thoroughfares, or arterials. For residential lots that do front on collector streets, they must have an internal turnaround or circle drive to minimize conflict points.
 - g. Non-residential driveways shall be 25 feet to 35 feet wide of pavement.
 - h. Driveways shall be spaced with a minimum of 50-foot separation.
 - i. Islands may be allowed within non-residential driveways, but must have a minimum of 12.5' travel lanes, and be pre-approved by the Fire Marshal.

- j. Driveways on major thoroughfares/boulevard streets shall be placed no closer than 125 feet from the ultimate curb line of an intersecting major thoroughfare or boulevard street.
- k. Driveways on collector/ minor streets are to be placed no closer than 75 feet from the ultimate curb line of an intersecting major thoroughfare/boulevard street.
- l. Driveways on major thoroughfares/boulevard streets are to be placed no closer than 75 feet from the ultimate curb line of an intersecting collector commercial/minor street.
- m. For purposes of determining the separation distance, the back of curb or edge of street shall be used in conjunction with the edge of driveway which is closest and parallel to the street.
- n. Non-residential tracts with less than 150 feet of frontage on a public street shall have no more than 1 driveway. Non-residential tracts with between 150 and 320 feet of frontage on a public street shall have no more than 2 driveways. Non-residential tracts with between 321 feet and 600 feet of frontage on a public street shall have no more than 3 driveways. Non-residential tracts with over 600 feet of frontage on a public street shall have driveways specially designed and specifically approved by the City.
- o. Non-residential driveway connections to the public street shall be approved and inspected by the City of Manvel.
- p. Driveway radii shall not extend beyond the projection of a property corner to the back of the curb.
- q. Driveways shall be concrete installed according to the City of Manvel Construction Details.
- r. Driveways shall be evaluated with respect to signage, landscaping and structures for adequate sight distance.
- s. A note stating, "Access to adjacent property and common driveways may be required," shall be placed on the site plan.
- t. Curb returns for driveways shall be, at a minimum:
 - (1) For residential driveways:
 - (a) 5 feet on local streets
 - (b) 10 feet on collector streets, major thoroughfares and boulevards
 - (2) For non-residential driveways:
 - (a) 25 feet on local streets
 - (b) 35 feet on collector streets, major thoroughfares, boulevards and local streets less than 28 feet in width.
- u. Per Section 59-53 of the Manvel City Code, manholes, fire hydrants, and water valves shall not be located within a driveway, sidewalk, or street.

~~8. Fire Lanes~~

- ~~a. Fire lane easements shall be required on all multi-family and non-residential tracts if any part of a building is greater than 150 feet from either a fire lane or a public street right-of-way.~~
- ~~b. Fire lanes shall be a minimum 25-foot wide with 25-foot radius.~~
- ~~c. Fire lanes shall be constructed using the same structural requirements as public pavement. Alternate materials may be used with specific approval from the City.~~
- ~~d. Fire lanes shall be designed to drain in compliance with the Site Development Requirement.~~
- ~~e. Fire lane markings shall be provided as specified in the Manvel Code of Ordinances.~~

9. **Controlled Access Gate Requirements**
 - a. Plans for access control systems shall be submitted to the Fire Marshal's Office and approved prior to construction.
 - b. All access control gates shall have emergency means of operation in the event of power loss.
 - c. Access control gates shall provide a clear, passable width of at least twenty feet.
 - d. A Knox® key switch and Click2Enter-I.V4 scanner radio receiver shall be provided for all controlled access gates. The key switch shall operate all gates.
 - e. A Knox® pad lock and Click2Enter-I.V4 scanner radio receiver shall be provided for all non-motorized gates.
 - f. The location of the key switch shall be approved by the Fire Marshal's Office.
 - g. The owner shall maintain all parts of the access system and keep them in good working order.
 - h. The Fire Marshal's Office and Police Dispatch shall be notified immediately of any damage to the access system that hinders access including, but not limited to, damage to the key box, lock, or gates.
10. **Pollution Prevention**

A pollution prevention plan shall be provided for all site development projects.

 - a. Filter fabric fence shall be installed at the perimeter of the site before construction is to begin.
 - b. Once construction is completed, either filter fabric fence, 5 feet of hydro mulch or sod shall be installed at the back of all curbs, or other Best Management Practices shall be implemented.
 - c. Refer to the storm water ordinance for additional requirements.
11. **Parking Lot Guidelines**

A parking lot layout is required to ensure that adequate off-street parking is provided with the construction, alteration, remodeling or change of use of any building or change in use of land.

 - a. Off-street parking spaces shall be located on the same lot, tract, parcel, or premises as the use being served or on other property of the same or less restrictive zoning classification that the owner of the premises being served has a continuing right to use for parking. When the off-street parking spaces are not located on the same lot, tract, parcel, or premises being served, the distance from the center of the parking lot to an entrance to the building or use shall not exceed 300 feet in distance, measured along the shortest available pedestrian route with public access.
 - b. Any existing building or use that is enlarged, structurally altered, or remodeled to the extent of increasing or changing the use by more than 50 percent as it existed shall be accompanied by off-street parking for the entire building or use. When the enlargement, structural alteration, or remodeling is to the extent that the use is not increased or changed by more than 50 percent, additional off-street parking shall only be required for the increased or changed floor area or use.
 - c. Existing parking spaces may not be used to satisfy additional off-street parking requirements unless the existing spaces exceed the number recommended for the building or use for which the existing spaces are associated. Commercial areas may be phased. Parking from earlier phases may count for future uses.

- d. ~~The number of off-street parking spaces recommended for each building or use shall be determined by reference to the following table of parking groups. Where several different property uses will share a joint parking area, the parking should be computed based upon the overall development. Shopping centers containing not more than 200,000 square feet of gross leasable floor area should have a minimum of six spaces per 1,000 square feet of gross leasable floor area. Shopping centers containing more than 200,000 square feet of gross floor area should have a minimum of 5.5 spaces per 1,000 square feet of gross leasable floor area.~~
- d. The Parking Group Table can be found in the Zoning Ordinance, Section 77-45.
- e. The design and dimensions of off-street parking areas shall be in accordance with the following table of minimum dimensions. The minimum size of a parking spaces shall be 10 (ten) feet wide and twenty (20) feet long. All dimensions below are in feet:

	<i>Angle</i>			
	<i>0°</i>	<i>45°</i>	<i>60°</i>	<i>90°</i>
Stall, parallel to aisle	25.0	10.0	10.0	10.0
Stall, perpendicular to aisle	10.0	20.0	20.0	20.0
Aisle width, one-way	25.0	25.0	25.0	25.0
Aisle width, two-way	25.0	25.0	25.0	25.0
Cross aisle, one-way	25.0	25.0	25.0	25.0
Cross aisle, two-way	25.0	25.0	25.0	25.0

- f. Off-street parking spaces shall be clearly marked. Parking spaces abutting an adjoining property line or street right-of-way shall be provided with wheel guards or bumper guards so located that no part of a normally parked vehicle will extend beyond the property line. When wheel guards are used, they shall be centered 2.5 feet from the property line for 90-degree parking, 2.3 feet for 60-degree parking, and 2.0 feet for 45-degree and 30-degree parking.
- g. Approval of the parking area layout and design of all off-street parking areas shall be by the City. The City shall determine that spaces provided are usable, and that the circulation pattern of the area is adequate.
- h. Mixed/Combination of Land Uses - Where a mixed or combination of land uses are proposed, parking shall be calculated based on the respective requirements of each land use. Shared parking is encouraged, if appropriate.
- i. All new parking shall be constructed with concrete, with a minimum slab thickness of 6 inches with $f_c = 3,500$ psi and reinforcement shall be Grade 60, $f_y = 60,000$ psi, #4 deformed reinforcing bars spaced at 18 inches center to center both ways and minimum lap lengths of 18 inches.
12. Fences in any single-family residential district may not exceed six feet in height. Fences in districts other than single-family residential, may not exceed eight feet in height. Barbed wire fences are only allowed on property at least two acres in size and the barbed wire portion of the fence shall be no higher than 52 inches as measured from the natural ground.
- a. Perimeter fencing adjacent to Major Thoroughfares shall be masonry.
- b. Perimeter fencing adjacent to Detention Ponds and Amenity Lakes shall be ornamental (wrought) iron.
- c. Perimeter fencing to be installed prior to the release of the Maintenance Bond.

13. Driveway Culverts

a. *New Culverts*

- (1) Driveway culverts will be set by Road and Bridge Department personnel on ~~city-maintained~~city-maintained roads.
- (2) The Department will not set culverts in rights-of-way for State roads or on private roads.
- (3) Citizens wishing new culverts to be set are required to furnish reinforced concrete pipe (RCP) of a suitable size as determined by Department personnel. Reasonable notice from citizen is required.
- (4) New culverts will be backfilled with soil or other material available on the site at the time culvert is set. Any material other than in-place soil must be purchased by the citizen from a vendor of their choosing. Clean out openings or grates must be supplied by the citizen if the culvert is longer than 48 feet.

b. *Existing Culverts*

- (1) When drainage projects are undertaken by the Department, culverts may be enlarged if necessary, and replaced with RCP at Department's expense. Installation will be completed as follows:
 - (a) Culverts covered with base material well be re-covered with base material.
 - (b) Asphalt or concrete removed will be replaced with like material (asphalt for asphalt and concrete for concrete).
 - (c) When the Department undertakes projects to re-surface roads with asphalt, asphalt will be tapered outside edge of pavement at existing driveways to avoid abrupt drop off.

c. *Culvert Installation*

- (1) Stake and mark the ditch where you would like to have the culvert set. Call City of Manvel, Permits Department and have a work order prepared. We will send out our Public Works Personnel they measure the ditch; and will call you with the correct size of reinforced concrete pipe you need to purchase.
- (2) Once the size is determined, order the reinforced concrete culvert pipe and have them delivered to the site. The only dirt we typically use to cover pipe is fill dirt (what we usually dig out of the ditch when we set the culverts). After your culverts are delivered to the site, give City Hall a call and we will put in another work order to install the culverts.

d. *Driveway Surface*

- (1) The citizen's contractor may add asphalt or concrete surfacing over a driveway culvert at the citizen's expense. Contractor shall insure that alignment of culvert pipe is not altered during such operation.
- (2) If concrete surfacing is added by citizen's contractor: An expansion joint shall be provided two feet beyond outer edge of pipe on each side of culvert pipe, to facilitate removal of concrete as may be necessary to enlarge pipe during drainage improvement projects.
- (3) No concrete shall be placed within 11 feet of roadway centerline.

14. Streetlights
 - a. All new streetlights within a subdivision to be installed by the developer.
 - b. All monthly electrical charges and any maintenance and operation costs for streetlights within a subdivision to be paid for by the ~~homeowners~~homeowners' association or MUD, as applicable.
 - c. All new streetlights to be LED Modules/Fixtures.
 - d. Refer to City Code 62-114.
 - e. Streetlights to be installed at all intersections, dead-ends, cul-de-sacs, and at a minimum spacing of 250 feet; or consistent with a photometric layout, as approved by the City.
 - f. Streetlights on Streets ($\leq 80'$ ROW) shall have minimum ~~60-watt~~60-watt LED. Streetlights on Thoroughfares ($> 80'$ ROW) shall have minimum ~~180-watt~~180-watt LED.
15. Fire Apparatus Access Roads and Fire Lanes
 - a. Fire apparatus access roads and Fire Lanes shall have a radius of 25 feet and unobstructed width of not less than 24-25 feet exclusive of shoulders, except for approved security gates in accordance with Section 503.6 of the Fire Code, and an unobstructed vertical clearance of not less than 14 feet (4267 mm).
 - b. Fire apparatus access roads shall be designed and maintained to support imposed loads of 80,000 Lbs. for fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.
 - c. Fire Lane Marking Striping, signs, or other markings, when approved by the fire code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.
 - (1) Striping – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE TOW-A-WAY ZONE" or "FIRE LANE NO PARKING TOW-A-WAY ZONE" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.
 - (2) Signs – Signs shall read "NO PARKING FIRE LANE TOW-A-ZONE" or "FIRE LANE NO PARKING TOW-A-WAY ZONE" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Marshal.
 - d. Where a portion of the facility or building hereafter is constructed or moved into or within the jurisdiction is more than 300 feet from a hydrant on a fire apparatus road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire marshal.

16. Address Identification. New and existing buildings shall be provided with address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 6 inches (152.4 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, or other approved sign with approved 6 inch (152.4 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address identification shall be maintained.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum 4 inches (88.9 mm) in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

17. 2" PVC Conduit shall be installed along Major Thoroughfares for future City of Manvel fiber optic network.
18. A Photometric Plan is required for all Non-Residential Site Plans. The Photometric Plan shall show lighting calculations in foot-candles along all property lines. The maximum allowable light level is 0.5 foot-candles along all property lines.

2.0 EXECUTION

2.01 RESEARCH REQUIREMENTS

- A. Discuss project concepts outlining proposed features and usage with the City.
- B. Research existing utility and right-of-way information.
- C. Verify that no restrictions exist that will deny approval of the project concept.

