

AGENDA
BENBROOK PLANNING AND ZONING COMMISSION
THURSDAY, MARCH 12, 2026
911 WINSOTT ROAD, BENBROOK, TEXAS
A quorum of the Benbrook City Council may be in attendance at this meeting
PRE-COMMISSION WORKSESSION, 7:00 P.M.
EXECUTIVE CONFERENCE ROOM

1. Review and Discuss Items for the Regular Meeting
2. Review Items Administratively Reviewed/Approved by Staff

REGULAR MEETING, 7:30 P.M.
COUNCIL CHAMBERS
ALL AGENDA ITEMS ARE SUBJECT TO FINAL ACTION

I. CALL TO ORDER

II. MINUTES

A. Approve Minutes Of The Regular Meeting Held On January 8, 2026

Documents:

[PZ MINUTES 01.08.2026.PDF](#)

III. REPORTS BY CITY STAFF

A. Rezoning [PUBLIC HEARING]

1. **PZ-2026-02 – A Request To Rezone Approximately 61.31 Acres Of Land, Situated In The Thomas G. Zachary Survey, Abstract No. 1759, From “C-PD” Multiple-Family Planned Development District To “A-PD” One-Family Planned Development District. The Property Is Generally Located On The East Side Of I.H. 820 Between Veterans Pkwy And Chapin Rd (4501 W Loop 820 S).**

Documents:

[PZ-2026-02 PZ STAFF REPORT.PDF](#)
[PZ-2026-02 ATTACHMENTS.PDF](#)

IV. ADJOURNMENT

Motion carried: 8 – 0 – 0

V. MINUTES

A. Approve Minutes of the Regular Meeting Held on December 11, 2025.

Motion by Commissioner Ellison to approve the December 11th meeting minutes, with clarification added that Mr. Howard clarifying comment to the Commission at the end of the meeting was made after the adjournment. Seconded by Commissioner Craver. The presiding officer called the question.

Vote on the motion:

Ayes: Mr. Myers, Mr. Ellison, Mr. Wallis, Mr. Craver, Mr. Harville, and Ms. Rodriguez.

Noes: None

Abstain: Mr. Marino and Mr. Adelman

Motion carried: 6 – 0 – 2

VI. REPORTS BY CITY STAFF

A. No Items

VII. ADJOURNMENT

The presiding officer adjourned the meeting at 7:33 p.m.

APPROVED _____, 2026

Chair/Presiding Officer



City of Benbrook

Planning and Zoning Commission

DATE: 03/12/2026	REFERENCE NUMBER: PZ-2026-02	SUBJECT: Rowan Ranch: A request to rezone 61.31 acres of land from "C-PD" Multiple-Family District to "A-PD" One-Family Planned Development District [PUBLIC HEARING]	PAGE: 1 of 4
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Request Type:	Rezoning
Site Description:	Approximately 61.31 acres situated in the T.G. Zachary Survey, Abstract No. 1759
Location:	East of IH-820, near Mary's Creek; Approx. 1,050ft north of Veterans Pkwy, along the frontage road east of IH-820 (4501 W Loop 820 S)
Current Zoning District:	"C-PD" Multiple-Family Planned Development District (Ord. 1490)
Proposed Zoning District:	"A-PD" One-Family Planned Development District
Property Owner(s):	Chapin Holdings LLC, Fort Worth, TX
Applicant:	Ron Ramirez, Evolving Texas, Fort Worth, TX

Summary

The applicant requests to rezone approximately 61.31 acres of land located east of IH-820, near Mary's Creek, from the existing "C-PD" Multiple-Family Planned Development District to "A-PD" One-Family Planned Development District. (see Attachment 8, pp. 4-14 for full details on the specific proposed development regulations).

Historical Background

In June 2023, the City Council adopted Ord. 1490, establishing a Planned Development (PD) using the "C" Multiple-Family District as the base zoning district. The ordinance:

- Limited primary building types to two-family dwellings only;
- Restricted residential development to property located outside the 100-year FEMA floodplain and within the boundary designated as Area 1 (approximately 18.6 acres);
- Preserved more than 60 acres of land as undeveloped open space (Area 2), with limited exceptions outlined in Ord. 1490;
- Set a maximum density of 12.5 dwelling units per acre (DU/AC) for the developable area, with an overall district density of approximately 2.87 DU/AC. Under the original "SD" Suburban District zoning, the district potentially could have allowed up to 8 lots (a minimum lot size of 10 acres), providing a density of about 0.01 dwelling units per acre; and
- Established enhanced landscaping standards, set tree preservation and mitigation standards, increased required front, side, and rear building setbacks, and reduced maximum height standards for the development.

DATE: 03/12/2026	REFERENCE NUMBER: PZ-2026-02	SUBJECT: Rowan Ranch: A request to rezone 61.31 acres of land from “C-PD” Multiple-Family District to “A-PD” One-Family Planned Development District [PUBLIC HEARING]	PAGE: 2 of 4
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In June 2024, one year after the adoption of Ord. 1490, a deed was recorded transferring ownership from Altgelt Laughlin Group LTD to Chapin Holdings LLC (D224101727 and D224098067).

In September 2024, the Planning and Zoning Commission voted to recommend that the City Council deny a rezoning request (City File #Z-24-01) for this property. The request sought to divide the property into 3 regulatory areas; “D-PD” Multiple-Family Development (Area 1: 16.4 acres), Open Space attached to the “D-PD” (Area 2: 36.9 acres), and “BR-PD” One-Family Reduced Development (Area 3: 26.5 acres). In response, the applicant withdrew the rezoning application and, in November of 2024, requested the Commission's authorization to allow the City to accept a new rezoning application for further consideration. The Commission voted to deny that request.

