

CITY OF HUNTSVILLE, TEXAS

Andy Brauninger, Mayor

Bert Lyle, Position 1 At-Large
Karen Denman, Position 2 At-Large
Vicki McKenzie, Position 3 At-Large
Pat Graham, Position 4 At-Large



Mayor Pro Tem Russell Humphrey, Ward 2
Vacant, Ward 1
Deloris Massey, Ward 3
Jon Strong, Ward 4

**HUNTSVILLE CITY COUNCIL AGENDA
TUESDAY, NOVEMBER 21, 2023**

**WORKSHOP 5:00 P.M. - Staggs Community Room
REGULAR SESSION 6:00 P.M. - Staggs Community Room**

Huntsville Public Library, 1219 13th Street, Huntsville, Texas, 77340

Persons with disabilities who plan to attend this meeting and may need auxiliary aids or services are requested to contact the City Secretary's office (936.291.5413) two working days prior to the meeting for appropriate arrangements.

WORKSHOP (5:00 p.m.)

DISCUSSION

- a. Reception to recognize newly elected Councilmembers and outgoing Councilmembers

MAIN SESSION (6:00 p.m.)

CALL TO ORDER

INVOCATION AND PLEDGES - *U.S. Flag and Texas Flag: Honor the Texas Flag. I pledge allegiance to thee, Texas, one state, under God, one, and indivisible.*

PRESENTATIONS

- a. Presentation to Councilmember Deloris Massey to recognize her two years of service to the City of Huntsville.
Andy Brauninger, Mayor
- b. Presentation to Mayor Andy Brauninger to recognize his ten years of service to the City of Huntsville.
Russell Humphrey, Mayor Pro Tem

ELECTION MATTERS

- a. Administer the Oaths of Office and Statements of Officer to the duly elected Mayor and four Ward Position City Councilmembers.
- b. Elect a Mayor Pro Tem.

PROCLAMATION

- a. Proclamation No. 2023-33: Small Business Saturday
- b. Proclamation No. 2023-34: Recognizing the Café Texan as the Texas Downtown Association's Award Recipient

PUBLIC HEARING

- a. The City Council will hear public comment on adoption of Ordinance 2023-26 to change the Development District Classification of the approximately 86.56-acre tract of land adjacent to the 150 Block of FM 247 and also just east of American Legion Drive located on Walker County Property ID #13938, #13939 and #13941 from Management to Planned Development and to consider approval of the Concept Plan for the Planned Development
Armon Irones, City Planner

1. CONSENT AGENDA

The presiding officer will call for public comments before action is taken on these items. *(Approval of Consent Agenda authorizes the City Manager to implement each item in accordance with staff recommendations. An item may be removed from the Consent Agenda and added to the Statutory Agenda for full discussion by request of a member of Council.)*

- a. Consider approving the Minutes from the October 17, 2023 Regular City Council Meeting.
Kristy Doll, City Secretary
- b. Consider approving the Minutes from the November 14, 2023 Special City Council Meeting.
Kristy Doll, City Secretary
- c. Consider adoption of Ordinance 2023-28 to amend the budget for FY 23-24 and/or CIP Project budgets.
Steve Ritter, Finance Director
- d. Consider approving Resolution 2023-13 to authorize City staff as “Authorized Representatives” for the City’s TexPool accounts.
Steve Ritter, Finance Director
- e. Consider approving Resolution 2023-14 to authorize Financial Representative signatories for the 2020 Texas Community Development Block Grant, Texas General Land Office contract award #20-065-128-C439
Steve Ritter, Finance Director
- f. Consider authorizing the City Manager to award a contract for media material and laterals to rehab the filter system at Spring Lake Water Treatment Plant.
Brent Sherrod, Public Works Director
- g. Consider authorizing the City Manager to enter into an agreement with HICKS-RAY ASSOCIATES (HRA), for professional administration services.
Kathlie Jeng-Bulloch, City Engineer
- h. Consider authorizing the City Manager to enter into an agreement with Fugro Geospatial, Inc. for professional services for CIP FY23-24 Program to deliver Aerial, Planimetric and Topographic Mapping for City of Huntsville and its Extra-Territorial Jurisdiction (ETJ) limits.
Kathlie Jeng-Bulloch, City Engineer

2. STATUTORY AGENDA

- a. **First Reading** - To consider adopting Ordinance 2023-26, to change the Development District Classification of the approximate 86.56-acre tract of land adjacent to the 150 Block of FM 247 and also just east of American Legion Drive located on Walker County Property ID #13938, #13939 and #13941 from Management to Planned Development and to consider approval of the Concept Plan for the Planned Development.
Armon Irones, City Planner
- b. **First Reading** - Consider Ordinance No. 2023-27 authorizing the suspension of the effective date for an additional 90 days beyond the effective date proposed by Centerpoint in connection with its statement of intent to increase rates.
Leonard Schneider, City Attorney

- c. Consider authorizing the City Manager to enter into an agreement with LJA Engineering for professional engineering services for FY23-24 CIP Tanyard Creek Lift Station Force Main Replacement Project.

Kathlie Jeng-Bulloch, City Engineer

3. CITY COUNCIL/MAYOR/CITY MANAGER

4. MEDIA INQUIRIES RELATED TO MATTERS ON THE AGENDA

5. ITEMS OF COMMUNITY INTEREST

ADJOURNMENT

*If during the course of the meeting and discussion of any items covered by this notice, City Council determines that a Closed or Executive session of the Council is required, then such closed meeting will be held as authorized by Texas Government Code, Chapter 551, Section 551.071 – consultation with counsel on legal matters; 551.072 – deliberation regarding purchase, exchange, lease or value of real property; 551.073 – deliberation regarding a prospective gift; 551.074 – personnel matters regarding the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee; 551.076 – implementation of security personnel or devices; 551.087 – deliberation regarding economic development negotiation; Sec. 551.089 - deliberation regarding security devices or security audits; and/or other matters as authorized under the Texas Government Code. If a Closed or Executive session is held in accordance with the Texas Government Code as set out above, the City Council will reconvene in Open Session to take action, if necessary, on the items addressed during Executive Session.

CERTIFICATE

I, Kristy Doll, City Secretary, do hereby certify that the above notice was posted on the City Hall bulletin board, a place convenient and readily accessible to the general public at all times, and to the City's website, www.HuntsvilleTX.gov, in compliance with Chapter 551, Texas Government Code.

DATE OF POSTING: November 17, 2023

TIME OF POSTING: 2:00 p.m.

TAKEN DOWN:

Kristy Doll

Kristy Doll, City Secretary



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: a.

Agenda Item: Reception to recognize newly elected Councilmembers and outgoing Councilmembers

Initiating Department/Presenter: City Council

Presenter:

Recommended Motion: Not Applicable

Strategic Initiative:

Discussion:

Previous Council Action:

Financial Implications:

Approvals:

Kristy Doll

Associated Information:



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: a.

Agenda Item: Presentation to Councilmember Deloris Massey to recognize her two years of service to the City of Huntsville.

Initiating Department/Presenter: City Council

Presenter:

Andy Brauningner, Mayor

Recommended Motion: N/A

Strategic Initiative:

Discussion:

Previous Council Action:

Financial Implications:

Approvals:

Kristy Doll

Associated Information:



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: b.

Agenda Item: Presentation to Mayor Andy Brauninger to recognize his ten years of service to the City of Huntsville.

Initiating Department/Presenter: City Council

Presenter:

Russell Humphrey, Mayor Pro Tem

Recommended Motion: N/A

Strategic Initiative:

Discussion:

Previous Council Action:

Financial Implications:

Approvals:

Kristy Doll

Associated Information:



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: a.

Agenda Item: Administer the Oaths of Office and Statements of Officer to the duly elected Mayor and four Ward Position City Councilmembers.

Initiating Department/Presenter: City Council

Presenter:

Recommended Motion: N/A

Strategic Initiative:

Discussion:

Previous Council Action:

Financial Implications:

Approvals:

Kristy Doll

Associated Information:



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: a.

Agenda Item: Proclamation No. 2023-33: Small Business Saturday

Initiating Department/Presenter: City Council

Presenter:

Recommended Motion: N/A

Strategic Initiative:

Discussion:

Previous Council Action:

Financial Implications:

Approvals:

Kristy Doll

Associated Information:



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: b.

Agenda Item: Proclamation No. 2023-34: Recognizing the Café Texan as the Texas Downtown Association's Award Recipient

Initiating Department/Presenter: City Secretary

Presenter:

Recommended Motion: Not Applicable

Strategic Initiative:

Discussion:

Previous Council Action:

Financial Implications:

Approvals:

Kristy Doll

Associated Information:



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: a.

Agenda Item: The City Council will hear public comment on adoption of Ordinance 2023-26 to change the Development District Classification of the approximately 86.56-acre tract of land adjacent to the 150 Block of FM 247 and also just east of American Legion Drive located on Walker County Property ID #13938, #13939 and #13941 from Management to Planned Development and to consider approval of the Concept Plan for the Planned Development

Initiating Department/Presenter: Development Services

Presenter:

Armon Irones, City Planner

Recommended Motion: Public Hearing only-No action necessary

Strategic Initiative: Goal #3-Economic Development-Promote and enhance a strong and diverse economy.

Discussion: The owner of the property located at Parcel ID# 13938, #13939, and #13941 has made an application to amend the Development District Map to change the current Development District Classification from Management (M) to Planned Development (PD). In conjunction with the application for the change in the development district classification to (PD), a concept plan for the planned development is also required to be submitted for approval. The subject property is approximately 86.56 acres in size and the properties to the north and east are undeveloped, the property to the southeast is a manufactured home park, Crown Point Subdivision is adjacent to the west along American Legion Drive, and the properties adjacent to the subject property along Quality Boulevard are storage/commercial developments. All of the surrounding property is classified as Management (M).

The Owner/Developer is proposing a Planned Development for smaller single-family style homes. The development will occur in a total of four phases. The first phase will consist of 89 lots and the next three phases will be larger. They are planning to start phase one by the end of summer 2024 with a completion date of 40 to 50 homes by mid November 2024. The concept plan provides for approximately 7.37 acres of green space, 8.31 acres of nature preserve, (which includes storm water detention ponds), and a 3.3-acre amenity pond. Approximately 21.4 acres of the subject property, the lower southwest portion, is designated for future development. Streets within the development will comply with the Development Code standards.

The proposed land use within the development is allowed under the current Management district classification without the need for any special permits; however, because of the smaller size of the proposed lots and reduced building setback lines, a Planned Development is appropriate for the subject property. In review of the concept plan and in discussion with the developer, the smaller lot sizes and reduced setback lines are essential for the proposed development.

The applicant has developed a similar development in the Conroe, Texas area. The developer intends to have deed restrictions for the development to enforce, uphold, and enhance the quality of the neighborhood and the Huntsville community as a whole.

Applicable sections of the Development Code for planned development are Section 2.304 and 12.400. In the simplest terms, a Planned Development is a condensed version of the Development Code specific only to the subject property with review by both the Planning Commission and the Council before development can occur. The sections above are included in the attached Planning Commission Discussion form. In addition to the establishment of the subject property as a Planned Development district through the approval of a development district map amendment, there is a three-step plan approval of the planned development.

1. Planning Commission and Council approval of an initial generalized “concept plan”,
2. Planning Commission and Council approval of a more detailed “development plan”, and
3. Staff approval of the planned development site plans.

The Planning Commission will hold public hearings for both steps one and two and make a recommendation to City Council for approval or denial. City Council will also hold public hearings for steps one and two and be the final decision maker. Upon completion of steps one and two with approval from the City Council, staff approval is required for the planned development site plan, step three.

The subject property is at step one in the above process. The Development District Map Amendment for (PD) follows the same procedure as for any other change in classification, i.e. Neighborhood Conservation (NC) to Management (M). Section 12.308 of the Development Code addresses the review and approval criteria for the Development District map amendment.

The Planning Commission held a public hearing and consideration of this Planned Development case on October 5, 2023. Staff received comments from four citizens before the public hearing. One opposed and the other three had questions and wanted to know more information about the concept plan. They had no issues with the proposed single-family subdivision as long as it is a nice, quality development that will bring value to the area.

The Planning Commission unanimously recommended to Council approval of the Development District map amendment to change the subject property to (PD) and approval of the concept plan.

Previous Council Action: None

Financial Implications: There is no financial impact associated with this item.

Approvals:

Kevin Byal
Aron Kulhavy
Kristy Doll

Associated Information:

1. Planned Development ORDINANCE 2023-26
2. 87 Acre Huntsville Residential Subdivision Concept Plan
3. Elevations
4. Interiors
5. Vicinity Map-Proposed PD
6. Article 12.400-PD

-
7. Official Development District Map
 8. PC Minutes 10-5-23-approved

ORDINANCE NO. 2023-26

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF HUNTSVILLE, TEXAS, AMENDING THE DEVELOPMENT DISTRICT MAP OF THE CITY OF HUNTSVILLE, TEXAS TO CHANGE THE DEVELOPMENT DISTRICT CLASSIFICATION FOR PROPERTY ADJACENT TO THE 150 BLOCK OF FM 247 AND ALSO JUST EAST OF AMERICAN LEGION DRIVE ON 86.56 ACRE TRACT LOCATED ON WALKER COUNTY PROPERTY ID #13938, 13939, AND #13941, FROM MANAGEMENT TO PLANNED DEVELOPMENT.

WHEREAS the City Council of the City of Huntsville, Texas, has adopted an Official Development District Map and attendant regulations for the City which, in accordance with the Comprehensive Plan, was designed to control the density of population to the end that congestion may be lessened in public streets and that the public health, safety, convenience and general welfare is promoted in accordance with Chapter 211, Municipal Zoning Authority of the Texas Local Government Code; and

WHEREAS the Development Code of the City of Huntsville provides for the amendment of the Official Development Map; and

WHEREAS after public notice, the Planning Commission held a public hearing on October 5, 2023 to consider comments of the public regarding the adoption of the amendment to the Development District Map; and

WHEREAS the Planning Commission has studied and evaluated the request and the report prepared by City Staff; and

WHEREAS the Planning Commission has considered the comments of the public presented at the public hearing and has prepared a report for this Council of its conclusions and recommendations;

WHEREAS after public notice, City Council held a public hearing on November 21, 2023, considered comments from the public regarding the adoption of amendments to the Official Development District Map; and

WHEREAS the City Council has studied and evaluated the request, the report prepared by City Staff and the recommendations by the Planning Commission; and

WHEREAS the City has updated the map to reflect the amended area;

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

SECTION 1: The Official Development District Map of the City of Huntsville, as provided in Section 2.200 of the City's Development Code, is amended and City Staff is direct to make such change.

SECTION 2: The newly amended Official Development District Map is adopted and shall supersede the prior Official Development District Map and shall be identified by the signature of the mayor and attested to by the City Secretary.

SECTION 3: The City Secretary is hereby directed to cause the caption of this Ordinance to be published at least twice within ten days of final passage. This ordinance shall take effect ten (10) days after the date of final passage.

PASSED AND APPROVED THIS _____ DAY OF _____ 2023.

THE CITY OF HUNTSVILLE

Mayor

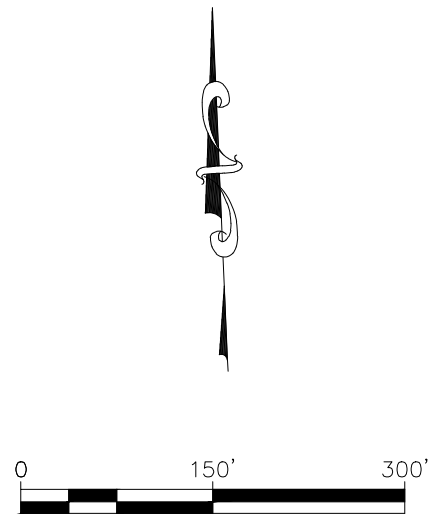
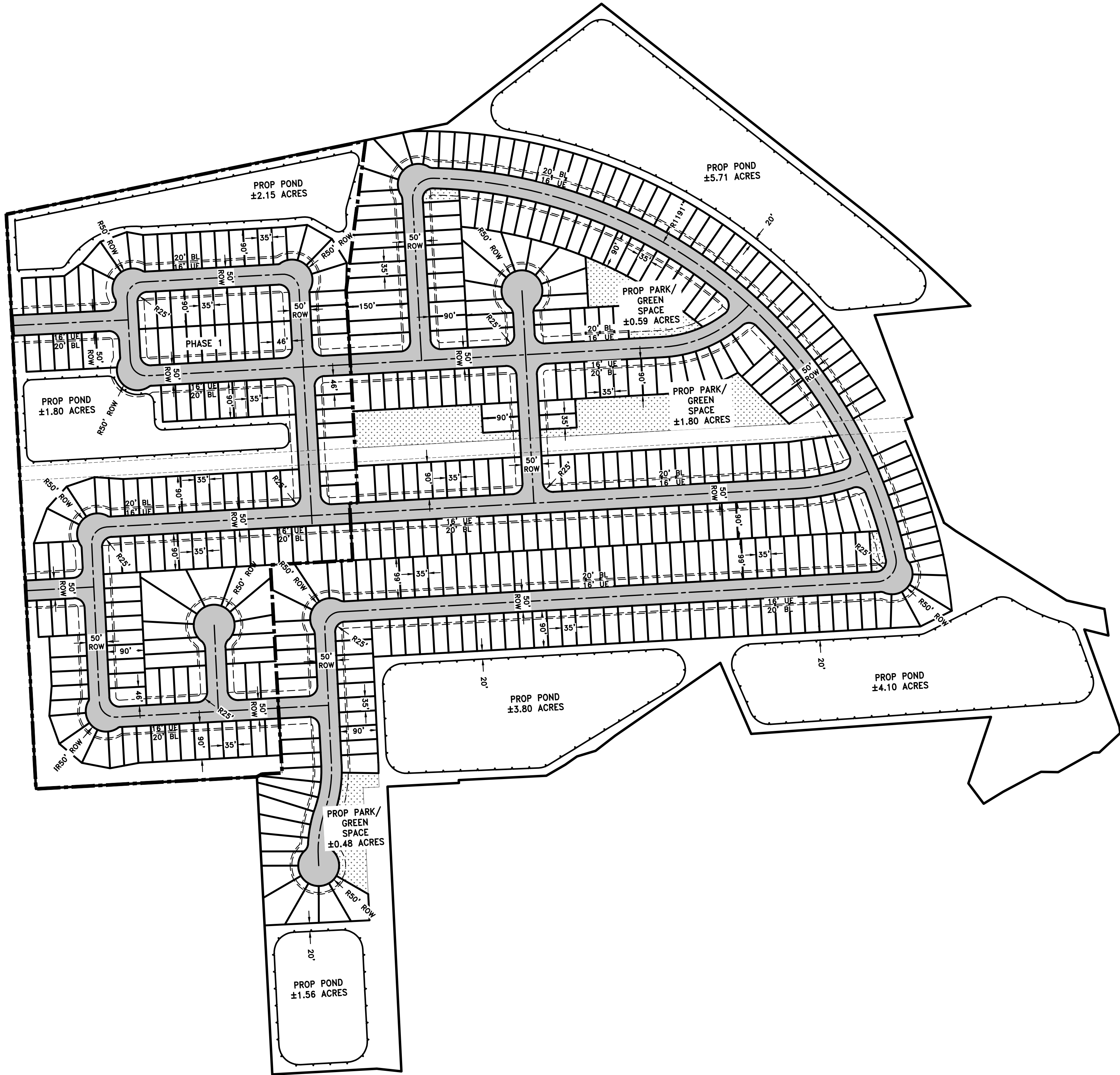
ATTEST:

APPROVED AS TO FORM:

Kristy Doll, City Secretary

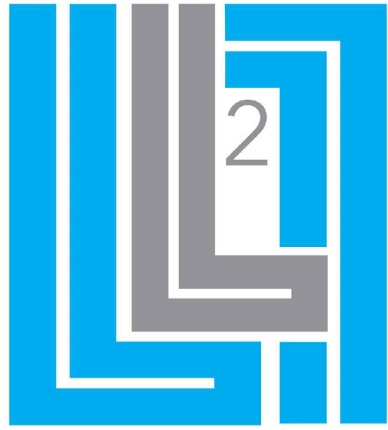
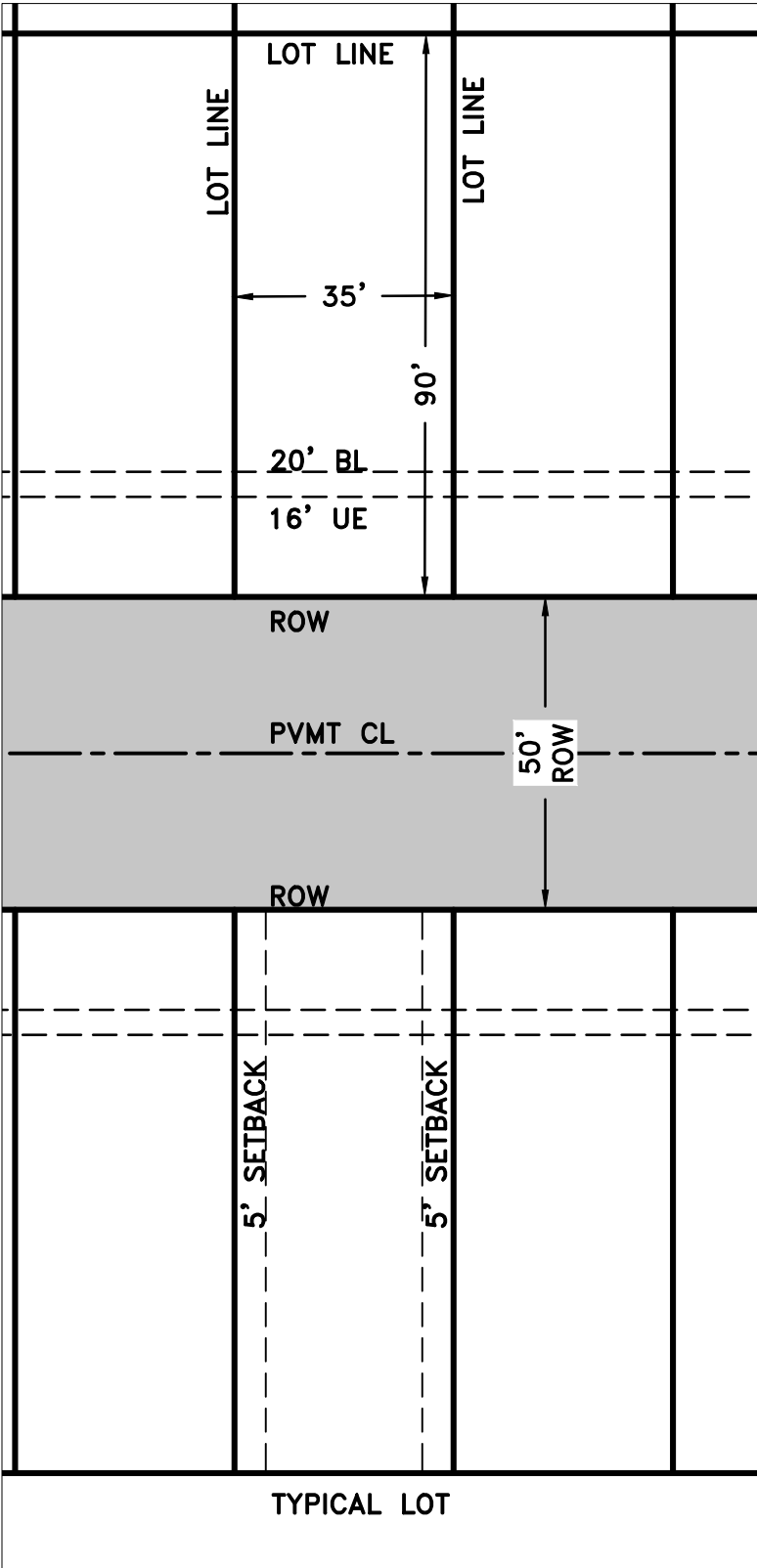
Leonard Schneider, City Attorney

L:\SHARED\L2 ENGINEERING PROJECTS\ENGINEERING PROJECTS\10830 - 71 ACRE HUNTSVILLE RESIDENTIAL\03 CAD\DESIGN SET\YBASE-10830-OP2.DWG Sep. 15, 2023--7:46 PM PAIGE STEVENS



TOTAL ACRES - 86.56
TOTAL # OF LOTS = 476
PHASE 1 LOTS = 155
LOTS/AC = 5.49
NOMINAL LOT WIDTH = 35'
NOMINAL LOT DEPTH = 90'

EX PROJECT BOUNDARY
PROP PHASE 1 BOUNDARY



L SQUARED ENGINEERING
MUNICIPAL COMMERCIAL RESIDENTIAL
WWW.LZENGINERING.COM
PWA REGISTRATION NUMBER 13125
3307 W. DAVIS STREET #100
CONROE, TEXAS 77384
OFFICE 936-647-0400

88 ACRE HUNTSVILLE RESIDENTIAL

HUNTSVILLE

9/15/2023

DRAWING INFORMATION			
PROJECT	10830	TDLR	**
DRAWN	MCV	CHECKED	JTW
SCALE	SHEET		
1" = 150' (24x36)	01		
1" = 300' (11x17)			

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF:
E. LEVI LOVE, PE #99340
OR
JONATHAN WHITE, PE #127058
FOR REVIEW PURPOSES ONLY
NOT FOR CONSTRUCTION

ICONIQ HOMES



ICONIQ HOMES



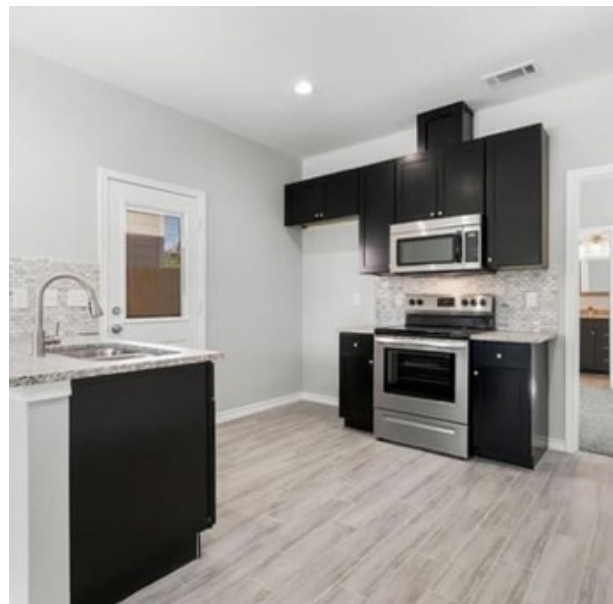
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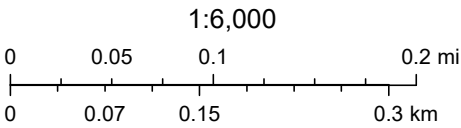
Vicinity Map



9/22/2023, 11:39:38 AM

-  Override 1
-  Property Lines
-  City Limits
-  MSAG Blocks
-  1:500
FM; Park Road; State Highway; US Highway

 Local Roads





DEVELOPMENT CODE

UNIFIED DEVELOPMENT ORDINANCE

ARTICLE 12 DEVELOPMENT REVIEW AND APPROVAL PROCEDURES

12.400 PLANNED DEVELOPMENTS

12.401 Overview

Planned development (PD) districts are established through the approval of a development district map amendment in accordance with Sec. 12.300. The PD approval process also requires either a two-step or three-step plan approval procedure. The three-step plan approval process entails (1) approval of an initial generalized “concept plan,” (2) approval of a more detailed “development plan,” and (3) staff approval of PD site plans. At the property owner’s option, the PD plan approval process may be consolidated into two steps, involving (1) review and approval of a “development plan” that includes all of the information otherwise required in the concept plan and development plan and (2) staff review and approval of PD site plans. This section sets forth the required review and approval procedures for approval of planned developments.

12.402 Step One: Map Amendment and Concept (or Development) Plan Approval

The first step of the PD approval process is approval of the development district map amendment establishing the PD district. A PD concept plan must be processed concurrently with a PD map amendment unless the applicant elects instead to forgo the concept plan stage and process a development plan concurrently with the PD map amendment.

12.404.A Authority to File

PD concept plan (or development plan) applications may be filed only by the subject landowner or the subject landowner’s authorized agent.

12.404.B Application Filing

Complete applications for concept plan (or development plan) approval must be filed with the City Planner at the same time that the PD development district map amendment application is filed.

12.404.C Review and Recommendation—City Planner

Following receipt of a complete application for concept plan (or development plan) approval, the City Planner must prepare a report and recommendation that evaluates the proposed planned development district and concept plan (or development plan) in light of applicable PD district provisions of [Article 2](#) and the criteria of §12.402.G. The report must be transmitted to the Planning Commission before their public hearing on the proposed PD map amendment and concept plan (or development plan).

12.404.D Notice of Hearing

Public hearing notice must be provided in accordance with the development district amendment notice procedures (see Sec. [12.304](#)).

12.404.E Hearing and Recommendation—Planning Commission

The Planning Commission must hold a public hearing on the proposed PD map amendment and concept plan (or development plan). Following the close of the hearing, the Planning Commission must act by simple majority vote to recommend that the proposed map amendment and concept plan (or development plan) be approved, approved with modifications, or denied and transmit its recommendations to the City Council.

12.404.F Hearing and Final Action—City Council

1. Following receipt of the Planning Commission’s recommendation, the City Council must hold a public hearing on the proposed PD map amendment and concept plan (or development plan). Following the close of their public hearing, the City Council must act to approve the proposed map amendment and concept plan (or development plan), approve the map amendment and concept plan (or development plan) with modifications or deny the proposed map amendment and concept plan (or development plan). The City Council may also remand the proposed map amendment and concept plan (or development plan) to the Planning Commission for further consideration.
2. PD district map amendments are subject to the protest provisions of Sec. [12.307](#).

12.404.G Approval Criteria

1. In order to approve a PD concept plan and map amendment, the City Council must make all of the following determinations:
 - a. The proposed PD district is at least 5 acres in area;
 - b. The proposal is consistent with the Comprehensive Plan;
 - c. Proposed uses and the development features are compatible with uses of nearby property and the existing and proposed character of the surrounding neighborhood;
 - d. The concept plan (or development plan) complies with applicable PD district provisions of [Article 2](#); and
 - e. Appropriate terms and conditions have been imposed on the approval to protect the interests of the public and any residents of the planned development.
2. In order to approve a PD development plan and map amendment, the City Council must make all determinations required for concept plans (see [§12.402.G](#)) and PD development plans (See [§12.403.I](#)).

12.404.H Adopting Ordinance

1. The ordinance establishing a PD district must incorporate the approved concept plan or development plan and include at least the following:
 - a. A statement as to the purpose and intent of the district.
 - b. The uses authorized for each tract or subarea in the district, by use category, the location of such uses, and the residential densities and/or nonresidential intensities associated with phases of the project, in conformance with the approved concept plan or development plan.
 - c. The conditions applicable to development within the district, as established by the City Council.
2. The graphic depiction of features on the incorporated concept plan or development plan must be enforced as regulatory standards applicable

within the approved PD district. Change or modification to such features requires processing of a PD district map amendment, including a revised concept plan or development plan.

12.403 Optional Step Two: Development Plan Approval

12.404.A Options

1. Substitution for Concept Plan

The developer may submit a development plan in lieu of a concept plan in accordance with Sec. 12.402.

2. Following Approval of Concept Plan and PD District

If a PD district is established based upon a concept plan, review and approval of a development in accordance with this subsection (12.403) is required before any PD site plans are approved and before any development or construction is allowed within the PD district.

12.404.B Timing; Lapse of Approval

If the landowner fails to file an application for development plan approval within 2 years of the date of the PD district amendment and concept plan approval, the plan approval will be deemed to have lapsed and no development plan may be accepted for processing. In the event of lapse of approval, the City Council may institute proceedings to determine whether the land should be classified in another development district. In such case, the Planning Commission must deliver its recommendation, with a copy to the owner of the affected land, to the City Council, who must conduct a public hearing on the matter and determine what action is to be taken with respect to the PD district and whether to revoke or reinstate the developer's authorization to submit a development plan.

12.404.C Authority to File

PD development plan applications may be filed only by the subject landowner or the subject landowner's authorized agent.

12.404.D Application Filing

Complete applications for development plan approval must be filed with the City Planner.

12.404.E Review and Recommendation—City Planner

Following receipt of a complete application for development plan approval, the City Planner must prepare a report and recommendation that evaluates the PD development plan in light of the approved concept plan and the approval criteria of §12.403.I. The report must be transmitted to the Planning Commission before their public hearing on the proposed PD development plan.

12.404.F Notice of Hearing

1. Planning Commission

Notice of the Planning Commission's required public hearing on a PD development plan must be mailed and posted, in accordance with § [12.106.A](#) and §[12.106.C](#). Required notices must be mailed and posted at least 11 days before the Planning Commission public hearing.

2. City Council

Notice of the City Council's required public hearing on a PD development plan must be published in accordance with §12.106.B. The notice must be published at least 16 days before the City Council public hearing.

12.404.G **Hearing and Recommendation—Planning Commission**

The Planning Commission must hold a public hearing on the proposed PD development plan. Following the close of the hearing, the Planning Commission must act by simple majority vote to recommend that the proposed development plan be approved, approved with conditions, or denied and transmit its recommendations to the City Council.

12.404.H **Hearing and Final Action—City Council**

1. Following receipt of the Planning Commission's recommendation, the City Council must hold a public hearing on the proposed PD development plan. Following the close of their public hearing, the City Council must act to approve the proposed development plan, approve the development plan with conditions or deny the development plan. The City Council may also remand the development plan to the Planning Commission for further consideration.

2. PD district development plans are subject to the protest provisions of Sec. 12.307.

12.404.I **Approval Criteria**

In order to approve a PD development plan, the City Council must make all of the following determinations:

1. The development plan generally is consistent with the approved concept plan and the standards and conditions set forth in the PD district adopting ordinance;
2. The plan provides for a compatible arrangement of buildings and land uses within the project;
3. The general plan for traffic circulation and pedestrians provides for adequate and safe circulation inside and external to the development, consistent with the adopted thoroughfare plan;
4. The general plan for accommodation of floodwaters and drainage is adequate;
5. The plan does not adversely affect adjoining neighborhoods or properties outside the plan, taking into consideration proposed buffers;
6. The amenities proposed in the development plan application, if any, are sufficient to justify increased densities or intensities on the site; and
7. The sequence of development and timing of the phases are consistent with the overall phasing of capital facilities intended to serve the site and with the City's overall growth.

12.404.J **Approving Ordinance**

The ordinance approving the development plan, whether approved as part of the PD map amendment or after the PD map amendment and concept is approved, must include at a minimum the following information. The development plan must be incorporated as an exhibit to the ordinance:

1. A table of the specific land uses permitted in the area subject to the development plan, together with a description of the tracts or subareas to which such uses are restricted;

2. The residential densities and nonresidential intensities of each permitted land use;
3. A table showing the dimensions of each permitted land use, including the following information:
 - a. Minimum lot area;
 - b. Minimum lot width and depth;
 - c. Minimum front, side, and rear yard areas;
 - d. Maximum height of buildings;
 - e. Minimum parking standards for each multi-unit residential and nonresidential land use;
4. A description of the elements of the general circulation plan to serve the development;
5. Provisions governing amenities, if any, to serve the area subject to the development plan; and
6. Such additional conditions as are applicable to development within the area subject to the development plan, as established by the City Council.

12.404 **Final Step: PD Site Plans**

Approval of PD site plans for development on individual building lots, parcels or tracts within the project is the final step of the PD approval process. Such reviews are intended to help ensure that all construction and development are consistent with the approved development plan and standards for the PD district.

12.404.A **Timing; Lapse of Approval**

A PD site plan must be submitted for approval within 2 years of the date that the development plan was approved. If a PD site plan is not submitted within such period, the development plan approval will be deemed to have lapsed and no PD site plan may be accepted for processing. In the event of lapse of approval, the City Council may institute proceedings to determine whether the development plan for the property should be modified or the property subject to the development plan should be reclassified in another development district, and whether to revoke or reinstate the developer's authorization to submit a site plan.