2.02 DESIGN ANALYSIS – Reserved

2.03 DRAWINGS

- A. The plans shall include an overall drainage layout showing:
 - 1. Total area (in acres) of site to be drained.
 - 2. Area (in acres) drained to each inlet.
 - 3. Contours or an adequate number of spot elevations to indicate area drained to each inlet.
 - 4. Top elevation and flowline elevation at each inlet.
 - 5. Gradient and size on each private storm sewer.
 - 6. Computations to support pipe sizes and grades shown
 - 7. Design velocity for storm sewers shall be 3 feet per second.
 - 8. TX DOT permit shall be required for drainage affecting a state owned/maintained facility. Submit permit with site plan.
 - 9. The drawings shall be prepared and sealed by a Registered Professional Engineer.
 - 10. The size and location of the detention facility shall be indicated on the plans, along with the size and location of the outfall structure.
- B. All drainage plans shall be approved by the appropriate drainage entity prior to City approval.
- C. The site plan shall show all water and sewer service lines, sizes, grades and alignments with appropriate ties into existing public trunk lines.
- D. The site plan shall show all parking areas.
- E. The site plan shall indicate the types and location of all existing and proposed landscaping. Landscaping shall meet the minimum requirements of the Zoning Ordinance. A tree survey is required for first 20 feet of depth adjacent to all proposed streets. If no trees exist, a note to that affect shall be placed on the site plan.
- F. The site plan shall show all proposed and existing building setbacks, locations, heights and square footage of all proposed buildings.
- G. The land use for all adjacent property shall be shown on the site plan.
- H. All parking lot pavement for site plans shall be engineered to provide for regular use of vehicles expected to utilize the parking area and based upon the soil conditions underlying the parking area. A Registered Professional Engineer shall certify the design submitted for approval.
- I. Concrete sidewalks (a minimum of 4.5 feet wide and 4 inches thick with steel reinforcement) shall be required along all curb-and-gutter street frontages. The design and installation of such sidewalks shall comply with Texas Accessibility Standards Architectural Barriers requirements. The location of all proposed and existing sidewalks shall be shown on the construction drawings.
- J. Show location of signs, screening walls or fences (indicate height, minimum 8 feet) and dumpsters (with appropriate screening).
- K. No improvements to the right-of-way shall be made without prior City approval. This includes planting trees in the right-of-way of residential and non-residential areas.
- L. In the event that there is a discrepancy in the drainage criteria requirements between the City and the applicable Drainage District, the City Engineer may determine which criteria will apply.

**CITY OF MANVEL
DESIGN CRITERIA MANUAL
SECTION 7 - MODIFICATION FORM**

Variations to technical standards identified in the Design Criteria Manual may be permitted by the City of Manvel City Engineer. The modification proposal must be submitted by a registered Professional Engineer following generally accepted engineering standards and such proposal contains the following information and substantiates the findings in paragraph four (4) below. If an appeal to the City of Manvel City Engineer decision is requested, the Planning Development & Zoning (PD&Z) will review that appeal and make a recommendation to City Council. City Council will have final authority on the approval or denial of the Appeal.

PROJECT NAME: _____

PROJECT ENGINEER: _____

This entire form must be completed in its entirety. If form is submitted incomplete, it will be administratively rejected.

SUBMITTAL DATE: _____

SUBDIVISION NAME: _____

~~MODIFICATION LOCATION~~ MODIFICATION LOCATION:

1. Set forth the proposed deviation to the technical standard.

2. Set forth the impact such deviation has on speed differential and street capacity, the likelihood of accidents, the long-term maintenance and operation effect, the degree of functionality and efficiency, the technological advancements involved, and other relevant matters.

3. Show a comparison of the technical standard to the proposed deviation with respect to overall safety and quality, speed differential, street capacity, existing and projected accidents, long-term maintenance and operation, degree of functionality, degree of efficiency, technological advancements, and other relevant matters.

4. Describe all mitigating improvements that reduce the negative impact of the proposed deviation on overall safety and quality, speed differential, street capacity, accident occurrences, long-term maintenance and operation, degree of functionality, degree of efficiency and demonstrating the degree to which the proposed deviation detrimentally affects the foregoing. Other relevant factors, including technological advances, should be explained by describing how they will affect the proposed development. Mitigating improvements can include but are not limited to, traffic control devices, pavement improvements, added acceleration or deceleration lanes or reservoirs, and other on-site improvements.

SUMMARY & CONCLUSION/RECOMMENDATION FOR MODIFICATION:

List of Supporting Documentation Attached?

Yes____

No____

Seal of Professional Engineer:



City of Manvel Use ONLY

1. Modification Request:

Approved

Denied

City Engineer

Date

2. Planning Development & Zoning:

Recommended

Not Recommended

Chair

Date

3. City Council:

Approved

Denied

Mayor

Date

RESOLUTION NO. 2021-R-11

A RESOLUTION OF THE CITY OF MANVEL, TEXAS, EXTENDING THE LOCAL STATE OF DISASTER, DUE TO COVID-19 PANDEMIC.

* * * * *

WHEREAS, on March 18, 2020, Debra Davison, Mayor of the City of Manvel, issued a declaration of a local state of disaster for the City of Manvel resulting from

COVID-19 Pandemic;

WHEREAS, on April 6, 2020, the City Council of the City of Manvel adopted Resolution No. 2020-R-04 extending the local state of disaster for the City of Manvel until May 4, 2020; and

WHEREAS, on April 20, 2020, the City Council of the City of Manvel adopted Resolution No. 2020-R-07 extending the local state of disaster for the City of Manvel until June 6, 2020; and

WHEREAS, on June 1, 2020, the City Council of the City of Manvel adopted Resolution No. 2020-R-09 extending the local state of disaster for the City of Manvel until July 6, 2020; and

WHEREAS, on July 6, the City Council of the City of Manvel adopted Resolution No. 2020-R-10 extending the local state of disaster for the City of Manvel until August 4, 2020; and

WHEREAS, on August 5, 2020, Debra Davison, Mayor of the City of Manvel, again issued a declaration of a local state of disaster for the City of Manvel resulting from COVID-19 Pandemic; and

WHEREAS, on October 5, 2020 the City Council of the City of Manvel adopted Resolution No. 2020-R-15 extending the local state of disaster for the City of Manvel until January 5, 2021; and

WHEREAS, on January 4, 2021 the City Council of the City of Manvel adopted Resolution No. 2021-R-01 extending the local state of disaster for the City of Manvel until June 8, 2021; and

WHEREAS, the conditions necessitating declaration of the local state of disaster continue to exist; and

WHEREAS, §418.108(b) of the Texas Government Code provides that a local state of disaster may not be continued for a period of excess of seven days without the consent of the governing body of the political subdivision;

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MANVEL, TEXAS:

1. That the City Council hereby consents to the local state of disaster declared by the Mayor for the City of Manvel on March 18, 2020, and extended by the City Council by Resolution Nos. 2020-R-09, 2020-R-10, 2020-R-12, 2020-R-15, and 2021-R-01 to continue until _____, 2021, unless terminated sooner by the Mayor or by a vote of the City Council of the City of Manvel.

2. A state of emergency under section 4.07 of The City Charter is also declared by the City Council.

PASSED, APPROVED, AND RESOLVED by the City Council of the City of Manvel, Texas,
on this _____ day of June, 2021.

Debra Davison, Mayor

ATTEST:

Tammy Bell, City Secretary

ORDINANCE NO. 2021-O-10

AN ORDINANCE AMENDING ORDINANCE NO. 2020-O-09, 2020-O-11, 2020-O-13, 2020-O-18, 2020-O-19, 2020-O-20, 2020-O-24, 2020-O-35 AND ORDINANCE 2021-O-01 WHICH ADOPTED EMERGENCY MEASURES IN RESPONSE TO A LOCAL STATE OF DISASTER DECLARED DUE TO COVID-19 PANDEMIC; PROVIDING FOR THE CONTINUATION OF TEMPORARY SUSPENSION OR MODIFICATION OF CERTAIN ORDINANCES AND REGULATIONS DURING THE DECLARED LOCAL STATE OF DISASTER; AND PROVIDING THAT THIS ORDINANCE SHALL BECOME EFFECTIVE FROM AND AFTER ITS PASSAGE AND ADOPTION.

WHEREAS, the novel coronavirus (COVID-19) has been recognized globally as a contagious respiratory virus and global pandemic; and

WHEREAS, it is critical to take additional steps to prepare for, respond to, and mitigate the spread of COVID-19 to protect the health and welfare of Texans; and

WHEREAS, the Governor of the State of Texas declared a state of disaster on March 13, 2020; and

WHEREAS, the Mayor of the City of Manvel declared a local state of disaster for the City of Manvel on March 18, 2020, and

WHEREAS, on March 19, 2020, the Governor issued Executive Order GA-08 regarding COVID-19 preparedness and mitigation; and

WHEREAS, the conditions necessitating declaration of a state of disaster continue to exist; and

WHEREAS, on March 23, 2020, the City Council extended the local state of disaster for the City of Manvel and additionally declared a state of emergency under section 4.04 of The City Charter; and

WHEREAS, on March 23, 2020, the City Council adopted Ordinance No. 2020-O-09 to adopt emergency measures in response to the pandemic; and

WHEREAS, on March 31, 2020, the Governor issued Executive Order GA-14 regarding continuity of essential services and activities during the COVID-19 disaster; and

WHEREAS, on April 6, 2020, the City Council adopted Ordinance No. 2020-O-11 to amend the emergency measures in response to the pandemic; and

WHEREAS, on April 27, 2020, the Governor issued Executive Order GA-18 regarding continuity of essential services and activities during the COVID-19 disaster; and

WHEREAS, on May 4, 2020, the City Council adopted Ordinance No. 2020-O-13 to amend the emergency measures in response to the pandemic; and

WHEREAS, on May 5, 2020, the Governor issued Executive Order GA-21 regarding continuity of essential services and activities during the COVID-19 disaster; and

WHEREAS, on May 18, 2020, the Governor issued Executive Order GA-23 regarding continuity of essential services and activities during the COVID-19 disaster

WHEREAS, on May 18, 2020, the City Council adopted Ordinance No. 2020-O-18 to amend the emergency measures in response to the pandemic; and

WHEREAS, on June 1, 2020, the City Council adopted Ordinance No. 2020-O-19 to amend the emergency measures in response to the pandemic; and

WHEREAS, on May 26, 2020, the Governor issued a Proclamation modifying Executive Order GA-23 regarding continuity of essential services and activities during the COVID-19 disaster

WHEREAS, on August 6, 2020, the City Council adopted Ordinance No. 2020-O-24 to amend the emergency measures in response to the pandemic; and

WHEREAS, on September 17, 2020, the Governor issued Executive Order GA-30 regarding continuity of essential services and activities during the COVID-19 disaster

WHEREAS, on October 5, 2020, the City Council adopted Ordinance No. 2020-O-35 to amend the emergency measures in response to the pandemic; and

WHEREAS, on October 7, 2020, the Governor issued Executive Order GA-32, which supersedes GA-30 and GA-31 regarding continuity of essential services and activities during the COVID-19 disaster. Significantly, GA-32 updates the thresholds for areas with high hospitalizations; and

WHEREAS, on March 2, 2021, the Governor issued Executive Order GA-34, which supersedes GA-17, GA-25, GA-29, GA- 31, and GA-32.

WHEREAS, said local state of disaster requires certain amendments to the emergency measures adopted by council, to continue to address the effects of the situation;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MANVEL, TEXAS:

Section 1: That Ordinance No. 2020-O-09, (as amended by Ordinance No. 2020-O-11, Ordinance No. 2020-O-13, Ordinance No. 2020-O-18, Ordinance No. 2020-O-19, Ordinance No. 2020-O-20, Ordinance No. 2020-O-24, Ordinance No. 2020-O-35 and Ordinance 2021-O-01) are further amended to read and provide as follows.

The following revised emergency measures shall be in effect immediately upon issuance, and shall remain in effect until the local state of disaster is terminated:

A. PRICE CONTROLS:

It shall be unlawful for any vendor, merchant, or other person selling or offering to sell, whether retail or wholesale, any of the following goods or services at an exorbitant or excessive price:

- (1) groceries, beverages, toiletry articles, ice;
- (2) gasoline, diesel oil, motor oil, kerosene, grease, and automotive lubricants;
- (3) restaurant, cafeteria, and boarding-house meals; and
- (4) medicine, pharmaceutical, and medical equipment and supplies.

Determination of an exorbitant or excessive price shall be as determined with §17.46(b) of the Texas Deceptive Trade Practices-Consumer Protection Act.

Section 2: That the following city ordinances and regulations are hereby suspended or modified, and said changes shall remain in effect until the local state of disaster is terminated:

SUSPENSION AND MODIFICATION OF ORDINANCES:

- (1) suspend- the requirement of disconnection of city water utility service for non-payment (City Code, Sec. 71-9(a));
- (2) suspend- the offense of operation of alarm system without permit (City Code, Sec. 5-2(c));
- (3) suspend- the offense of failure to register dog or cat older than 3 months (City Code, Sec.8-9));
- (4) suspend- City Procurement Policies and Procedures [*note- state procurement laws still apply]

Section 3: As required by section 4.11 of The City Charter, the City Council hereby finds that an emergency exists. This ordinance is enacted as an emergency measure in response to the novel coronavirus (COVID-19) which has been recognized globally as a contagious respiratory virus and global pandemic. The goal is to reduce public contact.

Section 4: All ordinances or parts of ordinances inconsistent or in conflict herewith are, to the extent of such inconsistency or conflict, hereby repealed. Should any provision of this ordinance conflict with a state law or executive order of the Governor, it is the intent that the state law or executive order shall control. The Mayor is authorized to issue any orders consistent with this ordinance.

Section 5: In the event any clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged

invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Manvel, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

Section 6. Any person who shall intentionally, knowingly, recklessly or with criminal negligence violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and upon conviction, shall be fined in an amount not to exceed \$2,000.00. Each day of violation shall constitute a separate offense. If there is any conflict with fine/penal amount provided by order of the Governor, the Governor's order shall prevail.

Section 7: During this period of local state of disaster, any business establishment that allows patrons to visit the establishment in contravention of section 1 (A) or (B), shall be deemed to have created a serious health, safety and welfare risk. In such case, the city manager, or his designee, is authorized to revoke the certificate of occupancy of the establishment for the duration of the earlier of: (1) thirty (30) days, (2) end of the local state of disaster, or (3) until such sooner time as the city manager is satisfied that the serious health, safety and welfare risk no longer exists and is not likely to re-occur during this local state of disaster.