In August 2025, the City Council denied with prejudice a rezoning request involving two components: a request to rezone a portion of the site to the “D” Multiple-Family District, and a request that would have allowed a “BR” One-Family Reduced District development within Area 2, as identified in Ord. 1490. Because the denial was issued with prejudice, the City may not accept another rezoning application requesting either of the same zoning classifications (“D” or “BR”) for a period of 12 months.

In January 2026, the City Council denied with prejudice a rezoning request involving two components: a request that would have allowed a “B” One-Family District development within Area 2 (61.3 acres), as identified in Ord. 1490 and allow the remainder of the site to remain “C-PD” (18.6 acres), generally consistent with the existing Planned Development district. Because the denial was issued with prejudice, the City may not accept another rezoning application requesting either of the same zoning classifications (“B” or “C-PD”) for a period of 12 months.

Adjacent Properties

Adjacent zoning districts and property information are primarily as follows:

North: The northern boundary includes three distinct areas near Mary’s Creek:

1. The western portion is zoned “SD” Suburban District and consists of unplatted, mostly vacant land.
2. Moving eastward along the northern property line is the Pecan Valley subdivision, zoned “A” One-Family District. This is a typical single-family residential subdivision with an average density of approximately 2.84 dwelling units per acre (DU/AC).
3. Further east along the northern property line are large unplatted tracts of land zoned “A” One-Family District, containing several single-family homes built in the 1940s and 1950s.

East: The eastern boundary includes two distinct areas:

1. Near the northeastern end this boundary line is the Russ Lo Valley subdivision, zoned “A” One-Family District, characterized by larger single-family lots with an average density of approximately 2.6 DU/AC.
2. Directly adjacent to the eastern boundary is a large lot of approximately 35-acres, zoned “B” One-Family District, which is preliminarily approved for a 5-lot subdivision, which equates to a very low density of approximately 0.14 DU/AC. This lot is part of the La Cantera subdivision, which is a multi-phased neighborhood featuring a variety of lot sizes. The nearest phase (PH 1), aside from the 35-acre lot, has a density of 0.61 DU/AC.

DATE: 03/12/2026	REFERENCE NUMBER: PZ-2026-02	SUBJECT: Rowan Ranch: A request to rezone 61.31 acres of land from “C-PD” Multiple-Family District to “A-PD” One-Family Planned Development District [PUBLIC HEARING]	PAGE: 3 of 4
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South: The southern boundary includes two distinct areas:

1. Along the IH-820 frontage is property zoned “C-PD”, a portion of the subject property’s existing Planned Development (Ord. 1490) zoning district. The land is currently vacant.
2. Reata Place subdivision, zoned “B-PD” One-Family Planned Development, with an average residential density of approximately 2.25 DU/AC.

West: The western boundary of the site is defined by the IH-820 frontage road, which also marks the City of Fort Worth city limits.

Floodplain Consideration

Portions of the subject site lie within a FEMA-designated floodplain; however, the presence of the floodplain does not prevent the property from being assigned a zoning district. Zoning is the first step in a multi-layered regulatory process that grants certain development rights, but it does not guarantee that a project can proceed without meeting all applicable development standards.

These technical and regulatory requirements are reviewed during later stages of the development process by the appropriate agencies, which may include the City of Benbrook, FEMA, the City of Fort Worth, and the U.S. Army Corps of Engineers.

Staff Analysis

The applicant requests to rezone a 61.31-acre portion of the existing Planned Development District adopted under Ordinance No. 1490 (“Area 2”) to a new “A-PD” designation, while maintaining the existing Planned Development framework for the remainder of the property (“Area 1”). The request would effectively carve out a portion of the previously approved Planned Development without comprehensively amending the regulations that govern the tract as a whole.

Ordinance No. 1490 established a unified development framework for the property. The preservation of Area 2 was not imposed by the City; it was proposed by a prior applicant as part of a development concept that clustered all improvements within the approximately 18.6-acre Area 1 building envelope, while leaving more than 60 acres of floodplain as privately retained open space. This approach advanced elements of the Comprehensive Plan encouraging the private preservation of environmentally sensitive areas and formed the basis for the approved density distribution for the property.

The existing Planned Development regulations were adopted as an integrated framework, with provisions that work together to establish the density and development pattern for the property. Carving out a portion of the property for separate rezoning, without comprehensively addressing how the remaining regulations would function independently, creates potential conflicts and inconsistencies within the adopted ordinance and should require a comprehensive amendment to the Planned Development regulations.

The applicant has requested that City Council authorize staff to make administrative language, formatting, or boundary “clarifications;” however, modifications to an adopted Planned Development ordinance cannot be made administratively. Any amendment to Ordinance No. 1490 must be considered and adopted by the City Council through a formal zoning ordinance amendment process.

Although the existing Future Land Use Map, adopted in 2020, designates this area for low-density residential, the City Council more recently adopted Ordinance No. 1490 as a more specific zoning framework for the property, establishing a clustered development pattern in Area 1 building envelope and long-term private

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preservation of Area 2 within the lot. The Council reaffirmed this policy direction through its subsequent denials with prejudice of rezoning requests in August 2025 and January 2026.

While the Comprehensive Plan provides general long-range guidance, adopted zoning regulations represent the Council’s most specific and controlling land use decision for a property. Through adoption of Ordinance No. 1490 and its later reaffirmation, the Council established its expectations for how this site should develop. Absent a change in policy direction by the City Council, staff finds no basis to support the requested rezoning and recommends maintaining the existing Planned Development district.

Staff Recommendation

Following the applicant’s presentation, staff’s report, and public testimony, the Planning and Zoning Commission should engage in discussion, ask any relevant questions, and carefully consider all information presented. While the Commission is not responsible for making a final determination on rezoning requests, the Commission votes to recommend the City Council either approval or deny an applicant’s request. The City Council ultimately makes the final decision on rezoning applications.