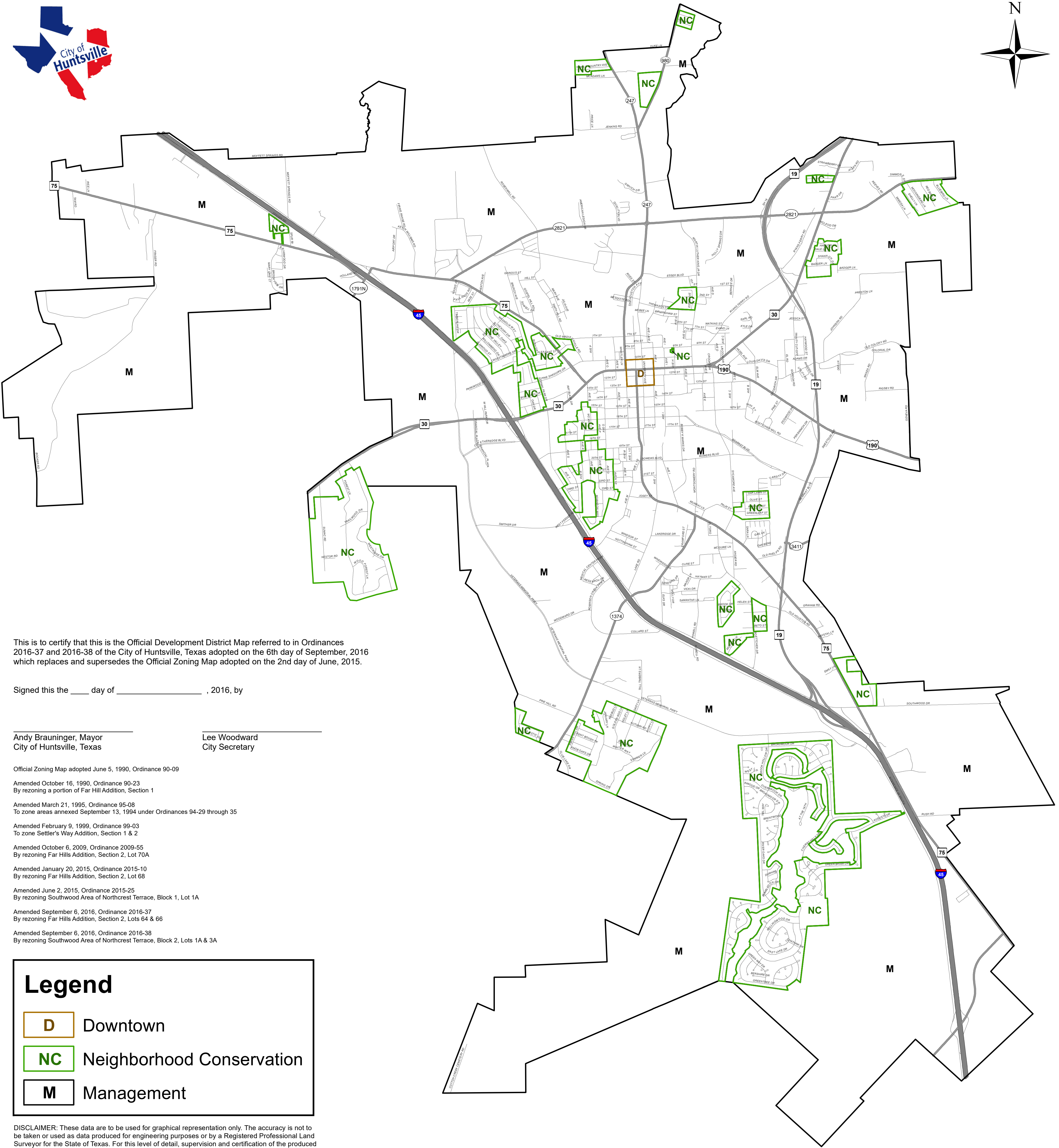
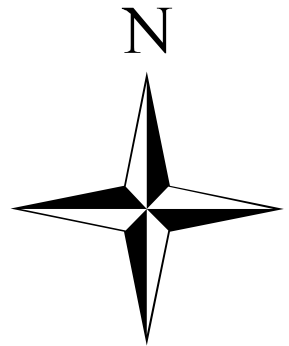
12.404.B **Review and Action by City Planner**

1. The City Planner is authorized to review and take action on PD site plans. The City Planner must approve a PD site plan if it complies with the approved development plan, all conditions of development plan approval and all of the following criteria:
 - a. The plan complies with the approved development plan;
 - b. The plan complies with all standards and conditions set forth in the ordinance approving the development plan;
 - c. Unless modified by the ordinance approving the development plan, the plan complies with the following additional standards generally applicable to development within the City, as set forth in this Development Code:
 - (1) Performance standards; and
 - (2) Setback, landscaping and off-street parking and loading standards;

- d. The plan provides for appropriate ingress and egress points for access, parking and loading, including existing and proposed ingress/egress/access easements, queuing and internal circulation;
 - e. The plan provides for fire safety and adequate measures for fire control and dealing with fire or explosive hazard; and
 - f. The plan provides for adequate utilities, roads, drainage, and other infrastructure, as required by the City's Development Codes.
 - 2. The City Planner may establish conditions and require modifications to ensure that the PD site plan is consistent with the approved development plan and the approval criteria in this section.
 - 3. If the City Planner disapproves a PD site plan or imposes conditions, the applicant may appeal the decision to the City Council by filing a written request with the City Planner within 10 days of the decision.
- 12.404.C **Effect of Approval**
- Approval of PD site plans must occur before a building permit may be issued for the subject property.
- 12.404.D **Lapse of Approval**
- 1. An approved PD site plan will lapse and have no further effect 24 months after it is approved, unless:
 - a. A building permit has been issued (if required); or
 - b. A certificate of occupancy has been issued.
- 12.404.E The Planning Commission is authorized to extend the expiration period for good cause on up to 2 separate occasions, by up to one year each. Requests for extensions must be submitted to the City Planner and forwarded to the Planning Commission for a final decision.
- 12.404.F A conditional use also lapses upon revocation of a building permit or a certificate of occupancy, for violations of conditions of approval or upon expiration of a building permit to carry out the work authorized by the approved PD site plan.

12.405 **PD Project Review**

If the City Council finds that conditions imposed on development of the planned development project have not been timely fulfilled, or for any other reasons related to reasonable exercise of the powers conferred by Texas *Local Government Code* Chapter 211, that the development district classification of the PD district should be reexamined, the City Council may initiate review of the PD district in order to determine whether the authorized uses, standards and conditions applicable to development within the district should be changed for part or all of the undeveloped land within the district. If the City Council makes such determination, it must refer the matter to the Planning Commission for its recommendation and thereafter take appropriate action to modify the uses, standards or conditions applicable to development within the district in accordance with procedures applicable to development district amendments.



This is to certify that this is the Official Development District Map referred to in Ordinances 2016-37 and 2016-38 of the City of Huntsville, Texas adopted on the 6th day of September, 2016 which replaces and supersedes the Official Zoning Map adopted on the 2nd day of June, 2015.

Signed this the ____ day of _____, 2016, by

Andy Brauning, Mayor
City of Huntsville, Texas

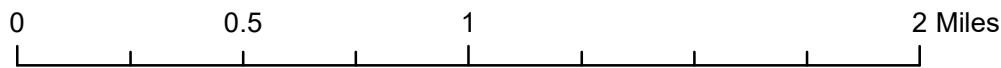
Lee Woodward
City Secretary

- Official Zoning Map adopted June 5, 1990, Ordinance 90-09
- Amended October 16, 1990, Ordinance 90-23
By rezoning a portion of Far Hill Addition, Section 1
- Amended March 21, 1995, Ordinance 95-08
To zone areas annexed September 13, 1994 under Ordinances 94-29 through 35
- Amended February 9, 1999, Ordinance 99-03
To zone Settler's Way Addition, Section 1 & 2
- Amended October 6, 2009, Ordinance 2009-55
By rezoning Far Hills Addition, Section 2, Lot 70A
- Amended January 20, 2015, Ordinance 2015-10
By rezoning Far Hills Addition, Section 2, Lot 68
- Amended June 2, 2015, Ordinance 2015-25
By rezoning Southwood Area of Northcrest Terrace, Block 1, Lot 1A
- Amended September 6, 2016, Ordinance 2016-37
By rezoning Far Hills Addition, Section 2, Lots 64 & 66
- Amended September 6, 2016, Ordinance 2016-38
By rezoning Southwood Area of Northcrest Terrace, Block 2, Lots 1A & 3A

Legend

- D** Downtown
- NC** Neighborhood Conservation
- M** Management

DISCLAIMER: These data are to be used for graphical representation only. The accuracy is not to be taken or used as data produced for engineering purposes or by a Registered Professional Land Surveyor for the State of Texas. For this level of detail, supervision and certification of the produced data by a Registered Professional Land Surveyor for the State of Texas would have to be performed. The City of Huntsville assumes no responsibility for the accuracy of said data.



Official Development District Map of the City of Huntsville, Texas

MINUTES OF THE MEETING OF THE PLANNING COMMISSION HELD IN THE COMMUNITY ROOM, AT THE HUNTSVILLE PUBLIC LIBRARY, 1219 13TH STREET, HUNTSVILLE, TEXAS ON THE 5TH DAY OF OCTOBER 2023 AT 5:30 PM.

Members present: Hooten; Carpenter; Sessions; Gumm; Thompson

City staff present: Irones; Yeager; Gibson

Audience present: Stefan Pardoe; Josh Rothstein; Lesley Reel; Scott Martsolf; Lex Presley; Terry Presley; Tarek Himuam; Vicki McKenzie; Martha Memdijla

1. CALL TO ORDER

The meeting was called to order by Vice-Chairman Hooten. [5:30 PM]

2. PLEDGE OF ALLEGIANCE

- a. U.S. Flag
- b. Texas Flag

3. INVOCATION

Commissioner Carpenter led the invocation.

4. PUBLIC HEARING

- a. For a proposed Development District Map Amendment Request to go from Management District to a Planned Development District and approval of Concept Plan, located adjacent to Quality Boulevard and also just east of American Legion Drive on Walker County Property ID #13938 and #13941, located in the city limits of Huntsville.

5. CONSIDER

- a. The Development District Map Amendment Request to go from Management District to a Planned Development District and approval of Concept Plan, located adjacent to Quality Boulevard and also just east of American Legion Drive on Walker County Property ID #13938 and #13941, located in the city limits of Huntsville.

City Planner, Armon Irones gave an overview of the subject property. He informed the Planning Commission this is the first step of the Planned Development process. The zone change and approval of the concept plan will require approval. They will also go before the City Council for a Public Hearing and approval as well. The second step is a more in-depth development plan submittal and approval by the Planning Commission and City Council. These will also require Public Hearings.

Staff spoke with 4 property owners prior to the meeting regarding the proposed development:

- Greg Rigsby at 118 Avalon was in opposition, says that it will reduce his property values.
- Mrs. Pressley prefers single family homes over multifamily but does not oppose the development.
- Charles Von Schmidt is undecided and was curious about the proposed development.
- There was a property owner that owns property within 300' and couldn't attend but was curious about the development as well.

Staff recommended the approval of the Concept Plan and Development District Map Amendment. Josh Rothstein & Stefan Pardoe gave a presentation providing details and plans for the proposed development & answered questions from the Planning Commission.

Commissioner Gumm moved to approve the zoning change from Management District to a Planned Development District and approval of the Concept Plan. Second was by Commissioner Thompson. The vote was unanimous.

- b. The Final Plat of Caliber Collision, being a partial replat of Rollingbrook Section 2, located in the city limits of Huntsville.

City Planner, Armon Irones gave an overview of the final plat submittal. This proposed development received a positive recommendation for a Conditional Use Permit at the July 21, 2022, Planning Commission meeting.

The applicant is requested to have two Modification/Waiver of Subdivision Standards, one from Article 6.1107.B (1) of the Development Code. The applicant is requesting a driveway entrance from the IH-45 Feeder Road, but Pine Shadows will be constructed in the future. The Development Code requires driveway spacing to be 65 feet in separation, but the applicant has their driveway 63 feet from the proposed Pine Shadows Drive. TX Dot will not issue a driveway permit until the Waiver is granted. The applicant is also requesting a Waiver from Article 10.201 of the Development Code. The Planning Commission requested that as a part of the approval that TX Dot sends a copy of the permit to city staff.

Commissioner Carpenter moved to approve the final plat and the Modification/Waivers of Subdivision Standards requests. Second was by Commissioner Thompson. The vote was unanimous.

- c. The minutes of the September 21, 2023, meeting.

Commissioner Sessions moved to approve the minutes from the September 21st meeting. Second was by Commissioner Thompson. The vote was unanimous.

6. PUBLIC COMMENTS

There were no public comments.

7. ITEMS OF COMMUNITY INTEREST

Announcements concerning items of community interest from the Commission and City Staff for which no action was discussed.

- *Fair on the Square October 7, 2023*
- *The State of the City will be held on October 19, 2023, at 5:30 PM at the Walker County Storm Shelter.*
- *Due to the time conflict, the Planning Commission meeting previously scheduled for that day will be postponed.*
- *The Planning Commission has a new member, Weldon Wallace, who is expected to begin at the next meeting.*

8. ADJOURNMENT

Commissioner Carpenter moved to adjourn the meeting. Second was by Commissioner Gumm. The vote was unanimous. [6:19 PM]



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 1.a.

Agenda Item: Consider approving the Minutes from the October 17, 2023 Regular City Council Meeting.

Initiating Department/Presenter: City Secretary

Presenter:

Kristy Doll, City Secretary

Recommended Motion: Motion to approve the Minutes from the October 17, 2023 Regular City Council Meeting.

Strategic Initiative:

Discussion:

Previous Council Action:

Financial Implications:

Approvals:

Kristy Doll

Associated Information:

1. October 17, 2023 City Council Minutes

MINUTES FROM THE HUNTSVILLE CITY COUNCIL REGULAR MEETING HELD ON THE 17th DAY OF OCTOBER 2023, AT THE HUNTSVILLE PUBLIC LIBRARY, LOCATED AT 1219 13th STREET, IN THE CITY OF HUNTSVILLE, COUNTY OF WALKER, TEXAS, AT 6:00 P.M.

The Council met in a workshop and regular session with the following:

COUNCILMEMBERS PRESENT: Mayor Brauninger, Mayor Pro Tem Humphrey, Councilmember At-Large Position 1 Lyle, Councilmember At-Large Position 2 Denman, Councilmember At-Large Position 3 McKenzie, Councilmember Ward 4 Strong

COUNCILMEMBERS ABSENT: Councilmember At-Large Position 4 Graham, Councilmember Ward 3 Massey.

OFFICERS PRESENT: Aron Kulhavy, City Manager; Kristy Doll, City Secretary; Leonard Schneider, City Attorney

WORKSHOP (5:00 p.m.)

Mayor Brauninger called the meeting to order at 5:00 p.m.

- a. Receive a presentation from TXDoT on the proposed FM 1374, IH-45, and I-14 projects.
Aron Kulhavy, City Manager

Mayor Brauninger adjourned the meeting without objection at 5:55 p.m.

MAIN SESSION (6:00 p.m.)

CALL TO ORDER (6:00 p.m.)

Mayor Brauninger called the meeting to order at 6:00 p.m.

INVOCATION AND PLEDGES - *U.S. Flag and Texas Flag: Honor the Texas Flag. I pledge allegiance to thee, Texas, one state, under God, one, and indivisible.*

Mayor Brauninger gave the invocation and led the pledges.

1. CONSENT AGENDA

The presiding officer will call for public comments before action is taken on these items. (*Approval of Consent Agenda authorizes the City Manager to implement each item in accordance with staff recommendations. An item may be removed from the Consent Agenda and added to the Statutory Agenda for full discussion by request of a member of Council.*)

- a. Consider approving the Minutes from the October 3, 2023, Regular City Council meeting.
Kristy Doll, City Secretary

- b. Consider adoption of Ordinance 2023-23 to amend the budget for FY 22-23 and/or CIP Project budgets.**
Steve Ritter, Finance Director
- c. Consider adoption of Ordinance 2023-24 to amend the budget for FY 23-24 and/or CIP Project budgets.**
Steve Ritter, Finance Director
- d. Consider approving the purchase of updated VMware licensing and support for data center virtualization.**
Bill Wavra, IT Director
- e. Consider authorizing the City Manager to retain the services for Curbside Recycle Processing to Fomento de Construcciones y Contratas, (FCC) SA with a price per ton to be based on the Audited Material Composition and Price per Commodity Index.**
Brent Sherrod, Public Works Director
- f. Consider the purchase of FY 2024 vehicles, from multiple vendors, authorizing the City Manager to award the contract.**
Brent Sherrod, Public Works Director
- g. Consider the approval of Sourcewell Contract 120721-RAU for the purchase of a new Sewer TV Truck with a new complete sewer video system.**
Brent Sherrod, Public Works Director
- h. Consider authorizing the City Manager to purchase a Pierce Enforcer Pumper and authorize the City Manager to award the contract.**
Greg Mathis, Fire Chief
- i. Consider authorizing the City Manager to enter into an agreement with LJA Engineering for professional engineering services for the CIP FY23-24 Miscellaneous Drainage Project.**
Kathlie Jeng-Bullock, City Engineer
- j. Consider authorizing the City Manager to enter into an agreement for the purchase of safety work boots.**
Sam Masiel, Assistant City Manager
- k. Consider authorizing the City Manager to approve the Additional Services to RPS for the IH-45 Segment 2A Widening and Utility Relocation with Betterment Project – Project 18-03-01.**
Kathlie Jeng-Bullock, City Engineer
- l. Consider temporarily suspending the Rules of Procedure Section 3.01 requiring a regular City Council meeting on the first Tuesday of the month for the**

**November 7, 2023, Regular City Council meeting.
Kristy Doll, City Secretary**

Councilmember Vicki McKenzie made a motion to approve the Consent Agenda, Items a-1. The motion was seconded by Councilmember Jon Strong. The motion passed 6-0. Yes - Andy Brauninger, Russell Humphrey, Bert Lyle, Karen Denman, Jon Strong, Vicki McKenzie; No - None

2. STATUTORY AGENDA

- a. Consider authorizing the City Manager to approve the Additional Service to Enprotec/Hibbs & Todd (eHT) for the AJ - 08 & AJ - 10 Trunk Sanitary Sewer Line Replacements Project Number 21-03-01.
Kathlie Jeng-Bulloch, City Engineer**

Councilmember Russell Humphrey made a motion to authorize the City Manager to approve the Additional Services in the amount of \$700,000.00 for the AJ – 08 & AJ – 10 Trunk Sanitary Sewer Line Replacements Project Number 21-03-01. The motion was seconded by Councilmember Bert Lyle. The motion passed 6-0. Yes - Andy Brauninger, Russell Humphrey, Bert Lyle, Karen Denman, Jon Strong, Vicki McKenzie; No - None

3. CITY COUNCIL/MAYOR/CITY MANAGER

- a. Consider the appointments to the City of Huntsville Housing Authority Board for vacant board positions.
Andy Brauninger, Mayor**

Mayor Andy Brauninger moved to nominate members to the Huntsville Housing Authority Board as presented. The motion passed 6-0. Yes - Andy Brauninger, Russell Humphrey, Bert Lyle, Karen Denman, Jon Strong, Vicki McKenzie; No – None

BOARD NAME	SEAT #	APPOINT/ REAPPOINT	BOARD MEMBER	TERM EXPIRES
HUNTSVILLE HOUSING AUTHORITY				
	2	Appoint	Rolando Salazar	8/31/2025
	4	Appoint	Cynthia Cooper	8/31/2024

- b. Consider approving the 2023 Election Services Contract with Walker County for a potential special runoff election if needed. Runoff elections are to be held on December 9, 2023.
Kristy Doll, City Secretary**

Councilmember Vicki McKenzie made a motion to approve the 2023 Election Services Contract with Walker County to prepare for the potential of a special runoff election to be held on December 9, 2023. The motion was seconded by Councilmember Russell Humphrey. The motion passed 6-0. Yes - Andy Brauninger, Russell Humphrey, Bert Lyle, Karen Denman, Jon Strong, Vicki McKenzie; No – None

4. MEDIA INQUIRIES RELATED TO MATTERS ON THE AGENDA

None

5. ITEMS OF COMMUNITY INTEREST

Mayor and Council announced Items of Community Interest.

6. EXECUTIVE SESSION

- a. City Council will convene in closed session as authorized by Texas Government Code, Chapter 551, Section 551.087 for deliberation regarding economic development negotiations - Project Outlaw and Project 2A.
Tammy Gann, Director of Economic Development

City Council convened in closed session at 6:30 p.m.

7. RECONVENE

City Council reconvened from Executive Session at 7:06 p.m.

ADJOURNMENT

Mayor Brauninger adjourned the meeting without objection at 7:06 p.m.

ATTEST:

CITY OF HUNTSVILLE

Kristy Doll, City Secretary

Andy Brauninger, Mayor



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 1.b.

Agenda Item: Consider approving the Minutes from the November 14, 2023 Special City Council Meeting.

Initiating Department/Presenter: City Secretary

Presenter:

Kristy Doll, City Secretary

Recommended Motion: Motion to approve the Minutes from the November 14, 2023 Special City Council Meeting.

Strategic Initiative:

Discussion:

Previous Council Action:

Financial Implications:

Approvals:

Kristy Doll

Associated Information:

1. November 14, 2023 Special City Council Meeting Minutes

MINUTES FROM THE HUNTSVILLE CITY COUNCIL SPECIAL MEETING HELD ON THE 14th DAY OF NOVEMBER 2023, AT THE HUNTSVILLE PUBLIC LIBRARY, LOCATED AT 1219 13th STREET, IN THE CITY OF HUNTSVILLE, COUNTY OF WALKER, TEXAS, AT 4:00 P.M.

The Council met in a special session with the following:

COUNCILMEMBERS PRESENT: Mayor Brauninger, Mayor Pro Tem Humphrey, Councilmember At-Large Position 1 Lyle, Councilmember At-Large Position 2 Denman, Councilmember At-Large Position 3 McKenzie, Councilmember Ward 4 Strong

COUNCILMEMBERS ABSENT: Councilmember At-Large Position 4 Graham, Councilmember Ward 3 Massey.

OFFICERS PRESENT: Aron Kulhavy, City Manager; Kristy Doll, City Secretary

OFFICERS ABSENT: Leonard Schneider, City Attorney

MAIN SESSION (4:00 p.m.)

CALL TO ORDER (4:00 p.m.)

Mayor Brauninger called the meeting to order at 4:00 p.m.

INVOCATION AND PLEDGES - *U.S. Flag and Texas Flag:* *Honor the Texas Flag. I pledge allegiance to thee, Texas, one state, under God, one, and indivisible.*

Mayor Brauninger gave the invocation and led the pledges.

1. CITY COUNCIL/MAYOR/CITY MANAGER

- a. Consider adopting Ordinance 2023-25 to Canvass the returns of the Municipal Election elections held on the 7th day of November 2023, for the purpose of Electing a Mayor at-large and four Councilmembers, one from each of the City's four wards, (1) one, (2) two, (3) three, and (4) four; Declaring the results of the City of Huntsville, Texas November 7, 2023, Election and the adoption or rejection of proposed amendments to the existing Charter of the City of Huntsville, Texas, as amended.**
Kristy Doll, City Secretary

Councilmember Vicki McKenzie made a motion to adopt Ordinance 2023-25 to Canvass the returns of the Municipal Election elections held on the 7th day of November 2023, for the purpose of Electing a Mayor at-large and four Councilmembers, one from each of the City's four wards, (1) one, (2) two, (3) three, and (4) four; Declaring the results of the City of Huntsville, Texas November 7, 2023, Election and the adoption or rejection of proposed amendments to the existing Charter of the City of Huntsville, Texas, as amended. The motion was seconded by Councilmember Russell Humphrey. The motion passed 6-0. Yes - Andy Brauninger, Russell Humphrey, Bert Lyle, Karen

Denman, Jon Strong, Vicki McKenzie; No – None

ADJOURNMENT

Mayor Brauninger adjourned the meeting without objection at 4:02 p.m.

ATTEST:

CITY OF HUNTSVILLE

Kristy Doll, City Secretary

Andy Brauninger, Mayor



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 1.c.

Agenda Item: Consider adoption of Ordinance 2023-28 to amend the budget for FY 23-24 and/or CIP Project budgets.

Initiating Department/Presenter: Finance

Presenter:

Steve Ritter, Finance Director

Recommended Motion: Move to adopt Ordinance 2023-28 to amend the budget for FY 23-24 and/or CIP Project budgets.

Strategic Initiative: Goal #6, Finance - Provide a sustainable, efficient and fiscally sound government through conservative fiscal practices and resource management.

Discussion: Detailed explanation for the Budget Amendments is provided in the attachment, Exhibit A, to the Ordinance.

Previous Council Action: No previous Council action for these budget amendments.

Financial Implications: See the attached Ordinance 2023-27 and related Budget Amendment (Exhibit A)

Approvals:

Steve Ritter

Aron Kulhavy

Kristy Doll

Associated Information:

1. Ordinance 2023-28
2. BAs 11.21.23 City Council

ORDINANCE NO. 2023-28

AN ORDINANCE OF THE CITY OF HUNTSVILLE, TEXAS, AMENDING THE 2023-2024 ANNUAL BUDGET AND CAPITAL IMPROVEMENTS PROJECTS (CIP) BUDGETS, ORDINANCE NO. 2023-20 TO AMEND ADOPTED EXPENDITURES OF THE BUDGET; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the 2023-2024 Annual Budget and CIP Budgets were adopted by Ordinance 2023-20 on September 19, 2023;

WHEREAS, various unforeseen circumstances affecting the City have presented themselves during the course of the fiscal year;

WHEREAS, the City Council considered the circumstances independently, deliberating appropriately on the associated revenues and expenditures and the overall impact on the general financial status of the City;

WHEREAS, pursuant to the laws of the State of Texas and the City Charter of the City of Huntsville, Texas, the City Council has determined that it will be beneficial and advantageous to the citizens of the City of Huntsville to amend the annual budget for fiscal year 2023 – 2024 and the Capital Improvements Projects (CIP) budget as set forth herein; and

WHEREAS, this ordinance combines the independent Council actions into one budget amendment document;

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

Section 1. The findings set forth above are incorporated into the body of this ordinance.

Section 2. The annual budget for fiscal year 2023 – 2024 is hereby amended to include the expenditures and revenues in Exhibit “A” and the Capital Improvements Projects budget is hereby amended to include the expenditures described in Exhibit “A” attached hereto and made a part of this ordinance as if set out verbatim herein.

Section 3. All ordinances of the City in conflict with the provisions of this ordinance are hereby repealed, and all other ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

Section 4. Should any section, portion, sentence, clause or phrase of this ordinance be declared unconstitutional or invalid for any reason, it shall not invalidate or impair the force or effect of any other section or portion of this ordinance.

Section 5. The necessity for amending the budget for the fiscal year 2023 – 2024 and Capital Improvements Projects, as required by the laws of the State of Texas, requires that this ordinance shall take effect immediately from and after its passage, as the law in such cases provides.

Section 6. This ordinance shall take effect immediately after its passage.

PASSED AND APPROVED on this the 21st day of November 2023.

THE CITY OF HUNTSVILLE, TEXAS

Mayor

ATTEST:

APPROVED AS TO FORM:

Kristy Doll, City Secretary

Leonard Schneider, City Attorney

Budget Amendment FY 23-24 City Council 11/21/23

Exhibit A

Decrease: Autumn Road Drainage CIP	\$	250,000
Increase: Miscellaneous Drainage Projects CIP	\$	250,000

Explanation:	During the FY 23-24 budget process for prioritizing and funding CIP projects the Autumn Road Drainage CIP project was inadvertently included for funding instead of a "Miscellaneous Drainage Projects CIP". Funding amounts for both the projects were \$250,000. This Budget Amendment request does not increase the budget for Utility CIP projects; it just moves the budget from the Autumn Road Drainage CIP (to be funded in a future year) to the "Miscellaneous Drainage Projects CIP".
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Increase: Tanyard Creek Lift Stn. Force Main CIP	\$	197,613
Decrease: Waters Edge Lift Stn. Force Main CIP	\$	57,902
Decrease: Evergreen Dr - WW 6" line replace CIP	\$	91,781
Decrease: Water R & R CIP Unallocated Budget	\$	47,930

Explanation:	The Tanyard Creek Lift Station Force Main project currently has \$136,000 available in the Engineering account. Engineering costs anticipated for the project at this time is \$289,900. The proposed budget amendments will provide \$333,613 for the project. It is anticipated there will be around \$40,000 - \$45,000 of easement/property acquisition costs. The Waters Edge Lift Station Force Main project is complete and has \$57,902 of unused budget. The Evergreen Drive - WW 6" line replacement project is complete and has \$91,781 of unused budget. The Water R&R CIP Unallocated Budget account has a current balance of \$47,930 and after this budget amendment (if approved) will have a balance of \$-0-.
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Increase: TRA 5 YR CIP - Intake, Plant, & 48" Line - prelim. admn. costs	\$	150,000
Decrease: Water CIP - 30" Transmission Main Continuous Improvements	\$	150,000

Explanation:	City staff have been meeting with TRA staff about TRA plans (TRA 5 YR CIP) for Renew and Replace CIP needs at the TRA water plant and for the water line from the plant to City water plants. TRA has indicated internal administrative costs related to this planning will be in the neighborhood of \$150,000. City staff believe capitalizing such costs via a City CIP project is the appropriate way to budget and account for this. The City had funded \$700,000 to a "30" Transmission Main Continuous Improvements" CIP project from FY 2015 through FY 2018. Only \$46,000 has been used through FY 2023 leaving \$654,000 in this "project". If this budget amendment is approved there will be \$504,000 of budget remaining in the "30" Transmission Main Continuous Improvements "project".
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CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 1.d.

Agenda Item: Consider approving Resolution 2023-13 to authorize City staff as “Authorized Representatives” for the City’s TexPool accounts.

Initiating Department/Presenter: Finance

Presenter:

Steve Ritter, Finance Director

Recommended Motion: Move to approve Resolution 2023-13 to authorize specific City staff as “Authorized Representatives” for the City’s TexPool accounts.

Strategic Initiative: Goal #6 - Finance - Provide a sustainable, efficient and fiscally sound government through conservative fiscal practices and resource management.

Discussion: TexPool, a local government investment pool utilized by the City to earn interest on funds, requires a Resolution approved by Council in order to add “Authorized Representatives” to pool accounts. Passage of this Resolution will designate Linda Clary, Senior Accountant with the City, as an “Authorized Representative” for City of Huntsville accounts with TexPool.

Previous Council Action: No previous Council action for this item.

Financial Implications: No financial impact related to this item.

Approvals:

Steve Ritter

Leonard Schneider

Aron Kulhavy

Kristy Doll

Associated Information:

1. document to add Linda Clary as representative.contact



Resolution Amending Authorized Representatives

Resolution No. 2023-13 (page 1 of 2)

Please complete this form to amend or designate Authorized Representatives. *This document supersedes all prior Authorized Representative forms.*

* Required Fields

1. Resolution

WHEREAS,

City of Huntsville

Participant Name*

7 8 3 4 5

Location Number*

("Participant") is a local government of the State of Texas and is empowered to delegate to a public funds investment pool the authority to invest funds and to act as custodian of investments purchased with local investment funds; and

WHEREAS, it is in the best interest of the Participant to invest local funds in investments that provide for the preservation and safety of principal, liquidity, and yield consistent with the Public Funds Investment Act; and

WHEREAS, the Texas Local Government Investment Pool ("TexPool / Texpool Prime"), a public funds investment pool, were created on behalf of entities whose investment objective in order of priority are preservation and safety of principal, liquidity, and yield consistent with the Public Funds Investment Act.

NOW THEREFORE, be it resolved as follows:

- That the individuals, whose signatures appear in this Resolution, are Authorized Representatives of the Participant and are each hereby authorized to transmit funds for investment in TexPool / TexPool Prime and are each further authorized to withdraw funds from time to time, to issue letters of instruction, and to take all other actions deemed necessary or appropriate for the investment of local funds.
- That an Authorized Representative of the Participant may be deleted by a written instrument signed by two remaining Authorized Representatives provided that the deleted Authorized Representative (1) is assigned job duties that no longer require access to the Participant's TexPool / TexPool Prime account or (2) is no longer employed by the Participant; and
- That the Participant may by Amending Resolution signed by the Participant add an Authorized Representative provided the additional Authorized Representative is an officer, employee, or agent of the Participant;

List the Authorized Representative(s) of the Participant. Any new individuals will be issued personal identification numbers to transact business with TexPool Participant Services.

1. Steven L Ritter Director of Finance

Name Title

9 3 6 2 9 1 5 4 8 6 9 3 6 2 9 1 5 4 8 9 sritter@huntsvilletx.gov

Phone Fax Email

Signature
2. Marcy M Metz Senior Accountant

Name Title

9 3 6 2 9 1 5 4 4 3 9 3 6 2 9 1 5 4 8 9 mmetz@huntsvilletx.gov

Phone Fax Email

Signature
3. Linda D Clary Senior Accountant

Name Title

9 3 6 2 9 1 5 4 3 5 9 3 6 2 9 1 5 4 8 9 lclary@huntsvilletx.gov

Phone Fax Email

Signature

1. Resolution (continued)

4.

Name										Title																			
Phone										Fax										Email									
Signature																													

List the name of the Authorized Representative listed above that will have primary responsibility for performing transactions and receiving confirmations and monthly statements under the Participation Agreement.

Steven L Ritter

Name

In addition and at the option of the Participant, one additional Authorized Representative can be designated to perform only inquiry of selected information. *This limited representative cannot perform transactions.* If the Participant desires to designate a representative with inquiry rights only, complete the following information.

Name										Title																			
Phone										Fax										Email									

D. That this Resolution and its authorization shall continue in full force and effect until amended or revoked by the Participant, and until TexPool Participant Services receives a copy of any such amendment or revocation. This Resolution is hereby introduced and adopted by the Participant at its regular/special meeting held on the day of , 20 .

Note: Document is to be signed by your Board President, Mayor or County Judge and attested by your Board Secretary, City Secretary or County Clerk.

City of Huntsville

Name of Participant*

SIGNED

Signature*
Printed Name*
Title*

ATTEST

Signature*
Printed Name*
Title*

2. Delivery Instructions

Please return this document to **TexPool Participant Services**:

Email: texpool@dstsystems.com

Fax: 866-839-3291



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 1.e.

Agenda Item: Consider approving Resolution 2023-14 to authorize Financial Representative signatories for the 2020 Texas Community Development Block Grant, Texas General Land Office contract award #20-065-128-C439

Initiating Department/Presenter: Finance

Presenter:

Steve Ritter, Finance Director

Recommended Motion: Move to approve Resolution 2023-14 authorizing Financial Representative signatories for the 2020 Texas Community Development Block Grant, Texas General Land Office contract award #20-065-128-C439

Strategic Initiative: Goal #4 - Infrastructure - Ensure the quality of the City utilities, transportation and physical structures so that the City's core services can be provided in an effective and efficient manner.

Discussion: The City was awarded a CDBG Disaster Recovery contract on July 1, 2020 from the Texas General Land Office for the 2020 Flood & Drainage Improvement and Street Improvement projects in the Elkins Lake Subdivision. The grant was awarded to the City in response to damages sustained from Hurricane Harvey. The City of Huntsville received a total fund allocation of \$1,848,750.00 from the Infrastructure Program.

The grant requires that the City Council designate signatories for different aspects of the grant management. This agenda, item with the accompanying Resolution, will designate new signatories for the grant for Financial Representatives. Currently two Senior Accountants and one Accountant in the Finance Department are tasked with financial and reporting responsibilities for this grant until a new Grants Manager is hired.

Previous Council Action: Due to turnover in the Grants Manager position Council has approved various Financial Representative signatories for this grant since the beginning of the grant in July 2020.

Financial Implications: None

Approvals:

Steve Ritter

Leonard Schneider

Aron Kulhavy

Kristy Doll

Associated Information:

-
1. Resolution 2023-14 (1)
 2. authorized signatories - GLO

RESOLUTION NO. 2023-14

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HUNTSVILLE, TEXAS, DESIGNATING AUTHORIZED SIGNATORIES FOR CONTRACTUAL DOCUMENTS AND DOCUMENTS FOR REQUESTING FUNDS PERTAINING TO THE TEXAS GENERAL LAND OFFICE COMMUNITY DEVELOPMENT BLOCK GRANT – DISASTER RECOVERY (CDBG-DR) PROGRAM FOR HARVEY ROUND 1 FUNDING - CONTRACT NUMBER 20-065-128-C439.

- WHEREAS The City of Huntsville, Texas has received a 2020 Community Development Block Grant – Disaster Recovery (CDBG-DR) Program award to provide flood and drainage and street improvements, and;
- WHEREAS It is necessary to appoint persons to execute contractual documents and documents for requesting funds from the Texas General Land Office (GLO), and;
- WHEREAS An original signed copy of the *Depository/Authorized Signatories Designation Form* is to be submitted with a copy of this Resolution, and;
- WHEREAS The City Huntsville, Texas acknowledges that in the event of a change by an authorized signatory of the City (elections, illness, resignations, etc.), the City must provide Texas General Land Office (GLO) with the following:
- A Resolution stating who the new authorized signatory is; and
 - A revised *Depository/ Authorized Signatories Designation Form*.

NOW THEREFORE, be it resolved by the City Council of the City of Huntsville Texas, as follows:

- SECTION 1: The Mayor and City Manager be authorized to execute contractual documents between the Texas General Land Office and the City for the 2020 Community Development Block Grant – Disaster Recovery (CDBG-DR) Program.
- SECTION 2: The Mayor, City Manager, Senior Accountant(s), and Accountant be authorized to execute the *State of Texas Purchase Voucher* and *Request for Payment Form* documents required for requesting funds approved in the 2020 Community Development Block Grant – Disaster Recovery (CDBG-DR) Program.

PASSED AND APPROVED this 21st day of November 2023.

THE CITY OF HUNTSVILLE

Mayor

ATTEST:

APPROVED AS TO FORM:

Kristy Doll, City Secretary

Leonard Schneider, City Attorney



COMMUNITY DEVELOPMENT & REVITALIZATION
The Texas General Land Office
Depository/Authorized Signatories Designation Form

Subrecipient: City of Huntsville

Contract Number: 20-065-128-C439

The individuals below are designated by resolution as authorized signatories for contractual documents. At least two signatories required.

	Aron Kulhavy
Name	Name
Mayor	City Manager
Title	Title
Signature	Signature

Name	Name
Title	Title
Signature	Signature

The financial lending institution listed here will serve as the depository for the Texas General Land Office-Disaster Recovery Program Community Development Block Grant (CDBG) funds:

First National Bank	700069941
Name of Lending Institution	Fund Account Number
1300 11th Street	Huntsville, TX 77340
Address	City, State, Zip Code

The individuals below are designated by resolution as authorized signatories for financial documents. At least two signatories required.

Marcy Metz	Linda Clary
Name	Name
Senior Accountant	Senior Accountant
Title	Title
Signature	Signature



COMMUNITY DEVELOPMENT & REVITALIZATION
The Texas General Land Office
Depository/Authorized Signatories Designation Form

Christina Bodin-Turner	
Name	Name
Accountant	
Title	Title
Signature	Signature

NOTE: A copy of a Resolution passed by the city council or county commissioner's court authorizing the signatories must be submitted along with this form.

Disclaimer: The Texas General Land Office has made every effort to ensure the information contained on this form is accurate and in compliance with the most up-to-date CDBG-DR and/or CDBG-MIT federal rules and regulations, as applicable. It should be noted that the Texas General Land Office assumes no liability or responsibility for any error or omission on this form that may result from the interim period between the publication of amended and/or revised federal rules and regulations and the Texas General Land Office's standard review and update schedule.



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 1.f.

Agenda Item: Consider authorizing the City Manager to award a contract for media material and laterals to rehab the filter system at Spring Lake Water Treatment Plant.

Initiating Department/Presenter: Public Works

Presenter:

Brent Sherrod, Public Works Director

Recommended Motion: Move to authorize the City Manager to award a contract to Filtrionics Inc. for media material and laterals to rehab the filter system at Spring Lake Water Treatment Plant.

Strategic Initiative: Goal #4, Infrastructure - Ensure the quality of the City utilities, transportation and physical structures so that the City's core services can be provided in an effective and efficient manner.

Discussion: The City of Huntsville uses an Electromedia® filtration system made by Filtrionics, Inc, to remove the naturally occurring Iron and Manganese from the potable water collected by water wells and treated at the Spring Lake Water Treatment Plant. This contract will be a complete removal and replacement of the Electromedia® housed in the filter vessel and to replace the existing broken PVC laterals with stainless steel laterals.

The Filtrionics filter system is designed to only use the Electromedia® that Filtrionics, Inc. provides and is considered a Sole Source.

Previous Council Action: No previous Council action.

Financial Implications: This item is budgeted in account 220-361-69020 for \$139,196.00 through a Decision package that was approved in the FY23-24 Budget.