Section 8: This ordinance is an emergency ordinance adopted pursuant to section 4.11 of The City Charter and shall become effective immediately upon adoption of this ordinance. The procedural requirement of two readings is expressly dispensed with.

PASSED, APPROVED, AND ADOPTED on first and final reading this 15th, day of March, 2021.


Debra Davison, Mayor

ATTEST:


Tammy Bell, City Secretary





GOVERNOR GREG ABBOTT

May 18, 2021

FILED IN THE OFFICE OF THE
SECRETARY OF STATE
12:15 PM
MAY 8 2021
Secretary of State

The Honorable Ruth R. Hughs
Secretary of State
State Capitol Room 1E.8
Austin, Texas 78701

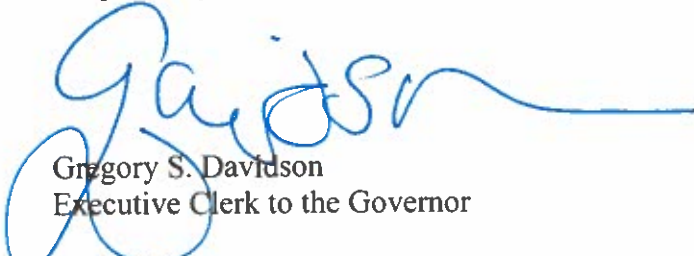
Dear Secretary Hughs:

Pursuant to his powers as Governor of the State of Texas, Greg Abbott has issued the following:

Executive Order No. GA-36 relating to the prohibition of governmental entities and officials from mandating face coverings or restricting activities in response to the COVID-19 disaster.

The original executive order is attached to this letter of transmittal.

Respectfully submitted,


Gregory S. Davidson
Executive Clerk to the Governor
GSD/gsd

Attachment

Executive Order

BY THE
GOVERNOR OF THE STATE OF TEXAS

Executive Department
Austin, Texas
May 18, 2021

EXECUTIVE ORDER GA 36

Relating to the prohibition of governmental entities and officials from mandating face coverings or restricting activities in response to the COVID-19 disaster.

WHEREAS, I, Greg Abbott, Governor of Texas, issued a disaster proclamation on March 13, 2020, certifying under Section 418.014 of the Texas Government Code that the novel coronavirus (COVID-19) poses an imminent threat of disaster for all counties in the State of Texas; and

WHEREAS, I issued Executive Order GA-34 on March 2, 2021, to open Texas 100 percent and remove face-covering requirements; and

WHEREAS, since then, COVID-19 hospitalizations and the rate of new COVID-19 cases have continued their steady decline; and

WHEREAS, Executive Order GA-34 specifically provides that “no person may be required by any jurisdiction to wear or to mandate the wearing of a face covering,” and, notwithstanding that order, some local governmental entities have caused confusion by nonetheless purporting to require face coverings; and

WHEREAS, Executive Order GA-34 also provides that “there are no COVID-19-related operating limits for any business or other establishment,” that any “conflicting order issued by local officials in response to the COVID-19 disaster” is superseded, and that all relevant statutes are suspended to the extent necessary to preclude inconsistent local orders; and

WHEREAS, to further ensure statewide uniformity, and based on the continued improvement of conditions in Texas, revised standards are appropriate to achieve the least restrictive means of combatting COVID-19; and

WHEREAS, in the Texas Disaster Act of 1975, the legislature charged the governor with the responsibility “for meeting ... the dangers to the state and people presented by disasters” under Section 418.011 of the Texas Government Code, and expressly granted the governor broad authority to fulfill that responsibility; and

WHEREAS, under Section 418.012, the “governor may issue executive orders ... hav[ing] the force and effect of law;” and

WHEREAS, under Section 418.016(a), the “governor may suspend the provisions of any regulatory statute prescribing the procedures for conduct of state business ... if strict compliance with the provisions ... would in any way prevent, hinder, or delay necessary action in coping with a disaster;” and

FILED IN THE OFFICE OF THE
SECRETARY OF STATE
12:15 PM O'CLOCK

MAY 18 2021

WHEREAS, under Section 418.018(c), the “governor may control ingress and egress to and from a disaster area and the movement of persons and the occupancy of premises in the area;” and

WHEREAS, under Section 418.173, the legislature authorized as “an offense,” punishable by a fine up to \$1,000, any “failure to comply with the [state emergency management plan] or with a rule, order, or ordinance adopted under the plan;”

NOW, THEREFORE, I, Greg Abbott, Governor of Texas, by virtue of the power and authority vested in me by the Constitution and laws of the State of Texas, do hereby order the following on a statewide basis effective immediately:

1. No governmental entity, including a county, city, school district, and public health authority, and no governmental official may require any person to wear a face covering or to mandate that another person wear a face covering; provided, however, that:
 - a. state supported living centers, government-owned hospitals, and government-operated hospitals may continue to use appropriate policies regarding the wearing of face coverings; and
 - b. the Texas Department of Criminal Justice, the Texas Juvenile Justice Department, and any county and municipal jails acting consistent with guidance by the Texas Commission on Jail Standards may continue to use appropriate policies regarding the wearing of face coverings.
2. Notwithstanding the above, public schools may continue to follow policies regarding the wearing of face coverings to the extent reflected in current guidance by the Texas Education Agency, until June 4, 2021. The Texas Education Agency shall revise its guidance such that, effective 11:59 p.m. on June 4, 2021, no student, teacher, parent, or other staff member or visitor may be required to wear a face covering.
3. This executive order shall supersede any face-covering requirement imposed by any local governmental entity or official, except as explicitly provided in paragraph numbers 1-2. To the extent necessary to ensure that local governmental entities or officials do not impose any such face-covering requirements, I hereby suspend the following:
 - a. Sections 418.1015(b) and 418.108 of the Texas Government Code;
 - b. Chapter 81, Subchapter E of the Texas Health and Safety Code;
 - c. Chapters 121, 122, and 341 of the Texas Health and Safety Code;
 - d. Chapter 54 of the Texas Local Government Code; and
 - e. any other statute invoked by any local governmental entity or official in support of a face-covering requirement.

Pursuant to the legislature’s command in Section 418.173 of the Texas Government Code and the State’s emergency management plan, the imposition of any such face-covering requirement by a local governmental entity or official constitutes a “failure to comply with” this executive order that is subject to a fine up to \$1,000, beginning at 11:59 p.m. on May 21, 2021.

4. Under Executive Order GA-34, business activities and legal proceedings are free to proceed without COVID-19-related limitations imposed by local governmental entities or officials, in all counties not in an area of high hospitalizations as defined in that executive order. Executive Order GA-34 also superseded any conflicting local order in response to the COVID-19 disaster, and directed that all relevant laws

FILED IN THE OFFICE OF THE
SECRETARY OF STATE
12:15 PM O'CLOCK

MAY 18 2021

are suspended to the extent necessary to preclude any such inconsistent local orders. Pursuant to the legislature's command in Section 418.173 of the Texas Government Code and the State's emergency management plan, the imposition of any conflicting or inconsistent limitation by a local governmental entity or official constitutes a "failure to comply with" this executive order that is subject to a fine up to \$1,000, beginning at 11:59 p.m. on May 21, 2021.

This executive order supersedes subparagraph numbers 1(b) and 2(c)(iii) of Executive Order GA-34, but does not otherwise supersede Executive Orders GA-10, GA-13, GA-34, or GA-35. This executive order shall remain in effect and in full force unless it is modified, amended, rescinded, or superseded by the governor. This executive order may also be amended by proclamation of the governor.



Given under my hand this the 18th
day of May, 2021.

A handwritten signature in black ink, reading "Greg Abbott", written over a horizontal line.

GREG ABBOTT
Governor

ATTESTED BY:

A handwritten signature in black ink, reading "Ruth R. Hughs", written over a horizontal line.

RUTH R. HUGHS
Secretary of State

FILED IN THE OFFICE OF THE
SECRETARY OF STATE
12:15 PM O'CLOCK

MAY 18 2021

Tammy Bell

From: Kyle Marasckin
Sent: Monday, May 24, 2021 8:12 PM
To: Tammy Bell; Kyle Jung; Jessica Rodriguez
Subject: In person meetings request:

Please pass this on to all our city council members. I had a hard time in the last council meeting to get the star six to work and at least I could reach out to another PDZ member to voice my opinion in the last meeting.

Not sure what the hold up is but we should be meeting in person. Schools, colleges, and city around us have pretty much gone back to in person meetings and some are having large events. Pearland Commerce is had large meetings, City of Pearland has even had retirement parties, Catholic schools are having Gala events, AISD is holding meetings in person, City of Alvin is holding meetings in person, Alvin - Manvel Chamber is holding in person meetings, our state representatives and congressman have had in person meetings and gone to large events, & ACC has held the last 3 months of meeting in person and I know this for a fact because I attend the ACC meetings.

Manvel is now behind on things. We never want to be behind the curve ball we want to be ahead and be a leader.

I know a lot if not all of PDZ members are ready to be back face to face to help the city go in the right direction.

In person meetings is what we signed up for when we took the oath to serve our city and our citizens. Vote to put us back in face to face meetings.

Kyle Marasckin
PD&Z member
Alvin Community College, Media Technology Specialist



City of Manvel

P. O. Box 187
20025 HWY 6
Manvel, Texas 77578

(281) 489-0630
Fax (281) 489-0634

AGENDA REQUEST

REQUEST MUST BE MADE ACCORDING TO THE SUBMITTAL SCHEDULE

Meeting Requested: (Please check applicable meeting)

Planning, Development & Zoning	☐	City Council	☐	Both	☒
--------------------------------	--------------------------	--------------	--------------------------	------	-------------------------------------

Date of Request: May 24, 2021 PDZ and June 7, 2021 City Council

YOUR REQUEST WILL BE PLACED ON THE NEXT AVAILABLE MEETING DATE. MEETINGS ARE SECOND AND FOURTH MONDAYS FOR PLANNING, DEVELOPMENT & ZONING AND FIRST AND THIRD MONDAYS FOR CITY COUNCIL. THE AGENDAS ARE POSTED TO THE GENERAL PUBLIC AT MANVEL CITY HALL AND ON OUR WEBSITE AT www.cityofmanvel.com. THE AGENDA IS POSTED AND WILL REMAIN POSTED CONTINUOUSLY FOR AT LEAST 72 HOURS PRECEDING THE SCHEDULED TIME OF THE MEETING. PLEASE CHECK THE BOARD FOR YOUR MEETING SCHEDULE. WE STRONGLY ENCOURAGE YOU TO ATTEND THE MEETING FOR QUESTIONS AND ANSWERS. IF YOU ARE UNABLE TO ATTEND ACTION MAY BE TABLED UNTIL THE FOLLOWING MEETING.

Person to Speak: Brad Sweitzer

Daytime Phone: 713-784-4500 Fax Number: N/A

E-mail Address: bsweitzer@ehrainc.com

Description of Request and Physical Address:

Consideration and possible action to approve and forward with recommendation to
City Council, Preliminary Plat for Meridiana Section 25A, a subdivision of 19.49 acres,
being a partial replat of Lots 17 & 18, Block 1, of Lulling Stone Section 1, as recorded
at Volume 21, Pages 267-270, Brazoria County Plat Records, City of Manvel, Brazoria
County, Texas.

Plats:

Preliminary X

Final

ALL DOCUMENTATION AND FEES ASSOCIATED WITH THIS AGENDA REQUEST MUST BE SUBMITTED ACCORDING TO THE MEETING SUBMITTAL SCHEDULE WHICH CAN BE FOUND ON OUR WEBSITE. BY SIGNING THIS AGENDA REQUEST FORM I ACKNOWLEDGE THAT I HAVE READ AND UNDERSTAND THIS AGENDA REQUEST FORM.

Brad Sweitzer

SIGNATURE

4/26/2021

DATE

Land Use Table

Use	Gross Area	%
Single Family (SF)	+/- 931 Ac.	55%
Patio Home (PH)	+/- 50 Ac.	3%
Townhome (TH)	+/- 36 Ac.	2%
Village Center (VC)	+/- 38 Ac.	2%
Commercial (C)	+/- 13 Ac.	1%
Institutional (I)	+/- 75 Ac.	5%
Rights-of-Way*	+/- 99 Ac.	6%
Parks & Open Space (P-OS)	+/- 431 Ac.	26%
Drill Site		
Totals	+/- 1,663 Ac.	100%

* Includes proposed major thoroughfares, collectors, and neighborhood collectors.

THIS GENERAL DEVELOPMENT PLAN APPROVED BY THE CITY OF MANVEL PLANNING, DEVELOPMENT, AND ZONING COMMISSION ON _____

GEORGE GRIFFITH

KYLE MARASCKIN

NICOLE LISTON-TYSON

ALINA ROGERS

DOROTHY WYNNE

CHRISTY KENNARD

MUHAMMED ALAM



GDP AMENDMENTS

Amendment #1 Approved:	05/18/2009
Amendment #2 Tabled:	06/25/2019
Amendment #3 Tabled:	07/09/2018
Amendment #4 Tabled:	07/23/2018
Amendment #5 Approved:	10/09/2018
Amendment #6 Approved:	10/22/2018
Amendment #7 Approved:	11/26/2018
Amendment #8 Approved:	01/28/2019
Amendment #9 Approved:	05/13/2019
Amendment #10 Not Approved:	06/10/2019
Amendment #11 Approved:	07/08/2019
Amendment #12 Not Approved:	08/12/2019
Amendment #13 Approved:	09/09/2019
Amendment #14 Approved:	12/09/2019
Amendment #15 Approved:	02/24/2020
Amendment #16 Approved:	11/09/2020



**DEVELOPMENT SERVICES DEPARTMENT**

20025 HIGHWAY 6
MANVEL, TX 77578
281-489-0630

Planning, Development and Zoning Commission Plat Report

Plat Name	Meridiana Section 25A Preliminary Plat
Applicant	Brad Sweitzer, EHRA, Inc.
PD&Z Meeting Date	May 24, 2021
Recommendation	Denial
Submitted By	Jessica Rodriguez, Director of Development Services

Staff Recommendation

The City staff recommends denial of the Meridiana Section 25A Preliminary Plat.