Based on the analysis provided in this report, staff recommends the following motion:

“Move to recommend that the City Council deny the rezoning request.”

Attachments

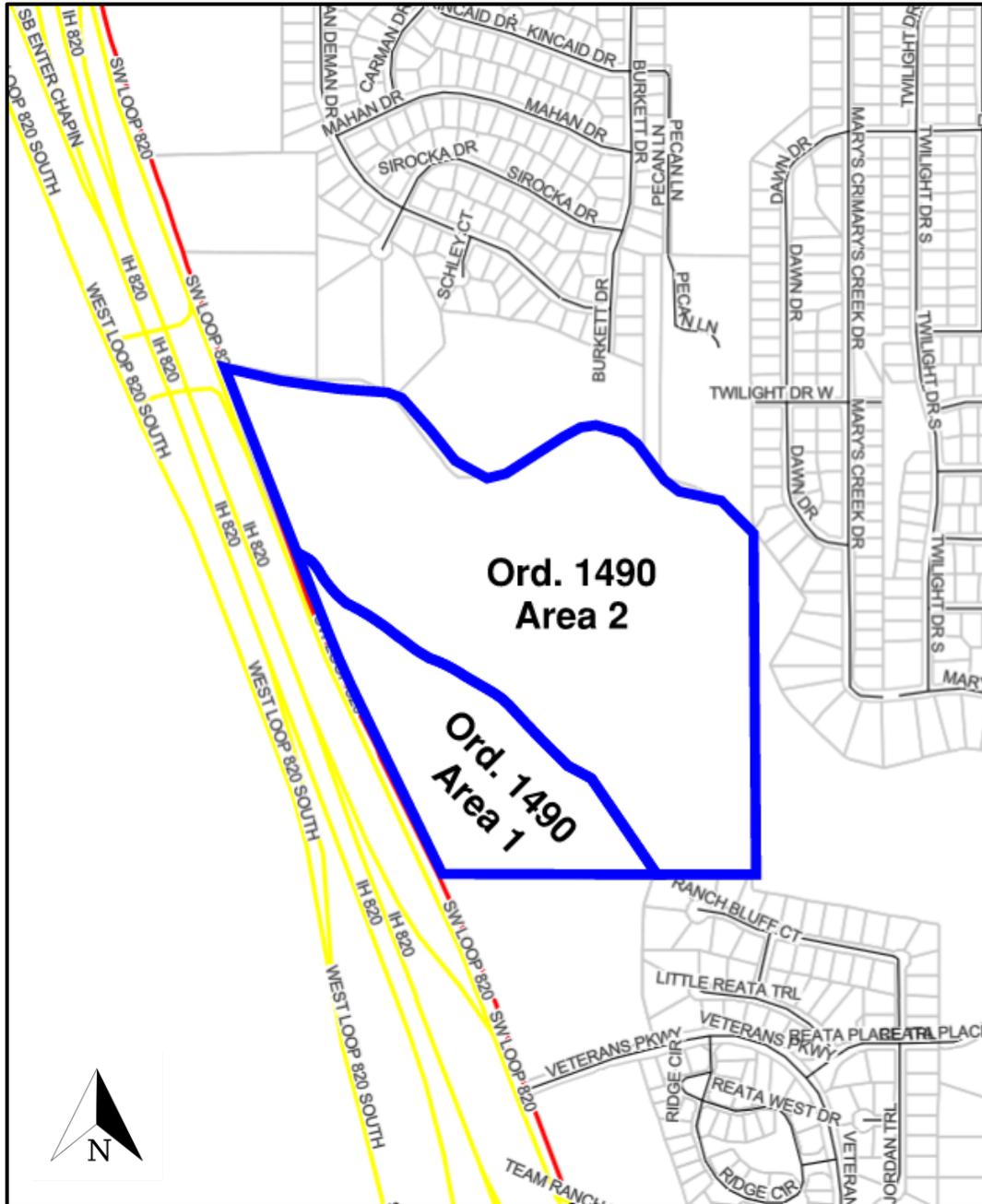
- 1. Aerial Map
- 2. Existing Zoning Map
- 3. Zoning Map – Panel 3
- 4. Proposed Zoning Map
- 5. Future Land Use Map – Panel 3
- 6. Single Family Zoning Districts and Tables
- 7. Comprehensive Plan Principles – Chapter 3
- 8. Applicant’s Submittal Documents
- 9. Applicant’s P&Z Presentation Materials