Approvals:

Brent Sherrod

Leonard Schneider

Aron Kulhavy

Kristy Doll

Associated Information:

1. Filter Media Quote
2. Filter Media Sole Source

FILTRONICS, Inc.
 16872 Hale Avenue, Unit B
 Irvine, CA 92606
 714-630-5040
 www.filtronics.com

Proposal

Date	Proposal #
9/20/2023	20230114-1C

Name / Billing Address	Ship To
City of Huntsville Attn: Accounts Payable 1212 Avenue M Huntsville, TX 77340	Attn: Joe Massey 450 State Hwy 75 North Huntsville, TX 77320

Rep	FOB	Terms	Project #	Project Name	
U	Irvine, CA	50% Down,...	15231001		
Description			Qty	U/M	Total Price
Media, Full Load - EM-I, FH-14			2	ea	119,110.00T
Assemblies - Filtrionics, Laterals - Complete Set, FH-14, 304 Stainless Steel			1	ea	8,700.00T
Lateral anchoring hardware to retrofit to FH-14 including *5/8" 304 Stainless steel unistrut *Strut channel pipe clamps 2-3/8" *5/16" stainless steel bolts *5/16" stainless steel split lock washers *5/16" stainless steel flat washers *5/16" Flat square washers stainless steel 3/8" thick *5/16" Flat square washers stainless steel 1/8" thick *Adhesive grip concrete anchor stainless steel			2	ea	11,220.00T
Manway Gasket, Oval, 12" x 16"			4	ea	166.00T
Note: Laterals are 2" diameter x 24" long w/ 0.035 slots.					
Open account purchases are subject to credit approval or account standing					0.00T
Media must remain dry prior to installation. It is either to be stored inside or adequately covered to protect against the elements and off the ground.					0.00
New installations must have backwash flow and control confirmed prior to installation of media.					
EM-I and EM-IX media must be backwashed and placed into service immediately after installation.					
EM-II through EM-VIII may be installed in the tank after backwash confirmation.					
Consult your Operation and Maintenance manual for further clarifications. Owner/purchaser is responsible for local regulations that may apply regarding disinfection, documentation, or other requirements.					
Signature _____ Date: _____			Total		

IMPORTANT: THIS PROPOSAL IS SUBJECT TO ALL TERMS AND CONDITIONS PRINTED ON THE FACE AND REVERSE SIDE

Proposal

Date	Proposal #
9/20/2023	20230114-1C

Name / Billing Address	Ship To
City of Huntsville Attn: Accounts Payable 1212 Avenue M Huntsville, TX 77340	Attn: Joe Massey 450 State Hwy 75 North Huntsville, TX 77320

[illegible]

IMPORTANT: THIS PROPOSAL IS SUBJECT TO ALL TERMS AND CONDITIONS PRINTED ON THE FACE AND REVERSE SIDE

20 September 2023

City of Huntsville
1212 Avenue M
Huntsville, TX 77340

Attn: Joe Massey, Chief Water Operator

Re: Filtronic Iron and Manganese Filters, Media, and Internals

Dear Mr. Massey,

This letter is to notify that Filtronic, Inc. is the sole source provider of *Electromedia*® permanent media systems for contaminant removal in water and wastewater treatment in its municipal and industrial water treatment systems.

The use of our *Electromedia*® in our custom-designed systems significantly reduces the size of the treatment facility and the simplicity of operation. It reduces waste water and increases overall efficiency. These systems require a short, four-minute backwash cycle, instead of other filtration systems that take 15 minutes or more. This material can filter up to 15 GPM/FT² versus 3–5 GPM/FT². Minimal downtime and fast treatment time reduces cost with less time off-line and high productivity.

As a result of our investment in innovation, (methodology, principles and processes, techniques, tools, protocols and documentation) we have created a portfolio of intellectual property rights that include patents, trademarks and copyrights.

We are the only organization in the world with the unique technical competence, expertise, experience and proprietary knowledge in the applications using Electromedia® as well as the design and manufacture of the Filtronic water treatment systems using Electromedia®. We look forward to continuing our collaboration with the City of Huntsville to provide clean drinking water to your community.

Regards,

A handwritten signature in black ink, appearing to read "Mike Hoyer".

Mike Hoyer

VP Operations



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 1.g.

Agenda Item: Consider authorizing the City Manager to enter into an agreement with HICKS-RAY ASSOCIATES (HRA), for professional administration services.

Initiating Department/Presenter: Engineering

Presenter:

Kathlie Jeng-Bulloch, City Engineer

Recommended Motion: Move to authorize the City Manager to enter into an agreement with HICKS-RAY ASSOCIATES (HRA) for professional administration services with a \$0 cost to the City of Huntsville.

Strategic Initiative: Goal #4, Infrastructure - Ensure the quality of the City utilities, transportation and physical structures so that the City's core services can be provided in an effective and efficient manner.

Discussion:

This item is to request authorization for the City Manager to enter into an agreement with HICKS-RAY ASSOCIATES (HRA) to perform the Professional Administration Services relating to Grant applications.

HRA will support and assist in application with:

1. Identifying supporting documents needed for the Fiscal Year 2024 Transportation, Housing & Urban Development (THUD) Grant Program.
2. Assist the City in identifying and applying for grants relating to Streets and Sidewalks potentially suitable for Federal Funding request as Community Funded Projects or other opportunities.
3. Assist the City in identifying and applying for Federal Funding Opportunities including but not limited to USEPA grants, Department of Transportation, Road and Drainage projects, HUD CDBG funding (US Department of Housing and Urban Development, Community Development Block Grant Program), and any other opportunities that are applicable and of potential benefit to the City.
4. Continue working with Congress and USEPA before anticipated Federal funding in the FY24 Interior and Environment Appropriations Bill Community Directed Funding can be awarded for the NB Davidson Wastewater Treatment Plant.
5. Continue working to provide EPA required documents to complete the State and Tribal Assistance Grant (STAG) for the City's FY 24 budget.
6. Assist with identifying and securing additional Federal funding that would supplement the FY 24 Interior Appropriations for the same or other project(s), including request for another STAG allocations.

This Professional Administration Services Agreement will have a \$0.0 cost to the City of Huntsville. The

compensation will be on a reimbursement basis and will only be reimbursed for grant approved eligible costs (after the City receives Grant Funding), and expenses as determined by the City.

Prior to receiving any funding, HRA will assist in developing project scopes, helping grant application(s), providing the concise information needed for submission of the applications.

After receiving grant funding, HRA will administer funding(s). The administrative duties may include assisting in public hearings; providing all Labor Standards Officer Services; preparing and submitting all required reports; providing monthly project status updates; and will evaluate monthly invoices from such grant funded project(s).

Previous Council Action: None

Financial Implications: In the amount of \$0.0

Approvals:

Kathlie Jeng-Bulloch
Leonard Schneider
Aron Kulhavy
Kristy Doll

Associated Information:

1. Huntsville-HRA Agmt - exec 20231108
2. 20231025_Exihibit A-B Huntsville_submittal revised final

AGREEMENT FOR DESIGNATED SERVICES

THIS CONTRACT SERVICES AGREEMENT (herein “Agreement”) is made and entered into in NOVEMBER 2023 by and between the CITY OF HUNTSVILLE (herein “City”) and HICKS-RAY ASSOCIATES (herein “Consultant” or “HRA”).

WHEREAS, HRA is a federally registered firm qualified to provide federal government liaison and support services to the City;

WHEREAS, the City is selected for FY2024 funding by the Interior, Environment and Related Agencies Appropriations Committee (Interior Appropriations Committee) has approved in the Community Funded Project section the FY 2024 Interior Appropriations bill funding for the City;

WHEREAS, the City desires to compensate HRA services on a reimbursement basis using federal funding and required local (City) matching funds for grant eligible services;

WHEREAS, the HRA will provide services to assist the City in securing future federal funding through Congressional appropriations to support projects identified by the City;

NOW THEREFORE BE IT RESOLVED that the parties agree to the following:

1.0 Services

Consultant will provide services as generally set forth in the “Scope of Services” attached hereto as Exhibit A. The City has the prerogative of specifying services through the use of individual “Work Orders” that will detail the type, purpose, eligible expenses and timeframe of the specific service to be rendered. The Consultant recognizes the need to provide services for an initial four month period and that future services will with the City’s approval.

2.0 Limitations

The scope of services is based upon present understanding of the objectives and needs of the services and projects by Consultant. In the event it is necessary to amend the scope of services,



in order to accommodate new information obtained during the course of the project, the parties may mutually agree to amend in writing such services or other provisions of this agreement.

3.0 Term

The term of this agreement shall begin DECEMBER 1, 2023 and end on DECEMBER 1, 2024 (12 month period). The parties agree that either party has the right to terminate for any reason or for no reason said agreement, prior to the end term, providing written notice is given to the other party, whereupon termination is effective thirty (30) days from the date of receipt of said notice.

4.0 Compensation

Consultant recognizes that compensation shall be on a reimbursement basis and will only be reimbursed for grant approved eligible costs (after City receives Grant Funding) and expenses as determined by the City, and after City receives grant funding. Based on approved task orders prepared by HRA and approved by the City, compensation will be on an hourly-rate basis with an identified and agreed upon not to exceed amount for the task. It is anticipated that a series of task orders would be prepared and presented to City as the parties agree to undertaking federal opportunities. Hourly rates for HRA services are attached as Exhibit B.

After City receives Grant Funding, payment will be made within thirty (30) days of submission and verification of an invoice for the services provided. In addition, Consultant may be reimbursed for reasonable actual expenses for express mail, long distance telephone calls, and travel expenses, such as round-trip business class airfare, hotel accommodations, meal expenses, and surface transportation, provided such expenses are approved by the City in advance. Amounts paid as reimbursement for travels, meals, and lodgings shall basically follow the City's policies for reimbursing City employees and must be properly documented.

5.0 Records

Consultant agrees to maintain all records, correspondence, books, financial accounts and other information relating to this agreement. The City reserves the right to inspect any and all records at any reasonable time.



6.0 Independent Contractor

Consultant shall carry out the terms of this agreement as an independent contractor and not as agent, servant, or employee of the City. Accordingly, Consultant shall not receive any employee benefits. For all purposes hereunder, Consultant shall be deemed to be an independent contractor, and it is mutually agreed that nothing contained herein shall be deemed or construed to constitute a partnership or joint venture between Consultant and the City.

7.0 Interest of the City Officials

No member of the governing body of the City, and no other officer, employee, or agent of the City shall have any personal interest, direct or indirect, in this agreement.

8.0 Interest of other public officials

No member of a governmental body, subdivision or agency thereof located in Walker County, Texas, who exercises any functions or responsibilities in the review or approval of the carrying out of the project, goods, or services to which this agreement pertains shall have any personal interest, direct or indirect, in this agreement.

9.0 Discrimination

No one will, on the grounds of race, creed, color, national origin, disability, age, or gender be subject to discrimination in the performance of this agreement.

10.0 Force Majeure

Neither the City nor the Consultant shall be deemed in violation of this agreement if it is prevented by performing any of the obligations hereunder by reason of strikes, boycotts, labor disputes, embargoes, act of God, acts of the public enemy, acts of superior governmental authority, riots, rebellion, sabotage, or other circumstances for which it is not responsible or which is not within its control.



IN WITNESS WHEREOF, the parties have executed this Agreement to be effective as of the date first above written.

Owner:

By: _____

Aron Kulhavy

Title: _____
City Manager

Date: _____

Attest:

Kristie Dall - City Secretary

Approved As To Form:

Leonard Schneider, City Attorney

Consultant:

Hicks-Ray Associates

By: Tom Ray

Title: Partner

Date: 11/8/2023



Exhibit A
Scope of Work

TO: Dr. Kathlie S. Jeng-Bulloch, P.E., D.WRE, CFM
City Engineer
Director of Engineering Department
City of Huntsville, Huntsville Texas
kjengbulloch@huntsvilletx.gov

FROM: J. Tom Ray, Hicks-Ray Associates

DATE: October 25, 2023

SUBJECT: Scope of Work and Fee Proposal

This memo **presents** a draft scope of work and hourly rate proposal (see Exhibit B) for Hicks-Ray Associates (HRA) to assist the City of Huntsville in presenting in identifying and presenting its Federal agenda. The services anticipated are divided into main areas of support and other related services.

Main Areas:

- (1) Assist the City with past agreements with Lockwood, Andrews & Newnam, Inc. (LAN) and any applicable future LAN agreements in working with Congress and USEPA Region VI to initiate and complete the Federal agency review process required before anticipated Federal funding in the FY24 interior and Environment Appropriations Bill Community Directed Funding can be awarded for the NB Davidson Wastewater Treatment Plant.
- (2) Assist the City and identify on behalf of the City, the EPA required documents and supporting information necessary to complete a State and Tribal Assistance Grant (STAG) for the City's FY24 funding discussed above.
- (3) Arrange conference calls or meeting with EPA Region VI staff to review and discuss requirements and barriers associated with securing the award of Congressionally directed STAG funding.
- (4) Assist with identifying and securing additional Federal funding that would supplement the FY24 Interior Appropriations for the same or other project(s), including request for another STAG allocation.
- (5) Assist with identifying support documents needed or helpful in supporting any other Federal funding requests, including THUD requests.
- (6) Assist the City in identifying and launching its Federal agenda with a special focus on Congressional Community Directed Funding opportunities. This is an especially important task because of the election of a new Speaker and the fact that 2024 is a Presidential election year which brings with it opportunities and pitfalls.
- (7) Develop and implement an action plan that focuses on securing funding in Congressional appropriations and authorizing combined with a continued follow-up effort to win the release of Congressional funding already awarded to the City.



Other related areas:

HRA related service include but are not limited to:

- Assist City in identifying further prioritizing projects from the City's CIP for streets and sidewalks potentially suitable for Federal funding request as Community Funded Projects or other opportunities;
- Assist the City in identifying Federal funding opportunities including but not limited to USEPA grants, Department of Transportation, Road and Drainage projects, HUD CDBG funding, and any other opportunities that are applicable and of potential benefit to the City. (See Fee Proposal below);
- Coordination with and seeking guidance from the City's Congressional delegation that includes Congressman Sessions and Senators Cornyn and Cruz;
- Assisting as directed by the City with any additional Federal efforts or needs; and,
- Assist with identifying any pending Federal actions of potential concern to the City.

Discussion:

HRA has worked closely more than 20 years with Congressman Pete Sessions on water- and transportation-related projects in Texas and we have developed a strong working relationship with the Congressman and his staff. The FY25 Appropriations cycle will officially begin in February 2024, but we recommend that the City begin conversations with Mr. Sessions and his staff in an October-December 2023 time-frame. This will allow the City to have established its funding needs with your Member of Congress before the FY25 Appropriations cycle begins this coming February. Kevin Burnette, Mr. Sessions District Director, suggests that requests be completed in October or November 2023 timeframe, and discussed with Congressman Sessions and his staff well ahead of the rush that comes when the annual appropriations process begins in the New Year.

HRA has also worked successfully with Senators Cornyn and Cruz and their staffs on Texas focused projects and funding including integrating House and Senate support into final legislation signed into law by the President.

Congressman Sessions has secured Community Project Funding in the House Interior and Environment Appropriations bill included a request for funding of the City of Huntsville's NB Davidson Wastewater Treatment Plant. This funding is likely to remain in the final version of the bill. We recommend that the City move immediately once the Interior and Environment FY24 Appropriations bill is signed into law to have the funds released from EPA to the City.

Routine support provided by HRA includes:

1. HRA working with the City to explore and identify opportunities in new programs being proposed by the President during the second session of the 118th Congress.



2. HRA supporting the City in making arrangements Huntsville representatives to visit Washington DC in early 2024 as soon as that becomes practical depending on the status of the COVID-19 pandemic.
3. HRA will assist the City with identifying, reviewing, and preparing application(s), as the City directs, for federal grant funds that benefit the City and support its federal agenda.
4. Work and coordinate, as instructed by the City Manager, with City's other government-relation consultants on federal efforts, including Congressional efforts to secure funding.
5. With direction from the City, assist with opportunities for improved federal support through the federal grants, including the streets and sidewalks, STAG, WIFIA and the INFRA grant program, as these opportunities may emerge during the year.
6. Support the City of Huntsville on Washington, DC trips and Capitol Hill appointments in follow-up to key issues identified as a part of the Huntsville Federal agenda including providing advanced planning, assistance with preparing briefing papers to concisely present Huntsville positions, providing informed recommendations on appointments to support Huntsville's interests or positions, making appointments, preparing final itineraries, and attending appointments with Huntsville representatives.





Exhibit B

Fees and Costs to the City

Retainer Basis. Based on these areas of service, Fred and I have discussed an appropriate fee basis. We continue to operate with a monthly retainer based on level of services provided. We feel the following range of services is fair and gives the City the opportunity to decide which best fits your needs:

Levels of Service		
Services	Description of Services	Propose Hourly Rates (number of hours will vary by Task Order)
Basic	For all areas of HRA support listed above: 1. Assistance with completing the State and Tribal Assistance Grant (STAG) process, including arrangements for EPA Region VI staff to discuss requirements, eligibilities and forms/paperwork needed. 2. Efforts in the second Session of the 118th Congress to seek CFP authorizations for infrastructure project (Interior Appropriations Subcommittee) and surface transportation projects (Transportation and Housing Urban Development Appropriations Subcommittee). 3. Efforts, immediate and future, to identify federal opportunities, evaluate, discuss recommendations with city staff, close funding agreements, assist the city with grant/funding requirements. 4. Prepare and submit Work Orders that will identify the anticipated HRA hours required for the effort.	Hourly rate for all Basic services HRA Principals – \$150/hour
DC Mtgs	HRA will facilitate local (at Mr. Sessions' Waco Office) meetings, including pre-planning and on-site assistance, in coordination with the City's other federal consultants.	Included in Basic Services plus expenses (depending on level of effort additional fees at

Hicks-Ray Associates



		time & materials may be requested)
Additional Services	HRA is available to assist in other federal areas as appropriate and as needed by the City. The compensation for additional services can be negotiated.	As required, To be negotiated

The above table provides a range of fees for the anticipated services that would be of benefit to the City. We can certainly review, discuss and refine these further.

Other Costs.

Travel and Production Expenses. Reasonable travel expenses approved in advance by the City are charged. Production expenses can include presentation materials, etc., as needed.

Termination of Services. The City can terminate services at any time with 30 day notice appreciated.

Term of Contract. The typical contract is twelve months with the opportunity to renew.

If there is any additional information that you may need, please let Fred or I know.
We appreciate the opportunity to work for the City of Huntsville, under your direction!

Fred B. Hicks & J. Tom Ray
Hicks-Ray Associates



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 1.h.

Agenda Item: Consider authorizing the City Manager to enter into an agreement with Fugro Geospatial, Inc. for professional services for CIP FY23-24 Program to deliver Aerial, Planimetric and Topographic Mapping for City of Huntsville and its Extra-Territorial Jurisdiction (ETJ) limits.

Initiating Department/Presenter: Engineering

Presenter:

Kathlie Jeng-Bullock, City Engineer

Recommended Motion: Move to authorize the City Manager to enter into an agreement with Fugro Geospatial, Inc. for professional services for the CIP FY23-24 Program to deliver Aerial, Planimetric and Topographic Mapping for City of Huntsville and its Extra-Territorial Jurisdiction (ETJ) limits.

Strategic Initiative: Goal #4, Infrastructure - Ensure the quality of the City utilities, transportation and physical structures so that the City's core services can be provided in an effective and efficient manner.

Discussion: Aerial and topographic mapping is an essential element in planning, engineering, and managing the City's infrastructure. Mapping is also a valuable tool for prospective developers, existing businesses, and citizens for planning their respective needs. Updating aerial and topographic mapping will not only aid in providing improved and more realistic data, but also saves time and cost by eliminating otherwise needed field data gathering for many City and Private Sector projects and related tasks. The City last updated the City-wide mapping in 2018. The City's GIS mapping website www.huntsvilletx.com/gis is frequently used and appreciated by citizens, businesses, realtors, engineers, contractors, and government alike.

The purpose of this update is to acquire and process aerial imagery (approximately 249 square miles), lidar and planimetries to produce 6-inch pixel resolution and 8 points per square meter (PPSM) spacing lidar point cloud with associated lidar-derived products, updating the City's geodatabase from the newly acquired aerial imagery and lidar and performing data conversion services (GDB to CAD). (See map for area)

All ground control will have coordinate and elevations established on the NAD 83 (Texas State Plane Coordinate System of 1983) and NAVD 88 vertical datums, respectively. The coordinates will be surveyed to meet or exceed National Geodetic Survey, second order, class 1 (1:50,000) accuracy and elevations will be surveyed to at least third order, 3 cm-equivalent accuracy. Fugro Geospatial, Inc will work with the City Surveyor to verify horizontal, vertical, and contour accuracies. Fugro will also convert the City of Huntsville existing utility features GIS data to CAD format. Features include Water Wells, Water Lines, Water Features, Sewer Lift Stations, Sewer Force Mains, Sewer Collection System, and Treatment Plants and Storm Sewer System.

The negotiated price proposal with Fugro for services, including Ortho Imagery, Lidar, Planimetric

Update and Data Conversion with Added Ground Control and Check Points is \$148,214.11.

Previous Council Action: Council last approved a contract for aerial imagery and associated services on December 19, 2017.

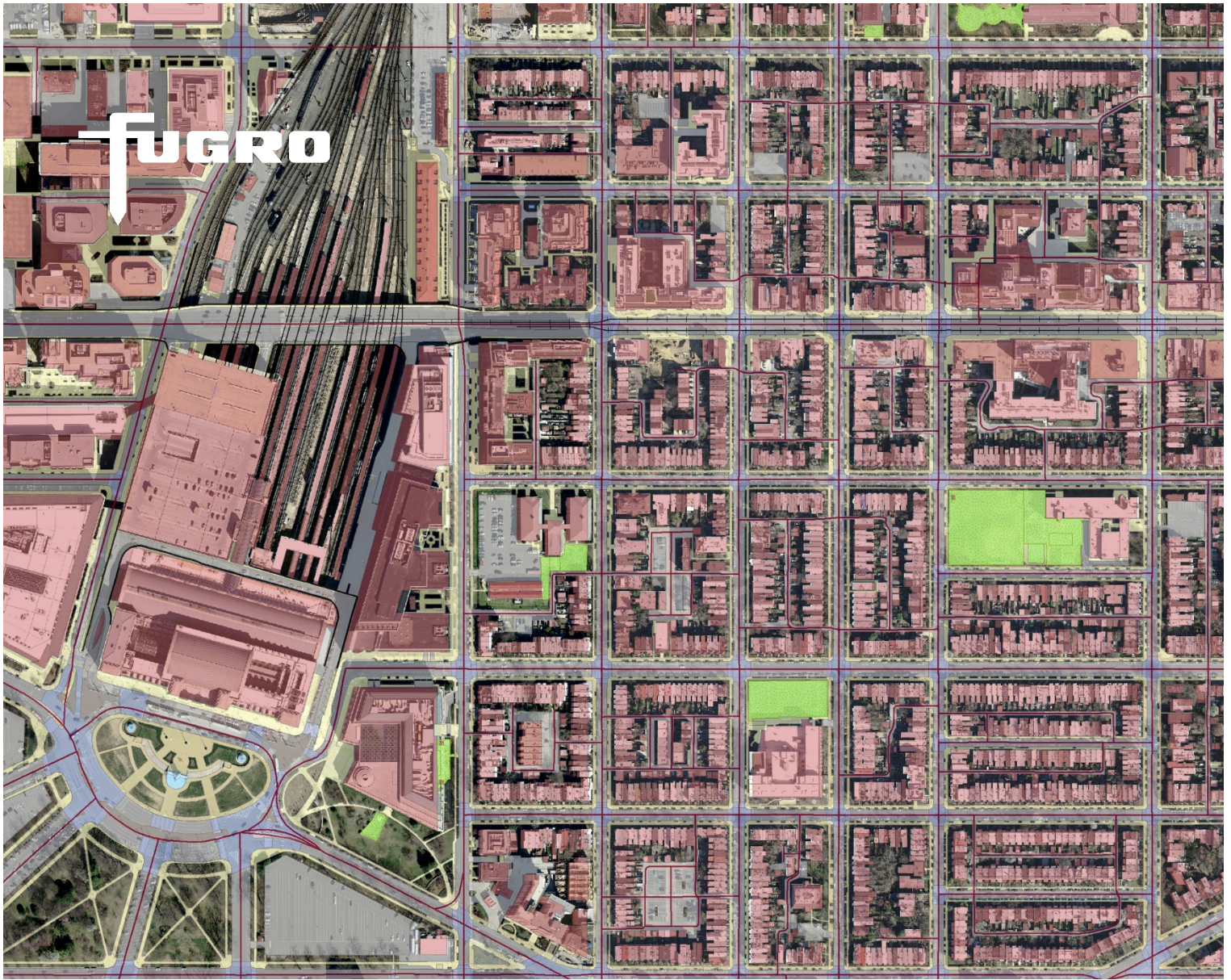
Financial Implications: Budgeted: In the amount of \$150,000.00 (CIP FY23-24)

Approvals:

Kathlie Jeng-Bulloch
Leonard Schneider
Aron Kulhavy
Kristy Doll

Associated Information:

1. 240810 City of Huntsville TX USA Lidar Orthos Planimetrics proposal 2023
2. Flight Plan Map



Huntsville Texas Geo-Data Project

Proposal | Aerial Imagery, Lidar, Planimetrics and Data Conversion

240810 01 | 10 August 2023

The City of Huntsville, Texas



Document Control

Document Information

Project Title	City of Huntsville TX USA Lidar Orthos Planimetrics RSM
Document Title	Huntsville Texas Geo-Data Project
Fugro Project No.	240810
Fugro Document No.	240810
Issue Number	01
Issue Status	Final
Fugro Legal Entity	Fugro USA Land, Inc.
Issuing Office Address	6100 Hillcroft Ave, Houston Texas 77081
DIR Contract Number	DIR-CPO-4643
Vendor ID	1742426512600

Client Information

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AP	Angie Pelkie	Technical and Business Development Manager
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BD	Ben Downey	Project Manager
LB	Lynn Baker	Geospatial Team Lead
TW	Tian Wang	Production Manager
MR	Mike Rusenko	Aviation Manager

Welcome

Fugro provides high resolution aerial imagery, lidar, and planimetric data as a reliable and accurate service for county engineering operations and maintenance.

We are pleased to submit this technical and budgetary document to the City of Huntsville, Texas for acquiring, processing, and delivering aerial imagery, lidar, and planimetric data to produce 15cm (6in) pixel resolution orthoimagery, 8 points per square meter (PPSM) classified lidar point cloud (and data products), update to the existing city planimetric geodatabase and data conversion processes (GBD to CAD). With this submission, Fugro is offering to aid the City in its continued commitment to *maintain and enhance the quality of life* of their citizens with highly detailed and accurate Geo-data to make smarter decisions.

At Fugro our goal is to guarantee client's project satisfaction, build a sustainable partnership, and improve your return on investment. We assist you in building technical specifications, budgets, and schedules, to connect your needs with product development.

Fugro provides Geo-data to measure, analyze, and understand the earth to manage assets and safeguard life. Our surveying and mapping specialists acquire high accuracy, geospatial data which builds the foundation for better decision making.

Fugro's Commercial Director, Mr. Keith Owens, is available for questions and clarifications regarding this proposal. M: +1 775 287 2661 | Email: k.owens@fugro.com

We are pleased to present a proposal that demonstrates unique technology, extensive experience on successfully completing this project in 2018 and projects of similar complexity, size, and scope since then.

Thank you for considering our proposal. We look forward to your response and would be grateful to have the opportunity to work with you on this important project.



Dave White

Regional Manager Remote Sensing and Mapping, Americas

Executive Summary

Our purpose is to acquire and process aerial imagery, lidar and planimetrics to produce 15cm pixel resolution orthoimagery, 8 points per square meter (ppsm) lidar point cloud with associated lidar-derived products, updating the City's planimetric geodatabase from the newly acquired aerial imagery and lidar and performing data conversion services (GDB to CAD).

Using state-of-the art full waveform lidar sensor technology (Riegl VQ 1560 II-S), we will capture lidar data at >8ppsm over the chosen area of interest (AOI). 4-band Imagery will be captured concurrently using our mapping-grade medium format camera system (Phase One). Planimetric features will be updated utilizing imagery and lidar for extracting important details.

Survey Ground Control

Fugro will coordinate ground control surveys with the City of Huntsville. We've provided optional approach and pricing for Fugro to perform the ground control survey. If the City would prefer to conduct the survey, Fugro has provided pricing that removes the survey option. This project requires ten (10) ground control points for the orthoimagery and lidar and twenty (20) ground control point check points for the accuracy validation.

Topographic Lidar

The topographic lidar will be captured by Fugro aircraft and sensors for creating a >8ppsm lidar point cloud and associated lidar-derived products. Aircraft and sensors are maintained to manufacturer and FAA requirements. Data captured and processed will exceed the City's requirements for topographic lidar and data products (requesting 1m nps, achieving 0.35m nps)

Digital Orthoimagery and Planimetric Feature Extraction

Digital 4-band orthoimagery will be produced using the Phase One aerial mapping sensor for creating 15cm pixel resolution (or better) orthoimagery. The imagery (and data products) acquired and processed will comply with Positional Accuracy Standards for Digital Geospatial Data American Society of Photogrammetry and Remote Sensing (ASPRS).

Project Pricing

Description	Total Project Price
Total Orthos, Lidar, Planimetric Update and Data Conversion	\$136,975.01
Total Orthos, Lidar, Plan Update and Data Conversion w/ Added Ground Control and Check Points	\$148,214.11

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1. Technical Approach

Fugro has reviewed the City's project specifications and designed a project approach to utilize the City's existing and newly acquired ground control, imagery and lidar data to develop the project deliverables.

The project is designed to acquire imagery and lidar data within the selected project boundary (AOI) at 6-inch pixel resolution and >1m post spacing (8ppsm achieved), respectively.

Once the contract is awarded and the project kick-off meeting is complete Fugro will mobilize one (1) aircraft, equipped with a Riegl lidar and concurrent Phase One imagery sensor to the project site prior to the acquisition window to prepare for the data collection effort.

The technical approach and pricing assume that this project will be collected during leaf-off conditions (Dec, Jan and/or Feb, 2023/24).

1.1 Project Assumptions

- Collection Season - Winter/Spring 2023/24 leaf off
- Project Includes 5% DIR discount
- Mapping Sensors – Riegl VQ 1560 II-S and Phase One for lidar and imagery
- (optional) Fugro to collect 10 Lidar and Ortho GCP (total 10 points)
- (optional) Fugro to collect 20 Lidar and Ortho QA/QC GCP Check Points (total 20 points)

1.1.1 Ground Control Survey

Fugro has provided options for collecting the orthoimagery and lidar ground control points and QA/QC ground control check points.

Conformance with the accuracy standards will be internally verified through review of aerotriangulation residuals and comparison of image/map coordinates for targeted ground control and checkpoints against their corresponding ground-surveyed values. The City will perform an accuracy check of the mapping by comparison of Fugro's photogrammetrically derived coordinates and elevations with accurately surveyed coordinates and elevations for specifically placed and targeted ground checkpoints. City Surveyor, Mr. Gene Woods, RPLS/LSLS will utilize a minimum of 20 blind panels to verify compliance of contractual accuracy requirements for elevation and horizontal positioning for both Aerial and Lidar prior to processing at no additional cost to the City. Furthermore, Mr. Gene Woods will be the point-of-contact for survey grade quality control and assurance standards for all deliverables.

1.1.2 Orthoimagery

- Full tile deliverable, approximately 249 square miles

- 6-inch GSD, 4-band geotiffs, ECWs, and MrSIDs
- Newly generated ortho-suitable DSM
- ASPRS accuracies for 6-inch orthoimagery (2 pixel RMSE x and y)
- Compressed deliverables include individual tiles and mosaic

1.1.3 Lidar and Contours

- Full tile deliverable, approximately 249 square miles
- >0.35m Post Spacing (8ppsm) Classified Point Cloud LAS
 - Class 1, 2, 7, 9, 10 and in an LAS 1.4 format
- Bare Earth LAS
- Hydro breaklines specifications needed to generate 2-foot contours
 - DTM with hydro breaklines only - no need for added supplemental breaklines for 2-foot contours generated from 0.35m nps lidar
- 2-foot contours generated from the lidar data

1.1.4 1"=100' Scale Planimetric Update

- Project boundary to the 2018 geodatabase extents, approximately 189.9 square miles
- Will use the same structure as the 2018 geodatabase
- Features updated must be visible and distinguishable within the 6-inch imagery. Typically, the following are not visible in 6-inch imagery:
 - Hydrant
 - Manhole
 - Storm Inlet
 - Water Valve
- Update does not include fixing legacy data errors
- Walls include retaining walls

1.1.5 Utility Feature GIS to CAD Conversion

- Manage the existing geodatabase and export individual shapefiles,
- Add layer names based on feature type,
- Combine point, line and polygon features into shapefile
- Adding necessary CAD fields
- Update the color attribute and QC CAD fields
- Tile models with point, line, polygon shapefiles using the tile index and seed file

1.2 Project Standards and Accuracy

All of the project work will be accomplished in accordance with the City of Huntsville's directives and the following standards and specifications as applicable.

1. Federal Geographic Data Committee (FGDC) National Standard for Spatial Data Accuracy (NSSDA)
2. American Society for Photogrammetry and Remote Sensing (ASPRS) Positional Accuracy Standards for Digital Geospatial Data 2014

Horizontal accuracy for Digital Planimetric Data will meet a RMSEr of 21.2 cm threshold or $21.2 \times 1.7308 = 36.7$ cm at the 95% confidence level.

Vertical accuracy for Digital Elevation Data, including contours, for non-vegetated surfaces, will meet a RMSEv of 15 cm threshold or $15 \times 1.9600 = 29.4$ cm at the 95% confidence level.

1.3 Project Kick-off Meeting

Fugro recommends holding a project kick-off meeting to ensure all parties have a solid understanding of all aspects of the project, including schedule, deliverables, and quality expectations. The results of the kick-off meeting provide confirmation that Fugro can proceed with the project by finalizing our planned approach, ramping up the required resources, and preparing our resources for data collection.

1.4 Flight Planning and Mobilization

After the project kick-off meeting Fugro's project manager and flight operations manager, Mr. Mike Rusenko review and finalize the flight plan details. Acquisition considerations such as airspace restrictions, airport accessibility, terrain, weather patterns, and other customer or special project needs are addressed and incorporated into the final flight plan.

Flight planning is performed under the supervision of Suzee Parsons, CP, Fugro's planning, staging and controls (PSC) manager, using Fugro's proprietary planning software J-Flight. Ms. Parsons is an ASPRS Certified Photogrammetrist that has successfully designed hundreds of successful airborne data acquisition projects.

For this proposal, a customized, preliminary flight plan has been designed for the data acquisition establishing the locations, number and specific length of the flight lines; altitude and airspeed for maximum safety and sensor efficiency; number and locations of control points to ensure required accuracies are achieved.

1.5 Ground Control

During the initial field reconnaissance Fugro identifies candidate horizontal and vertical control monuments from the client supplied control to determine if they are suitable for use. We also investigate all existing control from previous imagery acquisition projects to find the most efficient ground control solution. This field reconnaissance is used to determine new accessible GPS visible monument locations. Should additional ground control be required, the surveying team selects locations for control points using the approved control layout design.

A standard photo control recovery form is prepared for each new control point established to aid in future identification (digital photograph is taken of each control point). This information is used to assist in populating the standard survey monument recovery sheet for each permanent monument in the network. Survey crews will use a uniform procedure to document new control, which will facilitate record keeping and metadata preparation.

1.5.1 Control Accuracy and Datum

All ground control will have coordinate and elevations established on the NAD 83 (Texas State Plane Coordinate System of 1983) and NAVD 88 vertical datums, respectively. The coordinates will be surveyed to meet or exceed National Geodetic Survey, second order, class 1 (1:50,000) accuracy and elevations will be surveyed to at least third order, 3 cm-equivalent accuracy. All survey measurements will be reported in US survey feet.

1.5.2 Ground Control Accuracy Checkpoints

At least 20 well-defined ground control points (blind panels) will be used to verify project horizontal and vertical accuracies. Fugro will extract X,Y,Z values of these panels, derived from the aerial triangulation solution. The City will compute the Residuals (R) by subtracting the surveyed "true" value from those corresponding values provided by the contractor. For horizontal compliance, the radial (r) Residual value will be used. Where $(r) = \text{Sqrt}(RN^2 + RE^2)$. The Root Mean Square Error RMSE of the radial Residual value should be less than 21.2 cm. The Root Mean Square Error RMSE of the vertical Residual value should be less than 15 cm. The City will notify the Contractor of the RMSEr and RMSEv values. Compliance of these RMSE values must be approved by the City prior to generation of any digital data.

1.5.3 Contour Accuracy Checkpoints

At least 20 field checks will be made to check the accuracy of 2-foot contour deliverables for compliance with project accuracy. Horizontal positions of selected contours will be extracted from the deliverables. These points will be on bare earth and a relatively level surface. Elevations of these points will be surveyed to meet the 3-cm equivalent control accuracy. These contour check points must meet or exceed a RMSEv of 15 cm threshold or $15 \times 1.9600 = 29.4$ cm at the 95% confidence level.

1.7 Flight Plan

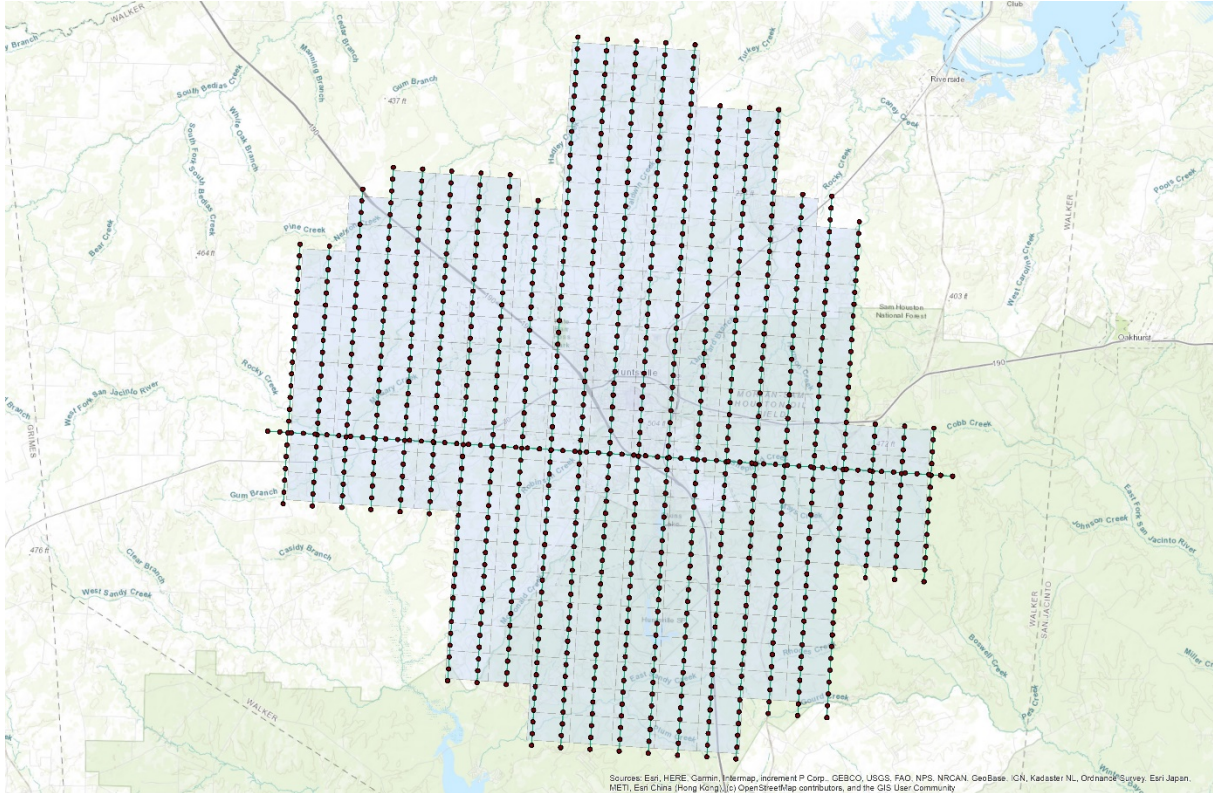


Figure 1.1: City of Huntsville TX Planning Graphic

1.8 Aerial Acquisition

Communication is vital when organizing and executing flight operations between the production offices, flight department and local airspace owners. This includes up-front details on project specifications, flight statistics, schedule, and deliverables.