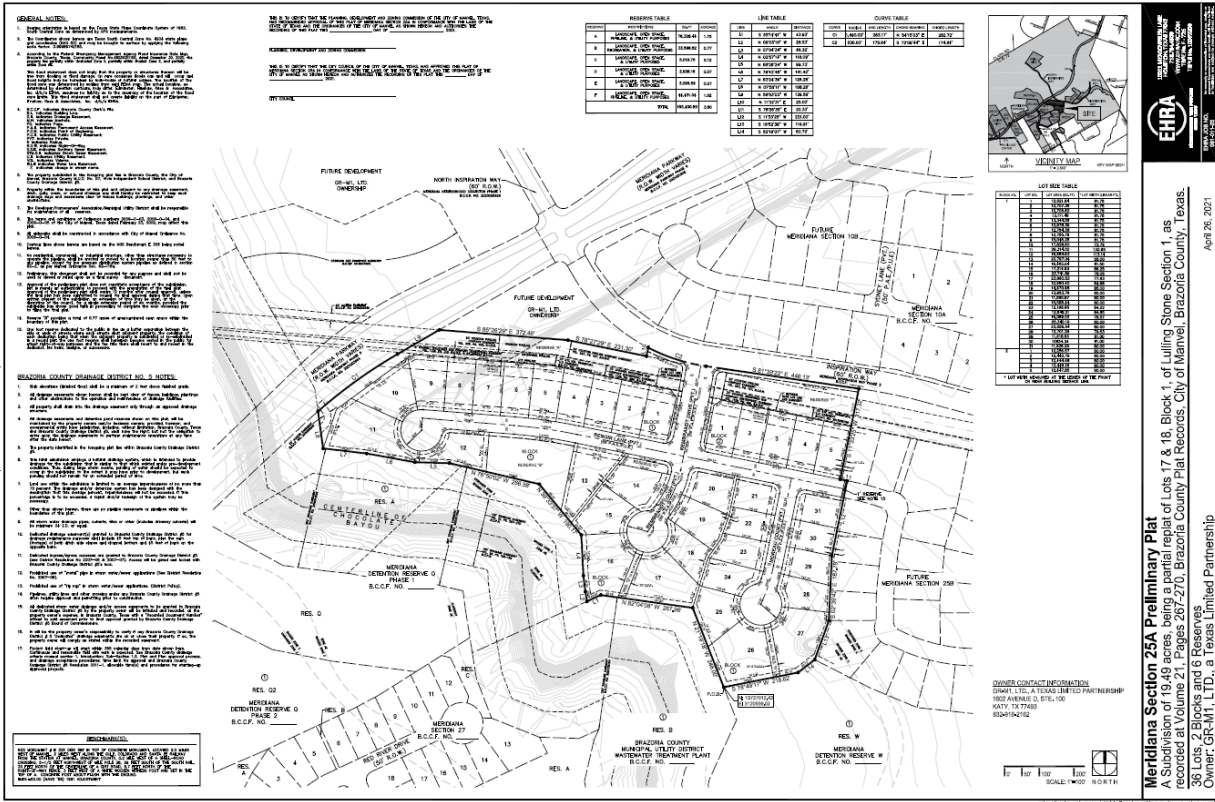
1. This plat has not been approved on the most recently approved Meridiana General Development Plan Amendment No. 17 (dated November 16, 2020) which is required according to page 61 of the adopted Meridiana O-PUD (Ordinance No. 2009-O-04).
2. Provide an approved preliminary drainage plan from Brazoria County Drainage District No. 5 (Section 62-38 (a) (14)).



DEVELOPMENT SERVICES DEPARTMENT

20025 HIGHWAY 6
MANVEL, TX 77578
281-489-0630

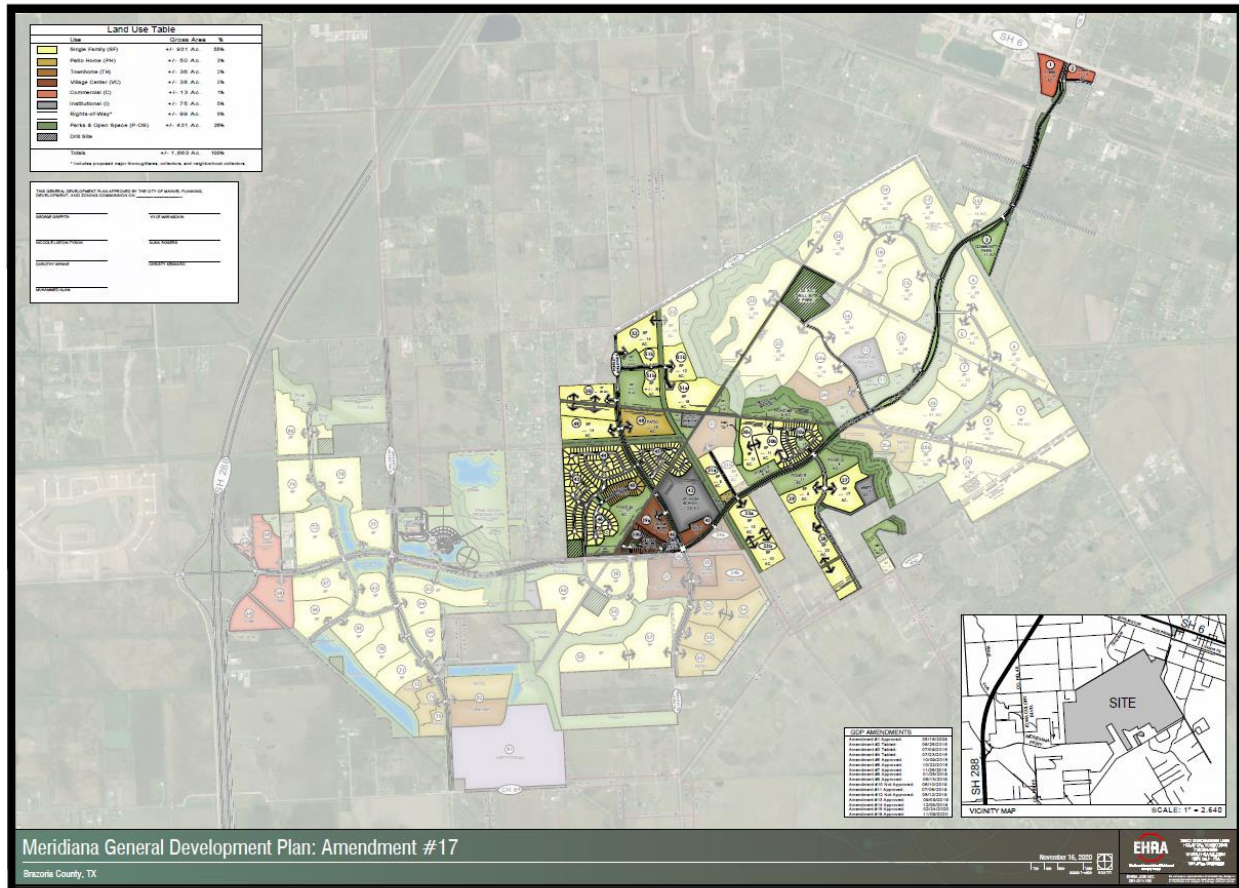
Plat Exhibit





DEVELOPMENT SERVICES DEPARTMENT
20025 HIGHWAY 6
MANVEL, TX 77578
281-489-0630

Meridiana General Development Plan Amendment No. 17 (dated November 16, 2020)



1. Bearing orientation is based on the Texas State Plane Coordinate System of 1983, South Central Zone as determined by GPS measurements.
2. The Coordinates shown hereon are Texas South Central Zone No. 4204 state plane grid coordinates (NAD 83) and may be brought to surface by applying the following scale factor: 0.99986742185.
3. According to the Federal Emergency Management Agency Flood Insurance Rate Map, Brazoria County, Texas, Community Panel No.48039C0100K, dated December 30, 2020, the project lies partially within Unshaded Zone S, partially within Shaded Zone S, and partially within Zone AE.

This flood statement does not imply that the property or structures thereon will be free from flooding or flood damage. On rare occasions floods can and will occur and flood heights may be increased by man-made or natural causes. The location of the flood zone was determined by scaling from said FEMA map. The actual location, as determined by elevation contours, may differ. Edminster, Hinshaw, Russ & Associates, Inc. d/b/a EHRA, assumes no liability as to the accuracy of the location of the flood zone limits. This flood statement shall not create liability on the part of Edminster, Hinshaw, Russ & Associates, Inc. d/b/a EHRA.

- B.C.F.C. indicates Brazoria County Clerk's File.
 - B.L. indicates Building Line.
 - D.E. indicates Drainage Easement.
 - M.H. indicates Mahan.
 - P.C. indicates Page.
 - P.A.E. indicates Permanent Easement.
 - P.B. indicates Point of Beginning.
 - P.U.E. indicates Public Utility Easement.
 - P.V. indicates Private.
 - R. indicates Radius.
 - R.O.W. indicates Right-Of-Way.
 - S.E. indicates Sanitary Sewer Easement.
 - S.W.S.E. indicates Siltation Sewer Easement.
 - U.E. indicates Utility Easement.
 - W.L. indicates Water Line Easement.
 - X indicates change in street name.
5. The property subdivided in the foregoing plat lies in Brazoria County, the City of Marvel, Brazoria County M.U.D. No. 57, Awa Independence School District, and Brazoria County Drainage District #5.
 6. Property within the boundaries of this plat and adjacent to any drainage easement, right-of-way, creek, or natural waterway shall hereby be restricted to keep such drainage ways and easements clear of fences buildings, plantings, and other obstructions.
 7. The Developer/Homesowners' Association/Municipal Utility District shall be responsible for maintenance of all reserves.
 8. The terms and conditions of Ordinance numbers 2009-0-03, 2009-0-04, and 2009-0-05 of the City of Marvel, Texas dated February 23, 2009, may affect this plat.
 9. All sidewalks shall be constructed in accordance with City of Marvel Ordinance No. 2009-0-04.
 10. Contour lines shown herein are based on the NGS Benchmark E 306 being noted herein.
 11. No residential, commercial, or industrial structure, other than structures necessary to operate the pipeline, shall be erected or moved to a location nearer than 50 feet to the pipeline except as authorized by the permit and distribution system pipeline as defined in section 62-2 as per Marvel Ordinance Sec. 62-116.
 12. Preliminary, this document shall not be recorded for any purpose and shall not be used or viewed or relied upon as a final survey document.
 13. Approval of the preliminary plat does not constitute acceptance of the subdivision, nor does it mean an authorized proceeding with the preparation of the final plat.
 14. Approval of the preliminary plat shall expire 12 months after council approval, unless the applicant has been given the opportunity to file for final approval during that time. Upon written request of the subdivider, an extension of time may be given, at the discretion of the council.
 15. The subdivider shall be responsible for the cost of the final plat. The subdivider shall have shown good faith in proceeding to complete the work necessary prior to filing the final plat.
 16. Reserve "B" provides a total of 5.77 acres of unencumbered open space within the boundaries of this plat.
 17. One foot reserve dedicated to the public in fee as a buffer separation between the side or ends of streets where such streets abut adjacent property, the condition of the plat herein being that the one foot reserve shall be subdivided and subdivided in a record plat the one foot reserve shall hereupon be vested in the public for the purpose of right-of-way purposes and the title thereon shall revert to and remain in the hands of the subdivider, his heirs, assigns, or successors.

1. Slob elevations (finished floor) shall be a minimum of 2 feet above finished grade.
2. All drainage easements shown herein shall be kept clear of fences, buildings, plantings and other obstructions to the operation and maintenance of drainage facilities.
3. All property shall drain into the drainage easement only through an approved drainage structure.
4. All drainage easements and detention pond reserves shown on this plat, will be managed by the property owner and/or business owners, provided, however, and governmental entity have jurisdiction, including, without limitation, Brazoria County, Texas and Brazoria County Drainage District #5, shall have the right, but not the obligation to require any of the drainage easements to perform maintenance operations at any time after the date hereof.
5. The property identified in the foregoing plat lies within Brazoria County Drainage District #5.
6. This rural subdivision employs a natural drainage system, which is intended to provide drainage for the subdivision that is similar to that which existed under pre-development conditions. Thus, during large storms, even ponding of water should be expected to occur in the subdivision to the extent it may have prior to development, but such ponding should not remain for an extended period of time.
7. Land use within the subdivision is limited to an average imperviousness of no more than 25%. The drainage and/or detention system has been designed with the assumption that this average percent, imperviousness will not be exceeded. If this percentage is to be exceeded, a reprint and/or redesign of the system may be necessary.
8. Other than shown herein, there are no pipeline easements or pipelines within the boundaries of this plat.
9. All storm water drainage pipes, culverts, tiles or other (includes driveway culverts) will be minimum 24" I.D. or equal.
10. Dedicated drainage easement(s) granted to Brazoria County Drainage District #5 for drainage maintenance purposes shall include 45 feet top of bank, plus the sum (footage) of both ditch side slopes and channel bottom and 45 feet of bank on the opposite bank.
11. Dedicated ingress/egress accesses are granted to Brazoria County Drainage District #5 for drainage District Resolution No 2007-06 & 2007-07. Access will be gated and locked with Brazoria County Drainage District #5's lock.
12. Prohibited use of "metal" pipe in storm water/sewer applications (See District Resolution No. 2007-08).
13. Prohibited use of "rip rap" in storm water/sewer applications. (District Policy).
14. Pipelines, utility lines and other crossing under any Brazoria County Drainage District #5 ditch require approval and permitting prior to construction.
15. All dedicated storm water drainage and/or access easements to be granted to Brazoria County Drainage District #5 by the property owner will be initiated and recorded, at the property owner's expense, in Brazoria County, Texas with a "Recorded Document Number" and paid easement prior to final approval granted by Brazoria County Drainage District #5 Board of Commissioners.
16. It will be the property owner's responsibility to verify if any Brazoria County Drainage District #5 "Dedicated" drainage easements are on or cross their property. If so, the property owner will comply as stated within the recorded easement.
17. Project manual start-up will start within 365 calendar days from date shown here. The project manual shall include the following: Section 1.01, City of Brazoria Drainage Criteria manual section 1, Introduction; Sub-Section 1.5, Plat and Plan approval process, and drainage acceptance procedures; Time limit for approval and Brazoria County Drainage District #5 Resolution 2011-1, allowable time(s) and procedures for starting-up approved projects.