Aerial Map



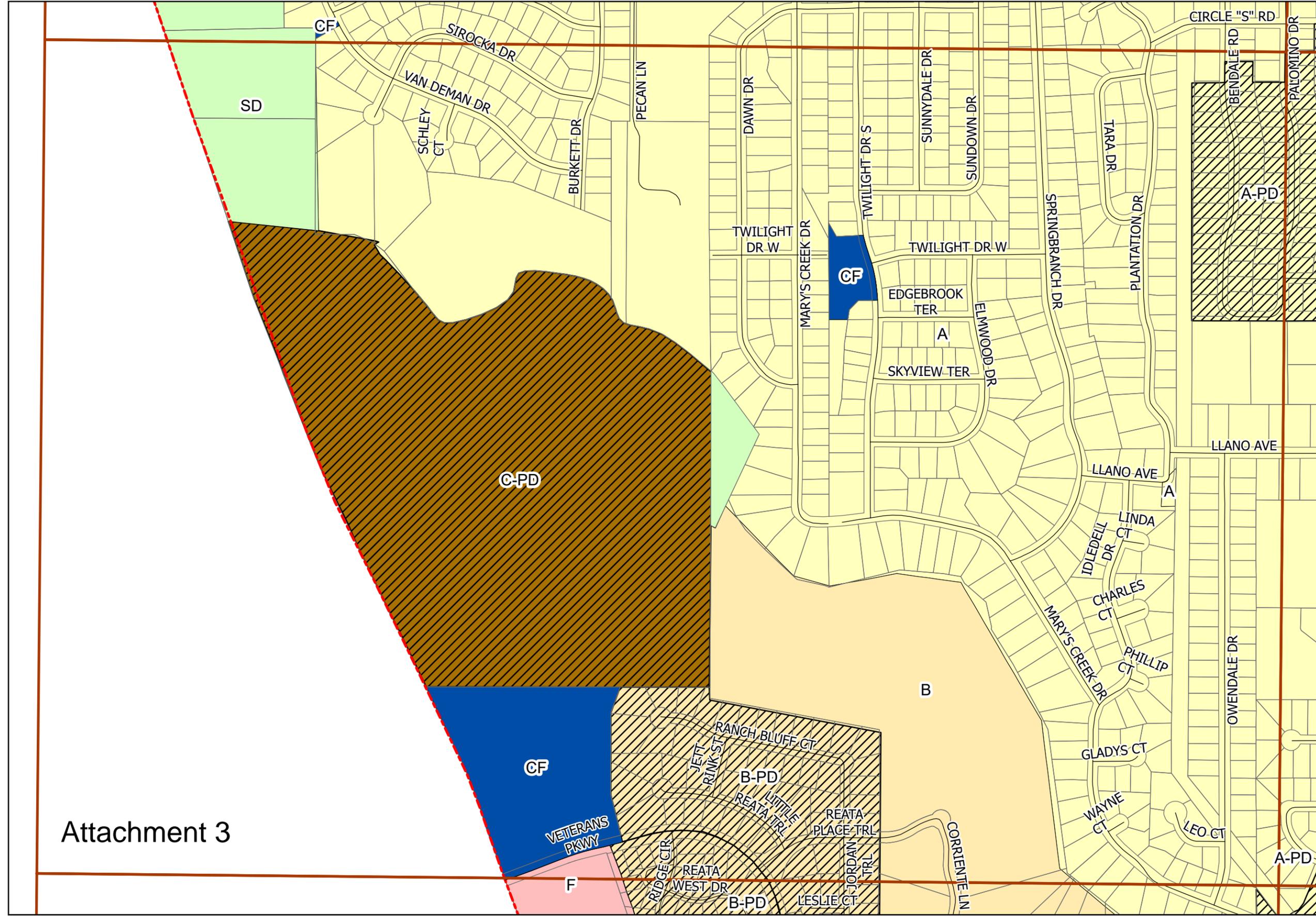
Existing Zoning (Ordinance 1490)

“C-PD” Multiple-Family Planned Development District



Area 1 (Ord. 1490): Approximately 18.6 acres designated in Ordinance 1490 as the area approved for multi-family development.

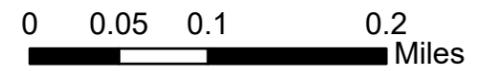
Area 2 (Ord. 1490): Approximately 62 acres preserved from development, with limited exceptions as outlined in Ordinance 1490.



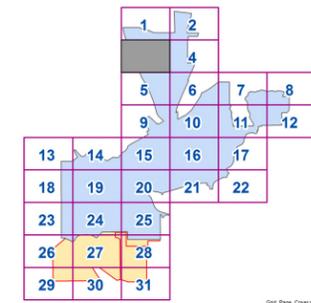
- Legend**
- A - Single Family
 - A-PD
 - B - Single Family
 - B-PD
 - BR - Single Family Reduced
 - BR-PD
 - C - Multiple Family
 - C-PD
 - CF - Community Facilities
 - CF-PD
 - CR - Multiple Family Redistricted
 - D - Multiple Family
 - D-PD
 - E - Commercial
 - E-PD
 - F - Commercial
 - F-PD
 - G - Commerce
 - H - Industrial
 - HC - Commercial
 - HC - PD
 - HC-PD1
 - HC-PD2
 - MU - Mixed Use
 - PD - Planned Development
 - RE - Residential Estate
 - SD - Suburban District
 - Benbrook_Grid
 - Streets
 - City Limits
 - ETJ