The flight operations department organizes detailed flight maps overlaid on airspace charts to be used for daily communication with air traffic control, Military Operations Areas (MOA), restricted airspaces and local airports. Prior to the data acquisition, the pilot in command sends each airspace owner a flight chart with flight lines (and line numbers) displayed to communicate the crew's objectives for the day.

1.8.1 Data Collection Activities

Data collection activities consist of safety inspections of the aircraft, operational inspections of the sensors and the ability for the crew to successfully capture the data to the project specifications when weather and airspace present the opportunity. Below is an itemized acquisition scenario for airborne data collection:

1. Inspect storage and system components to ensure all units are operational and have enough storage space
2. Select and confirm the lever arm coordinates
3. Load navigation system and perform system check
4. Perform 5-minute static alignment and record PDOP, GPS, and UTC start time
5. Ensure IMU is operational
6. Ensure all channels are operational, as applicable.
7. Observe in flight video display, POS status, and mass memory screens
8. Begin flight line data recording: UTC start/stop times, GPS data, ground speed, altitude, concerns, lines, waypoints and times on flight log
9. Perform a 5-minute static alignment after the flight mission is complete, followed by a systematic shutdown of the system
10. Download data for in-field QC
11. Arrange delivery of data and email flight log to team; perform data backup.

At the end of each day's data collection, the sensor operator forwards the completed flight logs to the Aviation and Project Manager to update Fugro's Project Tracking system (Fugro Access). Fugro Access is available for all project participants, providing up-to-date project information, flight line status and acceptance.

Digital imagery data from each sortie will be downloaded at our on-site base of operations and reviewed to verify image quality and complete project area coverage. Airborne GPS and IMU data will be field processed within 48 hours of acquisition to ensure that the GPS satellite geometry and IMU data will support the mapping accuracy requirements.

1.8.2 Data QC and Reflights

Quality control measures are performed before the flight/acquisition crew(s) leaves the project area. Airborne GPS and IMU data are field processed to ensure that GPS satellite geometry and IMU data will support the accuracy requirements. If any coverage or quality issues are identified, re-flights are called for immediately.

Upon confirmation that full coverage of the project area has been acquired and QC'd, the data is transferred to one or more of Fugro's production facilities for processing.

1.9 Orthoimagery Production

1.9.1 Image Post Processing

On receipt of data received from the aircrew a number of processes are initiated. Firstly, the flight data recorded is converted from raw format to tiff format using PhaseOne Capture One program. The tiff files are then reviewed for project coverage and cloud cover.

1.9.2 Radiometric Processing

Radiometric processing compensates for the effects of temperature, aperture, and other radiometric factors. A set of intermediate images are generated from radiometric processing and are written to the intermediate RAID storage on the central server. All intermediate images will be deleted upon completion of geometric processing.

Before notifying the orthophoto production team that the images are available a visual QC pass is performed on the processed images to ensure the expected quality and appearance has been achieved. The contrast of the images will be checked to ensure that details are present in both the dark areas (shadow) and light parts of the image and that the images show no flare and retain their original sharpness.

1.9.3 GPS/INS Post Processing

In parallel to the image post-processing the acquired GPS/INS is post-processed. The GPS data from the aircraft along with the data from the local base station(s) are processed using POSProc software. The trajectories are processed in forward and reverse, in kinematic mode to maximize accuracy and identify any potential problems. Built into the GPS processing is a series of QC processes that check a range of parameters and results, quality factors for the processing, estimated standard deviations, and separation of combined solutions to name a few. Once an acceptable result has been achieved, normally after a number of iterations, the aircraft trajectory is further processed in the Applanix POSProc software for the computation of the combined GPS/IMU data. The result of this processing is a set of exterior orientation parameters for each aerial photograph describing the photo's spatial position and its attitude. This data is used during the orthophoto production stage.

1.9.4 Orthorectification

Orthorectification is the process of removing the effects of image perspective and relief displacement from an image. Orthophotographs have the positive attributes of a photograph such as detail and timely coverage, and the positive attributes of a map including uniform scale and true geometry. The resulting accuracies of the ortho images are based on the accuracy of the GPS/IMU data, the resolution of the source image, the accuracy of the DTM and modelling of sensor geometry.

The orthorectification of the aerial photography will require a number of source materials consisting of post processed pan sharpened RGB aerial images, camera calibration information for each unique camera used in the project, a set of exterior orientation parameters and the DTM.

1.9.5 Orthophoto Production Methodology

A complete differential rectification will be carried out using a cubic convolution algorithm that removes image displacement due to topographic relief, rotational elements of the aircraft at the moment of exposure, and radial lens distortion within the camera. The methodology adopted by Fugro for orthorectification is based around the Inpho OrthoBox software suite. OrthoBox consists of OrthoMaster and OrthoVista.

OrthoMaster is a software solution for rigorous differential orthorectification of digital imagery. It offers high degree of processing automation and is optimized for high performance orthophoto production. OrthoMaster generates high quality orthophotos, i.e. digital images with constant scale, using digital aerial imagery, their exterior orientations and DTMs as the source data.

OrthoVista is radiometric adjustment/enhancement software which can automatically compensate for a wide range of image intensity and color variations originating from the imaging process. OrthoVista computes radiometric adjustments that compensate for visual effects within individual images, such as hot spots, lens vignetting and color variations.

1.9.6 Ortho Generation

A project is set up within the Inpho Application Master interface and the ISAT aerial triangulation project is imported. OrthoMaster is initiated and the DTM derived from the lidar point cloud is imported.

In order to delineate the project boundary, an area line will be imported and the affected orthophotos will be written-out to this line. On completion of the rectification process a visual inspection of the imagery will be undertaken to check for observable distortions or other anomalies. The geometric accuracy of the imagery will be reviewed using ground control and measured detail check points which are imported for checking the projection of a point and its true position. A visual inspection will also be undertaken at joins between adjacent rectified images within and between flight lines.

The output parameters are set i.e. Ground Sample Distance (GSD), file format, compression etc. and the individual orthophotos are generated.

1.9.7 Dodging

Dodging is a technique employed to correct tonal imbalances across a tiled image file caused by uneven lighting conditions and by the position of the camera/sensor with respect to the sun. This can be carried out if necessary within OrthoVista as part of the radiometric process. The OrthoVista software is non-destructive as only metadata is created. The dodge utility attempts to overcome the tonal imbalances by generating an array of discrete correction values across an

image that will darken bright areas of the image and lighten dark areas, shifting the entire image toward a user-specified tonal center.

1.9.8 Automatic Radiometric Correction

OrthoVista is a radiometric software product that improves the quality, utility, and value of ortho-rectified, digital image mosaics by performing a series of radiometric adjustments designed to match color and intensity across component images and producing seamless image mosaics. OrthoVista removes solar reflection “hot spots” and improves visual uniformity of most orthophotos by automatically balancing the intensity and color variation across each frame. The software compensates for various illumination effects by matching the color and intensity of adjacent input images in order to provide smooth and consistent radiometric image properties across all images. In order to check the quality and accuracy of radiometric correction, histograms of the orthophotos will be examined to ensure that they conform to the requirements of the technical specifications.

1.9.9 Seamline Generation

In order to avoid displacement problems and to provide a homogenous dataset, seamlines will be placed such that each pixel of the orthophoto will be taken from the photograph whose nadir position is the closest to the pixel. To achieve this, seamlines will be generated automatically to find their best geometric position before being edited manually reviewed.

1.9.10 Seamline Editing

In order of priority, the seamlines will be edited to preserve:

1. The geometric continuity and integrity of the road networks and of the buildings and landscape objects.
2. Buildings and other elements that are not on the surface level remain in the central projection.
3. “Hot spots” in urban zones
4. Clouds and cloud shadows
5. Specular mirroring on water
6. Blurred areas along the mosaic line

The Seam Editor is an add-on to OrthoVista, which enables either the manual creation of seam polygons or the interactive modification of automatically generated seamlines. Fugro will use this tool to check and modify the generated seamlines, making corrections were applicable. As the seamlines are modified interactively the effect of the edit are displayed on screen immediately. This is particularly effective in modifying seamlines in urban areas. It is also possible to extract individual areas of a single orthophoto and insert them into the mosaic e.g., buildings that extend the overlap area can be extracted and then be included in the final mosaic.

1.9.11 Final Radiometric Correction

The radiometric editor allows for the interactive adjustment of individual frames, strips, or areas of imagery. During normal processing, OrthoVista matches the colors, contrast, and intensity from one image to the next throughout the processing areas. If the input images are uniform in color, contrast or intensity, it is not always necessary to use the Radiometric Editor.

However, if some images were flown at different dates or the sensor settings varied for different images (or groups of images), the Radiometric Editor can be used to make corrections to individual images, strips or blocks of selected images.

1.9.12 Tile Creation

The seamless Orthophoto image database will be organized as tiles in an agreed upon size. The tiles will be supplied in uncompressed Tiff format with appropriate naming convention, each ortho tile will have an associated Tiff world file and associated metadata.

Each stage will be documented by the operator and signed off by the senior person responsible with any findings or issues highlighted. Fugro therefore create a wholly transparent "data trail" where the quality aspect of the project and each component part can be monitored, traced and assessed for compliance to our guidelines.

1.11 Lidar Production

Data processing includes the following four (4) production steps for generating the final deliverables:

1. Raw data processing and boresight
2. Pre-processing
3. Post-processing
4. Product development

Quality control steps are incorporated throughout each step and are described in the following sections.

1.11.1 Initial Data QC and Positioning

The technician will first process the raw lidar data to LAS format flight lines with full resolution output before performing QC. A starting configuration file is used in this process, which contains the latest calibration parameters for the sensor. The technician will also generate flight line trajectory files for each of the flight lines during this process. The technician will conduct the following checks of the lidar data:

- Trajectory files will be reviewed to ensure completeness of acquisition for project flight lines, calibration lines, and cross flight lines.
- Intensity images will be generated for the entire lift at 1 meter nominal point spacing, visually inspected against the project boundary to ensure full coverage, and have the histogram analyzed to verify the quality of the intensity values.
- Data will be reviewed for gaps in project area.
- Sample TIN(s) will be generated to ensure no anomalies appear in the data.
- Achieved post spacing will be evaluated against the project-proposed post spacing.
- Turbulence is inspected and if quality is impacted the flight line will be rejected and re-flown.

Failure of any of these checks will result in corrective actions or re-flights. Once all checks have been passed, the lidar data is considered ready for boresight calibration and production.

1.11.1.1 GPS Accuracy

The absolute and relative accuracy of the data, both horizontal and vertical, and relative to known control, will be verified prior to classification and subsequent product development. Accuracies will be reported to meet the accuracy requirements required by the client. Two (2) GPS reference stations will be operational during all missions, sampling positions at 1Hz or higher frequency. The GPS baseline lengths will not exceed 40-60km. Lidar data will only be acquired when GPS PDOP is less than 4 and at least 6 satellites are in view.

1.11.2 Boresight

Raw data processing is the reduction of raw lidar, IMU, and GPS data into XYZ points. This is a hardware-specific, vendor-proprietary process. The raw lidar data processing algorithms use the sensor's complex set of electronic timing signals to compute ranges or distances to a reflective surface. The ranges must be combined with positional information from the GPS/IMU system to orient those ranges in 3D space and to produce XYZ points. As with any such electronic measuring system, systematic errors can be introduced from a variety of internal and external sources – instrument timing errors, effects of the atmosphere, initialization errors and so on.

The boresight for each lift is done individually as the solution may change slightly from lift to lift. The following steps describe the Raw Data Processing and Boresight process:

- Technicians process the raw data to LAS format flight lines using the final GPS/IMU solution. This LAS data set is used as source data for boresight.
- Technicians first use Fugro proprietary and commercial software to calculate initial boresight adjustment angles based on sample areas within the lift. These areas cover calibration flight lines collected in the lift, cross tie and production flight lines. These areas are well distributed in the lift coverage and cover multiple terrain types that are necessary for boresight angle calculation. The technician analyzes the results and makes any necessary additional adjustment until it is acceptable for the selected areas. The boresight angle adjustment process will ensure proper alignment between different look angles as well as between flight line overlaps.
- Once the boresight angle calculation is complete for the selected areas, the adjusted settings are applied to all of the flight lines of the lift and checked for consistency. Technicians utilize commercial and proprietary software packages to analyze the matching between flight line overlaps for the entire lift and adjust as necessary until the results meet the project specifications.

Once all lifts are completed with boresight adjustment individually, the technician will check and correct the vertical misalignment of all flight lines and also the matching between data and ground truth. The following criteria will be used:

- Relative accuracy ≤ 9 cm within individual swaths (smooth surface repeatability)
- Swath overlap difference, RMSDZ, ≤ 12 cm between adjacent swaths
- Swath overlap maximum difference ± 24 cm

The technician will run a final vertical accuracy check of the boresighted flight lines against the surveyed NVA check points after the z correction to ensure meeting the requirement of RMSEZ (non-vegetated) ≤ 10 cm, NVA ≤ 19.6 cm 95% Confidence Level (Required Accuracy). The accuracy validation report will be included in the deliverables.

1.11.3 Pre-processing

The project will be set up for filtering once boresighting is complete for the project and all lifts are tied to ground control. The lidar data will be cut to production tiles.

1.11.4 Post-processing

Fugro has developed a unique, time efficient, and cost-effective method for processing lidar data.

The automated classification routines will be applied to the tiled data first. The low noise points, high noise points and ground points will be classified automatically in this process. We utilize commercial software, as well as proprietary, in-house developed software for automatic filtering. The parameters used in the process are customized for each terrain type per project to obtain optimum results. The algorithm has the ability to process large amounts of elevation point data in batch mode. Conceptually, the goal of automated processing is to classify the points to their proper classification as accurate as possible automatically, thereby reducing the amount of manual editing that is required.

Once the automated filtering has been completed, the files are run through a visual inspection to ensure that the filtering was not too aggressive or not aggressive enough. In cases where the filtering is too aggressive and important terrain have been filtered out, the data is either run through a different filter within local area or is corrected during the manual filtering process.

Bridge deck points are classified as well during the interactive editing process. The interactive editing is completed in visualization software that provides manual and automatic point classification tools. Fugro utilizes commercial and proprietary software for this process. All manually inspected tiles will then go through a peer review to ensure proper editing and consistency.

After the manual editing and peer review, all tiles will go through another final automated classification routine. This process ensures only the required classifications are used in the final product (all points classified into any temporary classed during manual editing will be re-classified into proper customer specified classifications).

1.11.5 Deliverable Product Development

After the lidar has been through all initial processing and checked for quality, we begin the process of derivative product development to the requirements and specification similar to the USGS Base Specifications.

1.11.5.1 Raw Point Cloud Data

All collected flight lines are included in generating this product after the boresight is completed and the adjustment is made to match data to the ground control. The flight lines will go through the following processes:

1. Assign flight line ID to each point and file source ID to each flight line based upon the flight line trajectory.
2. Re-project flight lines files to deliverable projection/datum and unit.
3. Package final LAS 1.4 format deliverable and QC.

The raw point cloud data will be delivered in fully compliant LAS v1.4 format, Point Record Format 6 with Adjusted Standard GPS Time. The flight lines will include all collected points, and will be fully calibrated, georeferenced, and adjusted to ground. Correct and properly formatted georeference information as Open Geospatial Consortium (OGC) well known text (WKT) will be assigned in all LAS file headers. Intensity values are included for each point, normalized to 16-bit. This deliverable will be organized and delivered in their original swath, one file per swath, one swath per file.

1.11.5.2 Classified Point Cloud Data

Once manual inspection, QC and final auto filter is complete for the lidar tiles, the LAS data will be packaged to the project specified tiling scheme, clipped to project boundary including the 100-meter buffer and LAS v1.4 format. It will also be reprojected to project specified projection, datum, and unit. The file header will be formatted to meet project specification with File Source ID assigned. This Classified Point Cloud product will be use for the generation of derived products. Water points will be classified to Class 9 and Ignored ground points are classified to Class 10 using the collected hydro breaklines.

This product will be delivered in fully compliant LAS v1.4 format, Point Record Format 6, with Adjusted Standard GPS Time at a precision sufficient to allow unique timestamps for each pulse. Correct and properly formatted georeferenced information as Open Geospatial Consortium (OGC) well known text (WKT) will be assigned in all LAS file headers. Each tile will have unique File Source ID assigned. The Point Source ID will match to the flight line ID in flight trajectory files. Intensity values are included for each point, normalized to 16-bit.

1.11.5.3 Bare Earth Raster DEM

The bare earth DEM will be generated using the lidar bare earth points and optional 3D hydro breaklines to a resolution of 1.0 meter. Where needed, supplemental breaklines will also be collected and used in DEM generation under the bridges to ensure a logical terrain surface below a bridge. This will be delivered in a separate shapefile. The bare earth points that fall within 1*ANPS along the hydro breaklines (points in Class 10) will be excluded from the DEM

generation process. This is analogous to the removal of mass points for the same reason in a traditional photogrammetrically compiled DTM. This process will be done in batch using proprietary software.

The technicians will use Fugro proprietary software for the production of lidar-derived hydro-flattened bare earth DEM surface in initial grid format at 1m GSD. Water bodies (inland ponds and lakes), inland streams and rivers, and other non-tidal water bodies will be hydro-flattened within the DEM. Hydro-flattening will be applied, in batch, to all water impoundments, natural or man-made, that are larger than ~2 acres in area, to all streams that are nominally wider than 100', and to all non-tidal boundary waters bordering the project area, regardless of size.

Once the initial, hydro-flattened bare earth DEM is generated, the technicians will check the tiles to ensure that the grid spacing meets specifications. The technicians will also check the surface to ensure proper hydro-flattening. The data set will be checked for project coverage. The tiles are then converted to ERDAS Imagine format. Georeferenced information will be included in raster files. Void areas (i.e., areas outside the project boundary but within the tiling scheme) will be coded using a unique "NODATA" value.

Table 1.1: Hydro specifications

Hydro specifications

10' double line stream/river, 1 acre pond or lake, and 0.5 acre island

1.11.5.4 Tile Scheme and Format

Tiled deliverables will be clipped to the Buffered Project Area. The project tile layout follows the USGS tiling scheme without overlap; tiles will be 1500 meters x 1500 meters and will be named according to the US National Grid conventions. The transition of the surface from tile to tile will be seamless in both the horizontal and vertical. The tiles will be projected to the Spatial Reference of: UTM Zone, NAD83(2011), Meters; NAVD88 GEOID 12A, Meters.

1.11.5.5 2D Topological QC

After initial collection, features are combined into working regions based on watershed sub-basins. Line work is then checked for the following topological and attribution rules:

- Lines must be attributed with the correct feature code (River, Lake, etc.).
- Lake and stream bank lines (River) must form closed polygons.

1.11.5.6 3D Attribution

Hydro features are collected as vector line work using lidar and its derived products listed above. This line work is initially 2D, meaning that it does not have elevation values assigned to individual line vertices. Vertex elevation values are assigned using a distance weighted

distribution of lidar points closest to each vertex. This is similar to draping the 2D line work to a surface modeled from the lidar points.

- After the initial 'drape', the line work elevation values are further adjusted based on the following rules:
- Lake feature vertices are re-assigned (flattened) to lowest draped vertex value.
- Proprietary profile tool is used to QC bank-to-bank flatness.
- Stream centerline vertices are adjusted so that subsequent vertices are lower than previous ones based on line direction.
- Double stream bank line vertices are re-assigned based on the vertices of the closest adjusted double stream connector line.

The hydro-flattened breaklines will be delivered in Esri geodatabase format.

1.12 Lidar-derived 2-foot Contours

Contour data derived from lidar are generated from the bare earth digital elevation model (DEM) surface. The contour dataset is created in accordance with NDEP-FEMA Appendix A guidelines. Steps for creating lidar contours are as follows:

1. Fugro's vector department will review the project area and hydro features. Fugro's compilers will collect additional hydro-flattened breaklines of water features that are outside of the base project scope to properly route the contours for a more cartographically correct dataset.
2. Lidar specialists will bring LAS and breakline data into MicroStation using the software overlay package of TerraSolid (TerraScan and TerraModeler modules) and create contour key points (different than a model key point typically used for DEM creation), ultimately choosing lidar points that best represent the contour lines vs. a grid.
3. Contour key points are created in batch mode to ensure the tying of all contours from edge to edge.
4. Contours key points run through a quality and completeness check prior to running the contours.
5. Contours are now generated over the entire project area in tied tiles before converting to a geodatabase.
6. Final edit is accomplished on the project-wide dataset and converted to the desired geodatabase. Contour index: intermediate, index depression, and intermediate depression are represented in the geodatabase.
7. Contour data is reviewed in ArcGIS for topology errors, spikes, alignments, etc. and adjusted manually for best terrain representation.
8. Contour data runs through topology checks until all topology errors pass quality control.

1.14 Planimetric Update

Fugro's mapping capabilities are supported by a highly experienced team of project managers and production staff who possess the experience and expertise to meet specific project requirements and quality expectations.

The technical approach described in the following section details Fugro's methodology to assure timely completion of map products and services. The approach includes project management techniques to demonstrate the organizational requirements to lead a project of this magnitude to success in addition to personnel / equipment capacity information demonstrating ample resources in primary and back-up positions for a very low-risk exposure for your project.

Your project has highly qualified management and supervisory personnel allocated to lead every phase of this project with available back-up and support staff to mitigate any interruption in the workflow and schedule.

Production workflow for planimetric updates include:

- Existing data management
- Change analysis
- Planimetric update
- QAQC

Fugro has extensive experience in the collection and update of digital planimetric features using stereo compilation techniques to meet National Map Accuracy Standards. From the newly collected airborne imagery, Fugro will deliver planimetric mapping and other forms of feature extraction at the requested scale of 1"=100' scale. Fugro's compilation workstations are capable of clear, precise stereoscopic viewing and quick and efficient processing. Each workstation is equipped with verification and validation software to ensure the quality and accuracy of the data collected meets client expectations. Fugro will deliver each dataset in an enterprise file geodatabase compatible format (ArcSDE and Microsoft SQL Server) which will minimize the effort needed to load the data into the final File Geodatabase design.

1.14.1.1 Existing Data Management

While building the technical approach and pricing for the planimetric update, Fugro has reviewed the provided geodatabase and client explanations for collecting and delivering the mapping data with Fugro's map compilation department to be sure our approach meets all defined expectations. Before beginning the project, Fugro will coordinate meetings to establish and finalize the spatial extent and precision for file geodatabase feature classes to be delivered.

1.14.2 Change Analysis

Change analysis will be performed by reviewing the existing planimetric data against the newly acquired imagery. Photogrammetric compilers will manually sweep the imagery to determine areas of change and update accordingly.

1.14.3 Planimetric Update

Digital planimetric mapping will be collected in strict accordance with the feature types and formats specified in the provided data dictionary. Fugro will capture planimetric information using SOCET SET or KLT Atlas softcopy photogrammetric workstations. Quality control (QC) and editing tasks are performed in the MicroStation environment.

Fugro's technical staff has considerable experience customizing the MicroStation environment and will incorporate client standards into the feature collection tables for each workstation at the start of the project.

Fugro has perfected a "handshake" transfer of data (which has been refined through completion of numerous projects) from the CAD to the GIS environment. Fugro has a proven production workflow that was designed specifically to maintain the 3D elements and topology of the planimetric mapping once data is migrated to the Esri file geodatabase environment keeping the needed attribute information. The following is a step-by-step description of the planimetric vector compilation, editing and quality control process.

Step 1 The project will be set up on softcopy photogrammetry workstations by the photogrammetric technician who will create a separate project directory for the project. In orienting the models, the technician will select the stereo pair he/she wants to start with and imports the necessary imagery to the workstation. Relative and absolute orientation will be achieved by importing the orientation parameters from the AT results. The software will import the stereo pair and orient the workstation automatically. At this point, stereo model orientation is complete.

Step 2 Prior to the initiation of compilation, a data capture matrix is set up in SOCET SET or KLT Atlas on the softcopy photogrammetric and data edit stations by the photogrammetric and edit team members who are assigned to the project. The setup of the project is based on the specifications set forth in accordance with client specifications. The mapping systems are programmed to support writing data to specific layers of the design file. The specific design and content of the geodatabase deliverables will be finalized during project planning.

Step 3 The compilation setup is verified through collection and formatting of several test stereo models. Fugro has developed a production workflow that is used when a mapping project requires the development of polygon topology. The photogrammetric technician collects features to be depicted as closed polygons and adds a label point within each feature. Fugro will

collect all planimetric feature data in 3D mode. As the technician completes each stereo model, the working file is given a unique name. The photogrammetric technician calls up the adjacent stereo models and performs a preliminary edge match to determine that features tie across model boundaries and to ensure that no features are omitted.

Step 4 As progressive stereo models are compiled, the operator conducts ongoing checks for the X, Y, and Z coincidence between stereo models (side-lap and overlap) verifying that no vertical shift occurs at model boundaries. This is a visual examination that can help identify any offsets attributable to the AT adjustment. All vector data features will be compiled in 3D with one digital file per stereo pair. This will simplify the tracking of the project through production and will eliminate the re-orientation of models. All features will be digitized to the edge of the provided project boundary. Polygons at the edge of the boundary will be closed.

Step 5 Cartographic editors review the compiled data to identify any systematic errors or inconsistencies between the newly collected data and the project's feature table. The datasets are further tested to verify that the conversion routine to produce the final ArcSDE geodatabase format correctly converts all layers of the digital files. The photogrammetric team leader will then review the results. Copies of completed test data with accompanying documentation regarding requirements and routines will be circulated to all Fugro production units for use as a standard in data collection. Fugro's project manager and the photogrammetric team leader will conduct a final review of all planimetric mapping data prior to delivery.

1.14.4 Compilation Requirements

Table 1.2: Compilation Requirements

Requirement	Specification
Edge-matching	- All digitized features will be both visual and coordinate edge-matched with features in adjacent sheet files. - No edge-match tolerance will be allowed. - Attributes for adjoining features will also be identical.
Point Duplication	No duplication of points that occur within a data string is permitted.
Connectivity	- Where graphic elements visually meet, they will also digitally meet. - All confluences of line, area, and polygon data will be exact mathematically; that is, no overshoots, undershoots, or offsets or pseudo nodes are permitted. - Lines that connect polygons will intersect those polygons precisely; that is, every end point shall be an intersection point of the respective polygon.
Line Quality	- A high-quality cartographic appearance will be achieved. - Transitions from straight line to curvilinear line segments will be smooth and without angular inflections at the point of intersection. - The digital representation will not contain extraneous data at a non-visible level. - There will be no jags, hooks, or zero length segments. - Curvilinear graphic features will be smooth with a minimum number of points.

Requirement	Specification
	■ When appropriate, line smoothing programs will be used to minimize the angular inflection in curvilinear lines. ■ Any lines that are straight, or should be straight, will be digitized using only two points that represent the beginning and ending points of the line.
Segmentation	■ The digital representation of linear elements will reflect the visual network structure of the data type. ■ An element will not be broken or segmented unless that segmentation reflects a visual or attribute code characteristic, or unless the break is forced by database limitations.
Polygon Closure and Centroids	■ For area features being digitized, the last coordinate pair shall be exactly (mathematically) equal to the first coordinate pair.
Point Criteria	■ All point features will be digitized as a single x,y coordinate pair at the visual center of that graphic feature.
Spatial Continuity	■ The structure of the map data will not inhibit the execution of GIS functions across boundaries or artificial discontinuities (sheet edges, model edges, or other delimitations).
Topology	■ A very strict topology rules with a .01-meter tolerance will be established.
Hidden Features	■ Hidden and inferred features will be reasonable and logical in definition. ■ They will maintain a predictable direction connecting the two (2) points that conceal or infer the feature.
Feature Geometry	■ Fugro will ensure that all features contain valid geometry. ■ There will be no features containing the following errors: short segment, null geometry, incorrect ring ordering, elf-intersection, unclosed rings, and empty parts.
Feature Unique Identifiers	■ Each layer contains a GIS_ID column holding a numeric unique identifier for each feature. This identifier will be preserved. If a feature is deleted, the number is retired. If a feature is added, or there is a new feature due to a modification and roof break addition, Fugro will assign it a new identifier from the numeric range pertinent to the layer. ■ The client must provide the identifier ranges for each layer at the kick-off.

1.16 Utility Feature GIS to CAD Transformation

Fugro has created an *in-house designed* production workflow specific for managing and translating the City of Huntsville existing utility feature GIS data from the GIS environment to CAD format. Features include:

- Water wells
- Sewer left station
- Sewer fitting
- Sewer force main
- Sewer casing
- Sewer plants

Our approach includes iterating through the database and exporting individual shapefiles, adding layer names based on feature type, combining point, line, and polygon features into a shapefile format and adding necessary CAD fields. Once the data is managed and prepared for CAD export, the Fugro Edit Team will review and update the color attribute and QC the CAD fields to ensure proper export to the CAD format. Finally, a process to include tiling models with the point, line, and polygon shapefiles using the tile index and a seed file created by Fugro's Science and Technologies department to resolve scale issues.

Deliverables will include a tiled CAD database from the single geodatabase. Fugro assumes:

- The project area/clip is the same limits as the 1"=100' scale planimetric database project
- All existing data provided to Fugro in a single geodatabase
- That clipping tool was sufficient per previous task
- No topology check or changes to existing data

3. Pricing and Deliverables

3.1 Pricing

Table 3.1: Price Table

All Products Contracted Together (6-inch Imagery, >0.35m NPS (8ppsm) lidar and 2-foot contours, 1"=100' scale plan update)		Price
New 4-band Digital Aerial Photo Capture = 4-band digital orthophotos at 0.5' resolution		\$32,748.53
New Aerial Lidar Survey (0.35m NPS) = Full return LAS files, bare earth LAS files, updated DTM breaklines and newly generated 2' contours		\$62,464.51
Updated Planimetrics = updated 1"=100' scale planimetric feature layers		\$37,786.97
Geodatabase to CAD format Conversion		\$3,975.00
(Optional) 10 lidar and ortho GCP		\$7,246.94
(Optional) 20 lidar and ortho QC/QC checkpoints (addition to CGPs)		\$3,992.16
Total Orthos, Lidar, Planimetrics and Data Conversion		\$136,975.01
Total w/ Added Ground Control and Check Points		\$148,214.11

The pricing includes the 5% DIR discount.

3.1.1 Schedule of Charges

Table 3.2: Schedule of Charges

Description	Approximate Invoice/Deliver Date	Amount Invoiced
Optional Ground Survey - 10 GCPs	February 1, 2024	\$7,246.94
Optional Ground Survey - 20 QA/QC Checkpoints	February 1, 2024	\$3,992.16
Aerial Acquisition Lidar	February 15, 2024	\$26,540.34
Aerial Acquisition Imagery	February 15, 2024	\$26,540.34
Production Lidar	May 15, 2024	\$31,735.88
Production Imagery	May 15, 2024	\$6,208.19
Production Planimetrics	May 31, 2024	\$37,786.97
Production Contours	May 31, 2024	\$4,188.29
GIS to CAD Conversion	May 31, 2024	\$3,975.00

Delivery schedule is weather dependent and subject to change. The pricing includes the 5% DIR discount.

3.1.3 Deliverables and Formats

Table 3.3: Deliverables

Orthoimagery	Lidar	Planimetrics	Additional
■ 6 Inch 4-Band Orthoimagery ■ Geotiff, ECW, and MrSID	■ 1 Meter Post Spacing Lidar ■ Classified Point Cloud LAS ■ Class 1, 2, 7, 9, 10 in an LAS 1.4 Format ■ Bare Earth LAS ■ 2 Feet Contours in DWG and SHP Format	■ 1" = 100' Scale Planimetric Update in DWG and SHP Format ■ The features will include (to the extent visible/interpretable): ■ Buildings and Mobile Homes ■ Highway/Street/Road Centerlines, Pavement Edges, and Names ■ Alleys ■ Paved and Unpaved Driveways and Parking Areas ■ Railroads and Rail Yards ■ Motor Vehicle Trails ■ Walls and Fences ■ Bridges and Dams ■ Public Sidewalks ■ Hydrographic/Drainage Features ■ Wooded Area Outlines ■ Active Quarries ■ Towers ■ Manholes, Hydrants, Valves, Catch Basins* ■ Power Poles and Cross-Country Powerlines ■ Treatment Plants ■ Public Utility Tanks ■ Park, Athletic Field, Golf Course Outlines ■ Control Point and Monument Locations	■ DEM (Digital Elevation Model) ■ TIN (Triangular Irregular Network) ■ DTM (Digital Terrain Model) ■ Flight Grid and Flight Path in DWG and SHP Format ■ Data Deliverable Coordinate System • Horizontal – NAD 1983 State Plane Texas Central FIPS 4203 (US Feet) • Vertical – NAVD 1988 ■ Tiled CAD database from the single geodatabase

* Features updated must be visible and distinguishable within the 6-inch imagery. Typically, the following are not visible in 6-inch imagery: Hydrant, Manhole, Storm Inlet, Water Valve

3.1.4 Data Delivery Method

The final data deliverables stated in the Deliverables and Pricing section, will be transmitted in the agreed formats on USB flash drive indicated with the project name and data contained.

3.2 Contract Options

Fugro is pleased to provide customers with geospatial services as a selected vendor of the Department of Information Resources, Contract DIR-CPO-4643.

<https://www.fugro.com/texas-dir-contract-dir-cpo-4643>

<https://dir.texas.gov/View-Search/Contracts-Detail.aspx?contractnumber=DIR-CPO-4643>

DIR Contract Number: DIR-CPO-4643

Contract Term End Date: 1/22/2023

Contract Exp Date: 1/22/2026

Vendor ID: 1742426512600

3.3 Project Statistics

Table 3.4: Planning Statistics

Product	Sensor	Altitude	Speed	Flight lines	Line miles	Side lap	FOV	Resolution
6-inch Ortho	Phase One iXM-150	5,150' AMT	160kts	26	381.13	25%	58.52°	6-inch
8ppsm Lidar	Riegl VQ 1560i IIS							8ppsm

Table 3.5: Project Area Statistics

Area	Size	Complexity
Orthoimagery	249 square miles	Full tile, mix land use (urban, suburban, and rural)
Lidar	249 square miles	Full tile, mix land use (urban, suburban, and rural)
Planimetrics	190 square miles	Full tile, mix land use (urban, suburban, and rural)

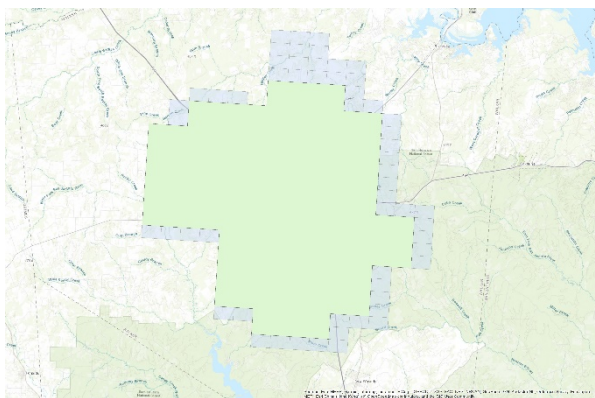


Figure 3.1: Project Boundaries

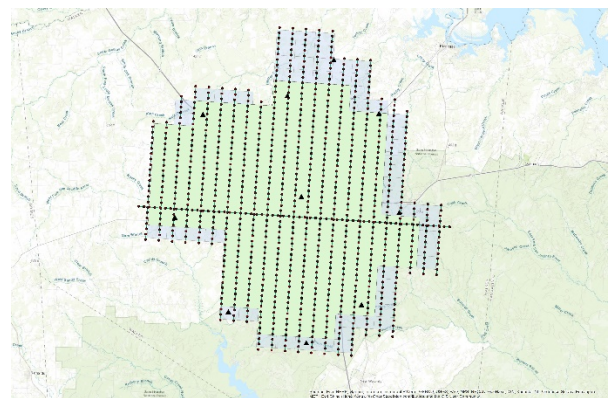


Figure 3.2: Flight Plan and Ground Control Layout

4. Quality Assurance Quality Control

Fugro is committed to provide timely delivery of high-quality geospatial products and services.

The success of the project is realized through a combination of comprehensive planning and a structured approach to quality control. With an emphasis on identifying potential risks, mitigation, and preventing errors, our planning and assessment procedures ensure that all products delivered under this contract meet the highest possible quality standards.

Fugro's ISO9001:2015-certified Quality Management System (QMS) encompasses all operations—from aviation operations to finance—and provides customers with an added level of assurance in our design, development, production, and delivery processes. Fugro requires input from the client personnel to develop quality control acceptance criteria, as well as to provide feedback during the production and review and acceptance processes upon final delivery.

The history of our QMS dates to 2001 when we first achieved certification for compliance to the ISO9001 quality standard. In November 2008, we achieved OSHA 18001:2007 certification, and we achieved certification for ISO 9001:2008 compliance in 2010, and ISO 9001:2015 compliance in 2016.

Additionally, we maintain the following related certifications:

- OHSAS 18001:2007 – Occupational Health & Safety Management System
- ISO 14001: 2015 – Environmental Management System

The success of our QMS system is evidenced by a number of improvements, including our first-time-right delivery rate, which improved to over 99% for since 2009. More importantly, Fugro has realized dramatic and measured improvements for cycle time reduction, reduced rework, improved subcontractor management, and performance. Together, these achievements have benefited our customers by transferring the burden of quality control from the customer to Fugro.

Finally, a key component of our QMS is the mandatory process of auditing and updating production and management procedures and quality metrics. This requirement allows us to continually and efficiently adapt our processes to technology innovations, which then translate into benefits for our customers.

6. About Fugro

Fugro is the world's leading Geo-data specialist, collecting and analyzing comprehensive information about the Earth and the structures built upon it. Through integrated data acquisition, analysis, and advice, we unlock insights from Geo-data to help our clients design, build and operate their assets in a safe, sustainable, and efficient manner. Working around the globe, we employ approximately 9,500 employees in 61 countries. By deploying our fleet of specialized assets and cutting-edge digital solutions we provide a vital contribution to building a safe and livable world.

We deliver critical information to facilitate the safe, cost effective and sustainable design and construction of buildings and infrastructure along with the precise location and condition of assets as they are built and operated, to optimize asset reliability, utilization and longevity. As the global leader in site characterization and asset integrity, we offer integrated services anywhere in the world. Delivering complex, high-profile projects, we have leadership positions in key market segments in many countries and regions.