NGS MONUMENT # E 306 DISK SET IN TOP OF CONCRETE MONUMENT, LOCATED 2.0 MILES WEST OF MANVEL, 2 MILES WEST ALONG THE GULF, COLORADO AND SANTA FE RAILWAY FROM THE STATION AT MANVEL, BRAZORIA COUNTY, 0.2 MILE WEST OF A SHELL-ROAD CROSSING, 5-1/2 FEET NORTHWEST OF MILE POLE 38, 39 FEET SOUTH OF THE SOUTH RAIL 33 FEET NORTH OF THE CENTERLINE OF A DIRT ROAD, 6.7 FEET WEST OF THE RIGHT-OF-WAY FENCE, 3 FEET WEST OF A WHITE WOODEN WITNESS POST AND SET IN THE TOP OF A CONCRETE POST ABOUT FLUSH WITH THE GROUND.
ELEV.=52.0 (NAVD '88) 1991 ADJUSTMENT

THIS IS TO CERTIFY THAT THE PLANNING, DEVELOPMENT AND ZONING COMMISSION OF THE CITY OF MANVEL, TEXAS, HAS RECOMMENDED APPROVAL OF THIS PLAT OF MERIDIANA SECTION 25A IN CONFORMANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE ORDINANCES OF THE CITY OF MANVEL AS SHOWN HEREON AND AUTHORIZES THE RECORDING OF THIS PLAT THIS _____ DAY OF _____, 2021.

PLANNING, DEVELOPMENT AND ZONING COMMISSION

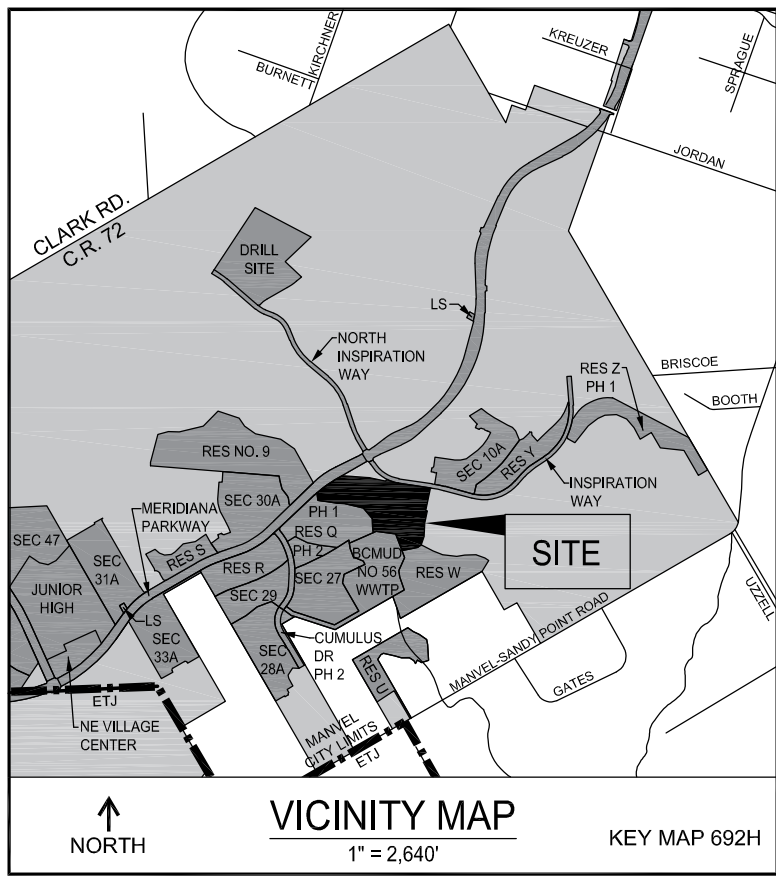
THIS IS TO CERTIFY THAT THE CITY COUNCIL OF THE CITY OF MANVEL, TEXAS, HAS APPROVED THIS PLAT OF MERIDIANA SECTION 25A IN CONFORMANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE ORDINANCES OF THE CITY OF MANVEL AS SHOWN HEREON AND AUTHORIZES THE RECORDING OF THIS PLAT THIS _____ DAY OF _____, 2021.

CITY COUNCIL

RESERVE TABLE			
RESERVE	RESTRICTIONS	SQ. FT	ACREAGE
A	LANDSCAPE, OPEN SPACE PIPELINE, & UTILITY PURPOSES	76,328.44	1.75
B	LANDSCAPE, OPEN SPACE RECREATION, & UTILITY PURPOSES	33,598.82	0.77
C	LANDSCAPE, OPEN SPACE & UTILITY PURPOSES	5,019.75	0.12
D	LANDSCAPE, OPEN SPACE, & UTILITY PURPOSES	2,926.16	0.07
E	LANDSCAPE, OPEN SPACE, & UTILITY PURPOSES	3,096.59	0.07
F	LANDSCAPE, OPEN SPACE, PIPELINE, & UTILITY PURPOSES	44,431.04	1.02
TOTAL		165,400.80	3.80

LINE TABLE		
LINE	ANGLE	DISTANCE
L1	S 65°14'41" W	43.93'
L2	N 09°03'10" W	28.53'
L3	N 07°04'34" W	46.32'
L4	N 02°57'14" W	118.09'
L5	N 88°26'24" W	99.73'
L6	N 79°42'48" W	141.42'
L7	N 83°24'36" W	126.26'
L8	N 07°58'11" W	108.26'
L9	N 59°53'03" W	139.56'
L10	N 11°32'31" E	25.00'
L11	S 78°26'35" E	20.33'
L12	S 11°32'25" W	221.00'
L13	S 19°52'38" W	119.91'
L14	S 52°19'07" W	60.72'

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	1,440.00'	283.17'	N 54°15'03" E	282.72'
C2	530.00'	175.64'	S 72°09'44" E	174.84'



BLOCK NO.	LOT NO.	LOT AREA (SQ. FT.)	* LOT WIDTH (LINEAR FT.)
1	2	12,521.84	81.75
	2	12,707.36	81.75
	3	12,705.60	81.75
	5	13,111.49	81.75
	5	13,344.36	81.75
	6	12,978.39	81.25
	7	12,764.38	81.75
	9	12,765.76	81.75
	9	15,046.26	81.75
	10	17,828.40	73.76
	11	29,314.50	130.95
	12	16,684.63	113.14
	13	20,797.04	55.00
	14	16,462.04	81.50
	15	17,214.93	86.25
	16	23,741.89	78.05
	17	23,660.53	77.83
	18	12,960.40	81.98
	19	14,970.98	85.00
	20	13,953.76	80.00
	21	11,565.87	80.00
	22	10,598.44	80.00
	23	12,198.95	84.22
	24	12,649.21	84.85
	25	16,069.02	78.57
	26	25,340.19	80.00
	27	23,956.54	80.00
	28	12,701.28	79.53
	29	11,618.63	81.00
	30	10,854.34	81.00
	31	11,026.26	80.00
2	1	12,256.57	80.00
	2	12,442.79	80.00
	3	12,446.16	80.00
	5	12,447.85	80.00

* LOT WIDTH MEASURED AT THE LESSER OF THE FRONT OR REAR BUILDING SETBACK LINE.

OWNER CONTACT INFORMATION
GR-M1, LTD., A TEXAS LIMITED PARTNERSHIP
1602 AVENUE D, STE. 100
KATY, TX 77493
832-916-2162



Meridiana Section 25A Preliminary Plat

A Subdivision of 19.49 acres, being a partial replat of Lots 17 & 18, Block 1, of Lulling Stone Section 1, as recorded at Volume 21, Pages 267-270, Brazoria County Plat Records, City of Manvel, Brazoria County, Texas.

36 Lots, 2 Blocks and 6 Reserves

Owner: GR-M1, LTD., a Texas Limited Partnership



ENGINEERING THE FUTURE
SINCE 1936

April 26, 2021

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: Nicole Mitchell

Please indicate your preference below.

☒ **Yes, I would be interested in serving on the Home Rule Charter Commission.**

Personal Information

Home Address: 6531 Granbury Road

Telephone: (832) 526-7647 Fax: _____

E-mail: keith.nicole@gmail.com

I have been a Manvel Resident for 5 years

Registered voter? ☒ Yes ☐ No

O Occupational Information

Business Owner? ☒ Yes ☐ No

Business Name: Cozy by Nicole

Occupation: Owner/Operator

Business Address: _____

Telephone: _____ Fax: _____

Are you a Citizen of the United States? ☒ Yes ☐ No

Do you have a current Driver's License? ☒ Yes ☐ No

List Driver's License Number _____ **Exp Date** _____ **DOB** _____

Have you ever been convicted of a felony? ☐ Yes ☒ No
If yes, explain _____

Have you been convicted of, received probation or deferred?
adjudication for any offense that was not a felony with in the last 10 year? ☐ Yes ☒ No
If yes, explain _____

Are you, or have you ever been an adversary party to pending litigation against?
the City of Manvel? ☐ Yes ☒ No
If yes, explain _____

Have you ever or do you currently serve on any city boards? ☒ Yes ☐ No
If so, what board/city and dates? TIRZ & SMDA

Are you involved in any community activities? (Civic or Hobbies) ☒ Yes ☐ No
TIRZ & SMDA

Are you related to any City Employee or Council Member? ☐ Yes ☒ No
If so, please state who: _____

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

- I have been involved with the city on many boards since moving to Manvel in 2015. _____
- I enjoy being a part of the growth and development of the city and have an interest _____
in the future of Manvel as it is the city I chose to raise a family and spend my time. _____
- I have some historical knowledge of the city and would like to participate as a member of _____
the commission to influence the direction Manvel takes moving forward. _____

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission; I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.



Signature

June 3, 2021

Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board _____.

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Appointment made to _____ Term

Expires _____

☐ Statement & Oath Completed

☐ No appointment made at this time, retain application for one year

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: Derck Dalmolin

Please indicate your preference below.

☐ Yes, I would be interested in serving on the Home Rule Charter Commission.

Personal Information

Home Address: 6515 Cemetery Rd

Telephone: 346-262-6034 Fax: N/A

E-mail: derek@3-dair.com

I have been a Manvel Resident for 35 years

Registered voter? ☒ Yes ☐ No

O Occupational Information

Business Owner? ☒ Yes ☐ No

Business Name: 3-D AIR CO LTD

Occupation: HVAC

Business X: 1/1

Are you a Citizen of the United States?

☒ Yes ☐ No

Do you have a current Li

List Driver's License A 2 Exp Date DOB

☒ Yes ☐ No

Have you ever been convicted of a felony?

☐ Yes ☒ No

If yes, explain _____

Have you been convicted of, received probation or deferred?

adjudication for any offense that was not a felony within the last 10 years?

☐ Yes ☒ No

If yes, explain _____

Are you, or have you ever been an adversary party to pending litigation against the City of Manvel?

☐ Yes ☒ No

If yes, explain _____

Have you ever or do you currently serve on any city boards?

☐ Yes ☐ No

If so, what board/city and dates? Volunteer Events Committee

Are you involved in any community activities? (Civic or Hobbies)

☐ Yes ☐ No

Volunteer Events Committee

Are you related to any City Employee or Council Member?

☐ Yes ☒ No ?

If so, please state who: _____

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission; I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.



Signature

6-3-2021
Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☒ No

If no, applicant previously served on _____ Board _____.

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper Appointment made to _____ Term _____

Expires _____

☐ Statement & Oath Completed ☐ No appointment made at this time, retain application for one year

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: Stephen Davison

Please indicate your preference below.

☒ Yes, I would be interested in serving on the Home Rule Charter Commission.

Personal Information

Home Address: 9801 Live Oak Ct.
Telephone: 713 291 0112 Fax: _____
E-mail: Steve@Janco Foods.com
I have been a Manvel Resident for 13 years
Registered voter? ☒ Yes ☐ No

O Occupational Information

Business Owner? ☐ Yes ☒ No
Business Name: _____
Occupation: Janco Foods/Sales
Business Address: 12400 Dairy Ashford
Telephone: _____

Are you a Citizen of the United States?

☒ Yes ☐ No

Do you have a current Driver's License?

List Driver's License Number _____ Exp Date _____ DOB 6

☒ Yes ☐ No

Have you ever been convicted of a felony?

If yes, explain _____

☐ Yes ☒ No

Have you been convicted of, received probation or deferred?

adjudication for any offense that was not a felony within the last 10 years?

If yes, explain _____

☐ Yes ☒ No

Are you, or have you ever been an adversary party to pending litigation against the City of Manvel?