Attachment 3

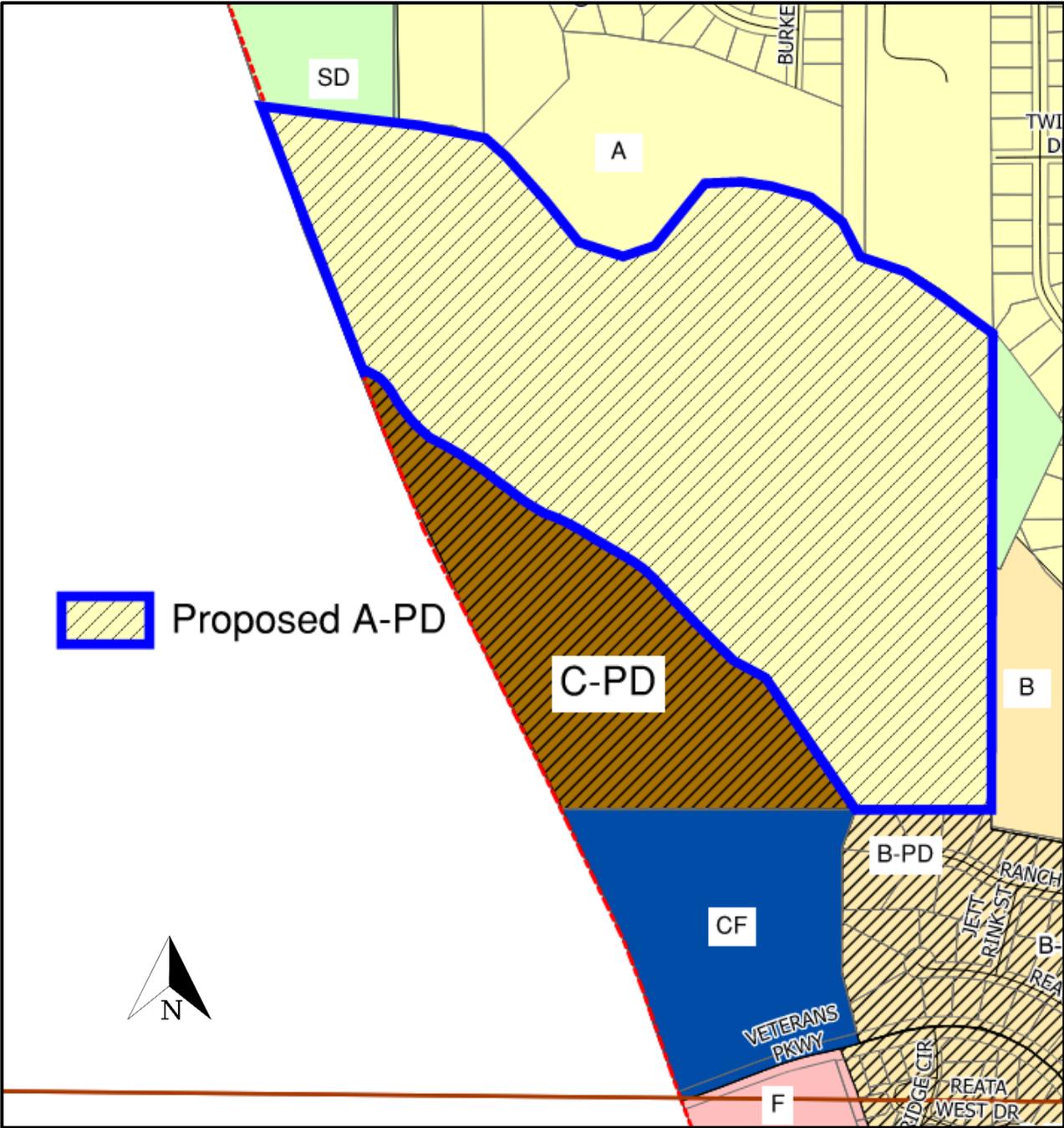
City of Benbrook



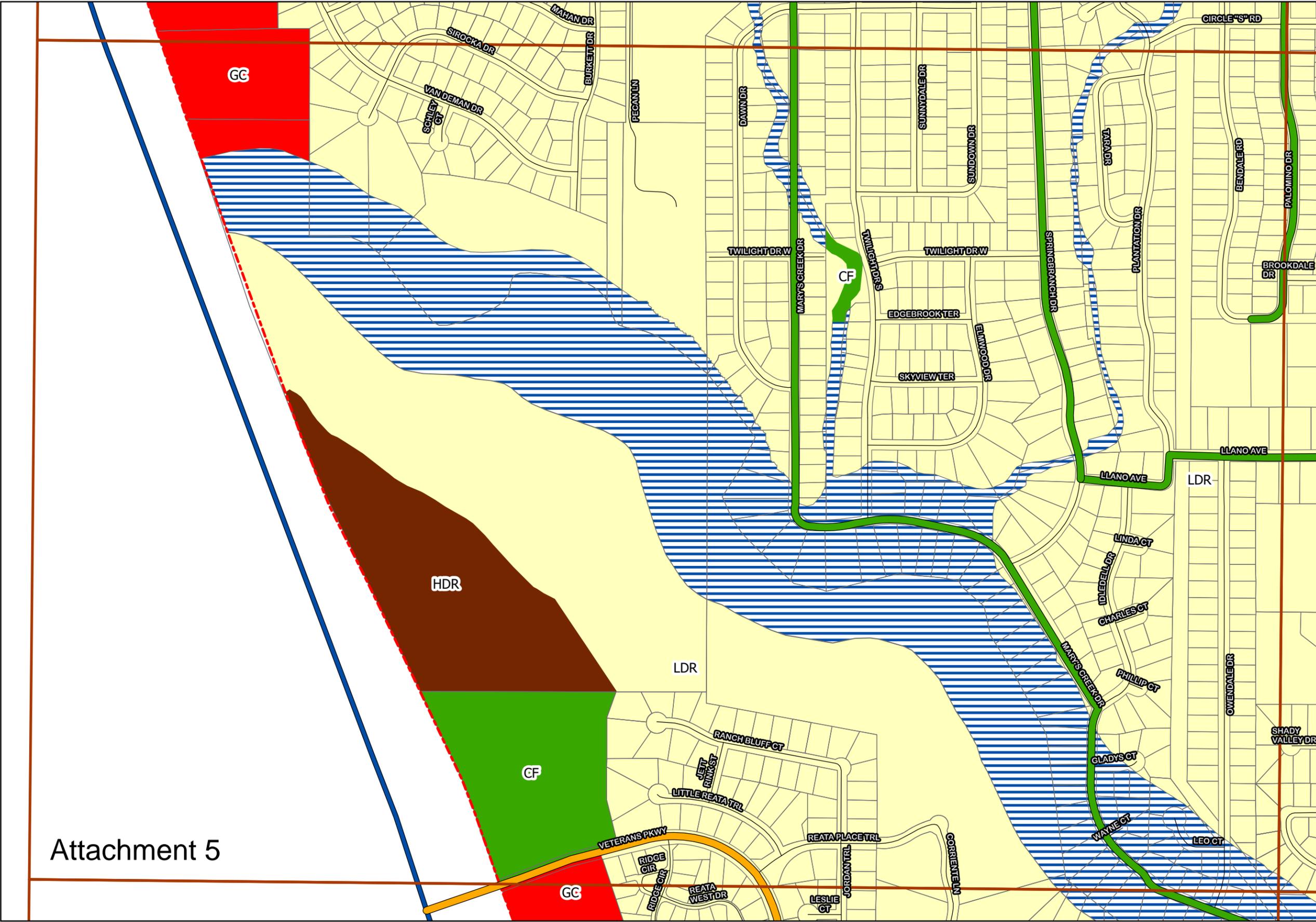
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Proposed Zoning