With offices across the US, from California to Texas to Maryland, our position in North America is well established. A diverse range of services and state-of-the-art technology enable us to help governments and diverse industries meet their commercial objectives and environmental responsibilities. As a multi-disciplined firm, we have a diverse group of professionals and technical specialists.

6.1 Company Overview

Staffing		Leadership	
102	Administrative	Director/President	Edward Saade
6	CADD Technicians	Director/Executive Vice President	Blaine Thibodeaux
19	Construction Inspectors	Executive Vice President	W. Ray Wood, P.Eng.
103	Foundation/Geotechnical Engineers	Vice Presidents	Erik Hordijk
3	GIS Specialists		Farid Motamed, PE
17	Geologists		Osman El Menchawi,
1	Hydrographic Surveyors		PhD, PE, GE, FRM
1	Hydrogeologists		Mark Buhrke, PLS CA
38	Project Managers	Secretary/Treasurer	Richard Baird
157	Technician/Analyst	Assistant Secretary/ Assistant Treasurer	Dwayne Janecek
1	Seismic Engineers	Fugro USA Land, Inc. Profile	
4	Geophysicists	Texas Corporation Established in 1947	
3	Scientists	19 Offices across the USA	

10	Pilots	Texas Geosciences Firm #50337
47	Operators	
7	Professional Land Surveyors	Federal ID No.: 74-2426512
7	Aerial Photographer	DUNS No.: 36-187-1759
3	Computer Programmer	QHSE Certs:
3	Photogrammetrist	OSHA 18001:2007 certified
2	Remote Sensing Specialist	ISO 9001:2015 certified
5	Mechanic	ISO 14001:2015 certified
38	Other	NAICS:
		541330 - Engineering Services;
		541370 Surveying and Mapping (Except Geophysical);
		541360 Geophysical Surveying and Mapping
573	Total	
		Cage No.: 1N4L2

6.2 Remote Sensing and Mapping

For over 65 years, Fugro has provided clients with customized geospatial solutions designed to accurately measure and characterize the earth. Fugro is highly competent and wholly committed to continue to provide exceptional service to the City of Huntsville and its partnering agencies. This document is an expression of our interest to work with the City and demonstrates our motivation and readiness to provide maximum value for the upcoming project.

Fugro specializes in airborne (manned and unmanned) acquisition of geospatial data and producing a wide range of mapping products and analysis-ready information. Working with existing and prospective customers, we aim to develop greater long-term partnerships and provide state of the art solutions to the constantly expanding user community.

6.2.1 Global Production Facilities

For nearly 20 years, Fugro has owned and operated a large photogrammetric production operation in Qinhuangdao, China, offering our customers a combination of large, highly skilled production resources at very cost-competitive rates. This facility's production resources include over 140 geospatial professionals. Staff at this facility use identical ISO9001:2015 quality procedures for orthoimagery production and lidar processing. All final quality assurance is performed by Fugro's US-based project management staff. Fugro has security protocols, documented and DoD approved, which govern data security; no data is processed in any of our global facilities without the explicit, written consent of our customers.

Certificate of Liability Insurance and W-9 shown on the next two pages.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
01/03/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Marsh USA Inc. 2929 Allen Parkway, Suite 2500 Houston, TX 77019 Attn: Houston.certs@marsh.com	CONTACT NAME: --- PHONE (A/C, No, Ext): E-MAIL: ADDRESS:	FAX (A/C, No):
CN102231194--GAWU-22-23	INSURER(S) AFFORDING COVERAGE	
INSURED Fugro Geospatial, Inc. Fugro USA Land, Inc. 7320 Executive Way Frederick, MD 21704	INSURER A: Liberty Mutual Fire Insurance Company	NAIC # 23035
	INSURER B: Liberty Insurance Corporation	42404
	INSURER C: HDI Global Insurance Co.	41343
	INSURER D: Axis Surplus Insurance Company	26620
	INSURER E:	
	INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

HOU-003198812-14

REVISION NUMBER: 0

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☒ POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:		TB2641005066032	01/01/2022	01/01/2023	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
A	AUTOMOBILE LIABILITY		AS2641005066022	01/01/2022	01/01/2023	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000
D	☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ HIRED AUTOS ONLY ☒ NON-OWNED AUTOS ONLY		P00100078614201 (3x2)	01/01/2022	01/01/2023	BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ Buffer per occur/agg \$ 3,000,000
C	☐ UMBRELLA LIAB ☒ OCCUR ☒ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☒ RETENTION \$ 250,000		XLD1498704	01/01/2022	01/01/2023	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N ☒ N ☐ Y N/A	WA764D005066132	01/01/2022	01/01/2023	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

For Bid Only

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Marsh USA Inc.

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Form

W-9(Rev. October 2018)
Department of the Treasury
Internal Revenue Service**Request for Taxpayer
Identification Number and Certification**► Go to www.irs.gov/FormW9 for instructions and the latest information.**Give Form to the
requester. Do not
send to the IRS.**Print or type.
See Specific Instructions on page 3.**1** Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

Fugro USA Land, Inc.

2 Business name/disregarded entity name, if different from above**3** Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.☐ Individual/sole proprietor or single-member LLC☒ C Corporation☐ S Corporation☐ Partnership☐ Trust/estate☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ►**Note:** Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.☐ Other (see instructions) ►**4** Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

6100 Hillcroft

6 City, state, and ZIP code

Houston, TX 77081

7 List account number(s) here (optional)

Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.**Social security number**

			-				
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or

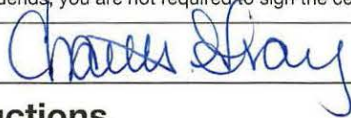
Employer identification number

7	4	-	2	4	2	6	5	1	2
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Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.**Sign
Here**Signature of
U.S. person ►

Date ►

1/11/23

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.**Purpose of Form**

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
 - Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
 - Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
 - Form 1099-S (proceeds from real estate transactions)
 - Form 1099-K (merchant card and third party network transactions)
 - Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
 - Form 1099-C (canceled debt)
 - Form 1099-A (acquisition or abandonment of secured property)
- Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.
- If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

6.6 Key Personnel Capacity and Experience

Fugro's aerial acquisition and processing capabilities for orthoimagery, lidar, planimetric, and topographic map data are supported by a highly experienced team of project planning staff, pilots, sensor operators, field crews, production staff, and project managers who possess the experience and expertise to meet the needs of our customers.

6.6.1 Personnel Capacity

Our staff of over 570 US and Canadian based technical professionals has specialized education and experience in data acquisition (flight and sensor operations), photogrammetry, photo interpretation, remote sensing, cartography, GIS, computer science, GPS surveying, and more. Fugro's global processing facilities are available for cost and schedule efficiency, increasing our staff count as shown in the column in the table below.

Table 6.1: Technical and Administrative Personnel Capacity

Labor Category	Quantity (US)	Additional Quantity (Global)
Acquisition	>33	N/A
Production	>78	+140
Project Management / Administrative	>46	+3
Total Employees	>570	+146

6.6.2 Professional Certifications

One major factor to Fugro's success over the last 60+ years is attributed to employing highly trained Geospatial and GIS professionals. Fugro staff maintains professional licenses, registrations, and certifications related to the surveying and mapping profession. The personnel listed in the table below are utilized in supervisory and management positions and are an invaluable resource ensuring quality products and services are delivered.

Table 6.2: Professional Certifications

Type	Name
CP	Lynn Baker; Jonathan Helta; Dave Holm; Doug Johnson; Nora May; Suzee Parsons; Kirk Spell; Linda Wehner Van Vlack; Michael Wernau
PLS	Ryan Chapman; Jesse Thibodeaux; Mark Buhrke; Brian Moyle; Tony Gray
PMP	Michael Wernau; Shelby Coder
GISP	Debbie Simerlink; Dave Holm
PE	Guy Meiron (SD)
CQM	Dave White (Pending Reinstatement)

CP: Certified Photogrammetrist PLS: Professional Land Surveyor PMP: Project Management Professional GISP: GIS Professional PE: Professional Engineer CQM: Certified Quality Manager

6.6.3 Production Management

Fugro's team has large acquisition and production equipment and personnel capacity available to support successful acquisition, processing, and delivery of imagery data. Fugro's Production Manager is responsible for maintaining a detailed schedule to monitor the production status of all current and upcoming projects. This schedule details:

Available and committed production hours per production department.

1. Estimated and actual (accrued daily) hours per production phase.
2. Anticipated projects expected to enter production in the next 30, 60, and 90 days.
3. Potential impacts on the current production schedule.

Fugro uses this master schedule to:

1. Determine whether or not we can take on new projects.
2. Evaluate the length of time required for production so we can work to develop a delivery schedule that meets both parties' expectations.

The production scheduling system comprises the number of hours available in each major production department against jobs booked (in hours) and potential opportunities that are highly likely to become jobs. Team members are polled weekly to determine production capacity and ability to perform within the desired timeframe.

Fugro also creates a project-specific production schedule that outlines all major production phases, milestones, interim deliverables and due dates, and final deliverables and due dates. This schedule is developed during the project initiation/kick-off phase and guides production throughout the life of the project.

6.6.4 Staff Qualifications and Experience

The following table identifies key supervisory staff, including subcontractors, who will be assigned to the contract, indicates the responsibilities and qualifications of such personnel. Fugro assures that staff identified in its proposal will be assigned to the project and that any staff substitution would require approval.

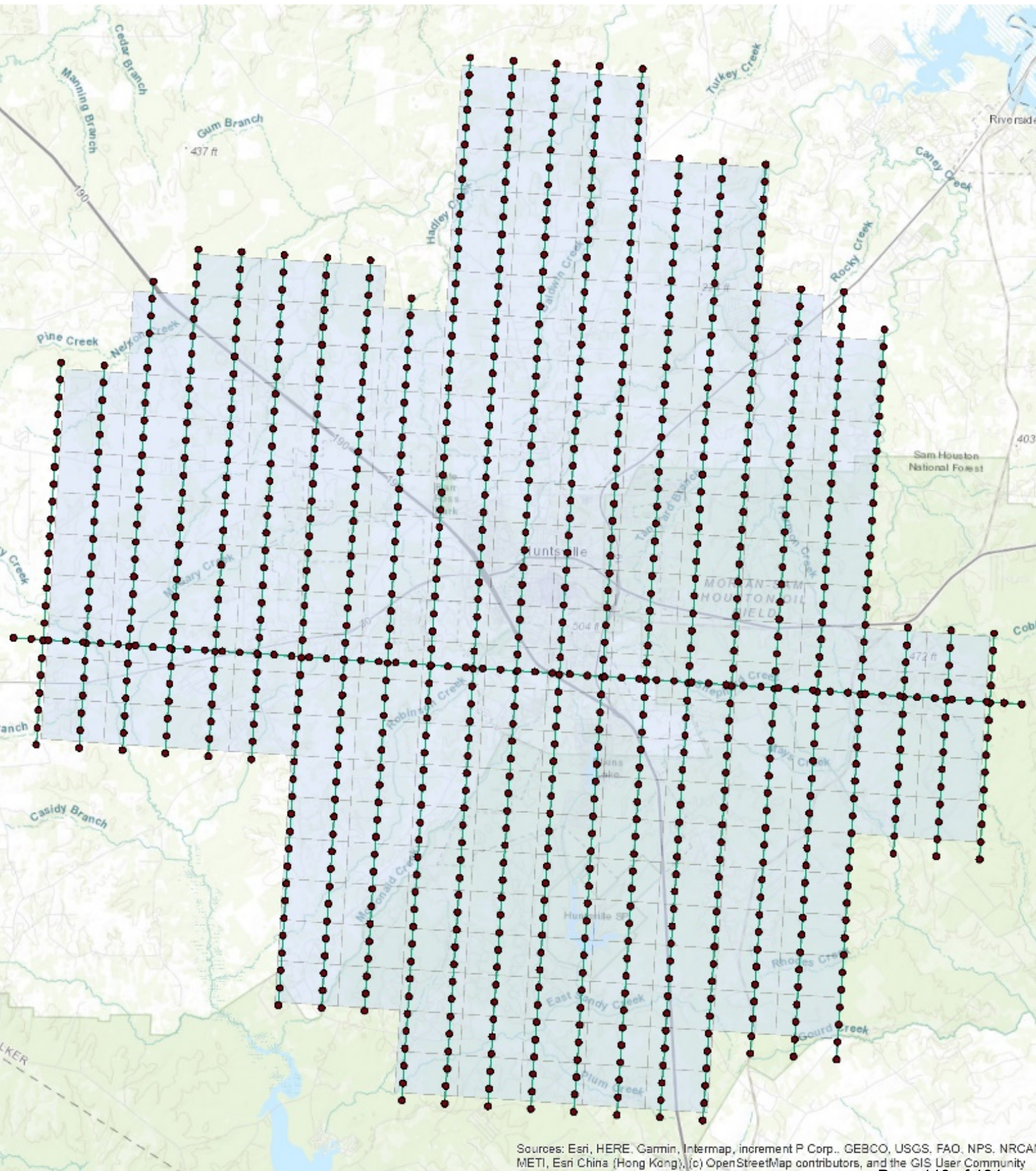
Table 6.3: Staff Qualifications and Experience

Name	Role/Responsibilities	Qualifications Summary
Dave White	Principal-in-Charge	26 years' experience in the mapping industry. Instrumental in developing Fugro's ISO9001:2015 Quality Management System.
Debbie Simerlink, GISP	Operations Manager	30 years' experience in the mapping industry. In her current role as Operations Manager Ms. Simerlink assesses production workload and capacity, manages production schedules for all projects, and reports on capacity, backlog, and forecasting to ensure new projects can be

Name	Role/Responsibilities	Qualifications Summary
		taken on and existing projects are completed on schedule and within budget.
Tian Wang	Production Manager	15 years' experience in the mapping industry. Instrumental in developing and improving Fugro's production / delivery processes. Ensures quality data delivery on Fugro's largest and most complex lidar projects.
Guy Meiron, PE	Science and Technology Manager	30 years' experience in the mapping industry. Provides day-to-day technical support throughout production, providing critical QA/QC review. Ensures each project conforms to technical specifications, budget, and schedule.
Nora May, PhD, CP	Senior Systems Geodetic Engineer	16 years' experience in the mapping industry. Research interests include surface extraction and modeling, sensor fusion, calibration of multi-sensor systems, including lidar boresight calibration
Dave Holm, CP, SP, GISP	Program Manager	24 years' experience in the mapping industry. Provides oversight of Fugro's largest IDIQ contracts and programs;
Michael Wernau, CP	Program Manager	19 years' experience in the mapping industry. Lead some of Fugro's largest R&D efforts and programs; Has managed the development of over 30,000 sq. mi. of imagery products in the last 4 years.
Joe Jones	Program Manager	20 years' project management experience. Focuses on every aspect of aerial mapping operations from planning, design, operations, and management.
Rob Rombough	Project Manager	12 experience in the mapping industry. Expertise includes project planning, financial and cost management, managing subcontractors, and liaising with clients to ensure all project needs are met throughout the contract life cycle.
Benjamin Downey	Project Manager	10 experience in the mapping industry. Expertise includes project planning, financial and cost management, managing subcontractors, and liaising with clients to ensure all project needs are met throughout the contract life cycle.
Suzee Parsons, CP	Project Planning	18 years' experience in the mapping industry at Fugro. Supervises all aspects of proposal/project planning, project execution, providing plans, technical parameters, and direction for photogrammetric and remote sensing projects.
Mike Rusenko	Aviation Manager	Over 40 years of experience as a pilot and aerial photographer. Has completed thousands of aerial photographic projects. Plans and directs all aerial sensor and airborne GPS acquisition missions and manages Fugro's flight crews, aircraft, aerial camera systems, and GPS systems.
Douglas Johnson, CP	Flight Coordinator	37 years' experience in the mapping industry. Involved with virtually every aerial data acquisition project to ensure data quality and coverage before the flight crews leave the project AOI.
Kirk Spell, CP, CMS	Technical Lead: Orthoimagery Processing	28 years' experience in the mapping industry. Supervises the production of Fugro's digital orthophotography. Responsibilities include maintenance of production for the digital imagery/orthophoto department including organizing, scheduling, image processing, and final deliverable QA/QC.

Name	Role/Responsibilities	Qualifications Summary
Todd Giesey	Technical Lead: Aerial Triangulation	30 years' experience in the mapping industry at Fugro. Fugro's aerotriangulation (AT) specialist ensuring the accuracy of our orthoimagery products.
Nick Nearman	Raw Data Quality Control	18 years' experience in the mapping industry. Responsibilities include GNSS-IMU pre-planning and post-processing and initial acquisition data QA/QC and data-management to ensure same-day validation of collected data.
Jonathan Helta, CP	Lidar Production Lead	15 years' experience in the mapping industry. Specialist in lidar processing techniques, software, and product development. Leads the lidar processing team to adapt to changes in technology.
Lynn Baker, CP, CPT	Manager of Cartographic Editing	40 years' experience in the mapping industry at Fugro. Extensive expertise in all key phases of technical operations, including photogrammetric mapping, GIS, and remote sensing analysis.
Debbie Wenner	GIS Analyst / Compilation Specialist	28 years' experience in the mapping industry. Provides cross training, quality review, technical support, and project management duties. Performs remote sensing and GIS for land cover mapping, image-based feature extraction.
Sue Hartman	Compilation Supervisor	19 years' experience in the mapping industry. Proficiencies include imagery analysis and compilation, lidar product development, and hydrography and is currently working on 3-D mapping of coastal communities.
Jim Bergan	Compilation Technician	22 years' experience in the mapping industry at Fugro. Provides management, supervision, and quality control in all photogrammetric mapping departments at Fugro (compilation, imagery, lidar).
Beth Bergan	Compilation Technician	15 years' experience in the mapping industry. Responsibilities include estimating, project setup and creation, and training of staff on multiple imagery and lidar projects, QC, and project delivery.

1.7 Flight Plan





CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 2.a.

Agenda Item: First Reading - To consider adopting Ordinance 2023-26, to change the Development District Classification of the approximate 86.56-acre tract of land adjacent to the 150 Block of FM 247 and also just east of American Legion Drive located on Walker County Property ID #13938, #13939 and #13941 from Management to Planned Development and to consider approval of the Concept Plan for the Planned Development.

Initiating Department/Presenter: Development Services

Presenter:

Armon Irones, City Planner

Recommended Motion: No action necessary-First Reading

Strategic Initiative: Goal #3-Economic Development-Promote and enhance a strong and diverse economy.

Discussion: The owner of the property located at Parcel ID# 13938, #13939, and #13941 has made an application to amend the Development District Map to change the current Development District Classification from Management (M) to Planned Development (PD). In conjunction with the application for the change in the development district classification to (PD), a concept plan for the planned development is also required to be submitted for approval. The subject property is approximately 86.56 acres in size and the properties to the north and east are undeveloped, the property to the southeast is a manufactured home park, Crown Point Subdivision is adjacent to the west along American Legion Drive, and the properties adjacent to the subject property along Quality Boulevard are storage/commercial developments. All of the surrounding property is classified as Management (M).

The Owner/Developer is proposing a Planned Development for smaller single-family style homes. The development will occur in a total of four phases. The first phase will consist of 89 lots and the next three phases will be larger. They are planning to start phase one by the end of summer 2024 with a completion date of 40 to 50 homes by mid November 2024. The concept plan provides for approximately 7.37 acres of green space, 8.31 acres of nature preserve, (which includes storm water detention ponds), and a 3.3-acre amenity pond. Approximately 21.4 acres of the subject property, the lower southwest portion, is designated for future development. Streets within the development will comply with the Development Code standards.

The proposed land use within the development is allowed under the current Management district classification without the need for any special permits; however, because of the smaller size of the proposed lots and reduced building setback lines, a Planned Development is appropriate for the subject property. In review of the concept plan and in discussion with the developer, the smaller lot sizes and reduced setback lines are essential for the proposed development.

The applicant has developed a similar development in the Conroe, Texas area. The developer intends to have deed restrictions for the development to enforce, uphold, and enhance the quality of the neighborhood and the Huntsville community as a whole.

Applicable sections of the Development Code for planned development are Section 2.304 and 12.400. In the simplest terms, a Planned Development is a condensed version of the Development Code specific only to the subject property with review by both the Planning Commission and the Council before development can occur. The sections above are included in the attached Planning Commission Discussion form. In addition to the establishment of the subject property as a Planned Development district through the approval of a development district map amendment, there is a three-step plan approval of the planned development.

1. Planning Commission and Council approval of an initial generalized “concept plan”,
2. Planning Commission and Council approval of a more detailed “development plan”, and
3. Staff approval of the planned development site plans.

The Planning Commission will hold public hearings for both steps one and two and make a recommendation to City Council for approval or denial. City Council will also hold public hearings for steps one and two and be the final decision maker. Upon completion of steps one and two with approval from the City Council, staff approval is required for the planned development site plan, step three.

The subject property is at step one in the above process. The Development District Map Amendment for (PD) follows the same procedure as for any other change in classification, i.e. Neighborhood Conservation (NC) to Management (M). Section 12.308 of the Development Code addresses the review and approval criteria for the Development District map amendment.

The Planning Commission held a public hearing and consideration of this Planned Development case on October 5, 2023. Staff received comments from four citizens before the public hearing. One opposed and the other three had questions and wanted to know more information about the concept plan. They had no issues with the proposed single-family subdivision as long as it is a nice, quality development that will bring value to the area.

The Planning Commission unanimously recommended to Council approval of the Development District map amendment to change the subject property to (PD) and approval of the concept plan.

Previous Council Action: None

Financial Implications: There is no financial impact associated with this item.

Approvals:

Kevin Byal
Kristy Doll

Associated Information:

1. Planned Development ORDINANCE 2023-26
2. 87 Acre Huntsville Residential Subdivision Concept Plan
3. Elevations
4. Interiors
5. Vicinity Map-Proposed PD
6. Article 12.400-PD

-
7. Official Development District Map
 8. PC Minutes 10-5-23-approved

ORDINANCE NO. 2023-26

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF HUNTSVILLE, TEXAS, AMENDING THE DEVELOPMENT DISTRICT MAP OF THE CITY OF HUNTSVILLE, TEXAS TO CHANGE THE DEVELOPMENT DISTRICT CLASSIFICATION FOR PROPERTY ADJACENT TO THE 150 BLOCK OF FM 247 AND ALSO JUST EAST OF AMERICAN LEGION DRIVE ON 86.56 ACRE TRACT LOCATED ON WALKER COUNTY PROPERTY ID #13938, 13939 AND #13941, FROM MANAGEMENT TO PLANNED DEVELOPMENT.

WHEREAS the City Council of the City of Huntsville, Texas, has adopted an Official Development District Map and attendant regulations for the City which, in accordance with the Comprehensive Plan, was designed to control the density of population to the end that congestion may be lessened in public streets and that the public health, safety, convenience and general welfare is promoted in accordance with Chapter 211, Municipal Zoning Authority of the Texas Local Government Code; and

WHEREAS the Development Code of the City of Huntsville provides for the amendment of the Official Development Map; and

WHEREAS after public notice, the Planning Commission held a public hearing on October 5, 2023 to consider comments of the public regarding the adoption of the amendment to the Development District Map; and

WHEREAS the Planning Commission has studied and evaluated the request and the report prepared by City Staff; and

WHEREAS the Planning Commission has considered the comments of the public presented at the public hearing and has prepared a report for this Council of its conclusions and recommendations;

WHEREAS after public notice, City Council held a public hearing on November 21, 2023, considered comments from the public regarding the adoption of amendments to the Official Development District Map; and

WHEREAS the City Council has studied and evaluated the request, the report prepared by City Staff and the recommendations by the Planning Commission; and

WHEREAS the City has updated the map to reflect the amended area;

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

SECTION 1: The Official Development District Map of the City of Huntsville, as provided in Section 2.200 of the City's Development Code, is amended and City Staff is direct to make such change.

SECTION 2: The newly amended Official Development District Map is adopted and shall supersede the prior Official Development District Map and shall be identified by the signature of the mayor and attested to by the City Secretary.

SECTION 3: The City Secretary is hereby directed to cause the caption of this Ordinance to be published at least twice within ten days of final passage. This ordinance shall take effect ten (10) days after the date of final passage.

PASSED AND APPROVED THIS _____ DAY OF _____ 2023.

THE CITY OF HUNTSVILLE

Mayor

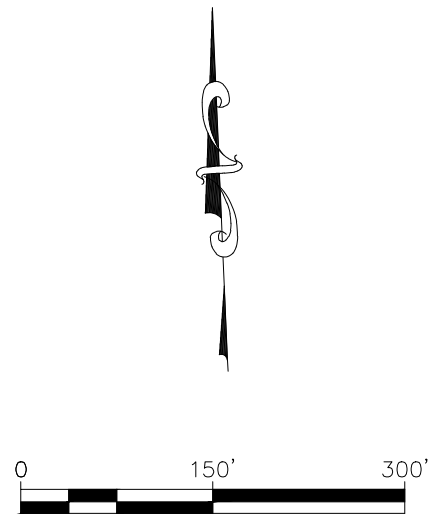
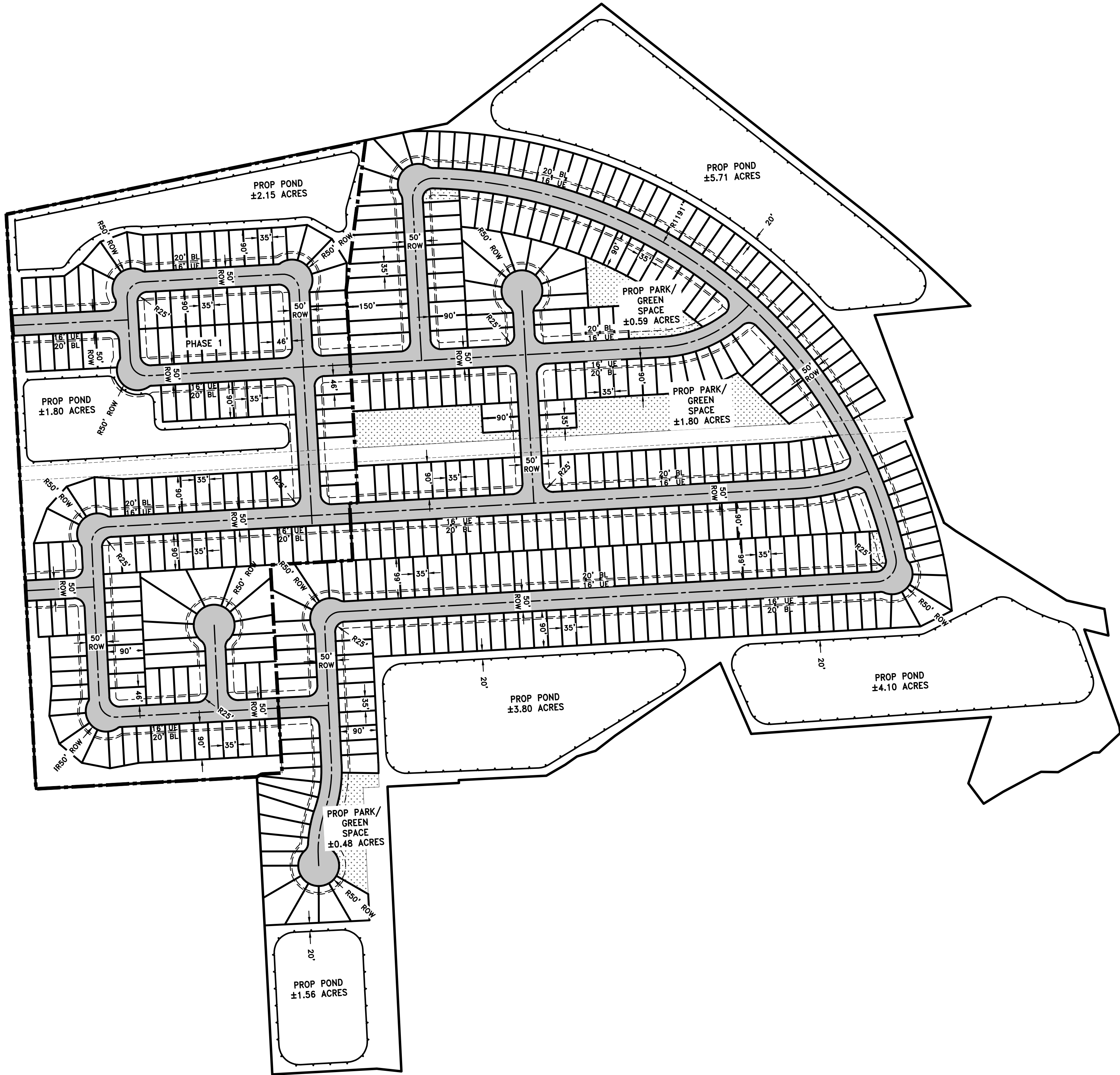
ATTEST:

APPROVED AS TO FORM:

Kristy Doll, City Secretary

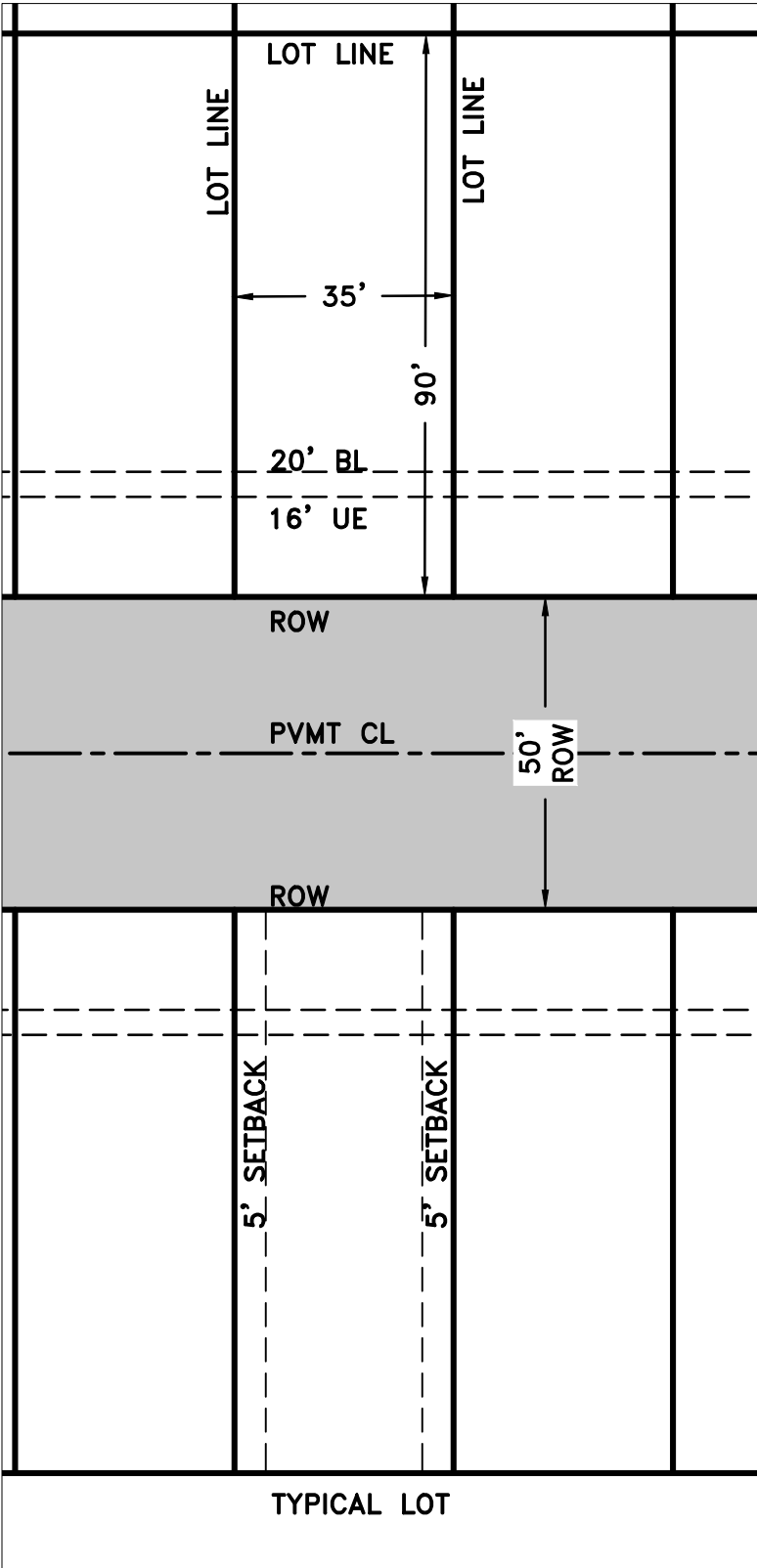
Leonard Schneider, City Attorney

L:\SHARED\L2 ENGINEERING PROJECTS\ENGINEERING PROJECTS\10830 - 71 ACRE HUNTSVILLE RESIDENTIAL\03 CAD\DESIGN SET\YBASE-10830-OP2.DWG Sep. 15, 2023--7:46 PM PAIGE STEVENS



TOTAL ACRES - 86.56
TOTAL # OF LOTS = 476
PHASE 1 LOTS = 155
LOTS/AC = 5.49
NOMINAL LOT WIDTH = 35'
NOMINAL LOT DEPTH = 90'

— EX PROJECT BOUNDARY
- - - - - PROP PHASE 1 BOUNDARY



2

L SQUARED ENGINEERING
MUNICIPAL COMMERCIAL RESIDENTIAL
WWW.LZENGINERING.COM
PHD REGISTRATION NUMBER 131235
3307 W. DAVIS STREET #100
CONROE, TEXAS 77384
OFFICE 936-647-0400

88 ACRE HUNTSVILLE RESIDENTIAL

HUNTSVILLE

9/15/2023

DRAWING INFORMATION			
PROJECT	10830	TDLR	**
DRAWN	MCV	CHECKED	JTW
SCALE		SHEET	
1" = 150' (24x36)		01	
1" = 300' (11x17)			
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF: E. LEVI LOVE, PE #99340 OR JONATHAN WHITE, PE #127058 FOR REVIEW PURPOSES ONLY NOT FOR CONSTRUCTION			

ICONIQ HOMES



ICONIQ HOMES



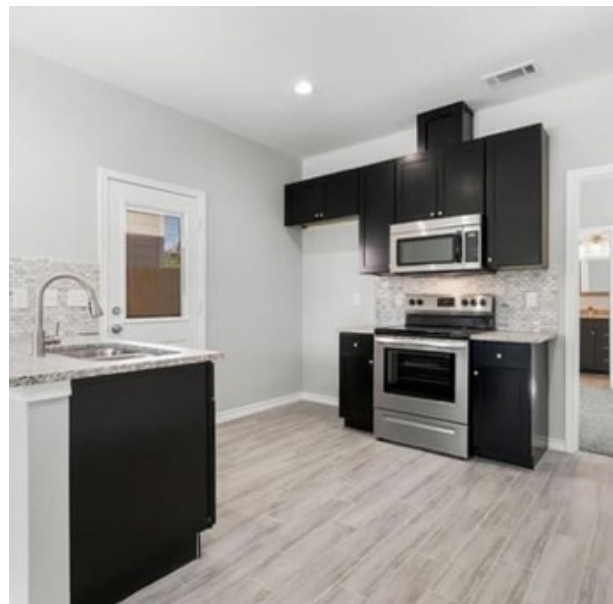
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ICONIQ HOMES



ICONIQ HOMES



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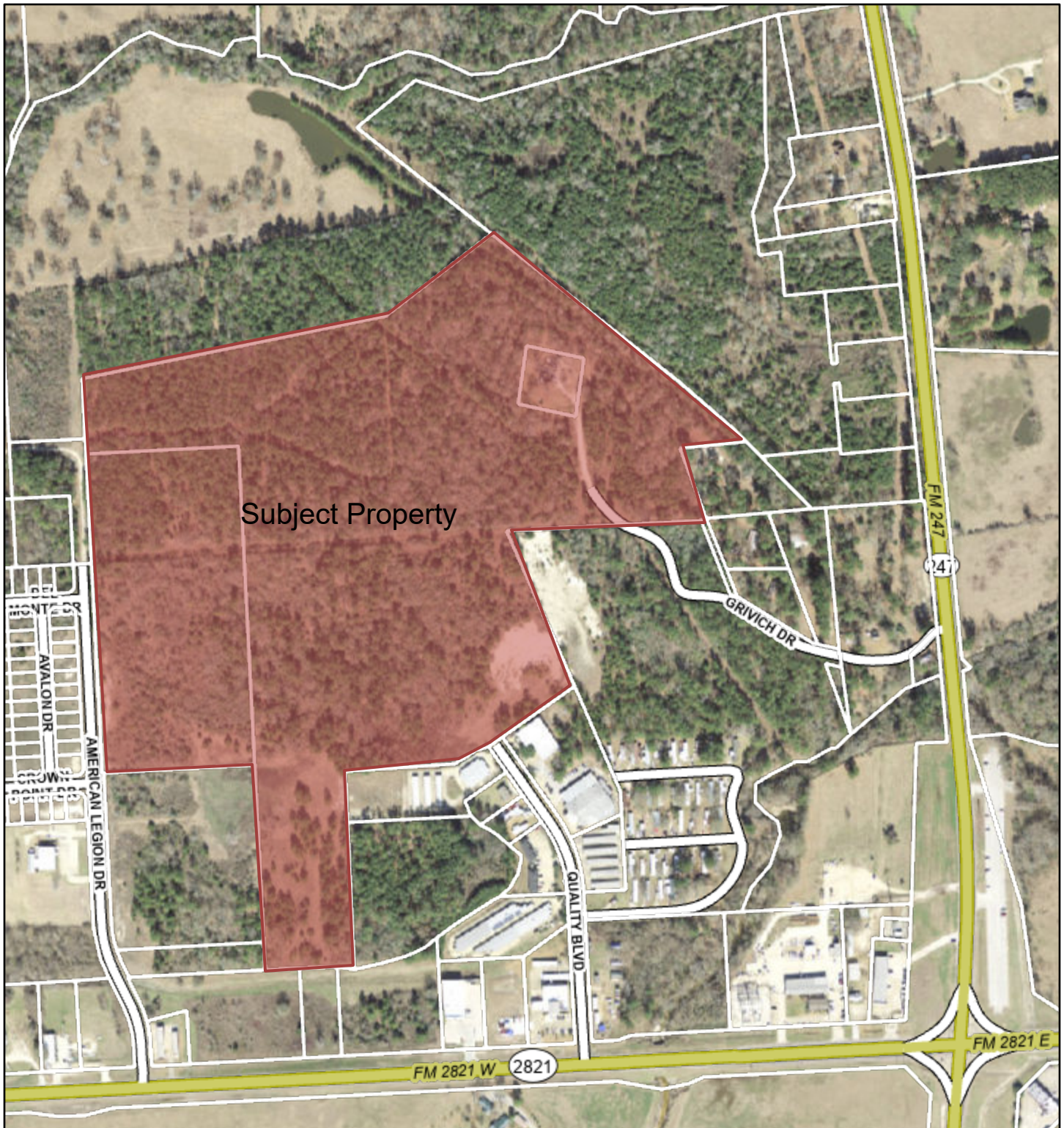
ICONIQ HOMES



ICONIQ HOMES



Vicinity Map



9/22/2023, 11:39:38 AM

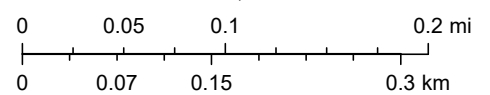
- Override 1
- Property Lines
- City Limits
- MSAG Blocks

1:500

FM; Park Road; State Highway; US Highway

Local Roads

1:6,000





DEVELOPMENT CODE

UNIFIED DEVELOPMENT ORDINANCE

ARTICLE 12 DEVELOPMENT REVIEW AND APPROVAL PROCEDURES

12.400 PLANNED DEVELOPMENTS

12.401 Overview

Planned development (PD) districts are established through the approval of a development district map amendment in accordance with Sec. 12.300. The PD approval process also requires either a two-step or three-step plan approval procedure. The three-step plan approval process entails (1) approval of an initial generalized “concept plan,” (2) approval of a more detailed “development plan,” and (3) staff approval of PD site plans. At the property owner’s option, the PD plan approval process may be consolidated into two steps, involving (1) review and approval of a “development plan” that includes all of the information otherwise required in the concept plan and development plan and (2) staff review and approval of PD site plans. This section sets forth the required review and approval procedures for approval of planned developments.