If yes, explain _____

☐ Yes ☒ No

Have you ever or do you currently serve on any city boards?

If so, what board/city and dates? POEZ

☒ Yes ☐ No

Are you involved in any community activities? (Civic or Hobbies)

☒ Yes ☐ No

Director, Brazoria County MUD 66

Are you related to any City Employee or Council Member?

If so, please state who: Mayor Debra Davison

☒ Yes ☐ No

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

Having been involved with city government
for the last twenty years, I feel that I
can make a positive contribution

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission, I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.

Stephen Dawson
Signature

6-3-2021
Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board _____

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Appointment made to _____ Term _____

Expires _____

☐ Statement & Oath Completed

☐ No appointment made at this time, retain application for one year

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: Chad Bell

Please indicate your preference below.

☒ Yes, I would be interested in serving on the Home Rule Charter Commission.

Personal Information

Home Address: 8502 lovers ln

Telephone: 281 813 1292 Fax:

E-mail: Cbell@medindia.org

I have been a Manvel Resident for 41 years

Registered voter? ☒ Yes ☐ No

O Occupational Information

Business Owner? ☐ Yes ☐ No

Business Name: media Riders

Occupation: VP

Business Address: 7409 Bailen TX 80

Telephone: _____ K: _____

Are you a Citizen of the United States?

Do you have a current Driver's License?

List Driver's License Number _____ Exp Date _____ DOB _____

Have you ever been convicted of a felony?

If yes, explain

Have you been convicted of, received probation or deferred?

adjudication for any offense that was not a felony with in the last 10 year?

If yes, explain

Are you, or have you ever been an adversary party to pending litigation against?

the City of Manvel?

Have you ever or do you currently serve on any city boards?

If so, what board/city and dates? MEDC

Are you involved in any community activities? (Civic or Hobbies)

Manuel PFA Booster club

Are you related to any City Employee or Council Member?

If so, please state who: _____

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

I have a strong desire to ensure Manvel grows
and maintains ethical core values.

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission; I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.

 Signature 6-2-2021 Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Appointment made to _____ Term

Expires _____

☐ Statement & Oath Completed

☐ No appointment made at this time, retain application for one year

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: Jason Hoelscher

Please indicate your preference below.

☒ **Yes, I would be interested in serving on the Home Rule Charter Commission.**

Personal Information

Home Address: 7438 Lewis Ln.

Telephone: 281-932-2168 Fax: N/A

E-mail: j.hoelscher@southernbuilders.com

I have been a Manvel Resident for 5+ years

Registered voter? ☒ Yes ☐ No

Occupational Information

Business Owner? ☐ Yes ☒ No

Business Name: _____

Occupation: _____

Business Address: _____

Telephone: _____ Fax: _____

Are you a Citizen of the United States? ☒ Yes ☐ No

Do you have a current Driver's License? ☒ Yes ☐ No

List Driver's License Number _____ **Exp Date** 8 **DOB** 6

Have you ever been convicted of a felony? ☐ Yes ☒ No
If yes, explain _____

Have you been convicted of, received probation or deferred?
adjudication for any offense that was not a felony with in the last 10 year? ☐ Yes ☒ No
If yes, explain _____

Are you, or have you ever been an adversary party to pending litigation against?
the City of Manvel? ☐ Yes ☒ No
If yes, explain _____

Have you ever or do you currently serve on any city boards? ☐ Yes ☒ No
If so, what board/city and dates? _____

Are you involved in any community activities? (Civic or Hobbies) ☐ Yes ☒ No

Are you related to any City Employee or Council Member? ☐ Yes ☒ No
If so, please state who: _____

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

I have watched the area grow since I moved in and would like the opportunity to be a part of a group that shares a vision of our City growing to be a place people recognize as an fun/exciting small town, not just a stop on the way to "here" or "there" for fuel or fast food. I want to collaborate a future that makes the Manvel "original folks" and the Manvel "future folks" proud to say, "We live in Manvel!".

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission; I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.

Signature

02 JUN 2021

Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board _____.

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Expires _____

☐ Statement & Oath Completed

Appointment made to _____ Term _____

☐ No appointment made at this time, retain application for one year



Texas^{USA}
DRIVER LICENSE

Director: *Samantha McRae*



[Signature]

DRIVER LICENSE

4d. DL: **15755197**

3. DOB: **11/09/1976**

1. **HOELSCHER**

2. **JASON PAUL**

8. **7438 LEWIS LN
MANVEL, TX 77578-5406**

12. Rest: **NONE**

16. Hgt: **5'-07"**

15. Sex: **M**

18. Eyes: **BRO**

5. DD: **18629080095209777574**

9. Class: **C**

4b. Exp: **11/09/2028**

4a. Iss: **09/29/2020**

DONOR

9a. End: **NONE**

11/09/1976

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: Gabriel Isaac Garza "Gabe"

Please indicate your preference below.

☒ **Yes, I would be interested in serving on the Home Rule Charter Commission.**

Personal Information

Home Address: 6611 Lone Star Ridge Manvel, TX 77578

Telephone: (956) 566-9643 Fax: _____

E-mail: gabriel.igarza@gmail.com

I have been a Manvel Resident for 4.5 years

Registered voter? ☒ Yes ☐ No

O Occupational Information

Business Owner? ☐ Yes ☒ No

Business Name: Marriott Marquis Houston Hotel

Occupation: Senior Sales Executive

Business Address: 1777 Main St., Suite 1000, Houston, TX 77010

Telephone: _____ Fax: _____

Are you a Citizen of the United States?

☒ Yes ☐ No

Do you have a current Driver's License?

☒ Yes ☐ No

List Driver's License Number 01 Exp Date 1 DOB 11

Have you ever been convicted of a felony?

☐ Yes ☒ No

If yes, explain _____

Have you been convicted of, received probation or deferred?

adjudication for any offense that was not a felony with in the last 10 year?

☐ Yes ☒ No

If yes, explain _____

Are you, or have you ever been an adversary party to pending litigation against the City of Manvel?

☐ Yes ☒ No

If yes, explain _____

Have you ever or do you currently serve on any city boards?

☐ Yes ☒ No

If so, what board/city and dates? _____

Are you involved in any community activities? (Civic or Hobbies)

☒ Yes ☐ No

I am an active member on the Alvin ISD zoning committee _____

Are you related to any City Employee or Council Member?

☐ Yes ☒ No

If so, please state who: _____

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

Civic involvement has always been a passion of mine. I think it is important to give back, in whichever form you are able, to the community you reside in. I also believe there is a sense of pride in ones self to be a part of something greater than just your day-to-day life. As the City of Manvel continues to grow at a rapid pace, citizen involvement and opinions have never been so crucial. I believe I can add a fresh perspective to the commission while preserving the roots of our community that brought me here in the first place.

I look forward to working with my fellow community members. Thank you!

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission; I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.


Signature

June 2, 2021
Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board _____.

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Appointment made to _____ Term _____

Expires _____

☐ Statement & Oath Completed

☐ No appointment made at this time, retain application for one year

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: Brian Vaughn

Please indicate your preference below.

☒ Yes, I would be interested in serving on the Home Rule Charter Commission.

Personal Information

Home Address: 6718 Granger Ln

Telephone: (832) 418-9177 Fax: _____

E-mail: briandvaughn@gmail.com

I have been a Manvel Resident for 4.5 years

Registered voter? ☒ Yes ☐ No

O Occupational Information

Business Owner? ☐ Yes ☒ No

Business Name: A-Kema

Occupation: Chemical Plant Operator

Business Address: 7502 Bayport Blvd. Pasadena, TX

Telephone: _____ Fax: _____

Are you a Citizen of the United States?

☒ Yes ☐ No

Do you have a current Driver's License?

☒ Yes ☐ No

List Driver's License Number _____ Exp Date _____ DOB _____

Have you ever been convicted of a felony?

☐ Yes ☒ No

If yes, explain _____

Have you been convicted of, received probation or deferred?

adjudication for any offense that was not a felony with in the last 10 year?

☐ Yes ☒ No

If yes, explain _____

Are you, or have you ever been an adversary party to pending litigation against the City of Manvel?

☐ Yes ☒ No

If yes, explain _____

Have you ever or do you currently serve on any city boards?

☐ Yes ☒ No

If so, what board/city and dates? _____

Are you involved in any community activities? (Civic or Hobbies)

☐ Yes ☒ No

Are you related to any City Employee or Council Member?

☐ Yes ☒ No

If so, please state who: _____

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

I enjoy living in Manvel, and I know that our City is in one of the fastest growing areas in Texas. I would like the opportunity to be involved in serving to ensure that the current, and coming growth is met with good and responsible governance.

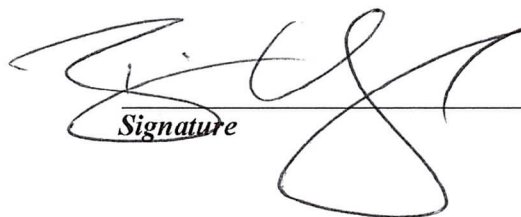
PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission; I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.


Signature

6/2/2021
Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board _____

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Appointment made to _____ Term _____

Expires _____

☐ Statement & Oath Completed

☐ No appointment made at this time, retain application for one year

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: RAFAEL A LOPEZ

Please indicate your preference below.

☒ Yes, I would be interested in serving on the Home Rule Charter Commission.

Personal Information

Home Address: 8228 Kirchman Rd

Telephone: 8322315735 Fax: _____

E-mail: RLLOPEZ@TWOWAYSIGNS.NET

I have been a Manvel Resident for 6 years

Registered voter? ☒ Yes ☐ No

O Occupational Information

Business Owner? ☒ Yes ☐ No

Business Name: TWO WAY SIGNS & GRAPHICS, LLC

Occupation: _____

Business Address: 12999 Murphy Rd Suite 02

Telephone: _____ Fax: _____

Are you a Citizen of the United States?

☒ Yes ☐ No

Do you have a current Driver's License?

☒ Yes ☐ No

List Driver's License Number _____ Exp Date _____ DOB _____

Have you ever been convicted of a felony?

☐ Yes ☒ No

If yes, explain _____

Have you been convicted of, received probation or deferred?

adjudication for any offense that was not a felony within the last 10 years?

☐ Yes ☒ No

If yes, explain _____

Are you, or have you ever been an adversary party to pending litigation against the City of Manvel?

☐ Yes ☒ No

If yes, explain _____

Have you ever or do you currently serve on any city boards?

☒ Yes ☐ No

If so, what board/city and dates? 2004

Are you involved in any community activities? (Civic or Hobbies)

☒ Yes ☐ No

Are you related to any City Employee or Council Member?

☐ Yes ☒ No

If so, please state who: _____

Do you have any outstanding taxes or other debt owed to the city?

Yes ☐ No ☒

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

Yes ☐ No ☒

Please indicate briefly why you would like to be appointed to a Board or Commission:

Would love to be a part of the direction our great city is going in. It's important to be involved with our city and being able to help steer the city in a good direction.

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

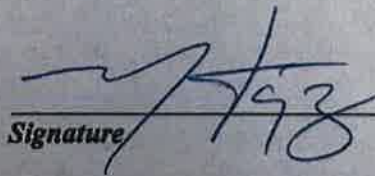
DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission; I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.

Signature



Date

5/29/2021

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board _____

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Appointment made to _____ Term _____

Expires _____

☐ Statement & Oath Completed

☐ No appointment made at this time, retain application for one year

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: KIM FAUGHT

Please indicate your preference below.

☒ Yes, I would be interested in serving on the Home Rule Charter Commission.

Personal Information

O Occupational Information

Home Address: 19110 SHORESIDE TERRACE Dr

Business Owner? ☐ Yes ☒ No

Telephone: 832-641-5160 Fax: _____

Business Name: _____

E-mail: bk farms 99 @ msn . com

Occupation: _____

I have been a Manvel Resident for 3 years

Business Address: _____

Registered voter? ☒ Yes ☐ No

Telephone: _____ Fax: _____

Are you a Citizen of the United States?

☒ Yes ☐ No

Do you have a current Driver's License?

List Driver's License Number _____ Exp Date _____ DOB _____

☒ Yes ☐ No

Have you ever been convicted of a felony?

If yes, explain _____

☐ Yes ☒ No

Have you been convicted of, received probation or deferred?

adjudication for any offense that was not a felony with in the last 10 year?

If yes, explain _____

☐ Yes ☒ No

Are you, or have you ever been an adversary party to pending litigation against?
the City of Manvel?

If yes, explain _____

☐ Yes ☒ No

Have you ever or do you currently serve on any city boards?

If so, what board/city and dates? _____

☐ Yes ☒ No

Are you involved in any community activities? (Civic or Hobbies)

☒ Yes ☐ No

MANVEL EVENTS Committee

Are you related to any City Employee or Council Member?

If so, please state who: _____

☐ Yes ☒ No

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

SERVING on the BOARD I believe is A SIGNIFICANT AND MEANINGFUL way to help shape my local community. I believe that being able to share what I know and learn from others provides A diversity of Experience and Skills. I would Love to be ENVOLED in my local community of Manvel

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission; I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.


Signature

5/28/2021
Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board _____

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Appointment made to _____ Term _____

Expires _____

☐ Statement & Oath Completed

☐ No appointment made at this time, retain application for one year

Board & Commission Application

INSTRUCTIONS: Please complete the entire form and sign at the bottom of the second page. A copy of your Driver's License or other state issued ID will need to be attached to the application in order for it to be processed. Please return your completed application to the City Secretary's Office at 20025 HWY 6, Manvel Tx 77578. Please note, knowingly making a false entry in, or false alteration of, a governmental record is an offense under section 37.10 of the Texas Penal Code and, upon conviction, may subject a violator to criminal penalties.