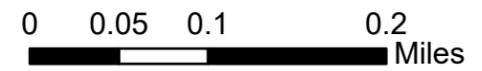
“A-PD”: A proposed One-Family Planned Development District, using the “A” district as the base zoning district. (Approx. 61.3 Acres)



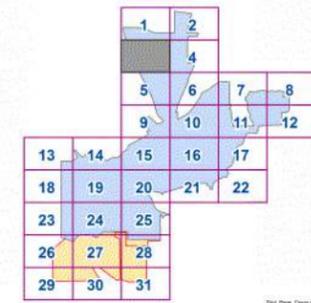
- Legend**
- Streets
 - City Limits
 - Road Types 2040
 - Primary Arterial
 - Secondary Arterial
 - Primary Collector
 - Secondary Collector
 - Proposed Primary Collector
 - Proposed Secondary Collector
 - Freeway
 - LANDUSE
 - Commerce (CM)
 - General Commercial (GC)
 - Community Facility (CF)
 - Downtown (DN)
 - Industrial (IN)
 - Mixed Use (MU)
 - Low Density Res. (LDR)
 - Medium Density Res. (MDR)
 - High Density Res. (HDR)
 - Mercer Ranch
 - ETJ
 - Floodway
 - Highway
 - Water
 - Parcels

Attachment 5

City of Benbrook



3



Single Family Districts

SD “Suburban District:” Section 17.28.010 – Purpose.

The purpose of this district is for the general continuation of certain farm, ranching, residential uses and non-urban uses of land that is not anticipated to be put to an urban-developed use in the immediate future. This district classification is to be used only in the outlying areas of the city's urban development, in newly annexed areas, or on major tracts of land containing ten acres of land or more. Upon the subdivision of land within this district for sale or intended use other than those noted below, the appropriate zoning district and classification for which the land subdivision is intended shall be required.

RE “Residential Estate District:” Section 17.32.010 – Purpose.

This zoning classification is for large-lot residences with a capability of keeping and maintaining limited numbers of livestock and other animals. It should be applied in areas of large lots and rural estate-type subdivision design and layout. This zoning classification should be applied in areas of the city to conserve rural neighborhood character and value and buildings.

A “One-Family District:” Section 17.36.010 – Purpose.

This zoning classification is the most restrictive of all residential zones and should be applied in areas of larger lots, more contemporary subdivision design and layout, and, for areas that are designed solely for residential uses. This zoning classification should be applied in areas of the city to conserve neighborhood character and value and buildings. It is not intended that this zoning district be the subject of major alterations except for a possible re-classification in minor areas for a less restrictive residential use for reasonable adjustment necessary for orderly development of vacant lots or the gradual transition from other districts.

B “One-Family District:” Section 17.40.010 – Purpose.

This zoning classification should be applied in areas of larger lots, more contemporary subdivision design and layout, and, for areas that are designed solely for residential uses. This zoning classification should be applied in areas of the city to conserve neighborhood character and value of buildings. It is not intended that this zoning district be the subject of major alterations except for a possible re-classification in minor areas for a less restrictive residential use for reasonable adjustments necessary for orderly development of vacant lots or the gradual transition from other districts.

BR “One-Family Reduced District:” Section 17.44.010 – Purpose.

This one-family residential zoning district is not as restrictive in its requirements and will allow greater design flexibility of residential uses. This district is to be applied in areas permitting smaller residential lots, smaller residential structures and in areas of transition between commercial and "A" and "B" one-family districts.

Residential Dimensions and Development Standards

	“SD”	“RE”	“A”	“B”	“BR”
Floor Space Min. (sqft)	-	1,500	1,500	1,250	1,200
Height Max. (ft)	3.5 stories; 45	2.5 stories; 35	2.5 stories; 35	2.5 stories; 35	2.5 stories; 35
Front Yard Min. (ft)	50; Corner Lots 2 nd 15	30; Corner Lots 2 nd 15	25; Corner lots 2 nd 15	25; Corner lots 2 nd 15	25; Corner lots 2 nd 15
Rear Yard Min. (ft)	20	20	20	20	15
Side Yard Min. (ft)	15	10	5; Total side yard combined: 15	5; Total side yard combined: 15	5; Total side yard combined: 15
Lot Width	200	100	75	70	60
Lot Area Min. (sqft)	435,600 (10 acres)	43,560 (1 acre)	9,000; Corner 10,800	8,400; Corner 10,080	7,000; Corner 8,400
Lot Coverage	25%	30%	40%	45%	45%
Garage/Gate	No closer than 20ft to ROW				
Landscaping *subject to bufferyards	1 canopy tree; 2-inch caliper				
Parking *behind required front and second yard setback	1/1,500 (up to 4) Min. 2				