12.402 Step One: Map Amendment and Concept (or Development) Plan Approval

The first step of the PD approval process is approval of the development district map amendment establishing the PD district. A PD concept plan must be processed concurrently with a PD map amendment unless the applicant elects instead to forgo the concept plan stage and process a development plan concurrently with the PD map amendment.

12.404.A Authority to File

PD concept plan (or development plan) applications may be filed only by the subject landowner or the subject landowner’s authorized agent.

12.404.B Application Filing

Complete applications for concept plan (or development plan) approval must be filed with the City Planner at the same time that the PD development district map amendment application is filed.

12.404.C Review and Recommendation—City Planner

Following receipt of a complete application for concept plan (or development plan) approval, the City Planner must prepare a report and recommendation that evaluates the proposed planned development district and concept plan (or development plan) in light of applicable PD district provisions of [Article 2](#) and the criteria of §12.402.G. The report must be transmitted to the Planning Commission before their public hearing on the proposed PD map amendment and concept plan (or development plan).

12.404.D Notice of Hearing

Public hearing notice must be provided in accordance with the development district amendment notice procedures (see Sec. [12.304](#)).

12.404.E Hearing and Recommendation—Planning Commission

The Planning Commission must hold a public hearing on the proposed PD map amendment and concept plan (or development plan). Following the close of the hearing, the Planning Commission must act by simple majority vote to recommend that the proposed map amendment and concept plan (or development plan) be approved, approved with modifications, or denied and transmit its recommendations to the City Council.

12.404.F **Hearing and Final Action—City Council**

1. Following receipt of the Planning Commission’s recommendation, the City Council must hold a public hearing on the proposed PD map amendment and concept plan (or development plan). Following the close of their public hearing, the City Council must act to approve the proposed map amendment and concept plan (or development plan), approve the map amendment and concept plan (or development plan) with modifications or deny the proposed map amendment and concept plan (or development plan). The City Council may also remand the proposed map amendment and concept plan (or development plan) to the Planning Commission for further consideration.
2. PD district map amendments are subject to the protest provisions of Sec. [12.307](#).

12.404.G **Approval Criteria**

1. In order to approve a PD concept plan and map amendment, the City Council must make all of the following determinations:
 - a. The proposed PD district is at least 5 acres in area;
 - b. The proposal is consistent with the Comprehensive Plan;
 - c. Proposed uses and the development features are compatible with uses of nearby property and the existing and proposed character of the surrounding neighborhood;
 - d. The concept plan (or development plan) complies with applicable PD district provisions of [Article 2](#); and
 - e. Appropriate terms and conditions have been imposed on the approval to protect the interests of the public and any residents of the planned development.
2. In order to approve a PD development plan and map amendment, the City Council must make all determinations required for concept plans (see [§12.402.G](#)) and PD development plans (See [§12.403.I](#)).

12.404.H **Adopting Ordinance**

1. The ordinance establishing a PD district must incorporate the approved concept plan or development plan and include at least the following:
 - a. A statement as to the purpose and intent of the district.
 - b. The uses authorized for each tract or subarea in the district, by use category, the location of such uses, and the residential densities and/or nonresidential intensities associated with phases of the project, in conformance with the approved concept plan or development plan.
 - c. The conditions applicable to development within the district, as established by the City Council.
2. The graphic depiction of features on the incorporated concept plan or development plan must be enforced as regulatory standards applicable

within the approved PD district. Change or modification to such features requires processing of a PD district map amendment, including a revised concept plan or development plan.

12.403 Optional Step Two: Development Plan Approval

12.404.A Options

1. Substitution for Concept Plan

The developer may submit a development plan in lieu of a concept plan in accordance with Sec. 12.402.

2. Following Approval of Concept Plan and PD District

If a PD district is established based upon a concept plan, review and approval of a development in accordance with this subsection (12.403) is required before any PD site plans are approved and before any development or construction is allowed within the PD district.

12.404.B Timing; Lapse of Approval

If the landowner fails to file an application for development plan approval within 2 years of the date of the PD district amendment and concept plan approval, the plan approval will be deemed to have lapsed and no development plan may be accepted for processing. In the event of lapse of approval, the City Council may institute proceedings to determine whether the land should be classified in another development district. In such case, the Planning Commission must deliver its recommendation, with a copy to the owner of the affected land, to the City Council, who must conduct a public hearing on the matter and determine what action is to be taken with respect to the PD district and whether to revoke or reinstate the developer's authorization to submit a development plan.

12.404.C Authority to File

PD development plan applications may be filed only by the subject landowner or the subject landowner's authorized agent.

12.404.D Application Filing

Complete applications for development plan approval must be filed with the City Planner.

12.404.E Review and Recommendation—City Planner

Following receipt of a complete application for development plan approval, the City Planner must prepare a report and recommendation that evaluates the PD development plan in light of the approved concept plan and the approval criteria of §12.403.I. The report must be transmitted to the Planning Commission before their public hearing on the proposed PD development plan.

12.404.F Notice of Hearing

1. Planning Commission

Notice of the Planning Commission's required public hearing on a PD development plan must be mailed and posted, in accordance with § [12.106.A](#) and §[12.106.C](#). Required notices must be mailed and posted at least 11 days before the Planning Commission public hearing.

2. City Council

Notice of the City Council's required public hearing on a PD development plan must be published in accordance with §12.106.B. The notice must be published at least 16 days before the City Council public hearing.

12.404.G **Hearing and Recommendation—Planning Commission**

The Planning Commission must hold a public hearing on the proposed PD development plan. Following the close of the hearing, the Planning Commission must act by simple majority vote to recommend that the proposed development plan be approved, approved with conditions, or denied and transmit its recommendations to the City Council.

12.404.H **Hearing and Final Action—City Council**

1. Following receipt of the Planning Commission's recommendation, the City Council must hold a public hearing on the proposed PD development plan. Following the close of their public hearing, the City Council must act to approve the proposed development plan, approve the development plan with conditions or deny the development plan. The City Council may also remand the development plan to the Planning Commission for further consideration.

2. PD district development plans are subject to the protest provisions of Sec. 12.307.

12.404.I **Approval Criteria**

In order to approve a PD development plan, the City Council must make all of the following determinations:

1. The development plan generally is consistent with the approved concept plan and the standards and conditions set forth in the PD district adopting ordinance;
2. The plan provides for a compatible arrangement of buildings and land uses within the project;
3. The general plan for traffic circulation and pedestrians provides for adequate and safe circulation inside and external to the development, consistent with the adopted thoroughfare plan;
4. The general plan for accommodation of floodwaters and drainage is adequate;
5. The plan does not adversely affect adjoining neighborhoods or properties outside the plan, taking into consideration proposed buffers;
6. The amenities proposed in the development plan application, if any, are sufficient to justify increased densities or intensities on the site; and
7. The sequence of development and timing of the phases are consistent with the overall phasing of capital facilities intended to serve the site and with the City's overall growth.

12.404.J **Approving Ordinance**

The ordinance approving the development plan, whether approved as part of the PD map amendment or after the PD map amendment and concept is approved, must include at a minimum the following information. The development plan must be incorporated as an exhibit to the ordinance:

1. A table of the specific land uses permitted in the area subject to the development plan, together with a description of the tracts or subareas to which such uses are restricted;

2. The residential densities and nonresidential intensities of each permitted land use;
3. A table showing the dimensions of each permitted land use, including the following information:
 - a. Minimum lot area;
 - b. Minimum lot width and depth;
 - c. Minimum front, side, and rear yard areas;
 - d. Maximum height of buildings;
 - e. Minimum parking standards for each multi-unit residential and nonresidential land use;
4. A description of the elements of the general circulation plan to serve the development;
5. Provisions governing amenities, if any, to serve the area subject to the development plan; and
6. Such additional conditions as are applicable to development within the area subject to the development plan, as established by the City Council.

12.404 **Final Step: PD Site Plans**

Approval of PD site plans for development on individual building lots, parcels or tracts within the project is the final step of the PD approval process. Such reviews are intended to help ensure that all construction and development are consistent with the approved development plan and standards for the PD district.

12.404.A **Timing; Lapse of Approval**

A PD site plan must be submitted for approval within 2 years of the date that the development plan was approved. If a PD site plan is not submitted within such period, the development plan approval will be deemed to have lapsed and no PD site plan may be accepted for processing. In the event of lapse of approval, the City Council may institute proceedings to determine whether the development plan for the property should be modified or the property subject to the development plan should be reclassified in another development district, and whether to revoke or reinstate the developer's authorization to submit a site plan.

12.404.B **Review and Action by City Planner**

1. The City Planner is authorized to review and take action on PD site plans. The City Planner must approve a PD site plan if it complies with the approved development plan, all conditions of development plan approval and all of the following criteria:
 - a. The plan complies with the approved development plan;
 - b. The plan complies with all standards and conditions set forth in the ordinance approving the development plan;
 - c. Unless modified by the ordinance approving the development plan, the plan complies with the following additional standards generally applicable to development within the City, as set forth in this Development Code:
 - (1) Performance standards; and
 - (2) Setback, landscaping and off-street parking and loading standards;

- d. The plan provides for appropriate ingress and egress points for access, parking and loading, including existing and proposed ingress/egress/access easements, queuing and internal circulation;
 - e. The plan provides for fire safety and adequate measures for fire control and dealing with fire or explosive hazard; and
 - f. The plan provides for adequate utilities, roads, drainage, and other infrastructure, as required by the City's Development Codes.
2. The City Planner may establish conditions and require modifications to ensure that the PD site plan is consistent with the approved development plan and the approval criteria in this section.
 3. If the City Planner disapproves a PD site plan or imposes conditions, the applicant may appeal the decision to the City Council by filing a written request with the City Planner within 10 days of the decision.

12.404.C **Effect of Approval**

Approval of PD site plans must occur before a building permit may be issued for the subject property.

12.404.D **Lapse of Approval**

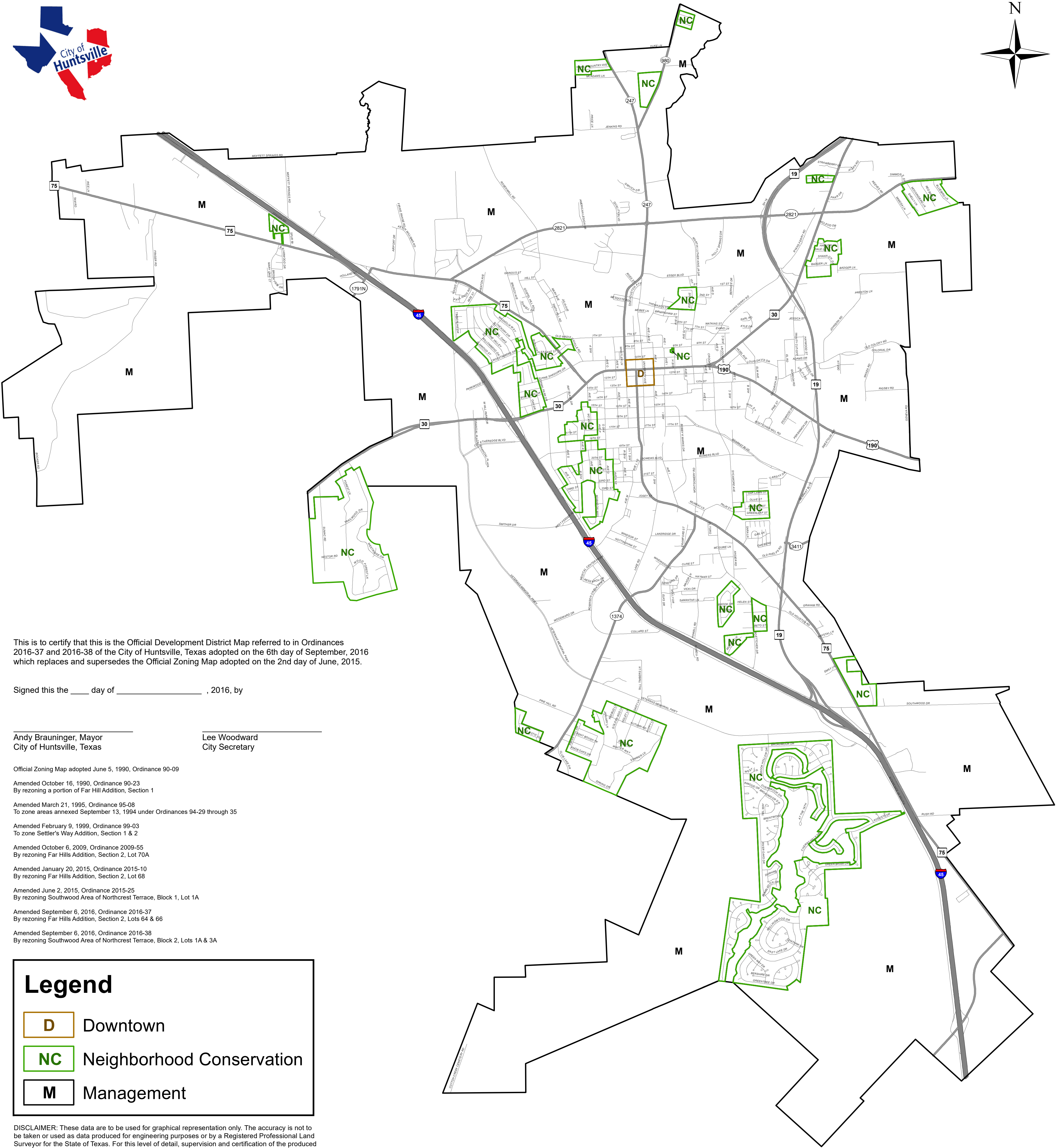
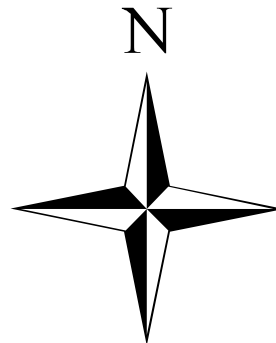
1. An approved PD site plan will lapse and have no further effect 24 months after it is approved, unless:
 - a. A building permit has been issued (if required); or
 - b. A certificate of occupancy has been issued.

12.404.E The Planning Commission is authorized to extend the expiration period for good cause on up to 2 separate occasions, by up to one year each. Requests for extensions must be submitted to the City Planner and forwarded to the Planning Commission for a final decision.

12.404.F A conditional use also lapses upon revocation of a building permit or a certificate of occupancy, for violations of conditions of approval or upon expiration of a building permit to carry out the work authorized by the approved PD site plan.

12.405 **PD Project Review**

If the City Council finds that conditions imposed on development of the planned development project have not been timely fulfilled, or for any other reasons related to reasonable exercise of the powers conferred by Texas *Local Government Code* Chapter 211, that the development district classification of the PD district should be reexamined, the City Council may initiate review of the PD district in order to determine whether the authorized uses, standards and conditions applicable to development within the district should be changed for part or all of the undeveloped land within the district. If the City Council makes such determination, it must refer the matter to the Planning Commission for its recommendation and thereafter take appropriate action to modify the uses, standards or conditions applicable to development within the district in accordance with procedures applicable to development district amendments.



Official Development District Map of the City of Huntsville, Texas

MINUTES OF THE MEETING OF THE PLANNING COMMISSION HELD IN THE COMMUNITY ROOM, AT THE HUNTSVILLE PUBLIC LIBRARY, 1219 13TH STREET, HUNTSVILLE, TEXAS ON THE 5TH DAY OF OCTOBER 2023 AT 5:30 PM.

Members present: Hooten; Carpenter; Sessions; Gumm; Thompson

City staff present: Irones; Yeager; Gibson

Audience present: Stefan Pardoe; Josh Rothstein; Lesley Reel; Scott Martsolf; Lex Presley; Terry Presley; Tarek Himuam; Vicki McKenzie; Martha Memdijla

1. CALL TO ORDER

The meeting was called to order by Vice-Chairman Hooten. [5:30 PM]

2. PLEDGE OF ALLEGIANCE

- a. U.S. Flag
- b. Texas Flag

3. INVOCATION

Commissioner Carpenter led the invocation.

4. PUBLIC HEARING

- a. For a proposed Development District Map Amendment Request to go from Management District to a Planned Development District and approval of Concept Plan, located adjacent to Quality Boulevard and also just east of American Legion Drive on Walker County Property ID #13938 and #13941, located in the city limits of Huntsville.

5. CONSIDER

- a. The Development District Map Amendment Request to go from Management District to a Planned Development District and approval of Concept Plan, located adjacent to Quality Boulevard and also just east of American Legion Drive on Walker County Property ID #13938 and #13941, located in the city limits of Huntsville.

City Planner, Armon Irones gave an overview of the subject property. He informed the Planning Commission this is the first step of the Planned Development process. The zone change and approval of the concept plan will require approval. They will also go before the City Council for a Public Hearing and approval as well. The second step is a more in-depth development plan submittal and approval by the Planning Commission and City Council. These will also require Public Hearings.

Staff spoke with 4 property owners prior to the meeting regarding the proposed development:

- Greg Rigsby at 118 Avalon was in opposition, says that it will reduce his property values.
- Mrs. Pressley prefers single family homes over multifamily but does not oppose the development.
- Charles Von Schmidt is undecided and was curious about the proposed development.
- There was a property owner that owns property within 300' and couldn't attend but was curious about the development as well.

Staff recommended the approval of the Concept Plan and Development District Map Amendment. Josh Rothstein & Stefan Pardoe gave a presentation providing details and plans for the proposed development & answered questions from the Planning Commission.

Commissioner Gumm moved to approve the zoning change from Management District to a Planned Development District and approval of the Concept Plan. Second was by Commissioner Thompson. The vote was unanimous.

- b. The Final Plat of Caliber Collision, being a partial replat of Rollingbrook Section 2, located in the city limits of Huntsville.

City Planner, Armon Irones gave an overview of the final plat submittal. This proposed development received a positive recommendation for a Conditional Use Permit at the July 21, 2022, Planning Commission meeting.

The applicant is requested to have two Modification/Waiver of Subdivision Standards, one from Article 6.1107.B (1) of the Development Code. The applicant is requesting a driveway entrance from the IH-45 Feeder Road, but Pine Shadows will be constructed in the future. The Development Code requires driveway spacing to be 65 feet in separation, but the applicant has their driveway 63 feet from the proposed Pine Shadows Drive. TX Dot will not issue a driveway permit until the Waiver is granted. The applicant is also requesting a Waiver from Article 10.201 of the Development Code. The Planning Commission requested that as a part of the approval that TX Dot sends a copy of the permit to city staff.

Commissioner Carpenter moved to approve the final plat and the Modification/Waivers of Subdivision Standards requests. Second was by Commissioner Thompson. The vote was unanimous.

- c. The minutes of the September 21, 2023, meeting.

Commissioner Sessions moved to approve the minutes from the September 21st meeting. Second was by Commissioner Thompson. The vote was unanimous.

6. PUBLIC COMMENTS

There were no public comments.

7. ITEMS OF COMMUNITY INTEREST

Announcements concerning items of community interest from the Commission and City Staff for which no action was discussed.

- *Fair on the Square October 7, 2023*
- *The State of the City will be held on October 19, 2023, at 5:30 PM at the Walker County Storm Shelter.*
- *Due to the time conflict, the Planning Commission meeting previously scheduled for that day will be postponed.*
- *The Planning Commission has a new member, Weldon Wallace, who is expected to begin at the next meeting.*

8. ADJOURNMENT

Commissioner Carpenter moved to adjourn the meeting. Second was by Commissioner Gumm. The vote was unanimous. [6:19 PM]



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 2.b.

Agenda Item: First Reading - Consider Ordinance No. 2023-27 authorizing the suspension of the effective date for an additional 90 days beyond the effective date proposed by Centerpoint in connection with its statement of intent to increase rates.

Initiating Department/Presenter: City Attorney

Presenter:

Leonard Schneider, City Attorney

Recommended Motion: FIRST READING – It is recommended the council take action at this meeting per the recommendation of the Lawton Law Firm because this ordinance would need to be passed on or before 12/4/23. Next Regular council meeting is 12/5/23. **Move to temporarily suspend the rules of procedure by waiving the two-reading requirement and adopt Ordinance No. 2023-27 authorizing the suspension of the effective date for an additional 90 days beyond the effective date proposed by Centerpoint in connection with its statement of intent to increase rates.**

Strategic Initiative: Goal #6, Finance - Provide a sustainable, efficient and fiscally sound government through conservative fiscal practices and resource management.

Discussion: CenterPoint recently filed an application with the City for an increase in gas service rates. The Company's application also includes a request to consolidate its Houston, Texas Coast, South Texas, and Beaumont/East Texas Divisions into a single Texas Division. Huntsville is in the Beaumont/East Texas Division. The total increase requested for the combined divisions is \$37.4 million annually, representing a 5.8% increase in non-gas revenues.

However, if the proposed consolidation is approved, customers in the Beaumont/East Texas Division service area are expected to experience a decrease in their monthly bills. If approved, the average decrease per residential customer ranges from -\$2.12 to -\$5.08 monthly depending on location. CenterPoint has proposed that the gas service rate increase become effective on December 4, 2023. As such, the City must take action to approve, deny, modify, or suspend the rate increase request by December 4, 2023. It is recommended that the City suspend the effective date of the proposed rate increase to permit time to review CenterPoint's request to see if there is potential for a greater decrease, and allow the Lawton Law Firm to make an informed recommendation to the City.

The proposed ordinance also authorizes the City to join with the Steering Committee of Cities to retain legal counsel and rate consultants, participate in the gas service rate proceeding before the Railroad Commission and any courts, and to seek reimbursement for rate case expenses from CenterPoint.

Previous Council Action: None.

Financial Implications: None at this time.

Approvals:

Aron Kulhavy
Kristy Doll

Associated Information:

1. 2023 CP Rate Susp Ordinance 2023-27

ORDINANCE NO. 2023-27

ORDINANCE OF THE CITY OF HUNTSVILLE, TEXAS
AUTHORIZING THE SUSPENSION OF THE EFFECTIVE DATE FOR
AN ADDITIONAL NINETY (90) DAYS BEYOND THE EFFECTIVE
DATE PROPOSED BY CENTERPOINT IN CONNECTION WITH ITS
STATEMENT OF INTENT TO INCREASE RATES IN THE TEXAS
DIVISION, FILED ON OCTOBER 30, 2023; AUTHORIZING THE
HIRING OF LAWYERS AND RATE EXPERTS; AUTHORIZING THE
CITY'S PARTICIPATION TO THE FULL EXTENT PERMITTED BY
LAW AT THE RAILROAD COMMISSION OF TEXAS; REQUIRING
REIMBURSEMENT OF MUNICIPAL RATE CASE EXPENSES;
FINDING THAT THE MEETING COMPLIES WITH THE OPEN
MEETINGS ACT; MAKING OTHER FINDINGS AND PROVISIONS
RELATED TO THE SUBJECT; AND DECLARING AN EFFECTIVE
DATE

WHEREAS, on or about October 30, 2023, CenterPoint Energy Resources Corp. d/b/a CenterPoint Energy Entex and CenterPoint Energy Texas Gas ("CenterPoint" or "Company") filed a Statement of Intent with the City of Huntsville ("City") to increase gas rates in its Houston, Texas Coast, South Texas, and Beaumont/East Texas Division Service Areas by \$37.4 million per year, effective December 4, 2023; and

WHEREAS, CenterPoint's statement of intent includes a request to consolidate the Houston, Texas Coast, South Texas, and Beaumont/East Texas Divisions into a single Texas Division; and

WHEREAS, City has exclusive original jurisdiction over the rates, operations and services of a gas utility in areas in the municipality pursuant to Texas Utilities Code § 103.001; and

WHEREAS, Texas Utilities Code § 103.021 requires a local regulatory authority to make a reasonable determination of rate base, expenses, investment and rate of return and retain the necessary personnel to determine reasonable rates; and

WHEREAS, the City's reasonable cost for regulatory expenses in ratemaking proceedings shall be reimbursed by the gas utility under Texas Utilities Code § 103.022; and

WHEREAS, Texas Utilities Code § 104.107(a)(1) authorizes a local regulatory authority to suspend a utility's proposed rate change for not longer than 90 days after the date the rate change would otherwise be effective; and

WHEREAS, given the complexity of the proposed rate increase and the need to fully review the proposed rate adjustment it is necessary to suspend the effective date for

implementing the proposed rates until March 3, 2024, to allow the City's rate experts sufficient time to determine the merits of CenterPoint's proposed rates; and

WHEREAS, to maximize the efficient use of resources and expertise in reviewing, analyzing, and investigating CenterPoint's \$37.4 million rate increase request, City's efforts will be coordinated with similarly situated municipalities in CenterPoint's Beaumont/East Texas Division Service Area; and

WHEREAS, the City will join with other municipalities in a steering committee in order to coordinate the hiring and direction of counsel and consultants working on behalf of the steering committee and the City.

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

Section 1. That the statement and findings set out in the preamble to this ordinance are hereby in all things approved and adopted.

Section 2. The effective date of CenterPoint's proposed rate increase, and the proposed tariffs related thereto, is hereby suspended for an additional ninety (90) days until March 3, 2024, in order to complete the review and investigation by City's experts.

Section 3. The City is authorized to join with other municipalities as part of the CenterPoint Beaumont/East Texas Division Service Area Steering Committee with the understanding that the steering committee will provide direction and guidance to the lawyers who are representing said cities.

Section 4. The City employs The Lawton Law Firm, P.C. to represent the City with regard to the proposed rate increase of CenterPoint before local and state regulatory authorities and any court of law and authorizes counsel to employ such rate experts as are recommended by the Steering Committee.

Section 5. The Steering Committee shall review the invoices of the lawyers and rate experts for reasonableness before submitting the invoices to CenterPoint for reimbursement.

Section 6. City's legal representatives shall have the right to obtain additional information from CenterPoint through the service of requests for information, which shall be responded to within seven (7) calendar days of receipt of such requests for information.

Section 7. CenterPoint shall reimburse the City, through the designated representative of the Steering Committee, for the reasonable costs of attorneys and consultant fees and expenses related thereto, upon the presentation of invoices reviewed by the Steering Committee.

Section 8. The meeting at which this ordinance was approved was in all things conducted in strict compliance with the Texas Open Meetings Act, Texas Government Code, Chapter 551.

Section 9. This ordinance shall become effective from and after its passage.

PASSED AND APPROVED this 21st day of November 2023.

THE CITY OF HUNTSVILLE

Mayor

ATTEST:

APPROVED AS TO FORM:

Kristy Doll, City Secretary

Leonard Schneider, City Attorney



CITY COUNCIL AGENDA

11/21/2023

Agenda Item Number: 2.c.

Agenda Item: Consider authorizing the City Manager to enter into an agreement with LJA Engineering for professional engineering services for FY23-24 CIP Tanyard Creek Lift Station Force Main Replacement Project.

Initiating Department/Presenter: Engineering

Presenter:

Kathlie Jeng-Bullock, City Engineer

Recommended Motion: Move to authorize the City Manager to enter into an agreement with LJA Engineering for professional engineering services for the FY23-24 CIP Tanyard Creek Lift Station Force Main Replacement Project.

Strategic Initiative: Goal #4, Infrastructure - Ensure the quality of the City utilities, transportation and physical structures so that the City's core services can be provided in an effective and efficient manner.

Discussion: A Request for Qualification (RFQ) process was conducted, and fourteen (14) applications from Engineering firms were received. The Evaluation Committee consisted of six (6) staff members from four (4) departments. As a result of this process, the top four (4) Engineering Companies were selected to be interviewed and to present their proposals to the committee members. Committee Members recommended the award to LJA Engineering, who ranked the second highest among the 4 presenters, for the design of the Tanyard Creek Lift Station Expansion and Improvement, and the Force Main Replacement Projects.

The existing Tanyard Creek Lift Station is to be improved and expanded to 3.1 MGD based on the 2016 Water and Wastewater Condition and Capacity Assessment Study. The existing firm pumping capacity is 2.59 MGD. The expansion will have to be able to handle the wastewater flow from six upstream lift stations (Mallery Lake, Highway 190, Old Colony, Sims, Bearkat and Badger) which have already been rerouted to the Tanyard Creek Lift Station (See Attached Map 1.). The Lift Station is under design and funds are scheduled to be available in the FY 23-24 CIP Program for construction upon the issuance of revenue bonds.

The existing 8,500' of 10-inch Force Main will, at the same time, need to be upsized to 14-inches in order to handle the increased capacity of the newly expanding Tanyard Creek Lift Station. (See Attached Map 2.)

At this time, there are six (6) developments, in various stages of progress, (Fishpond at Walker, ZincPoint expansion, Fish Hatchery, Huntsville Tiny Homes, SHSU New Outdoor Tennis Facility, and Faith Family Church) impacting the Tanyard Creek Lift Station and Force Main Projects. (See Attached Map 1.)

The City has applied for a Grant through the Regional Mitigation Program of Texas General Land Office

(GLO) Community Development & Revitalization for the Force Main portion of the project with \$364,000 for design. The FY23-24 CIP contains a budget of \$500,000 for the Force Main design with \$136,000 being the City share and the remaining \$364,000 coming from the Grant. However, we are not sure when the grant will be available. Staff has been working with the GLO for approximately one year in awaiting formal award of the funding allocated to Huntsville.

Because the Force Main capacity is needed now for the developments mentioned above, we cannot wait for grant approval to start the design phase. Assuming the Council approves the CIP budget amendment 2023-28 on this same agenda, which will transfer funds from two closed projects (1) Evergreen Drive Project (\$91,781.00) and (2) Water Edge Lift Station (\$57,902.27), and transfer (3) Unallocated Project Fund (\$47,930.00) for a total of \$197,613.30. The total available funding for this project is \$333,613.30 (\$197,613.30 + \$136,000.00).

If the Grant is approved and the funds received, the funds can be used for the construction of Force Main.

This agreement is for Phase I and II Services, Surveying Services, Geotechnical Investigation, Environmental Site Assessment Phase I, etc. only. The total cost of this agreement is \$289,900.00. The Detail Tasks are summarized in the attached "Detail Tasks Fee Authorization Addendum". The Scope & Fee Proposal is also attached.

Previous Council Action: FY 22-23 CIP for the Tanyard Creek Lift Station Expansion and Improvement Project - May 16, 2023

FY 23-24 CIP Budget approved - The City Council approved a total amount of \$136,000.00 in FY23-24 CIP budget for design of Force Main.

Financial Implications: ☐Item is budgeted (assuming budget amendment approval per ordinance 2023-28) : In the amount of \$333,613.30

Approvals:

Kathlie Jeng-Bulloch
Leonard Schneider
Aron Kulhavy
Kristy Doll

Associated Information:

1. COHID23-10-01(FM) Proposal - Force Main Replacement 2023-04-27
2. LJA FM Addendum Fee Authorization 10 24 2023
3. Map 1 - Proposed Devs and Abandoned LFs
4. Map 2 - Proposed Replacement of 10-inch to 14-inch

April 27, 2023

Dr. Kathlie S. Jeng-Bullock, P.E., D.WRE, CFM
City Engineer
Director of Engineering Department
448 Highway 75 North
Huntsville, Texas 77320

Re: Project Name: Tanyard Creek Lift Station Force Main Replacement
COH Project ID: 23-10-01 (FM)
LJA Engineering Proposal No.: 23-18063

Dear Dr. Bullock:

In response to your request and on behalf of our project team, LJA Engineering, Inc. (LJA) is pleased to submit this proposal to provide Professional Engineering Services for the above-stated project. The attached proposal includes a project description, scope of services, compensation, project schedules and other support documentation.

Project Description, Review, and Location

The project comprises the replacement of approximately 8,500 linear feet of existing 10-inch sanitary sewer force main with new 14-inch force main. This force main extends from the Tanyard Creek Lift Station to the discharge manhole within the right-of-way of State Highway 30 East, just south of its convergence with State Highway 19. The locations of the project improvements are summarized as follows:

Location	Extents	Approx. Length
Lift Station Access Rd.	From Lift Station to Fish Hatchery Rd.	1,050 L.F.
Fish Hatchery Road	From Lift Station Access Rd. to 1,100 ft West	1,100 L.F.
Crossing of Fish Hatchery Rd.	Crossing of TXDOT ROW	100 L.F.
Backlot Sanitary Easement	From Fish Hatchery Rd. to State Hwy 30 East	6,000 L.F.
State Highway 30 East	From Easement to Force Main Discharge Manhole	250 L.F.

SCOPE OF SERVICES REVIEW

The proposed services will be performed in accordance with the latest edition of the City of Huntsville Engineering Design Manual and the Texas Commission on Environmental Quality (TCEQ) 30 TAC Chapter 217 – Design for Domestic Wastewater Systems. LJA will manage the project and the efforts of the project design team. Collectively, we will provide professional civil engineering, surveying, geotechnical, environmental, structural, electrical, and other necessary services as described below, as defined in Exhibit A, and as described in the City of Huntsville Contract for Engineering Services. A brief description of each is provided as follows:

PHASE I, II, AND III BASIC SERVICES

Basic Services are defined to include Phase I - Preliminary Design, Phase II – Final Design, and Phase III – Construction Phase Services, addressed in Section **2** of the Contract. Exhibit A to the

Contract provides detailed requirements for each respectively. A general description of each is provided as follows:

Phase I - Preliminary Design

Preliminary Design Phase Services to be provided are defined in Section **2.2** of Exhibit A. This force main was identified in the "2016 Water and Wastewater Condition and Capacity Assessment Studies," prepared by Freese and Nichols, Inc. (FNI), as having insufficient capacity. According to the FNI Report the existing 10-inch force main will need to be replaced and upsized to a 14-inch force main. The 2016 FNI report, City provided record drawings, City provided flow data, and other project parameters will be reviewed during the preliminary engineering phase to determine the available options for expansion of the lift station.

Phase II – Final Design

Final Design Phase Services to be provided are defined in Section **2.3** of Exhibit A, generally described as follows:

1. Upon receipt of the City's written notice to proceed, we shall commence preparing the project's final design. The design and the construction cost estimate will be submitted for the City's review and comment at the 50%, 70%, 100%, and bid ready stages of design as defined in Sections **4.3**, **4.4**, and **4.5**, respectively of Exhibit A.
2. LJA and the project team will specify the minimum acceptable performances and material standards associated with temporary structures or facilities determined necessary to implement the project.
3. LJA and the project team will review the results from the Additional Services and where applicable, incorporate the information into the final design. These services may include, but are not limited to survey, geotechnical, environmental investigations, storm water pollution prevention, tree mitigation and planting plans, and underground utility investigations.
4. We will endeavor to verify or otherwise reconcile the findings from the utility plan review and the topographic survey to identify potential conflicts. The final design will avoid conflicts where physically and financially feasible. Where relocation of private utilities is unavoidable, we will inform and coordinate the issues with the City as early in the design process as possible.
5. LJA and the project design team will, as necessary, incorporate the City's standard details into the final design. Should it be necessary to revise the standard details to suit project specific requirements, we will notify the City, provide reasons for the revisions and obtain the City's approval for incorporation into the plan sets. We will also develop additional non-standard details as necessary for the bidding and construction of the project.
6. LJA and the project team will prepare the technical specifications in accordance with the standard format adopted by the City. The Table of Contents (TOC) associated with these standard specifications will serve as a guide for organizing the Contract Documents. We will review the standard specifications and supplement them as necessary to suit the specific requirements and the design intent of the project. We will prepare additional, non-standard specifications as necessary to bid and construct the project. All supplemental and additional specifications will be subject to the City's review and approval.
7. We will incorporate the front-end documents provided by the City into the project's technical specifications.
8. Prior to issuing the final drawings and specifications for the City's approval, we will make every effort to obtain the required signatures or approvals from other agencies, and public and private utilities (when possible) which may have facilities within or otherwise impact the project, or whom may require permits or license agreements. These typically include, but are not limited to, Walker County, Texas Department of Transportation (TxDOT), City's or County's Floodplain Administrator, SBC, Reliant Energy, CenterPoint Energy, AT&T, railroad, pipeline, and various communication companies.
9. LJA will assist the City in conducting the Pre-bid conference, including the preparation and submission of meeting minutes (within 3 working days) and addenda to address the issues or clarifications necessary to the completion of the bidding process.

10. LJA will furnish a tabulation of bids received within 2 working days after the bid opening, with a written recommendation of the award of the construction contract to follow after calling and following up with contractor references.
11. LJA will furnish a set of as-bid drawings after bids are received, reflecting all addenda changes.

Phase III - Construction Phase Services

Construction Phase Services to be provided are defined in Section **2.4** of Exhibit A, generally described as follows:

1. LJA and pertinent responsible project team members will make periodic (one per month per work site, minimum) visits to the project site during times when the contractor is actively performing major construction activities and shall submit a written "Construction Site Observation/Status Report", as defined in Exhibit A, as documentation. These visits may be combined with any site visit made to resolve field construction problems.
2. We will review and provide a written answer within 2 working days, when possible, or as otherwise directed, to the contractor's written Requests for Information (RFI).
3. We will prepare and submit record drawings based on the contractor provided redline as-builts within 30-days after receipt of the contractor's redline field drawings.