QUALIFICATIONS: In addition to the qualifications for service on a board required by city ordinances or state law, a person appointed to a board must not be delinquent in the payment of taxes, water service charge or other obligation to the city.

Name: Alina Rogers

Please indicate your preference below.

☒ Yes, I would be interested in serving on the Home Rule Charter Commission.

Personal Information

O Occupational Information

Home Address: 7426 Lewis Ln.

Business Owner? ☒ Yes ☐ No

Telephone: 281-910- Fax:

Business Name: SPARROW Realty

E-mail: 2944 AlinaWRogers@yahoo.com

Occupation: Real Estate Broker

I have been a Manvel Resident for 13 years 13 in the

Business Address: 6925 Masters Rd #1209

Registered voter? ☒ Yes ☐ No

Telephone: Fax:

Are you a Citizen of the United States?

☐ Yes ☒ No

Do you have a current Driver's License?

☐ Yes ☒ No

List Driver's License Number Exp Date DOB

Have you ever been convicted of a felony?

Yes ☒ No ☒

If yes, explain

Have you been convicted of, received probation or deferred?

Yes ☐ No ☒

adjudication for any offense that was not a felony with in the last 10 year?

If yes, explain

Are you, or have you ever been an adversary party to pending litigation against? the City of Manvel?

Yes ☐ No ☒

If yes, explain

Have you ever or do you currently serve on any city boards?

Yes ☒ No ☐

If so, what board/city and dates? PDO 2019 - Present

Are you involved in any community activities? (Civic or Hobbies)

Yes ☒ No ☐

Volunteer at different functions throughout the year.

Are you related to any City Employee or Council Member?

Yes ☐ No ☒

If so, please state who:

Do you have any outstanding taxes or other debt owed to the city?

☐ Yes ☒ No

Have you been cited in the past year for non-compliance of any City Codes/Ordinances
If yes, explain

☐ Yes ☒ No

Please indicate briefly why you would like to be appointed to a Board or Commission:

I am interested in serving on the Charter Commission Review because I love our City and enjoy serving our community. I'm an insatiable learner and always look for opportunities to learn & assist.

PROVIDE ALL INFORMATION REQUESTED: INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED FOR BOARD/COMMISSION OPPORTUNITIES. Your complete application form will be maintained in our active files for one year from the date of the application. I understand that should I not be appointed to a City of Manvel board or commission, this application and any other records obtained, collected or otherwise prepared regarding this application shall be maintained in accordance with the Texas Public Information Act and the City of Manvel's document retention schedule.

DISCLAIMER AND SIGNATURE

I certify that my answers above are true and complete. I understand that the information contained in this application may be considered among other criteria, qualifications and/or information, by the City Council in its evaluation for the position being sought. I further understand that should I be appointed to any City of Manvel board or commission, I serve at the pleasure of the City Council and may be removed from said position at any time and for any reason or no reason at all, with or without notice. I also understand that should I be appointed to a City of Manvel board or commission, I must be responsible for a creditable record of attendance and performance. If this application leads to my appointment to a position on a City of Manvel Board or Commission, I understand that false or misleading information in my application may result in my removal from my position.

I authorize the City of Manvel to conduct a background check to verify all data given in this application.

I have carefully read and understand the above statement.


Signature

(0/3/21)
Date

FOR OFFICE USE ONLY

Date Application Received _____ New Applicant? ☐ Yes ☐ No

If no, applicant previously served on _____ Board

Via: ☐ website ☐ mail ☐ in person ☐ referral ☐ newspaper

Expires _____

☐ Statement & Oath Completed

Appointment made to _____

Term _____

☐ No appointment made at this time; retain application for one year

The background is a blue gradient. In the corners, there are decorative white line art elements resembling circuit boards or neural networks, with lines and small circles.

Case Summary Report

January 2019 through May 2021

Case Reports Generated

	Assigned	Active	Cleared	Information	Inactive/ Suspended	Clearance Rate %
2019	534	8	321	61	144	60%
2020	567	26	336	92	111	59%
2021	305	61	139	52	31	45%

Aggravated Assault Cases

	Reported Cases	Cleared Cases	Open Cases	Information	Inactive/ Suspended	With Firearm	Clearance Rate %
2019	9	6	0	1	2	4	66%
2020	10	8	0	0	2	5	80%
2021	4	4	0	0	0	0	100%

Deadly Conduct

	Reported Cases	Cleared Cases	Open Cases	Unfounded	Inactive/ Suspended	With Firearm	Clearance Rate %
2019	0	0	0	0	0	0	0.0%
2020	1	0	0	*** 1	0	* 1	100.0%
2021	2	0	1	0	1	** 2	0.0%

- * Alleged Vehicle was shot at somewhere on State Highway 288. No evidence to substantiate the allegations.
- ** Victim in these incidents were the same. Both occurrences were targeted incidents towards the individual and his residence
- *** This Incident was a road rage incident that was Direct filed to the Grand Jury. No shots fired just a weapon display.

Unlawfully Carrying a Weapon

	Reported Cases	Cleared Cases	Open Cases	Unfounded	Inactive/ Suspended	Clearance Rate %
2019	12	12	0	0	0	100%
2020	7	7	0	0	0	100%
2021	5	5	0	0	0	100%

Robbery

	Reported Cases	Cleared Cases	Open Cases	Unfounded	Inactive/ Suspended	With Firearm	Clearance Rate %
2019	2	1	0	0	1		50%
2020	2	1	0	0	1	** 1	50%
2021	1	0	0	0	1	** 1	0%

** Victim alleged a firearm was used, no evidence to substantiate the allegation

From: [Dan Johnson](#)
To: [Kyle Jung](#)
Cc: [Tom Horn](#); [Willie Alfaro](#); [Jessica Rodriguez](#); [Brian Aarseth](#); [Tammy Bell](#)
Subject: Meridiana Section 29
Date: Wednesday, June 2, 2021 6:30:35 PM
Attachments: [image001.png](#)

Kyle,

A final inspection walk-through was conducted for Meridiana Section 29 to begin the one-year maintenance period. The Maintenance Bond has been submitted to the City Secretary's Office, and the As-Built Construction Plans have been submitted to the City Engineer's Office.

In short, we recommend that City Council accept the infrastructure improvements for this project to begin the One Year Maintenance Period.

Please let me know if you need any further information.

~Dan

Daniel S. Johnson, P.E., CFM

Assistant City Manager

City Engineer

20025 Highway 6

Manvel, Texas 77578

(281) 489-0630

www.cityofmanvel.com



From: [Dan Johnson](#)
To: [Kyle Jung](#)
Cc: [Tom Horn](#); [Willie Alfaro](#); [Jessica Rodriguez](#); [Brian Aarseth](#); [Tammy Bell](#)
Subject: Meridiana Section 30A
Date: Wednesday, June 2, 2021 6:18:17 PM
Attachments: [image001.png](#)

Kyle,

A final inspection walk-through was conducted for Meridiana Section 30A to begin the one-year maintenance period. The Maintenance Bond has been submitted to the City Secretary's Office, and the As-Built Construction Plans have been submitted to the City Engineer's Office.

In short, we recommend that City Council accept the infrastructure improvements for this project to begin the One Year Maintenance Period.

Please let me know if you need any further information.

~Dan

Daniel S. Johnson, P.E., CFM

Assistant City Manager

City Engineer

20025 Highway 6

Manvel, Texas 77578

(281) 489-0630

www.cityofmanvel.com



From: Dan Johnson

Sent: Friday, May 28, 2021 11:19 AM

To: Tammy Bell <tbell@cityofmanvel.com>; Brian Aarseth <brian@risecommunities.net>

Cc: Tom Horn <tom@risecommunities.net>; Willie Alfaro <willie.alfaro@cityofmanvel.com>; Jessica Rodriguez <jrodriguez@cityofmanvel.com>

Subject: RE: Meridiana Section 30A

Tammy, I'm okay with this one being on the Draft 6/7 Agenda keeping in mind that we still need:

1. Clean Walk Thru Inspection

2. As-Builts pdf
3. Maintenance Bond(s)

Brian – we need to have all 3 of these things by close of business on Wednesday 6/2 in order to stay on the Agenda.

Thanks all and have a great Memorial Day weekend.
~Dan

Daniel S. Johnson, P.E., CFM

Assistant City Manager
City Engineer
20025 Highway 6
Manvel, Texas 77578
(281) 489-0630

www.cityofmanvel.com



From: Brian Aarseth <brian@risecommunities.net>

Sent: Thursday, May 27, 2021 4:37 PM

To: Dan Johnson <dan.johnson@cityofmanvel.com>; Willie Alfaro <willie.alfaro@cityofmanvel.com>;
Tammy Bell <tbell@cityofmanvel.com>

Cc: Tom Horn <tom@risecommunities.net>

Subject: Meridiana Section 30A

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Dan. We have been working with Willie on getting the last couple items completed to close out Meridiana Section 30A. This morning we had a testing conflict with the Raven liner installation and the pulling of the mandrel on the last section of pipe that bumped our inspection from today to next Wednesday. We did unofficially mandrel that portion of line yesterday so I have no concern with it passing, we just won't be able to have the official test until Tuesday. Would it be possible to have this section placed on the agenda for the June 7th council at least as a placeholder with the understanding that if we don't pass the inspection that it could be pulled?

From: [Dan Johnson](#)
To: [Kyle Jung](#)
Cc: [Tom Horn](#); [Willie Alfaro](#); [Jessica Rodriguez](#); [Brian Aarseth](#); [Tammy Bell](#)
Subject: Cumulus Drive Phase 1
Date: Wednesday, June 2, 2021 6:31:54 PM
Attachments: [image001.png](#)

Kyle,

A final inspection walk-through was conducted for Cumulus Drive Phase 1 in the Meridiana Development to begin the one-year maintenance period. The Maintenance Bond has been submitted to the City Secretary's Office, and the As-Built Construction Plans have been submitted to the City Engineer's Office.

In short, we recommend that City Council accept the infrastructure improvements for this project to begin the One Year Maintenance Period.

Please let me know if you need any further information.

~Dan

Daniel S. Johnson, P.E., CFM

Assistant City Manager

City Engineer

20025 Highway 6

Manvel, Texas 77578

(281) 489-0630

www.cityofmanvel.com



THE STATE OF TEXAS §
COUNTY OF BRAZORIA §
CITY OF MANVEL §

LARRY AKERY, COUNCIL PLACE 1
LORRAINE HEHN, COUNCIL PLACE 2
NICCOLE TYSON, COUNCIL PLACE 3
DAN DAVIS, COUNCIL PLACE 4
JASON ALBERT, COUNCIL PLACE 5
JEROME HUDSON, COUNCIL PLACE 6

DEBRA DAVISON, MAYOR
KYLE JUNG, CITY MANAGER
TAMMY BELL, CITY SECRETARY



MINUTES 5/17/2021

Regular Session

Call To Order

Mayor Davison called the meeting of the Manvel City Council to order at 7:01 p.m. Those in attendance were:

Present: Mayor Debra Davison
Council Member Place 1 Larry Akery
Council Member Place 2 Lorraine Hehn
Council Member Place 3 Niccole Tyson
Council Member Place 4 Dan Davis
Council Member Place 5 Jason Albert
Council Member Place 6 Jerome Hudson

Absent: None

Also Present: Kyle Jung, City Manager; Tammy Bell, City Secretary; Bobby Gervais, City Attorney; Jessica Rodriguez, Development Director

Inspirational Reading - Council Member Hehn

Pledge

Pledge of Allegiance and Texas Pledge: "Honor the Texas flag; I pledge allegiance to thee Texas, one state under God, one and indivisible.

Citizen Comments: "Comment Card" Required

****Members of the public who wish to submit written comments on a listed agenda item must submit their comments via the Public Comment Request Form found on the city website www.cityofmanvel.com or by emailing tbell@cityofmanvel.com or by calling 281-489-0630 x4 for staff assistance.*

PD&Z Members present - Christine Diaz, Dorothy Wynne
Carson, Manager, 6407 Masters Rd Project

Public Hearing

TO HEAR INPUT FROM THE PUBLIC REGARDING AN ORDINANCE OF THE CITY OF MANVEL, TEXAS, AMENDING THE ZONING CLASSIFICATION OF APPROXIMATELY 2.594 ACRES LOCATED AT 6407 MASTERS ROAD, MANVEL, TEXAS, FROM HIGHWAY MIXED USE DISTRICT (HMU) TO HIGHWAY MIXED USE DISTRICT WITH SPECIFIC USE PERMIT (HMU-SUP); PROVIDING FOR THE GRANTING OF A SPECIFIC USE PERMIT WITH CONDITIONS TO AUTHORIZE THE USE OF PROPERTY FOR NAICS USE 493110 "GENERAL WAREHOUSING AND STORAGE"; PROVIDING FOR THE AMENDMENT OF THE CITY'S OFFICIAL ZONING MAP; PROVIDING FOR SEVERABILITY; AND PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF.

Mayor Davison opened the Public Hearing at 7:04 p.m.

1st call for comments;

Morgan & Amber Garlinge, 7330 Scott Ave -

Concerned about the proximity of commercial buildings and parking lot to his property. Working with the owner and project manager to have the parking lot and retention pond swapped on plans so that the pond is closest to his property.

Carson, project manager -

Is fine with redesigning plans and is in the process of doing so.

Jessica Rodriguez, Development Director - the reason this was tabled at PD&Z is because they wanted a traffic study done. Owner is working with staff on this.

2nd call for comments – None

3rd call for comments – None

Mayor Davison closed the Public Hearing at 7:15 p.m.

City Manager Update

Update on current events and city issues.