City of Benbrook Comprehensive Plan

Chapter 3: Principles

- Principle 3.1:** Approximately 60 percent of the land available for existing and future development within the City should be allocated to residential uses.
- Principle 3.2:** No more than 15 percent of the residential land within the City should be allocated to multi-family units.
- Principle 3.3:** Residential land uses should be protected from the intrusion of incompatible land uses.
- Principle 3.4:** Vacant land or redevelopment within existing residential areas should be limited to similar density residential, public, or semi-public uses.
- Principle 3.5:** The density of a new residential area should be in the same range as the average density of the adjacent existing developments, unless adequate protection and buffers are provided.
- Principle 3.6:** Design techniques, such as buffers or screens, access and building orientation, should be employed to mitigate negative intrusions on residential areas.
- Principle 3.7:** The City should enforce building and other codes to maintain the quality of housing and neighborhoods.
- Principle 3.8:** Residential development should provide adequate lot size and shape to accommodate residential structures, provide usable open space of adequate size, and protect the privacy of indoor and outdoor uses.
- Principle 3.9:** Neighborhood streets should have sidewalks amenable to pedestrians.
- Principle 3.10:** Residential areas should be designed to provide easy, convenient access to community facilities and services.
- Principle 3.11:** Wherever possible, residential uses should be oriented to front on or face local streets, fronting on collector streets only when necessary. Frontage on arterial streets should be avoided.
- Principle 3.12:** The City should allocate approximately 10 percent of the developable land area within the City to commercial uses.
- Principle 3.13:** The City should deny zoning requests and development proposals that conflict with the Comprehensive Plan.
- Principle 3.14:** The City should deny the rezoning of property solely for the intent of increasing the property's value.
- Principle 3.15:** The City should discourage rezoning requests that primarily benefit an individual applicant, and are detrimental to the community as a whole.

City of Benbrook Comprehensive Plan

Chapter 3: Principles

- Principle 3.16:** Land development standards in commercial areas should be sufficiently flexible to allow for creative ideas that can enhance stability and strengthen the City's economic base, while minimizing the adverse effects on adjacent non-commercial uses.
- Principle 3.17:** The City should review and revise zoning and development regulations regularly, providing adequate flexibility for development to occur within established constraints, and minimizing review and approval time by the City.
- Principle 3.18:** The City should establish design standards for development of commercial areas and remove Planned Development (PD) zoning designations where they are not appropriate or necessary.
- Principle 3.19:** The City should encourage appropriate design of commercial corridors that reduce congestion and land use conflicts associated with strip commercial development.
- Principle 3.20:** The City should provide a regulatory environment that encourages continued viability and expansion of existing conforming businesses and establishment of new business and industry.
- Principle 3.21:** The City should review its commercial and development regulatory process to identify and implement measures that would reduce the time and expense of development projects while continuing to protect the City's interests.
- Principle 3.22:** Sufficient off-street parking should be provided for all land uses to avoid congestion on streets.
- Principle 3.23:** The City should seek ways to reduce sprawl, use infrastructure more efficiently, and provide more environments that mix residential and commercial uses, and are welcoming to pedestrians.
- Principle 3.24:** The City should support a diversity of building types to accommodate a mix of residential and commercial uses.
- Principle 3.25:** The City should encourage a street design with wide sidewalks and attractive streetscapes that focus on the safety of pedestrians.
- Principle 3.26:** A downtown should include outdoor open spaces of sufficient size to support large public gatherings, festivals and other civic functions.
- Principle 3.27:** A downtown plan should call for businesses to also feature open spaces for amenities such as outdoor dining and window displays, as well as festivals, farmers markets, and other social events.

City of Benbrook Comprehensive Plan

Chapter 3: Principles

- Principle 3.28:** Industrial areas in the community should be for manufacturing, assembly, processing, repair, and storage uses, and be located separate from residential uses, to the mutual benefit of all parties.
- Principle 3.29:** Industrial uses should have direct access to the city's transportation system arterial/freeway network for use by trucks and employee vehicles and, if required, rail line service.
- Principle 3.30:** Site design techniques should recognize the unique characteristics of industry and mitigate their impact on adjoining property.
- Principle 3.31:** Industrial sites that use hazardous materials or perform hazardous operations should have easy access to fire and rescue services and be separate from non-industrial uses.
- Principle 3.32:** Private retention of environmentally-sensitive areas as undeveloped open space is specifically encouraged to protect fragile natural features, such as steep slopes, easily eroded soils, natural vegetation and drainage courses, and to help protect urban development from damage from soil erosion and flooding.
- Principle 3.33:** Where permitted, urban development in environmentally-sensitive areas should be appropriately engineered to avoid damage to natural and man-made environments.
- Principle 3.34:** Specific site design techniques, such as clustering development to limit the size of the disturbed area, lowering the density of development, and providing on-site mitigation measures to minimize site disruption should be used to limit harmful impacts on sensitive areas.
- Principle 3.35:** The City should utilize best-management practices for erosion and sedimentation control.

Project Narrative

Rowan Ranch is a thoughtfully planned neighborhood that advances Benbrook's long-range vision for high-quality residential growth while preserving and improving the Mary's Creek corridor. This request is intentionally limited in scope: **we are requesting a zoning for the 61.31-acre portion of the property (Area 2) only**, the portion that currently lacks a workable, modern zoning classification despite being designated for residential use on Benbrook's Future Land Use Map.

This zoning action is necessary to bring the property into alignment with the City's adopted planning framework and to create a clear, predictable path for orderly development review. Importantly, zoning does not authorize construction; it simply establishes a lawful district so that engineering, floodplain, drainage, traffic, and infrastructure requirements can be evaluated through the City's standard processes at the appropriate stages.

The intent of this PD district is to apply "A" Residential as the base zoning district, as the lowest reasonable residential classification density consistent with adjacent land use and the City's Comprehensive Plan, while using the Planned Development ("PD") tool to provide solutions and design flexibility in response to prior City feedback. This PD refines the comprehensive plan to mirror the Future Land Use Map boundary, strengthen compatibility with neighbors through enhanced buffers and open-space preservation, and support public safety outcomes for the surrounding community.

This PD district is further intended to:

- Align exactly with the City of Benbrook's adopted Future Land Use Map and Comprehensive Plan;
- Incorporate enhanced buffer zones, screening, and open-space preservation in excess of standard zoning requirements, based on feedback received through prior City review and community input;
- Maintain and carry forward elements of prior feedback and approvals previously cited by City staff and representatives as favorable, while refining other aspects in response to staff comments; and
- Provide a clear and predictable regulatory framework for orderly development review.