ADDITIONAL SERVICES

Additional Services are defined and addressed in Section **3** of the Contract. Section **3.0** of Exhibit A to the Contract provides detailed requirements for each respectively. A general description of each Additional Services proposed for this project is provided as follows:

Surveying Services

Surveying Services are proposed for the complete limits of the force main replacement alignment previously described in the summary table of information provided at the beginning of this proposal. The project surveyor will prepare the project topographic survey in accordance with the City of Huntsville and Section **3.1** of Exhibit A, generally reviewed as follows:

1. Provide field surveys of existing structures, lines, site conditions, and other features required for the preparation of final construction plans.
2. The project surveyor will provide monumentation documentation as required in accordance to Section **3.1.B** of Exhibit A.
3. The project surveyor will be tied to the Texas State Plan Coordination System in accordance to Section **3.1.B** of Exhibit A.
4. The project surveyor will provide route survey services in accordance to Section **3.1.C** of Exhibit A.
5. Deliverables for the topographical survey including digital photo copies of the original survey field books and electronic files, survey control map, and survey drawing will be submitted no later than when the 70% drawings are submitted for review. The deliverables are further defined in Section **3.1.D** of Exhibit A.
6. The geotechnical boring locations will be surveyed upon completion of the geotechnical investigation. Stations and offsets within one foot of the true State plan coordinates will be submitted to the City in an electronic file.

The additional services includes a fee cost for the preparation of eight parcel metes and bounds for either easement/property acquisition and/or temporary construction easements.

Underground Utility Investigation Services

Underground Utility Investigation Services may be required. The additional services budget added a placeholder cost item should this service be determined during design to be required. Services will be conducted in accordance to ASCE CI/ASCE 38-02 Guideline's titled, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data".

Geotechnical Investigation Services and Geologic Fault Study Services

Geotechnical Investigation Services are proposed for the improvements associated with the Tanyard Creek Lift Station Force Main Replacement. The Geotechnical Investigation Services will be in accordance to Section **3.2** of Exhibit A.

Environmental Site Assessment Services

Environmental Site Assessment (ESA) Services are proposed for the project. The proposed Additional Services includes funding for providing the Waters of the U.S. Delineation, Archeological Records Review, Threatened and Endangered Species Assessment, and an ESA Phase I, as well as the ESA Phase II, if determined to be necessary, to determine the nature and extent of contamination to assist in the engineering design process. The proposed Additional Services includes funding for providing a Nationwide Permit, if determined to be necessary, and a NEPA Document, if determined to be necessary.

The ESA Services for Phase I will be in accordance to ASTM Standard Practice E1527 and as further discussed in Section **3.3** of Exhibit A. The ESA Phase II will be in accordance to ASTM Standard Practice E1903 and as further stipulated in Section **3.3** of Exhibit A. The Phase I study will determine if any Phase II scope of work is necessary.

Special Licenses and Permits

Special Licenses and Permits are reimbursed at actual cost. Payments for any special licenses and permits are not anticipated at this time, however, a line item has been added in the Additional Services summary with a nominal fee for placeholder purposes.

Storm Water Pollution Prevention Plan

Storm Water Pollution Prevention Plan Services are not proposed for this project. The Storm Water Pollution Prevention Plan Services provided in the Tanyard Creek Lift Station Expansion project will cover the extents of the Force Main Replacement as well.

Tree Protection, Mitigation, and Planting Plan

Tree Protection, Mitigation, and Planting Plan Services are proposed to address the proposed improvements associated with the expansion of the lift station. These services are not anticipated at this time, however, a line item has been added in the Additional Services summary with a nominal fee for placeholder purposes. After the Preliminary Stage is complete, should those findings determine there is a need for these services, the responsible project design team member engineer will prepare the project's Tree Protection, Mitigation, and Planting Plan in accordance with the Design Manual and the applicable requirements of Section **3.85** of Exhibit A.

Construction Material Testing

Construction Material Testing Services are proposed to provide as required testing, field and laboratory, of construction materials.

TXDOT UIR Permitting

TXDOT UIR Permitting Services are proposed to provide the City with the necessary documents to gain approval from the Texas Department of Transportation for the portion of the proposed utility that will be installed within TXDOT right-of-way. These documents typically include exhibits with aerial background calling out the coordinates of the proposed utility and a letter with supporting exhibits outlining the abandonment procedures, as well as the plan and profile drawings developed under basic services.

Project Representative

Project Representative Services are proposed to include periodic site visits (typically 10-15 hours a week) to review progress of contractor's work. These visits will be performed on an as needed basis

during certain phases of construction. The Resident Project Representative will make his best effort to be on-site during critical phases of work.

Record Drawings

Upon completion of the project, the contract drawings will be revised to reflect all field changes. The completed "record drawings" will be delivered to the Owner.

Reimbursable Expenses

Reimbursable expenses include travel/mileage, phone charges, reproduction, printing, postage, delivery charges, and other actual charges incurred by the Engineer. Reimbursable expenses will be billed monthly with the invoice indicating the nature of the charge.

COMPENSATION

The compensation for Phase I Preliminary Design, Phase II Final Design, and Phase III Construction Phase Services will be on a lump sum basis proposed to be **\$39,360.00**, **\$100,040.00**, and **\$24,600.00**, respectively, for total Phase I, Phase II, and III Services of **\$164,000.00**. A level of effort spreadsheet with hourly rates, manhours, and cost is attached for reference.

The compensation for Additional Services will be paid on a lump sum or reimbursable basis as appropriate. The Additional Services are estimated at **\$350,000.00**. The total for Engineering Services including Phase I, II, and III Services, and Additional Services is **\$514,000.00**.

Tasks	Basis of Compensation	Compensation
1. Basic Engineering – Phase I	Lump Sum	\$ 39,360.00
2. Basic Engineering – Phase II	Lump Sum	\$ 100,040.00
3. Basic Engineering – Phase III	Lump Sum	\$ 24,600.00
4. Surveying Services	Lump Sum	\$ 60,000.00
5. Metes/Bounds for Property Acquisition	\$5,000 Per Parcel	\$ 40,000.00
6. Underground Utility Investigation	Place Holder Only	\$ 40,000.00
7. Geotechnical Investigation	Time & Materials	\$ 15,000.00
8. Construction Materials Testing	Time & Materials	\$ 15,000.00
9. Environmental Site Assessment, Phase I	Lump Sum	\$ 22,000.00
10. Environmental Site Assessment, Phase II	Place Holder Only	\$ 28,000.00
11. Environmental, Nationwide Permit (if req'd)	Place Holder Only	\$ 18,000.00
12. Environmental, NEPA Document (if req'd)	Place Holder Only	\$ 35,000.00
13. TXDOT UIR Permitting	Time & Materials	\$ 5,000.00
14. Project Representative	Time & Materials	\$ 50,000.00
15. Record Drawings	Lump Sum	\$ 3,500.00
16. Reimbursable Expenses	Engineer's Cost + 10%	\$ 7,500.00
17. Special Licensing and Permits	Place Holder Only	\$ 1,000.00
18. Tree Protection, Mitigation & Planting Plan	Place Holder Only	\$ 10,000.00
Total Engineering Services		\$ 514,000.00

PROJECT TEAM

- The proposed project team is comprised of the individuals listed below with their respective roles.
- John Grounds, PhD, PE, CFM, D.WRE – QA/QC (LJA)
- Jimmy Flowers, PE – Project Manager (LJA)
- Gavin Shukanes, EIT – Design Support (LJA)
- Pete Rodriguez – Design Support (LJA)
- Timothy Aschoff, PE – Design Support / Technical Consultant (LJA)
- Rick Kronenberger, PE – Construction Management (LJA)
- Jeremy Russell, PE – Survey (LJAS)
- Susan Alford, REM, ENV SP – Environmental (LJAES)
- Bobbie Sue Hood, PE – Geotechnical (Terracon)
- Nathan P. Griffith, PE – Construction Materials Testing (Terracon)

PROJECT SCHEDULE

Three Hundred Forty Five (345) calendar days for Phases I & II Preliminary and Final Design Services, reference attached Exhibit B.

SUMMARY

On behalf of the project team, LJA appreciates this opportunity to provide Professional Engineering Services to the City of Huntsville on this important project. The team is available to initiate the Work on this assignment upon receipt of your written authorization to proceed.

Please don't hesitate to contact me should you have any questions or need additional information.

Sincerely,



Jimmy C. Flowers, P.E.

Enclosures for Draft Proposal Approval:

*Level of Effort (LOE) Phase I, II, and III Services
Memorandum of Agreement Between LJA and COH PW for Additional Services
List of Proposed Subconsultants & Fee Participation
Engineering Pre-Design Opinion of Probable Cost*

Final Enclosures (to be completed/executed upon draft proposal approval):

Project Scope and Deliverables
Project Location Map(s)
Project Schedule
Conflict of Interest Questionnaire (CIQ)
Critical Infrastructure Verification
Firearm Verification
Certificate of Interested Parties 1295
Iran Sudan and Foreign Terrorist Organization Verification
Israel Verification
Non-Collusion Affidavit
Prohibition on Contracts Discriminating Against Energy Companies
Texas Public Information Act Verification
COH Insurance Guidelines & Requirements

Date: April 26, 2023
Re: Exhibit A to the Engineering Design Contracts
Prepared by: Mark A. McClure, P.E., City of Huntsville

EXHIBIT A
(To Professional Engineering Agreement)

SCOPE OF SERVICES AND DELIVERABLE DOCUMENTS
CITY OF HUNTSVILLE CONTRACT FOR ENGINEERING SERVICES

TANYARD CREEK LIFT STATION FORCE MAIN REPLACEMENT

File No. 23-10-01 (FM)

1.0 GENERAL

The Engineer shall provide professional engineering services as described in the Contract, and as further defined by this Exhibit A, Scope of Services. Reference to Director throughout Exhibit A refers to the City Engineer. The Director may appoint a designee representative for Contract execution and coordination.

1.1 Description of Project

The Project generally is described as follows: Replacement of the City's Tanyard Creek Lift Station Force Main.

LJA Engineering, Inc. (LJA) is pleased to submit this proposal to provide engineering and construction phase services associated with the Tanyard Creek Lift Station force main replacement project, COH ID #23-10-01 (FM). This force main was identified in the "2016 Water and Wastewater Condition and Capacity Assessment Studies," prepared by Freese and Nichols, Inc. (FNI), as having insufficient capacity. According to the FNI Report the existing 10-inch force main will need to be replaced with a new 14-inch force main to handle the future expanded capacity of the Tanyard Creek Lift. The 2016 FNI report, City provided record drawings and flow data, and other project parameters will be reviewed during the preliminary engineering phase to determine the available options for the replacement of the force main.

1.2 Reference Standards and Criteria

- A. "City of Huntsville Engineering Design Criteria," hereinafter referred to as "City Design Manual." The Consultant shall utilize the latest published edition, if manual does not address certain subject matter, the Engineer shall identify applicable standards and criteria to be utilized, for City's concurrence.

- B. American Society of Civil Engineers (ASCE) CI/ASCE 38-02 Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data.
- C. Texas Commission on Environmental Quality (TCEQ) 30 TAC Chapter 217 – Design for Domestic Wastewater Systems
- D. American Society for Testing and Materials (ASTM) Standard Practice E 1527-2021, Environmental Site Assessments: Phase I Environmental Site Assessments
- E. American Society for Testing and Materials (ASTM) Standard Practice E 1903-2011, Environmental Site Assessments: Phase II Environmental Site Assessments (if required)
- F. This Project shall be prepared utilizing English units.
- G. Deliverables shall be provided by the Consultant in electronic and hard copy of preliminary and final reports, documents, plans, and other work products on a flash drive or other City approved suitable media. Program versions shall be as follows, with more recent versions approved by the City on a case-by-case basis:
 - 1. Submit text files in Microsoft Word - current.
 - 2. Submit design drawings files and exhibits in AutoCAD Civil 3D - current.
 - 3. Submit a duplicate of text and drawing files in PDF format using Acrobat 2020, indexing as appropriate.
 - 4. Submit photographs in a digital format converted to a JPEG image and stored on the approved media. Images shall have a resolution no lower than 1024 x 768.
 - 5. Consultant to organize in a sequential file structure, indexing as appropriate to be approved by City.

1.3 Review of Existing Information

- A. Existing utility information, existing record drawings of previous contracts, and existing survey information are readily available to the Engineer and the public. The Director shall provide access to such information. It is the responsibility of the Engineer to physically gather this information from all available sources.
- B. The Engineer shall review applicable existing information and develop independent recommendations based on the information. It is expected that the investigative work involved in these previous engineering efforts will not be duplicated, except as included in this Scope of Services.

2.0 BASIC SERVICES

2.1 General

- A. The Engineer shall reference the City's Project Title and City's Project File Numbers on all correspondence and submittals.
- B. The Engineer shall manage the efforts of the Project team members and Consultants, assign manpower, delegate responsibilities, review work progress, monitor conformance to the scope regarding the budget and schedule, and otherwise direct the progress of the work.
- C. Periodic meetings shall be held to review the progress of the engineering effort, or to address other issues which may arise. The Director shall initiate meetings that include the Engineer and his Consultants, and if necessary, the Director and other applicable parties. The Engineer shall prepare and deliver meeting record memorandum of decisions and action items to the City within 3 working days after each meeting.
- D. The Engineer shall notify the Director immediately of any deviation from the Scope of Engineering Services and Fee agreed to in this Scope of Services. The Engineer shall not perform services outside of the Contract scope without an Amendment to this Contract.
- E. Route all written communication with regulatory agencies, neighborhood associations, and City Council through the Director.
- F. Submit invoices on City's standard form and provide a completed City's standard form for Project Performance Certification (PPC) to document and present the current status of each milestone noted within attached Exhibit "B" (Project Schedule), to record activities and deliverables completed within the month, and to note activities planned for next month.

2.2 Phase I – Preliminary Design

During the Phase I – Preliminary Design, and after written authorization from the City Engineer shall perform the following Phase I services during the Project:

- A. Prepare a Preliminary Engineering Report (PER) which contains the findings and recommendations resulting from this Phase of work. Include the following minimum items:
 - 1. EXECUTIVE SUMMARY
 - a. Project Location – Describe project boundaries and locations within City of Huntsville limits. Include location and lay-out maps.
 - b. Statement of Problem – Describe deficiencies of the system.
 - c. Project Base Solution – Describe the base solution if offered in the City's Project Description/Scope of Services.

- d. Evaluation of Alternative Solutions – Provide summary of principal findings and conclusions from the evaluation of alternatives, based on specific cost and non-cost criteria.
- e. Findings from Phase I Design Activities – Summarize the findings that may impact the alternative solutions. Also, summarize other issues associated with:
 - 1) Geotechnical Investigation
 - 2) Environmental Site Assessment
 - 3) Real Estate Acquisition
 - 4) Traffic Control Analysis/Requirements (not required)
 - 5) Permits
 - 6) Other items constructed in Right of Way including sidewalks, driveways, encroachments, additions or replacements.
 - 7) Other potential conflicts and special issues, such as inter-agency coordination and tree impacts.
- f. Recommended Project – Describe the recommended alternative, how it solves the described system deficiencies, and tabulate the design criteria.
- g. Estimated Construction Costs – Include Construction Costs for each alternative evaluated.

2. INTRODUCTION

- a. Project Location- Describe generally the Project boundaries and locations within City of Huntsville limits with Map references. Include project location and vicinity maps.
- b. Statement of Problem- Describe deficiencies of the system. Include history of the problem, if available.
- c. Existing Conditions –
 - 1) Existing Utilities – Indicate location, size, condition, and capacity of all public utilities. Indicate location and size of private utilities. Summarize coordination efforts with each utility. Indicate substandard or problem locations and describe deficiencies.
 - 2) Existing Right-of-way – Describe width of right-of-way. Indicate if right-of-way is adequate for proposed Project and if encroachments exist.
 - 3) Redline the available maps showing the proposed connections to existing utilities, upgrades/replacements of existing utilities or construction of new utilities.

- d. Project Base Solution – Describe the base solution if offered in the City’s Project description/scope of services.

3. FINDINGS FROM PHASE I DESIGN ACTIVITIES

- a. Utilities Research

- 1) The Engineer shall research all available information and show on schematic layouts of the project all existing water mains and appurtenances, well collection lines, sanitary sewer and storm water lines and facilities (house services lines, manholes, etc.), and lot lines from subdivision plats, telephone, power, gas, cable TV, and other private utilities.
- 2) On major transmission pipelines, the Engineer shall contact the various pipeline companies for their assistance to determine the product material, type of pipe material, depth, and routing of pipelines.
- 3) Summarize coordination efforts with other utilities. Indicate problem locations, describe deficiencies/conflicts and program for resolution.

- b. Proposed Right-of-way or Real Estate Acquisitions - Indicate right-of-way and easement needs, and/or other required real estate acquisitions (identification of number, location and sizes of necessary parcels based upon readily available information).

- c. Phase I Environmental Site Assessment – Summarize findings and recommendations, when authorized.

- d. Geotechnical Investigation – Summarize findings and recommendations, when authorized.

- e. Inter-agency Coordination – Identify potential conflicts in time and space with projects from other City departments and other agencies; and offer recommended solutions.

- f. Floodplain/Floodway Analysis- Findings and recommendations, if applicable.

- g. Permits and Licenses – Describe permits or licenses required from governmental agencies, public or private utilities, railroads, WC, TXDOT, NPDES, wetlands, etc.

- h. Tree/Landscaping Impacts – Describe the potential impact on existing trees/landscaping. Delineate between protected and non-protected trees under the City’s ordinance and measure to protect those trees covered by the ordinance.

4. EVALUATIONS AND RECOMMENDATIONS

- a. Evaluation of Alternatives – Provide a summary of principal findings and conclusions from the evaluation of alternatives, based on specific cost and non-cost criteria.
- b. Recommended Project – Describe the recommended alternative, how it solves the described system deficiencies, and tabulate the design criteria. Also, provide the following:
 - 1) Recommended Utility Improvements – Discuss the recommended improvements to public utilities and indicate locations of potential conflict with other utilities.
 - 2) Construction Traffic Control Plan – Provide traffic control concept, noting detours, phases, sequencing, construction zones, temporary pavement requirements and temporary signalization. Identify potential disruptions to local businesses and measures to address access during construction. (anticipate typical TXDOT approved traffic control plans only)
 - 3) Storm Water Pollution Prevention Plan – Describe the basic approach to storm water pollution prevention and what measures will be implemented.
 - 4) Tree Protection/Mitigation and Landscaping – Describe the general approach to landscaping, tree protection, and tree mitigation, as required.

5. EXHIBITS:

- a. Project location maps – Prepare a color map of Project Area(s). Include a separate vicinity map of general Project Area(s)
- b. Typical cross-sections – Show horizontal dimensions, pavement structure makeup and thickness, typical locations of existing and proposed buried utilities right-of-way and easements, sidewalks, shoulders, and drainage ditches.
- c. Plan Sheets – Show proposed water mains, sanitary sewers, storm sewers and pavement footprint with alternate(s), where applicable, in plan view.
- d. Right-of-way maps – Show dimensions and locations of existing and proposed right-of-way and easement locations.

6. ESTIMATED CONSTRUCTION COST

- a. Provide the estimated Construction Cost of the recommended Project and all viable alternatives or options.

7. APPEDICES

- a. For Wastewater Facilities – Plants and Lift Stations (as applicable) include:

- 1) Supporting Calculations
- 2) Hydraulic Profile and Hydraulic Analysis
- 3) Process Flow Diagram and Process Operation Analysis
- 4) Pump curves
- 5) Wet Well Sizing
- 6) Force Main Sizing
- 7) Electrical One-Line Diagram
- 8) Instrumentation Diagram
- 9) Historical & Future Flow Rate Calculations

- B. Deliver to City Engineer a Preliminary Engineering Report including applicable exhibits and recommended construction packaging for the Project.
- C. Comments will be collected by the City's Engineering Department from other Departments, including Public Works. If there are other issues that involve other Departments, the City will coordinate collecting those comments.
- D. Revise the PER in response to the City Review and furnish 3 final copies of the PER. Submit final PER in pdf Format on a flash drive in a single file with Table of Contents.
- E. Upon acceptance by the City Engineering Department of the need to acquire additional right-of-way or easements for the project, the Director shall issue to the Engineer a notice to proceed for the preparation of right-of-way and easement documents. These documents shall be delivered to the Director within the time specified in the notice to proceed.
- F. Schedule of Design Activities:
The Engineer shall submit a schedule that contains actual dates, based on the date of the notice to proceed and the number of calendar days from Exhibit "B" milestones.

2.3 Phase II - Final Design

- A. Estimate of Construction Cost

1. Reference basis of preparation.

2. The Engineer shall submit an estimate of Construction Cost at the 50 percent, 70 percent, and Final Drawings stages.

B. Agency Approvals and Signatures

1. Where necessary to perform the Work.
2. The Engineer shall obtain required signatures from other governmental agencies, public utilities, and private utilities, which may impact the Project prior to final approval by the Engineering Department. Governmental agencies include, but are not limited to; TCEQ, Walker County, and Grants/Funding requirements. Utility signatures include, but are not limited to; CenterPoint Energy-Gas, Entergy Company, Mid-South Synergy, AT&T, and cable TV. The Engineer will notify private utility companies of the project and attempt to obtain a response. Signatures will be obtained when possible.
3. Obtain necessary approvals (permits, license agreements, etc.) from TXDOT, Walker County, railroad, pipeline companies, and other pertinent jurisdictional entities prior to final approval by the Engineering Department.

C. Engineering

1. The Engineer is responsible for quality of the final design.
2. The Engineer shall specify the minimum acceptable performance and/or material standards associated with temporary facilities and structures that are determined necessary to implement the Project, that are potentially cause for significant disruption to local communities or businesses, and that are not solely for the convenience of the contractor.
3. The Engineer shall review results from additional services prior to submittal to the City and where applicable, incorporate this information into the Final Design documents. Such additional services may include, but not be limited to, survey, geotechnical, environmental, storm water pollution prevention plans, and special studies.
4. The Engineer shall incorporate the City Standard Details as applicable. The Engineer shall review each Standard Details and edit as necessary to suit Project-specific requirements and to meet the design intent of the Project. Revisions to the Standard Details shall not be incorporated based solely on Engineer's preference, but are subject to review and acceptance by the Director. The Engineer shall notify the Director of all proposed changes to Standard Details and provide reasons for such proposed changes. The Engineer shall prepare additional nonstandard details necessary for bidding and construction of the Project.

5. The Engineer shall prepare specifications in accordance with the Construction Specification Institute (CSI) standard format adopted by the City. The Engineer shall use the City Standard Specifications Table of Contents for Construction Documents as a guide for organization of the Contract Documents. The City Standard Specifications are prepared to include the requirements, features, construction materials, and related items desired by the City based on the City's experience and needs. The Engineer shall review each Standard Specification and supplement as necessary to suit Project-specific requirements and to meet the design intent of the Project. Supplements to the Standard Specifications shall not be incorporated based solely on the Engineer's preference. Supplements are subject to review and acceptance by the Director. The Engineer shall prepare additional nonstandard specifications necessary for bidding and construction of the Project. Incorporate Guide Specifications necessary for bidding and construction of the Project.
6. The Engineer shall incorporate the front-end documents provided by the City into the Project specifications and will complete those front-end documents as necessary to complete the specification.
7. The Engineer shall verify findings from Utility Plan Review with the results of the Route and Site Topographical Survey Services (see Additional Services) and identify potential conflicts during construction. Proposed designs shall strive to avoid conflicts where physically and financially feasible. Relocations of private utilities shall be coordinated with the City of Huntsville as early in design process as possible.

D. Application and Approval of Building Permit

1. The Engineer shall secure approval for the Building Permit Application, which provides the Director with documents necessary for obtaining a City Building Permit.
2. The Engineer shall secure the Floodplain permits from the Floodplain Administrator for the construction of the project.

E. Bidding Services

1. The Engineer shall assist the City in conducting the pre-bid conference, and submit meeting minutes within 3 working days.
2. The Engineer shall prepare necessary addenda to address issues or clarifications necessary for completion of the bidding process.
3. The Engineer shall furnish a tabulation of bids received within 2 working days after the bid opening, with a written recommendation for the award of a construction contract to follow after calling and following up with contractor references.

2.4 Phase III - Construction Phase Services

- A. The Engineer shall make site visits during times when the contractor is actively performing major construction activities. The site visits should be one visit per site location monthly, after the contractor has mobilized and is working. These visits may be combined with any site visits made to resolve field problems relating to the construction.
- B. Upon the completion of a site visit by the Engineer, a “Construction Site Observation/Status Report” shall be submitted to the City. Unless instructed otherwise by the Director, this report shall include, as a minimum, the following:
 - 1. Introduction and project description;
 - 2. Status of Submittals (shop drawings, RFIs, and RFPs);
 - 3. Site observation - to include discussion on whether the work observed was in general conformance with the contract documents;
 - 4. Closing remarks;
 - 5. Location maps;
 - 6. Site photos.
- C. Requests for Information (RFI) will normally be generated by the Construction Contractor when a situation or condition is anticipated or encountered in the field that may not be fully addressed in the Construction Contract Documents. RFIs are to be reviewed and a complete and fully responsive written answer provided to the City within 2 working days, when possible, or as otherwise directed.
- D. The Engineer shall submit the record drawings based on the contractor provided red-lined as-builts within 30 days after receipt of contractor red-lined as-builts.

3.0 ADDITIONAL SERVICES

Unless otherwise authorized or modified by the Director, the Engineer shall perform Additional Services in accordance with the following:

3.1 Survey

- A. Perform in accordance with the City Design Manual, if not available at the time of contracting the Engineer will propose design guidelines to be utilized.
- B. All projects must be tied to the Texas State Plane Coordinate System; all coordinates shown or displayed on any drawings must be true State plane coordinates. Perform in accordance with the City Surveyor’s Mapping Control Network Technical Report dated January 2010.

- C. Route Topographical Survey - Record all topographic features and improvements within the public right-of-way, permanent right-of-way, any contiguous easements to the right-of-way, and any construction right-of-way of the Project, and on all intersecting streets for a distance of 20 feet beyond the intersection of the right-of-way lines. For paving projects, extend the topographic survey at intersecting streets to 150 feet beyond the end of new pavement. Locate sufficient monumentation to determine lot lines, lot street address (unless instructed otherwise by the City), tract lines, and rights-of-way. Identify visible underground structures (by type, type of service, size, invert elevations, and depth) including manholes, inlets, and junction boxes. In general, do not open SWBT, HL&P, and other private utility manholes and junction boxes.”
- D. Deliverables shall be submitted no later than when the 70% drawings are submitted for review. Deliverables for route topographical survey services to the City include the following:
1. Field Book – provide digital photo copies of project applicable pages from the survey field books.
 2. Survey Control Map - A survey control map sheet drawn to scale of 1 inch = 100 feet shall show location and give a description of the vertical and horizontal City of Huntsville survey control monuments used for the Project. The sheet shall show both the survey base line and the Project alignment and give bearings and distances of all control lines. The beginning point, all P.I. points, and end point of both the Project alignment and the survey base line shall list the City of Huntsville survey control system coordinates and be tied into existing topography. The map shall contain the following: street names, centerline bearings, street intersection station equations, P.C.’s, P.T.’s, P.I.’s and curve data. All found property monuments shall be shown on the map with station-offset references made to the Project alignment. Those property monuments used as control monuments in setting the Project alignment shall be indicated. Project benchmarks, swing-tie (three-point tie) sketches, benchmark loops, and traverse shall be provided. The survey control map sheet shall be signed, sealed, and dated by the registered surveyor responsible for the survey.
 3. Survey Drawing - Shows results of field survey work, topography, and improvements.

- E. Survey services for acquisition of right-of-way, easement, or property shall include:
1. Right-of-way surveys and maps which show and describe the right-of-way, easement, or property to be acquired.
 - a. Overall project layout with acquisition parcels identified should be prepared.
 - b. Each acquisition parcel will have a reproducible drawing (no smaller than 11" x 17") to be signed and ink stamped.
 - c. Parcel maps should include NAD 83 State Plane Coordinates.
 - d. Each reproducible drawing will include a City of Huntsville signature block (available from the City of Huntsville website) in title block.
 - e. For encroachments only, enlarged details of the encroachment(s) will be shown on the reproducible drawing for encroachments into street right of way, show the right of way, right of way dimension and the street/avenue name.
 - f. Projects requiring TxDOT approvals should include a set of TxDOT approved, signed and sealed reproducible drawings and metes and bounds descriptions.
 2. Deed research.
 3. Metes and bounds descriptions.
- F. Deliverables for Site Topographical Survey to the City, to be submitted no later than when 70% drawings are due, shall include digital photo copies of project applicable pages from the survey field books, survey control map, and survey drawing.
- G. In compliance with the geotechnical requirements of the City Design Manual, all geotechnical boring locations shall be surveyed upon completion of the geotechnical investigation. Provide station and offset including true State plane coordinates with an accuracy of plus or minus one foot. The Engineer shall deliver the electronic files of this work to the City.
- H. Channel Crossings:
1. Channel cross-sections shall be surveyed at street right-of-way and center of the right-of-way where feasible. At minimum, the survey shall include points at channel right-of-way, flowline of swales, channel high-bank, toe at channel side slope, apparent grade breaks, channel water level and channel flowline invert elevation.
 2. Channel cross-sections shall be shown clearly on the design profile with all points surveyed including channel bottom flowline invert elevation.
 3. The design engineer shall provide the location of the proposed utility crossing alignment to the surveyor. Channel cross-section at the proposed utility crossing location shall be surveyed once the alignment is determined. Any portion of the channel submerged under water shall be surveyed at points no further than 10 feet interval.

4. Complete channel cross-sections (as noted in Item 1 above) shall also be surveyed 20 feet upstream and downstream of proposed pipeline crossing location.

3.2 Geotechnical Investigation

- A. Perform in accordance with the City Design Manual.
- B. Provide geotechnical engineering report, signed and sealed by Professional Engineer, registered in the State of Texas.
- C. A boring location map and individual boring logs shall be incorporated into the geotechnical engineering report. All boring locations shall be clearly identified in the field to permit compliance with the Survey Requirements of the City Design Manual.
- D. Boring logs shall include as a minimum the following information:
 1. City Project File Number.
 2. Boring number.
 3. Boring location-station and either offset or distance from curb, and one other semi-permanent feature and boring elevation.
 4. Date of field work.
 5. Depth to groundwater (both at end of drilling and at 24-hour readings).
 6. Depth to caving.
 7. Completion depth.
 8. Soil and sample symbology.
 9. Soil description - soil type identifications in accordance with the Unified Soil Classification System.
 10. Geotechnical analytical data.
- E. OSHA soil types should be included in the Geotechnical Engineering Report for use in design of a trench safety system. Design of the trench safety should be provided by the Contractor.
- F. The Engineer shall obtain and review boring logs by others. While the Engineer is not responsible for the accuracy of these borings, this information, along with boring logs gathered during the records review, are to be included in the Geotechnical Engineering Recommendations section of the geotechnical report. Include these logs in the appendix.
- G. At each boring location take surface and subsurface roadway core within the existing pavement area to determine the existing pavement section, including the thickness of the pavement, base and sub grade, and material types.
- H. If the potential for contamination exists, or if contamination is encountered at a bore hole location, the Engineer shall immediately notify the Director before proceeding. Comply with all applicable local, state, and federal environmental guidelines.

- I. The Engineer shall obtain permits and arrange for access to boring locations on private property.
- J. The Engineer shall provide for the safety of boring sites, including traffic control commensurate with the traffic and road conditions while working in street right-of-way.
- K. Critical locations (i.e., bayou crossings, railroads, etc.) which occur along the alignment may require site specific geotechnical information. Where the initial alignment borings cannot be positioned so that they provide part or all of this site specific information, additional borings (to depths in excess of the alignment borings) may be in order. Such cases will be handled on an individual basis.
- L. If no water-bearing layer is encountered, one piezometer shall be installed at the deepest boring location.
- M. For tunnel construction:
 - 1. Piezometers shall be installed, in water-bearing layer, at every other boring location.
 - 2. Perform continuous sampling through the tunnel zone (typically 6 feet above and below the tunnel). Sampling outside the tunnel zone should be in accordance with the requirements of the City Design Manual.
 - 3. Extend borings for tunnels typically one tunnel diameter below the tunnel invert, but not less than 15 feet.
 - 4. Extend borings for tunnel shafts typically 1.5 shaft diameters below the bottom of the shaft, but not less than 30 feet. Increase boring depths if necessary to determine the location of water-bearing layers and piezometric levels potentially affecting bottom stability. Use borings of less depth if ground water conditions are not of concern at the particular location.
- N. Obtain a minimum of two borings at each bridge site. Their depth shall be sufficient to develop pile curves, bearing and structural recommendations for the design and construction of the bridge structure.
- O. For bridge and retaining structure designs, in conjunction with TXDOT, perform TXDOT Cone Penetrometer test. Design procedures should be in accordance with TxDOT Bridge Design Manual, latest version.
- P. Perform Slope Stability Analysis for projects that are adjacent to the bank of a bayou or creek where the slope stability is of concern.
- Q. Perform Running Soil and Ground Water Aggressivity tests for projects where metallic pipes are used.

- R. In Projects where sandstone is encountered (also known as cemented soil or cemented sand), the Standard Penetration Test (SPT) shall be done continuously throughout the sandstone layer. Verify the length of the sandstone with additional borings.

3.3 Environmental Services

- A. WOTUS Delineation: Provide Waters of the U.S. (WOTUS) Delineation to evaluate and document any portion of the site to be classified as “Jurisdictional Water of the United States” as defined by CFR 328 and subject to U.S. Army Corps of Engineers (USACE) jurisdiction. The delineation will be conducted according to the 2010 Regional Supplement to the Corps of Engineers (USACE) Wetland Delineation Manual: Great Plains Region (v.2).
- B. Archeological Records Review: The objective of the Historical, Cultural, and Archeological Records Review is to: 1) review related historical information, including the Texas Historical Commission’s (THC) records; and 2) based on the review of THC’s records and property characteristics, determine if the subject tract possesses sufficient criteria to necessitate a detailed study that would evaluate the potential for sites of significant historical, cultural, or archeological public value on the subject property.
- C. Threatened and Endangered Species Assessment with IPAC: The objective of the Threatened and Endangered Species Assessment is to evaluate the potential for the existence of critical or irreplaceable habitats, which are considered protected under the Endangered Species Act of 1973 and subsequent amendments and listings.
- D. Phase I Site Assessment: The Phase I Environmental Site Assessment (Phase I) will be performed in accordance with ASTM standard practice E 1527-2021, Environmental Site Assessments: Phase I Environmental Site Assessments. This practice is intended to permit you to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA (Comprehensive Environmental Response, Compensation and Liability Act) liability: that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC '9601§(35)(B).
- E. Phase II Site Assessment (only if authorized by the City): The Limited Phase II Environmental Site Assessment (Phase II ESA) will be performed in general accordance with ASTM standard practice E 1903-2011, Environmental Site Assessments: Phase II Environmental Site Assessment Process and following the Texas Risk Reduction Program Tiered process for comparison of analyte concentrations. This practice covers a process for conducting a Limited Phase II ESA of a property with respect to the *presence* or the likely *presence of substances* including but not limited to those within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (e.g., *hazardous substances*), pollutants, contaminants, petroleum and *petroleum products*, and controlled *substances* and constituents thereof. It specifies procedures based on the *scientific method* to characterize *property* conditions in an objective, representative, reproducible, and defensible manner. To promote clarity in defining the *Phase II ESA*

objectives and transparency in communicating and interpreting *Phase II ESA* results, this practice specified adherence to requirements for documenting the scope of assessment and constrains on the conducts of the assessment process.

- F. Nationwide Permit (only if authorized by the City): Scope of work for the preparation of a Clean Water Act Section 404 Permit and submission to the USACE will follow the criteria set forth in 33 CFR 330 (Nationwide).
- G. NEPA Documentation (only if authorized by the City): If federal funding is secured for the Force Main Project, upon completion of the various investigations, a NEPA-compliant document (e.g., Environmental Assessment (EA), Environmental Information Document (EID)) will be prepared in accordance with current federal agency requirements and format.

3.4 Special Licenses and Permits (Payment)

- A. The actual cost of special licenses and permits, including required inspection fees, shall be reimbursed by the City.
- B. This additional service does not include Engineering work associated with Basic Services.
- C. Payments for any special licenses and permits are not anticipated at this time.

3.5 Traffic Control Plan (TCP) Not included in scope as additional service

A. General

- 1. Given the location and nature of the proposed project, the typical TXDOT standard TCP should be sufficient.
- 2. The TCP should be accomplished with the least inconvenience to the traveling public consistent with expeditious completion of the Project in time and costs.

B. Standards and Guidelines:

Construction Sequencing and TCP shall be in accordance with general traffic engineering principles and practices governing traffic control during construction as prescribed by the guidelines of the “Texas Manual on Uniform Traffic Control Devices” (TMUTCD), and City of Huntsville requirements.

- 1. The TCP should contain the following basic elements:
 - a. Project approach signing.

- b. Necessary TCP details, including appropriate City standards (Barricade & Construction, etc.), typical lane closures, and intersection details.

C. Drawings:

- 1. Engineer shall use a “typical” TCP detail for portions of the Project wherever possible.

D. General Notes and Specifications:

- 1. Engineer shall add general notes to the drawings or to the City’s Standard General Note Drawing, as required for clarity.
- 2. Typical designs have included/utilized TXDOT standards. Any specific requirement will be developed by the Engineer.

3.6 Storm Water Pollution Prevention Plan (SWPPP)

- A. Refer to City of Huntsville Standard Details and Standard Specifications.
- B. Refer to City of Huntsville “Storm Water Management Handbook for Construction Activities.” If the City hasn’t adopted a plan at contracting point in time, Consultant to identify alternative guideline for approval.
- C. The Engineer shall prepare the following documents in accordance with the above referenced standards and as described below:
 - 1. Pollution Prevention Plan Report, as required.
 - 2. Pollution Prevention Plan drawings having a minimum scale of 1 inch equals to 100 feet and showing all existing and proposed streets, Project alignments, applicable notes, proposed storm water conveyance systems, overland flow arrows, and pollution prevention measures.
 - 3. Pollution Prevention Plan specifications.
 - 4. Pollution Prevention Plan construction quantities and estimate of Construction Cost.
 - 5. The EPA Notice of Intent form (if required).
- D. Storm Water Pollution Prevention Plan Services are not proposed for this project. The Storm Water Pollution Prevention Plan Services provided in the Tanyard Creek Lift Station Expansion project will cover the extents of the Force Main Replacement as well.

3.7 Existing Conditions Survey and Analysis Not included in scope as additional services

- A. The Engineer shall perform a survey and analyses of the existing conditions at designated locations. The Engineer shall submit the results of this work in a separate report.
- B. This special service is used where a separate deliverable is desired, and where the survey/analysis is not directly related to the scope of the new work, thus the engineering cost would not be included in the Basic Services.

Example - Consider a project that includes the mechanical and electrical rehabilitation of an existing pump station at a treatment plant site. Surveying and analyzing the existing conditions of the pump station would not be included under Additional Services, since it is covered under Basic Services with associated enhancement factors (if fee curves are used). However, if on the same project the Public Utilities also desired a survey and analysis of the electrical/mechanical systems of the aeration blowers, but no new work to the existing aeration blowers was included, then this would be an example of Additional Services.

3.85 Tree Protection, Mitigation and Planting Plan

The following requirements are minimum for projects where tree inventory, protection, mitigation is required.