Kyle Jung, City Manager gave update on Covid numbers -

2333 total, 37 confirmed (down 20 from 5/3 meeting), 29 probable, 2245 recovered, 22 deaths

Regular Agenda

- 1. Consideration and possible action on a request by Meridiana to approve an appeal to the City's Designated Official's interpretation that the Meridiana General Development Plan Amendment #18 (as submitted to City Staff on March 24, 2021) does not adequately display "overall circulation" as required within the O-PUD agreement. (Tabled on 5/3/2021)**

Discussions have been had between the staff and the developer. Direction from City Council was for staff to discuss a compromise with the developer. Staff offered that 9 sections of private, gated housing and section 24 would not require a second access entry point.

No access on Clark or South Masters.

Kyle Jung, City Manager feels access on these roads are vital to regional overall circulation, but it is up to the City Council what they would like.

Additionally, 3 other vehicle access point within the subdivision that staff is recommending to be added.

Council Member Akery - Emergency grass cross overs. Concerns that during the raining period this could be a problem for a pumper to get through.

Brad Sweitzer - EHRA - not in favor of having a connection on Clark and Masters. Open to providing an emergency vehicle cut through for connection

Matt Lawson, Developer - wants to compromise. The emergency access will support emergency vehicles and pumper trucks. They have not heard from staff on the desire to have Clark and Masters access and would prefer not provide those connections.

Dorothy - Concern that the connectivity will hinder residents from exiting in the event of an emergency. We are here to protect the welfare, health, and safety of our citizens and if they get stuck in some sort of gas line emergency, fire emergency, or flood, then we are to blame. PD&Z Members have been requesting connectivity for a long time. Wanting to know what the City Council is wanting if it is not connectivity? What is the City Council's expectation of the PD&Z members?

Council Member Davis - Is there a need for additional ingress and egress? Nothing on the data sheet to PD&Z for Clarks and Masters.

The intent of the appeal is for connectivity between sections.

Kyle Jung, City Manager explained to Council Member Davis that it is not about just internal connectivity; it's about regional connectivity.

Dorothy, PD&Z - expressed that connectivity has been key from the beginning with PD&Z

Council Member Hehn - If things come down that the developer is wanting a different interpretation than what the designated official came up with then she is not in favor of that.

Matt Lawson, Developer - Having emergency access is very important but there is a balance to just putting roads in. Putting in access to these main roads is increasing conflicts with pedestrians, such as children playing in the street.

Council Member Davis - the intent of the appeal is specifically between sections, not Masters and Clark.

Dorothy, PD&Z - on the call to get a better understanding of council's intent and why they keep getting appeals.

Council Member Dan Davis made the motion to approve the appeal. Council Member Jerome Hudson seconded the motion.

The motion **FAILED** with a vote:

Vote: 2-5

Yes: City Council Member Place 4 Dan Davis, City Council Member Place 5 Jason Albert

No: Mayor Debra Davison, Council Member Larry Akery, Council Member Lorraine Hehn, Council Member Place 3 Niccole Tyson, City Council Member Place 6 Jerome Hudson

Absent: None

Abstained: None

2. Status update by the City Manager on the GLO Grant.

Ann Lister replied to emails today. She is waiting for a response from her management team regarding Manvel's continuation of the grant and will let us know as soon as she has a response.

Council Member Hehn - What kind of project is this for?

Kyle Jung, City Manager - This is to purchase Scada Equipment for the water and wastewater plants and lift stations. For remote operation of the plants. Also includes lightning protection at the plants.

3. Consideration and possible action to approve Resolution 2021-R-09;

A RESOLUTION CONSENTING TO THE ADDITION OF LAND INTO BRAZORIA COUNTY MUNICIPAL UTILITY DISTRICT NO. 43

Council Member Dan Davis made the motion to approve Resolution 2021-R-09. Council Member Niccole Tyson seconded the motion.

The motion carried with a vote:

Vote: 7-0

Yes: Mayor Debra Davison, Council Member Larry Akery, Council Member Lorraine Hehn, Council Member Place 3 Niccole Tyson, City Council Member Place 4 Dan Davis, City Council Member Place 5 Jason Albert, City Council Member Place 6 Jerome Hudson

No: None

Absent: None

Abstained: None

ADDENDUM ITEMS

4) Discussion and Possible Action to Approve (Forwarded With Unfavorable Recommendation by PD&Z):

A) Preliminary Plat for Meridiana Inspiration Way Phase 2,
BEING A SUBDIVISION OF 5.46 ACRES OUT OF THE OLIVER HALL SURVEY, A-203, CITY OF MANVEL, BRAZORIA COUNTY, TEXAS.

B) Preliminary Plat for Meridiana Section 10A;
BEING A SUBDIVISION OF 12.94 ACRES OUT OF THE OLIVER HALL SURVEY, A-203, CITY OF MANVEL, BRAZORIA COUNTY, TEXAS.

C) Preliminary Plat for Meridiana Detention Reserve Y;

5-17-2021 CITY COUNCIL MINUTES

BEING A SUBDIVISION OF 9.98 ACRES OUT OF THE OLIVER HALL SURVEY, A-203, CITY OF MANVEL, BRAZORIA COUNTY, TEXAS.

- D) Preliminary Plat for Brazoria County Municipal Utility District No. 57 Lift Station No. 1;
BEING A SUBDIVISION OF 0.19 ACRES OUT OF THE OLIVER HALL SURVEY, A-203, CITY OF MANVEL, BRAZORIA COUNTY, TEXAS.
- E) Preliminary Plat for Meridiana Detention Reserve 'W';
BEING A SUBDIVISION OF 15.46 ACRES, BEING A PARTIAL REPLAT OF LOTS 16, 17, 18, BLOCK 1, OF LULLING STONE SECTION 1, AS RECORDED AT VOLUME 21, PAGES 267-270, BRAZORIA COUNTY PLAT RECORDS, CITY OF MANVEL, BRAZORIA COUNTY, TEXAS.
- F) Preliminary Plat for Meridiana Detention Reserve 'Z' Phase 1;
BEING A SUBDIVISION OF 11.61 ACRES, BEING A PARTIAL REPLAT OF LOTS 1-8, BLOCK 1 OF LULLING STONE SECTION 1, AS RECORDED AT VOLUME 21, PAGES 267-270, BRAZORIA COUNTY PLAT RECORDS, CITY OF MANVEL.
- G) Master Plan for Foxtail Palms;
BEING A SUBDIVISION OF 80.95 ACRES OF LAND LOCATED IN THE H.T. & B. RAILROAD CO. SURVEY SEC 71, A-291, ALSO BEING A PARTIAL REPLAT OF EMIGRATION LAND COMPANY SUBDIVISION RECORDED IN VOLUME 2, PAGE 81 B.C.P.R.

Jessica Rodriguez, Development Director - A through F, sections are not illustrated on latest approved GDP, plats cannot be approved. Staff made an unfavorable recommendation to PD&Z and PD&Z made that same recommendation to Council.

Foxtail Palms had numerous reasons why it could not be approved. It did not meet certain sections of the subdivision ordinance. Staff made an unfavorable recommendation as well as PD&Z making that same recommendation to Council.

Council Member Dan Davis made the motion to approve. Mayor Davison seconded the motion.

The motion FAILED with a vote:

Vote: 1-6

Yes: Council Member Lorraine Hehn,

No: Mayor Debra Davison, Council Member Larry Akery, Council Member Lorraine Hehn, Council Member Place 3 Niccole Tyson, City Council Member Place 4 Dan Davis, City Council Member Place 5 Jason Albert, City Council Member Place 6 Jerome Hudson

Absent: None

Abstained: None

5. Discussion and Possible Action to Approve:

Final Plat for Meridiana Detention Reserve U;
BEING A SUBDIVISION OF 9.860 ACRES IN THE OLIVER HALL SURVEY, ABSTRACT 203, BEING A PARTIAL REPLAT OF A PORTION OF LOT 9, BLOCK 1, OF LULLING STONE SECTION THREE, AS RECORDED IN VOL. 22, PG. 231-234 B.C.P.R.; ALSO, BEING PART OF THE CITY OF MANVEL, BRAZORIA COUNTY, TEXAS.

Jessica Rodriguez, Development Director – brought to Council with a favorable recommendation to Council. Explained that PD&Z's unfavorable recommendation was due to an outstanding item. That item has since been cleared so now able to bring a favorable recommendation.

Mayor Davison made the motion to approve. Council Member Niccole Tyson seconded the motion.

The motion carried with a vote:

Vote: 7-0

Yes: Mayor Debra Davison, Council Member Larry Akery, Council Member Lorraine Hehn, Council Member Place 3 Niccole Tyson, City Council Member Place 4 Dan Davis, City Council Member Place 5 Jason Albert, City Council Member Place 6 Jerome Hudson

No: None

Absent: None

Abstained: None

REGULAR AGENDA ITEMS

This item was pulled from the consent agenda to take action on.

Council Member Larry Akery made the motion to pull item A from the consent agenda. Council Member Jason Albert seconded the motion.

The motion carried with a vote:

Vote: 7-0

Yes: Council Member Lorraine Hehn, City Council Member Place 4 Dan Davis, City Council Member Place 5 Jason Albert, City Council Member Place 6 Jerome Hudson, Mayor Debra Davison, Council Member Larry Akery, Council Member Place 3 Niccole Tyson

No: None

Absent: None

Abstained: None

A. Approve an Amendment/Addendum to Cooperation Agreement to the CDBG Entitlement Program.

Kyle Jung, City Manager – read the amendment/addendum exhibit to council.

Council Member Hehn – does this language overturn any of our zoning? Is this state language?

Kyle – this is federal language

City Attorney, Bobby Gervais - explains the definition comes out of the FHA itself, that requires all executive depts. and agencies have to administer and programs and activities relating to housing and urban development in a manner affirmatively to further the purpose of the FHA. It's changed over time - lately it looks like it may be further interpreted to grow into more of a role where it looks at things like eco integration, density, transit development - goes hand in hand with global warming, and regional cooperation to achieve fair housing goals. The latter is what is causing a lot of issues and is the part that can affect zoning laws.

Council Member Hehn - CDBG funds is not the first place she'd go to get money for the city. Having the ability to use the CDBG funds is different than actually using them.

Mayor - expressing the concern that in taking HUD money that another entity could govern our land uses. There are so many more grants available to us, particularly as a developing city. We have a lot of available

5-17-2021 CITY COUNCIL MINUTES

land, whereas other city's do not, and that is the concern with our city in particular.

Council Member Dan Davis made the motion to approve. Council Member Jason Albert seconded the motion.

The motion carried with a vote:

Vote: 4-3

Yes: Council Member Lorraine Hehn, City Council Member Place 4 Dan Davis, City Council Member Place 5 Jason Albert, City Council Member Place 6 Jerome Hudson

No: Mayor Debra Davison, Council Member Larry Akery, Council Member Place 3 Niccole Tyson,

Absent: None

Abstained: None

Consent Agenda

All Consent Agenda items listed are considered to be routine by the City Council and will be approved by one motion. There will be no separate discussion of these items unless a City Council Member so requests, in which event the item will be removed from the Consent Agenda and considered in sequence on the Agenda.

- B. Approve as recommended by Planning Development and Zoning Commission, Final Plat for Meridiana Retail Detention Reserve No. 1;
BEING A SUBDIVISION OF 3.738 ACRES OUT OF THE H.T. & B.R.R. CO. SURVEY, A-470, ALSO BEING OUT OF LOTS 139 AND 140 OF DR. A.A. LUTHER LANDS IN THE TOWN OF MANVEL, AS RECORDED UNDER VOL. 1, PG. 71-72, BRAZORIA COUNTY PLAT RECORDS, CITY OF MANVEL, BRAZORIA COUNTY, TEXAS.
- C. Approve Interlocal Agreement between Brazoria County and the City of Manvel for paving of roads.
- D. Acceptance of the infrastructure improvements for Terra Estates to begin the Two Year Maintenance Period.
- E) Acceptance of the meeting minutes to date.

Council Member Dan Davis made the motion to approve consent agenda items B through E. Council Member Lorraine Hehn seconded the motion.

The motion carried with a vote:

Vote: 7-0

Yes: Council Member Lorraine Hehn, City Council Member Place 4 Dan Davis, City Council Member Place 5 Jason Albert, City Council Member Place 6 Jerome Hudson, Mayor Debra Davison, Council Member Larry Akery, Council Member Place 3 Niccole Tyson

No: None

Absent: None

Abstained: None

Mayor Debra Davison convened the City Council into executive session at 8:29 p.m.

Executive Session

5-17-2021 CITY COUNCIL MINUTES

City Council will convene into Executive Session pursuant to Texas Government Code, Section 551.071: Consultation with attorney, and Texas Government Code, Section 551.072: “Deliberation Regarding Real Property” to discuss the following:

Potential Real Estate Acquisitions Opportunities

City Council will convene into Executive Session pursuant to Texas Government Code, Section 551.071: Consultation with attorney, and Texas Government Code, Section 551.087: “Deliberation Regarding Economic Development Negotiations” to discuss the following:

Discuss economic development incentives on the Sowell Property

Mayor Debra Davison reconvened City Council from executive session at 9:23 p.m.
No action was taken in executive session.

Adjourn

Council Member Jason Albert made the motion to adjourn the meeting. Council Member Jerome Hudson seconded the motion.

The motion carried with a vote:

Vote: 7-0

Yes: Council Member Lorraine Hehn, City Council Member Place 4 Dan Davis, City Council Member Place 5 Jason Albert, City Council Member Place 6 Jerome Hudson, Mayor Debra Davison, Council Member Larry Akery, Council Member Place 3 Niccole Tyson

No: None

Absent: None

Abstained: None

CERTIFICATION

DEBRA DAVISON, MAYOR
CITY OF MANVEL, TEXAS

TAMMY BELL, CITY SECRETARY
CITY OF MANVEL, TEXAS