- A. All tree protection, mitigation and planting plans shall be prepared for compliance with Article 7 Landscaping and Buffers of the City of Huntsville Code of Ordinances.
- B. Consultant will conduct and inventory of trees within and immediately adjacent to the street right-of-way including as a minimum: tree number, caliper, species, condition and physical address (where feasible).
- C. Tree Protection Plans will include a project layout sheet with each tree location graphically identified by tree number and the appropriate protection measures to be utilized. Details of protection measures shall be provided as necessary.
- D. The Tree Protection Plan will include a treatment schedule (tabular form) for all trees impacted by the project that shall include the tree number, physical address, species, caliper, condition and recommended treatment schedule.
- E. Tree Mitigation Plan will identify all trees to be removed from the project by tree number, physical address, species, caliper, condition and replacement conditions under the ordinance (tabular form).
- F. Trees identified to be replacements per the Tree Mitigation Plan shall be shown on a Tree Planting Plan of suitable scale and detail along with technical specifications and construction quantities. The Tree Planting Plan shall represent requirements necessary for compliance under the Ordinance.

- G. Tree inventories and treatment schedules are to be provided by a Certified Arborist. Plan and document preparation shall be provided by industry professionals in accordance with State Guidelines.
- H. At this time a place holder cost has been included in the contract only to be used if deemed necessary during the PER phase and as authorized by the City. If improvements are confined to the existing lift station site only, the need for these services is not anticipated. However, if the additional property is required this phase will need to be authorized.

3.9 Underground Utility Investigation

- A. If the need for subsurface utility engineering arises during design of the project, a separate subconsultant agreement will be provided for City review. At this time a place holder cost has been included in the contract only to be used as authorized by the City.

3.10 Construction Materials Testing

- A. Provide as required testing, field and laboratory, of construction materials.

3.11 Project Representative

- A. Provide the City with the necessary documents to gain approval from the Texas Department of Transportation for the portion of the proposed utility that will be installed within TXDOT right-of-way. These documents typically include exhibits with aerial background calling out the coordinates of the proposed utility and a letter with supporting exhibits outlining the abandonment procedures, as well as the plan and profile drawings developed under basic services.

3.12 Project Representative

- A. Provide on-site Resident Project Representation. This will include periodic site visits (typically 10-15 hours a week) to review progress of contractor's work. These visits will be performed on an as needed basis during certain phases of construction. The Resident Project Representative will make his best effort to be on-site during critical phases of work.
- B. It is agreed that the Engineer does not underwrite, guarantee, or ensure the work done by the contractors. Since it is the contractor's responsibility to perform the work in accordance with the Contract Documents, the Engineer is not responsible or liable for the contractors' failure to do so. Failure by any Resident Project Representative or other personnel engaged in on the site observation to discover defects or deficiencies in the work of the contractors shall never relieve the contractors for liability or subject the Engineer to any liability for any such defect or deficiencies.

3.13 Record Drawings

- A. Upon completion of the project, the contract drawings will be revised to reflect all field changes. The completed “record drawings” will be delivered to the Owner.

3.14 Reimbursable Expenses

- A. Reimbursable expenses include travel/mileage, phone charges, reproduction, printing, postage, delivery charges, and other actual charges incurred by the Engineer. Reimbursable expenses will be billed monthly with the invoice indicating the nature of the charge.

4.0 DEFINITION OF PHASE II MILESTONES FOR PAYMENT (Refer to Section 5 of the Contract)

4.1 Research Utilities

- A. Engineer obtains and completes review of available record drawings.
- B. Engineer completes the utility plan review, as defined in this Scope of Services.
- C. Engineer completes coordination with other agencies, as defined in this Scope of Services.
- D. Engineer verifies information obtained in steps A, B, and C above against findings from Survey.
- E. Engineer obtains maps and correspondence from applicable private utilities, showing and verifying location of existing private utilities.

4.2 Plot of Topographical Surveys and Utilities

- A. Engineer submits set of plan drawings showing results of topographic survey and location of existing public and private utilities.

4.3 50% Drawings

- A. Engineer submits sets of construction drawings including, as a minimum:
 - 1. Cover Sheet
 - 2. Overall Layout Sheet
 - 3. Survey Control Map
 - 4. Plan and profile drawings of existing conditions and existing utilities
 - 5. Plan drawings of proposed improvements
 - 6. Profile drawings of proposed improvements at critical locations and potential conflicts
 - 7. Locations of crossings (RR, HCFCD, TXDOT, etc.), potentially contaminated areas, and proposed real estate acquisitions

8. For Facilities Projects – process flow diagrams; piping and instrumentation diagrams, as applicable
 9. For Water & Wastewater Projects – design calculations for the proposed improvements and system head curves for pumps
- B. Engineer submits table of contents for construction specifications.
 - C. Engineer submits design review checklists (as available).
 - D. Engineer makes initial coordination effort with private utilities regarding potential conflicts for the project.

4.4 70% Drawings and Draft Specifications

- A. Engineer submits sets of completed construction drawings including as a minimum:
 1. Cover Sheet
 2. Index Sheet (list of drawings)
 3. Overall Layout Sheet
 4. Survey Control Map
 5. General Notes Sheets (as required)
 6. Plan and profile drawings of existing conditions, existing utilities and proposed improvements
 7. Details of crossings (RR, HCFCD, TXDOT, etc.), potentially contaminated areas, and proposed real estate acquisitions (if required)
 8. Standard Details
 9. Traffic Control Plan and Detour Plans (if required)
 10. Storm Water Pollution Prevention Plan (if required)
 11. Tree and plant protection plan (if required)
 12. For Facilities Projects – process flow diagrams; piping and instrumentation diagrams, as applicable
 13. For Water & Wastewater Projects – design calculations for the proposed improvements and system head curves for pumps
- B. Engineer submits sets of draft construction specifications including as a minimum:
 1. Table of Contents
 2. Document 00410 (Bid Form) with all bid items, but excluding quantities
 3. Section 01110 (Summary of Work)
 4. Completed technical specifications (Division 0 through 16, as required)
 5. All supplemental and non-standard technical specifications included in Divisions 2 through 16 identified.
 6. A detailed construction cost estimate.
- C. Engineer submits documentation that drawings were submitted to private utilities for final review.

- D. Engineer submits design review checklist (as available).

4.5 Final Drawings and Specifications (100% Design)

- A. Engineer submits completed sets of construction drawings, with all review comments resolved.
- B. Engineer submits completed construction specifications.
- C. Engineer submits sheet-by-sheet quantity takeoff and documentation to support the construction duration specified.
- D. Engineer provides permit approval, as applicable, from TXDOT, HCFCD, Railroads, U.S. Army Corps of Engineers, and Walker County Public Infrastructure Department.
- E. Engineer documents submittals of plans to City for Building Permit Application and to Texas Department of Licensing and Regulations for ADA requirements, if applicable.
- F. For wastewater projects, Engineer submits Final Engineering Design Report (FEDR) in conformance with TCEQ requirements.

4.6 Bid-ready Drawings and Specifications

- A. Engineer submits bid-ready construction documents (signed and sealed construction drawings with all required signatures; and completed construction specifications).
- B. Engineer documents that application for City Building Permit is approved, if applicable.

4.7 Bidding Services

- A. Engineer completes services as per requirements of the Contract and the Scope of Services.

PRELIMINARY ENGINEERING REPORT (PER)

ENGINEER'S PHASE-I LOE									
Tanyard Creek Lift Station Force Main Replacement							Total LF of Project:		
Pre Contract Cost Estimat \$1,685,200.00							8,500		
LJA Engineering, Inc.									
Date: April 26, 2023							Principal	Sr. Project Manager	Sr. Project Engineer
Billing Rate per Hour							Project Engineer	EIT Designer	Design Draftsman
Task No.	Description	Raw Salary Per Hour	\$297.50	\$227.50	\$217.00	\$157.50	\$122.50	\$105.00	\$87.50
		Raw Salary Factor	\$85.00	\$65.00	\$62.00	\$45.00	\$35.00	\$30.00	\$25.00
			3.5	3.5	3.5	3.5	3.5	3.5	3.5
BASIC SERVICES- PRELIMINARY PHASE									
LEVEL OF EFFORT									
Project Management									
1	Initiation Project Set-up		1	3				4	8
2	Meetings		1	5			6		12
3	Project Schedule			3			4		7
5	Project Management			8					8
6	Project Oversight			5					5
General Coordination									
7	Prepare General Vicinity Maps						1	3	4
8	Prepare Color Maps for City Review			2			2	4	8
9	Coordinate with other City Departments and Governmental Agencies			2			6	4	12
Preliminary Engineering									
10	Gather Existing Information (City GIS, Record Dwgs etc.)			3			6		9
11	Site visits to define existing conditions			4			6	6	16
12	Identify and define conflicts			4			4	6	14
13	Evaluate alternatives			8			18		26
14	Identify existing ROW/Easements and constraints, if any				4			10	14
15	Identify necessary permits, easements and agreements								0
16	Proposed sewer force main line layout and other exhibits			3			5	20	28
17	Quantities and construction cost estimates			3			8	10	21
18	Identify necessary permits, easements and agreements			1			6		7
19	FEMA Map			1				4	5
20	Photo survey						6	4.39	10.39
21	Prepare report			8			20	6	34
22	QAQC		2	2	10			4	18
Hours Sub-total			4	65	10	4	98	63	22.39
Phase I Total:									\$39,360.00

Project Tanyard Creek Lift Station Force Main Replacement																
Project 123-10-01 (FM)		File No.														
No. Sheets	Description / Task	Estimated Manhours										Subtotal (cost \$)	Subs (cost)	Subs (cost+8 %) NOT USED	Other Direct Costs (NOT USED)	Total Fee
		Principal	Project Manager	Construction Manager	Project Rep	EIT Designer	Design Draftsman		Construction Admin	Admin. (hrs)	Subtotal (hrs)					
	Raw Salary	\$ 85.00	\$ 65.00	\$ 51.00	\$ 45.00	\$ 35.00	\$ 32.00	\$ 1.00	\$ 37.00	\$ 25.00	\$ 1.00					
	Raw Salary Multiplier (3.50)	\$ 297.50	\$ 227.50	\$ 178.50	\$ 157.50	\$ 122.50	\$ 112.00	\$ 3.50	\$ 129.50	\$ 87.50	\$ 3.50					
I	Phase II - Final Design :															
A	Project Management and Document Submission															
	Project Management	2	10								12	\$ 2,870.00		\$ -		\$ 2,870.00
	Prepare Schedules		4			18					22	\$ 3,115.00		\$ -		\$ 3,115.00
	Perform QA/QC (50%, 70%, 100% Reviews)	4	15			4					23	\$ 5,092.50		\$ -		\$ 5,092.50
	Project Meetings (6 @ 3 hours ea. + meeting minutes)		24			6				6	36	\$ 6,720.00		\$ -		\$ 6,720.00
	Utility Corrd/Approvals (COH, Walker County, Utility Co.)		6			14					20	\$ 3,080.00		\$ -		\$ 3,080.00
	Prepare Base Existing Utility P/P Sheets		4			15	65				84	\$ 10,027.50		\$ -		\$ 10,027.50
	Prepare/Assemble Project Manual		4			18				9.83	31.83	\$ 3,975.00		\$ -		\$ 3,975.00
	Prepare Construction Quantities/Opinion of Cost		4			20	10				34	\$ 4,480.00		\$ -		\$ 4,480.00
	Subtotal Project Management	6	71	0	0	95	75	0	0	15.8285714	262.8285714	\$ 39,360.00	\$ -	\$ -	\$ -	\$ 39,360.00
		\$ 1,785.00	\$ 16,152.50	\$ -	\$ -	\$ 11,637.50	\$ 8,400.00	\$ -	\$ -	\$ 1,385.00	262.8285714					
B	Drawings	\$ 39,360.00														
1	Cover Sheet		1			2	2				5	\$ 696.50		\$ -		\$ 696.50
1	General Notes		4			8	16				28	\$ 3,682.00		\$ -		\$ 3,682.00
2	Project Layout		5			5	20				30	\$ 3,990.00		\$ -		\$ 3,990.00
2	Survey Control Sheet		5			5	10				20	\$ 2,870.00		\$ -		\$ 2,870.00
18	Plan and Profile Sheet		20			80	150				250	\$ 31,150.00		\$ -		\$ 31,150.00
2	Standard Sanitary Sewer Details		5			6	18				29	\$ 3,888.50		\$ -		\$ 3,888.50
2	Storm Water Pollution Prevention Plan		2			2	12				16	\$ 2,044.00		\$ -		\$ 2,044.00
1	Storm Water Pollution Prevention Details		2			2	6				10	\$ 1,372.00		\$ -		\$ 1,372.00
1	Traffic Control Plan - Conventional Road Shoulder Work		2			4	6				12	\$ 1,617.00		\$ -		\$ 1,617.00
1	Standard Barricade Details		1			1	7.32				9.32	\$ 1,170.00		\$ -		\$ 1,170.00
31	Subtotal Drawings	0	47	0	0	115	247.3214286	0	0	0	409.3214286	\$ 52,480.00	\$ -	\$ -	\$ -	\$ 52,480.00
		\$ -	\$ 10,692.50	\$ -	\$ -	\$ 14,087.50	\$ 27,700.00	\$ -	\$ -	\$ -	409.3214286					
C	Bidding Phase	\$ 52,480.00														
	1. Attend Pre-Bid Meeting		4			4					8	\$ 1,400.00		\$ -		\$ 1,400.00
	2. Prepare Attachments for Addenda to be Issued		3			8					11	\$ 1,662.50		\$ -		\$ 1,662.50
	3. Provide Responses to City Regarding Bidder Questions		2			5					7	\$ 1,067.50		\$ -		\$ 1,067.50
	4. Bid Evaluation / Bid Tabulation		2			4					6	\$ 945.00		\$ -		\$ 945.00
	5. Prepare Recommendation of Award		2			2					4	\$ 700.00		\$ -		\$ 700.00
	6. Assemble Construction Contract Information		3			10	4.62				17.62	\$ 2,425.00		\$ -		\$ 2,425.00
	Subtotal Bidding Phase	0	16	0	0	33	4.6205357	0	0	0	53.6205357	\$ 8,200.00	\$ -	\$ -	\$ -	\$ 8,200.00
		\$ -	\$ 3,640.00	\$ -	\$ -	\$ 4,042.50	\$ 517.50	\$ -	\$ -	\$ -	53.6205357					
		\$ 8,200.00														
Subtotal Phase II - Final Design :		6	134	0	0	243	326.9419643	0	0	15.8285714	725.7705357	\$100,040.00	\$0.00	\$0.00	\$0.00	\$100,040.00
		\$ 1,785.00	\$ 30,485.00	\$ -	\$ -	\$ 29,767.50	\$ 36,617.50	\$ -	\$ -	\$ 1,385.00						
		\$ 100,040.00														

II	PHASE III - CONSTRUCTION PHASE SERVICES:															
	Pre-Construction															
	Attend Pre-Construction Meeting		4	4							8	\$ 1,624.00		\$ -		\$ 1,624.00
	Prepare Meeting Minutes			2							2	\$ 357.00		\$ -		\$ 357.00
	Contractor Submittals															
	Review Submittals and Prepare Responses			12	12						24	\$ 4,032.00		\$ -		\$ 4,032.00
	Requests for Information															
	Project Coordination w/Contractor/City		2	2	10						14	\$ 2,387.00		\$ -		\$ 2,387.00
	Respond to RFI's		6		8				2		16	\$ 2,884.00		\$ -		\$ 2,884.00
	Prepare Design Changes		5								5	\$ 1,137.50		\$ -		\$ 1,137.50
	Review/respond to Proposals/Modifications/CO		2	4	4				3		13	\$ 2,233.00		\$ -		\$ 2,233.00
	Meetings and Site Visits															
	Attend Monthly Meetings (3hrs ea./1/month - 6 month duration)			18							18	\$ 3,213.00		\$ -		\$ 3,213.00
	Prepare Monthly Meeting Minutes								8.85		8.85	\$ 1,146.50		\$ -		\$ 1,146.50
	Project Closeout															
	Attend Substantial Completion Inspection		4		4						8	\$ 1,540.00		\$ -		\$ 1,540.00
	Attend Final Completion Inspection		4	4	4						12	\$ 2,254.00		\$ -		\$ 2,254.00
	Review/comment on Punchlist		2	2	2						6	\$ 1,127.00		\$ -		\$ 1,127.00
	Prepare and Submit Certification Letter		1	1					2		4	\$ 665.00		\$ -		\$ 665.00
	Record Drawings															
	Additional Service										0	\$ -		\$ -		\$ -
	Subtotal Phase III - Construction Phase Services	0	30	49	44	0	0	0	15.8532819	0	138.8532819	\$ 24,600.00	\$ -	\$ -	\$ -	\$ 24,600.00
		\$ -	\$ 6,825.00	\$ 8,746.50	\$ 6,930.00	\$ -	\$ -	\$ -	\$ 2,053.00	\$ -	138.8532819					
											\$ 24,554.50					
	TOTAL PHASE II - BASIC SERVICES HOURS	6	134	0	0	243	326.9419643	0	0	15.8285714	725.7705357	725.7705357				
	TOTAL PHASE II - BASIC SERVICES COST	\$ 1,785.00	\$ 30,485.00	\$ -	\$ -	\$ 29,767.50	\$ 36,617.50	\$ -	\$ -	\$ 1,385.00	\$100,040.00	\$100,040.00	\$0.00		\$0.00	\$100,040.00
	TOTAL PHASE III - BASIC SERVICES HOURS	0	30	49	44	0	0	0	15.8532819	0	138.8532819	138.8532819				
	TOTAL PHASE III - BASIC SERVICES COST	\$ -	\$ 6,825.00	\$ 8,746.50	\$ 6,930.00	\$ -	\$ -	\$ -	\$ 2,053.00	\$ -	\$24,554.50	\$ 24,600.00	\$ -		\$ -	\$ 24,600.00
Total																\$124,640.00

MEMORANDUM OF AGREEMENT

Subject: Tanyard Creek Lift Station Force Main Replacement
PRJ ID: 23-10-01 (FM)

Total Estimated Contract Amount (Phase II, III, and Additional Services): \$474,640.00
Additional Services Budgets

Activity No.	Services (Example Only)	Contract/ Exhibit A	Performed by Prime	Other Consultant	Extended Amount
1	Topographic Survey		\$60,000.00		\$60,000.00
2	Set Survey Control Points (Included in Activity No. 1)				\$0.00
3	Prepare Metes/Bounds for Easement Acquisition (assumed 8 @ \$5K/each)		\$40,000.00		\$40,000.00
4	Underground Utility Investigation (place holder)			\$40,000.00	\$40,000.00
5	Geotechnical Investigation			\$15,000.00	\$15,000.00
6	Construction Materials Testing			\$15,000.00	\$15,000.00
7	Environmental Site Assessment, Phase I (includes WOTUS Delineation, Archeological Review, & Threatened/Endangered Species)		\$22,000.00		\$22,000.00
8	Environmental Site Assessment, Phase II (place holder)		\$28,000.00		\$28,000.00
9	Environmental, Nationwide Permit (if required) (place holder)		\$18,000.00		\$18,000.00
10	Environmental, NEPA Document (if required) (place holder)		\$35,000.00		\$35,000.00
11	TXDOT UIR Permitting		\$5,000.00		\$5,000.00
12	Storm Water Pollution Prevention Plan (Covered under LS Project)				\$0.00
13	Project Representative (180 CD / 10-15 hrs per week)		\$50,000.00		\$50,000.00
14	Prepare Record Drawings		\$3,500.00		\$3,500.00
15	Reimbursable Expenses (Reproduction, Travel/Mileage, Shipping, etc)		\$7,500.00		\$7,500.00
16	Special Licenses and Permits (place holder)			\$1,000.00	\$1,000.00
17	Tree Protection, Mitigation and Planting Plan			\$10,000.00	\$10,000.00
18	Prepare Existing Utility Plan and Profile Base Mapping	Basic Services			\$0.00
19	Traffic Control Plan (anticipate basic TXDOT TCPs)	Basic Services			\$0.00
	Subtotal		\$269,000.00	\$81,000.00	\$350,000.00
	multiplier (1.2.1.2 – 8%)	NOT USED	0.00	0.00	\$0.00
	Total Additional Services		\$269,000.00	\$81,000.00	\$350,000.00

List of Proposed Subconsultants & Fee Participation
Project Name: Tanyard Creek Lift Station Force Main Replacement
Project ID: 23-10-01 (FM)
Prime Consultant: LJA Engineering, Inc.

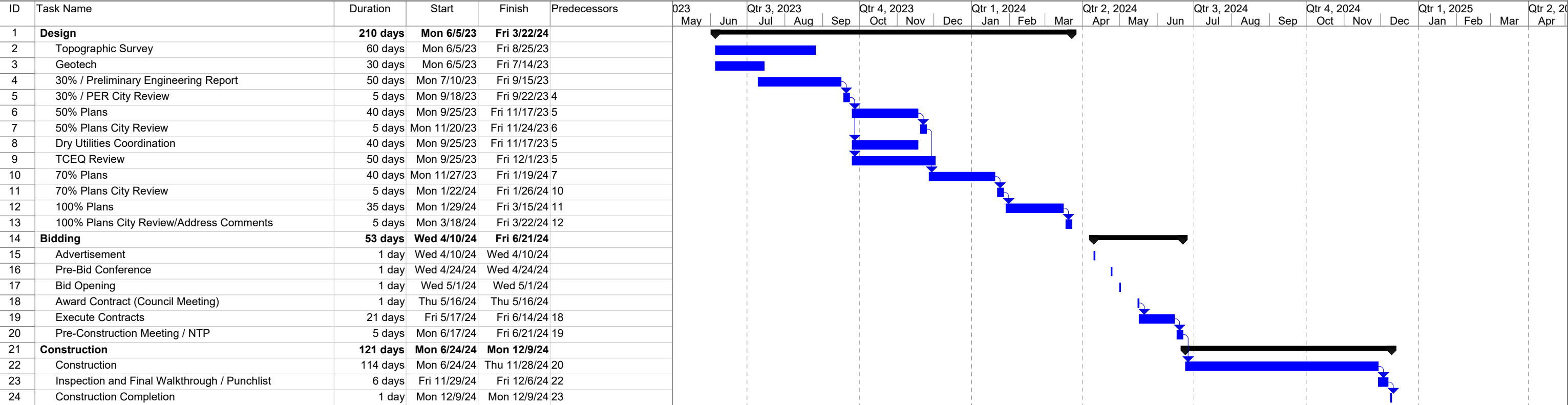
Activity	Cost
Estimated Construction Cost	\$1,685,200.00
Basic Services Fee (Phase I)	\$39,360.00
Basic Services Fee (Phase II & III)	\$124,640.00
Additional Services Fee	\$350,000.00
Total Fee Proposal	\$514,000.00

Description of Basic/Additional SUB Services	Consultant	Fee Schedule
Underground Utility Investigation (place holder)	TBD	\$40,000.00
Geotechnical Investigation	Terracon Consultants, Inc	\$15,000.00
Construction Materials Testing	Terracon Consultants, Inc	\$15,000.00
Tree Protection, Mitigation and Planting Plan (place holder)	TBD	\$10,000.00
Total SUB Services Proposed		\$80,000.00

Engineering Opinion of Probable Cost
Contract Negotiations
PRJ ID No.: 23-10-01 (FM)

			PRE-DESIGN Estimate 2023-04-26		
NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	AMOUNT
BASE BID ITEMS					
1	Mobilization (Not Greater Than 5% of Base Bid)	LS	1	\$ 75,000.00	\$ 75,000.00
2	Project Identification Signs	EA	2	\$ 1,000.00	\$ 2,000.00
3	NPDES Requirements (SWPPP)	LS	1	\$ 10,000.00	\$ 10,000.00
4	14" Sanitary Force Main (Open Cut Construction)	LF	6,400	\$ 120.00	\$ 768,000.00
5	14" Sanitary Force Main (Augered Construction)	LF	2,000	\$ 135.00	\$ 270,000.00
6	14" Sanitary Force Main (Augered & Encased Construction)	LF	100	\$ 470.00	\$ 47,000.00
7	Connect Proposed 14" Force Main to Existing Force Main	EA	1	\$ 3,000.00	\$ 3,000.00
8	Connect Proposed 14" Force Main to Existing Sanitary Manhole	EA	1	\$ 5,000.00	\$ 5,000.00
9	Sanitary Sewer Air/Vacuum Release Valve Manhole	EA	4	\$ 20,000.00	\$ 80,000.00
10	14" Isolation Valve on Sanitary Force Main	EA	4	\$ 4,000.00	\$ 16,000.00
11	Cut & Plug Exist. Force Main	EA	2	\$ 1,000.00	\$ 2,000.00
12	Fill Abandoned Force Main, 10-inch, with Cement Slurry within TXDOT ROW	LF	50	\$ 20.00	\$ 1,000.00
13	Remove Existing Force Main, 10-inch, within TXDOT ROW	LF	1,400	\$ 15.00	\$ 21,000.00
14	Trench Safety System	LF	8,500	\$ 4.00	\$ 34,000.00
15	Traffic Control	MO	6	\$ 4,000.00	\$ 24,000.00
16	Turf Establishment, Hydro-mulch Seeding	AC	4	\$ 2,500.00	\$ 10,000.00
17	Surface Restoration, Asphalt Surface	SY	100	\$ 100.00	\$ 10,000.00
18	Surface Restoration, Unpaved Surface (Gravel or Shell)	SY	1,400	\$ 50.00	\$ 70,000.00
19	SWPP, Reinforced Filter Fabric Barrier	LF	8,500	\$ 4.00	\$ 34,000.00
20	SUBTOTAL BASE BID ITEMS				\$ 1,482,000.00
SUPPLEMENTARY BID ITEMS					
21	"Extra" Well Point Dewatering System	LF	500	\$ 50.00	\$ 25,000.00
22	"Extra" Bedding and Backfill for Wet Sand Construction	CY	500	\$ 10.00	\$ 5,000.00
23	"Extra" Bank Sand	CY	100	\$ 10.00	\$ 1,000.00
24	"Extra" Crushed Limestone	CY	50	\$ 20.00	\$ 1,000.00
25	"Extra" Cement Stabilized Sand, 2.0 Sacks per Ton	TON	40	\$ 25.00	\$ 1,000.00
26	"Extra" Class A Concrete	CY	30	\$ 100.00	\$ 3,000.00
27	"Extra" Reinforcing Steel	LB	500	\$ 2.00	\$ 1,000.00
28	"Extra" Crushed Concrete, 1" to 2" Gradation	TON	500	\$ 18.00	\$ 9,000.00
29	"Extra" Turf Establishment, Full Sodding	SY	1,000	\$ 4.00	\$ 4,000.00
	SUBTOTAL SUPPLEMENTARY BID ITEMS				\$ 50,000.00
INTERIM SUBMITTAL This document submitted for review only. Not intended for construction, bidding, or permit.			SUBTOTAL \$ 1,532,000.00		
			CONTINGENCY (10%) \$ 153,200.00		
			TOTAL \$ 1,685,200.00		

City of Huntsville
Tanyard Creek Lift Station Force Main Replacement
COH Project ID # 23-10-01 (FM)



TANYARD CREEK
LIFT STATION FORCE MAIN
REPLACEMENT PROJECT
LIFT STATION EXPANSION &
IMPROVEMENT PROJECT

VICINITY EXHIBIT
APRIL 2023

LEGEND

- PARCELS
- FLOODWAY
- 100 YEAR
- 500 YEAR
- LS

 PROPOSED PROJECT
LOCATION TANYARD
CREEK LIFT STATION

 PROPOSED PROJECT
LOCATION FORCE
MAIN ALIGNMENT CHANNELS ABANDONED
PIPELINE PIPELINE IN SERVICE

DATA SOURCE: EFFECTIVE: FLOODPLAIN AND CHANNELS DATA -
FEMA, PARCELS - WALKER COUNTY, PIPELINES - RAILROAD
COMMISSION OF TEXAS (RRC)



AERIAL PHOTOGRAPH DATE: NEARMAP 2022

THIS PRODUCT IS FOR INFORMATIONAL PURPOSES AND MAY NOT HAVE
BEEN PREPARED FOR OR BE SUITABLE FOR LEGAL, ENGINEERING, OR
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SURVEY AND REPRESENTS ONLY THE APPROXIMATE RELATIVE LOCATION
OF PROPERTY BOUNDARIES.



3600 W Sam Houston Parkway S, Suite 600
Houston, Texas 77042
Phone 713.953.5200 TBPE F-1386
LJA.com

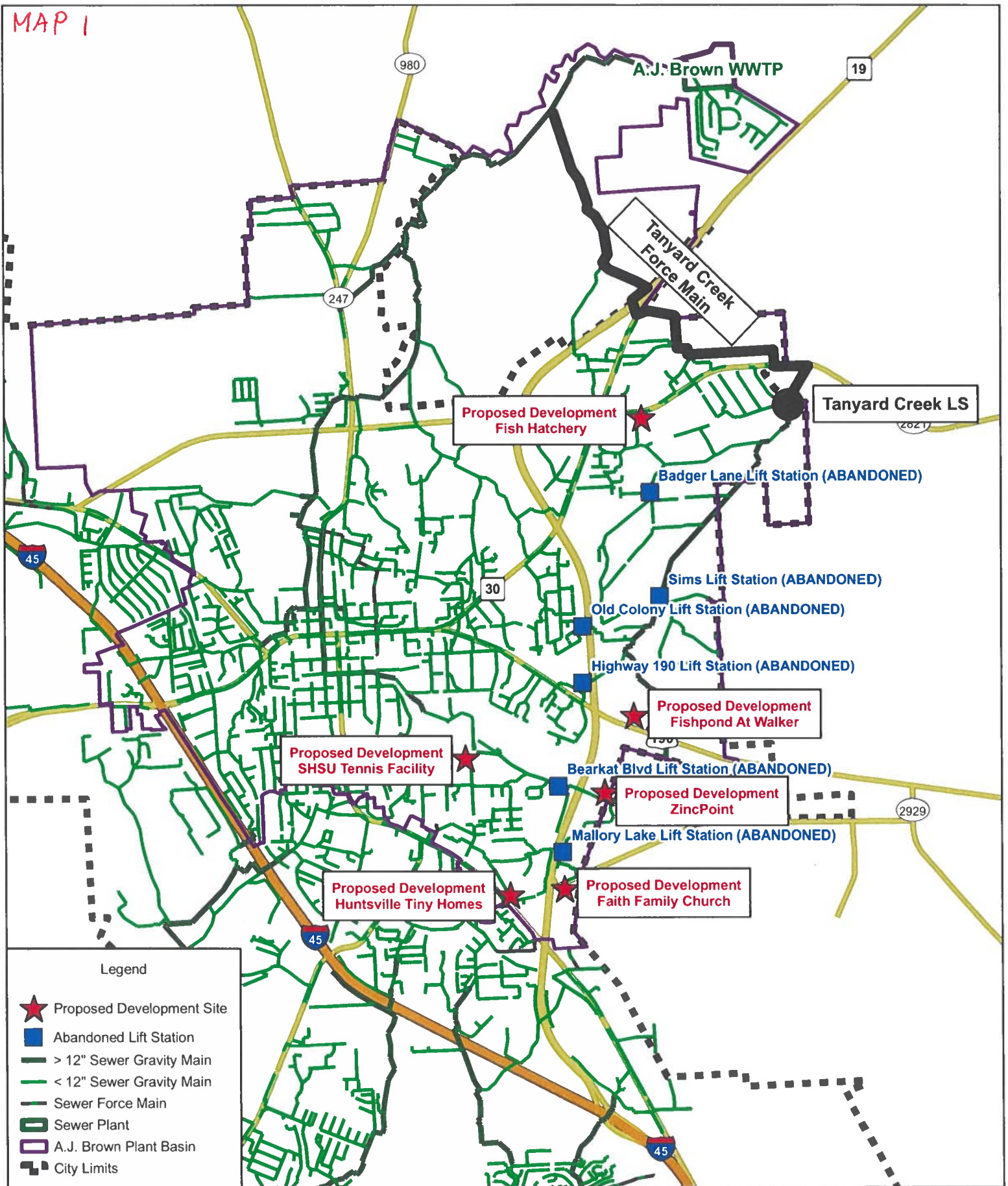


Tanyard Creek Lift Station Force Main Replacement
COH Project ID: 23-10-01 (FM)
LJA Engineering Proposal No.: 23-18063 Addendum No. 1 to Fee Authorization

CURRENT AUTHORIZATION		
Tasks	Basis of Compensation	Compensation
1. Basic Engineering – Phase I	Lump Sum	\$ 39,360.00
2. Basic Engineering – Phase II	Lump Sum	\$ 100,040.00
3. Surveying Services	Lump Sum	\$ 60,000.00
4. Underground Utility Investigation	Place Holder Only	\$ 40,000.00
5. Geotechnical Investigation	Time & Materials	\$ 15,000.00
6. Environmental Site Assessment, Phase I	Lump Sum	\$ 22,000.00
7. TXDOT UIR Permitting	Lump Sum	\$ 5,000.00
8. Reimbursable Expenses	Engineer's Cost + 10%	\$ 7,500.00
9. Special Licensing and Permits	Place Holder Only	\$ 1,000.00
Total Engineering Services		\$ 289,900.00

FUTURE AUTHORIZATION		
Tasks	Basis of Compensation	Compensation
1. Basic Engineering – Phase III	Lump Sum	\$ 24,600.00
2. Metes/Bounds for Property Acquisition	\$5,000 Per Parcel	\$ 40,000.00
3. Construction Materials Testing	Time & Materials	\$ 15,000.00
4. Environmental Site Assessment, Phase II	Place Holder Only	\$ 28,000.00
5. Environmental, Nationwide Permit (if req'd)	Place Holder Only	\$ 18,000.00
6. Environmental, NEPA Document (if req'd)	Place Holder Only	\$ 35,000.00
7. Project Representative	Time & Materials	\$ 50,000.00
8. Record Drawings	Lump Sum	\$ 3,500.00
9. Tree Protection, Mitigation & Planting Plan	Place Holder Only	\$ 10,000.00
Total Engineering Services		\$ 224,100.00

MAP 1



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On 8.5 x 11 inch Print

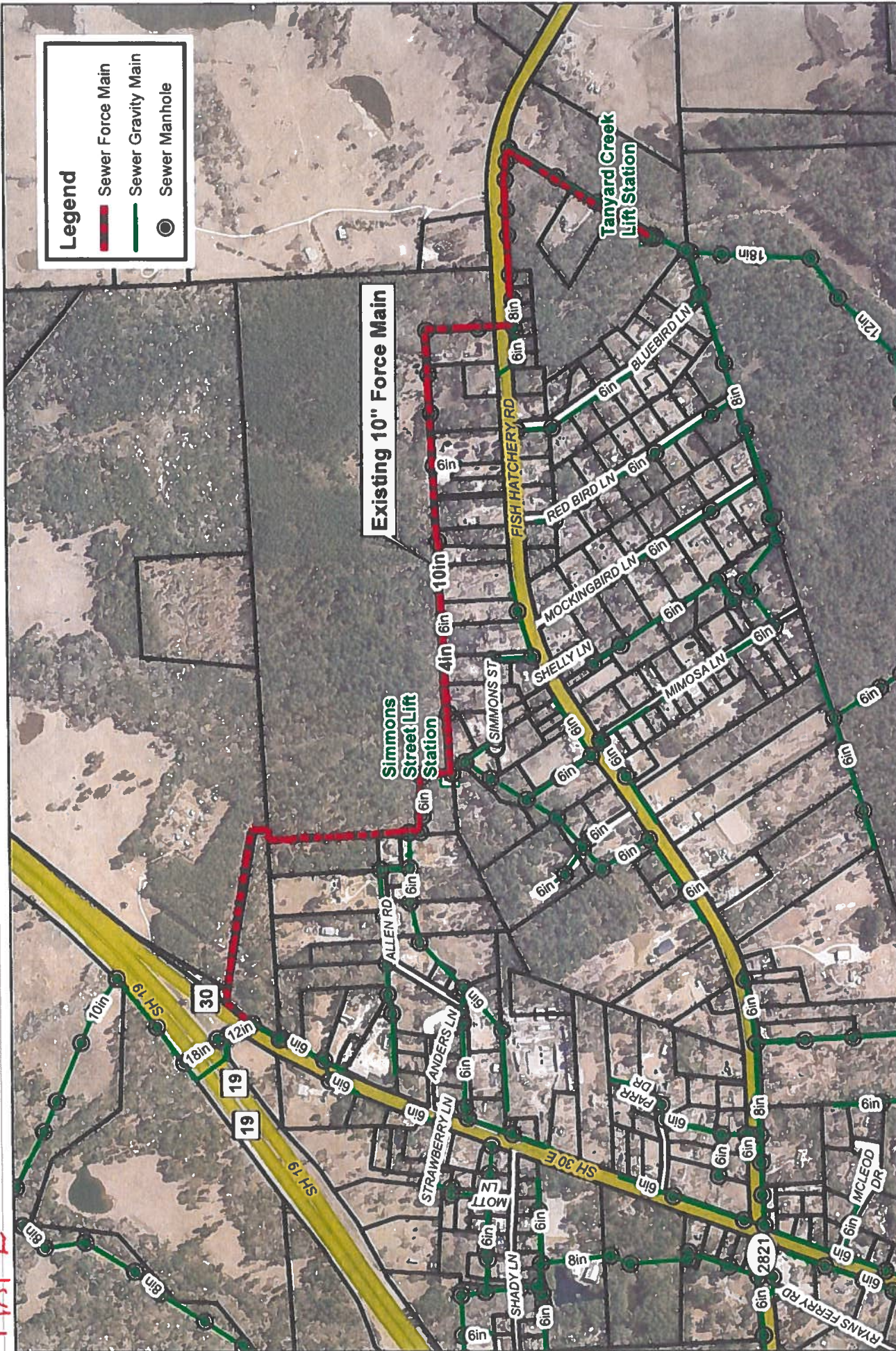
0 1,500 3,000 6,000 Feet

On Any Print Size

CREATED DATE: 11/10/2023

CITY OF HUNTSVILLE, TX
ENGINEERING DEPARTMENT / GIS DIVISION
**PROPOSED DEVELOPMENTS, ABANDONED LS's,
TANYARD CREEK LS & FORCE MAIN**





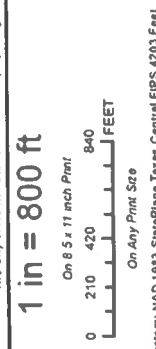
Legend

- Sewer Force Main
- Sewer Gravity Main
- Sewer Manhole

Existing 10" Force Main

CREATED DATE: 12/19/2022
CITY SERVICE CENTER
448 STATE HIGHWAY 75
HUNTSVILLE, TX, 77320
Map Created At:
www.huntsvilletx.gov/gis

CITY OF HUNTSVILLE, TX
ENGINEERING DEPARTMENT / GIS DIVISION
**Proposed Replacement of 10" Force Main
to 14" Force Main
(8500 LF)**



Coordinate System: NAD 1983 StatePlane Texas Central FIPS 4203 Feet

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