This application represents the culmination of the **tenth (10th) formal zoning-related submittal** for this property and reflects iterative refinement based on prior City staff direction, policy constraints, and procedural guidance.

The Applicant has complied with City direction regarding appropriate channels for engagement and has incorporated feedback through formal submittals, technical documentation, and revised development standards, rather than direct public forums with City Council.

We are asking the City to establish a clear residential zoning district for the **61.31 acres** so the property can be reviewed and developed consistent with the FLUM and Benbrook's adopted planning goals.

Development Concept and Compatibility

The Area 2 concept is a **low-density, single-family neighborhood** designed specifically to integrate with the existing community fabric. Lot patterns, setbacks, and building controls are calibrated to promote privacy, preserve character, and buffer adjacent neighborhoods, particularly along environmentally sensitive areas.

To ensure long-term compatibility and quality outcomes, the proposed standards include (among other requirements/benefits):

- **Meaningful buffer zones and screens** along perimeter boundaries, including the Mary's Creek edge and adjacent areas;
- **Open-space adjacency fencing standards** and durable materials requirements to protect views, maintain safety, and support consistent neighborhood aesthetics;
- **Building and site standards** that reinforce quality (height/story limits, minimum home size, lot coverage, landscaping, and trees);

A defining feature of this plan is the preservation and enhancement of the Mary's Creek corridor. The development standards reserve a dedicated open-space tract along Mary's Creek to support flood risk reduction and embankment improvements, prohibit residential structures within that open-space area, and limit uses to flood mitigation, drainage improvements, and open-space amenities.

This maintains a strong conservation outcome while still allowing the upland portions of Area 2 to be planned responsibly under an appropriate residential zoning classification.

To directly support the community in nearby households and to help strengthen the Mary's Creek embankment project and related infrastructure improvements, the project incorporates the "**Mary's Creek Neighbor Resilience Program**" as a condition tied to development timing to help promote community improvement & involvement. Key commitments include:

- **\$500,000 in program funding**, deposited into a restricted account and triggered prior to commencement of on-site residential construction;
- **Independent third-party administration** (community foundation or comparable neutral entity acceptable to the City), with the City and Owner not controlling individual grant decisions;

- **Eligible uses** include minor resilience improvements (drainage/erosion mitigation, restoration) and **post-project flood documentation**, such as elevation certificates and limited resurveys to support insurance/FEMA documentation needs;
- **Strict participation safeguards**: participation is voluntary and **not conditioned** on support/opposition, testimony, attendance, or any public/political process;
- **Unused funds** after the program period are redirected to **public safety/community resilience purposes** within Benbrook and never revert to the Owner.

Site Overview - Area 2 - 61.31 Acres Only

- **Location**: East of IH-820, approximately 1,600 feet north of Team Ranch Road (Rowan Ranch overall tract).
- **Requested Area: 61.31 acres (Area 2)**
- **FLUM Guidance**: Residential designation consistent with Benbrook’s adopted planning map and policies.

Requested Action:

1. Approve zoning for the 61.31-acre Area 2 portion of the property, “A-PD” as requested, in a manner consistent with the Future Land Use Map and Benbrook’s Comprehensive Plan, allowing the City’s standard development review process to proceed; and
2. Confirm and maintain the existing PD framework for Area 1 as previously established, and authorize City staff to make language, formatting, or boundary clarifications to each PD, as necessary, to ensure this Area 2 rezoning does not create conflict, while preserving the intent and substance of prior City approvals.

Closing Statement

This request is about bringing clarity and consistency to the City’s land-use framework for a portion of property that needs zoning in order to be reviewed and developed responsibly. It aligns with Benbrook’s planning vision, protects sensitive environmental areas along Mary’s Creek through dedicated open space and improvement standards, and provides a concrete, non-political neighborhood benefit through the independently administered Mary’s Creek Neighbor Resilience Program.

“A-PD” Proposed Development Standards:**“Tract - 2” - LDR Portion “A-PD” Development Standards:**

1. **Base Zoning District.** The base zoning district for this Planned Development District (PD) is the "A" single -Family District. Unless otherwise stated herein, the definitions and regulations set forth in the City Zoning Ordinance in Title 17 of the Benbrook Municipal Code (the "Zoning Ordinance"), as amended, apply to this PD. In the event of conflict between the regulations set forth in this PD and the Zoning Ordinance, the regulations in this PD apply. Unless otherwise stated herein, all regulations of the City of Benbrook applicable to the " A" District apply to this District.
2. **Allowed Principal Use.** Single-family dwellings.
3. **Accessory Uses.** A structure or use that is incidental and subordinate to the principal use on the lot, and which is intended to support, enhance, or serve the principal use. An accessory structure or use shall:
 - a. Be clearly secondary in area, intensity, and purpose to the principal use;
 - b. Be customarily associated with and directly related to the principal use; and
 - c. Be located on the same lot and within the same zoning district as the principal use.
 - d. Accessory structures and uses may include, but are not limited to: attached or detached garages, carports, storage buildings (including sheds), workshops, private recreational improvements (such as pools, sport courts, and play structures), and similar residential accessory improvements customarily incidental to a single-family home.
4. **Perimeter Buffers, Perimeter Setbacks, Screening, and Landscaping.** Landscaping and screening shall comply with Chapter 17.98 of the Zoning Ordinance and the City of Benbrook Tree Ordinance (Ordinance No. 1410), except as supplemented herein. Minimum perimeter buffer/setback areas (“Buffer Zones”) shall be provided as shown on the Concept Plan (Exhibit F) further described in Exhibit E, (Exhibit E - “Tract 2” - Buffer & Setback Concept Visual) and shall be maintained as open space, landscape, drainage, or screening areas, and may include a combination of native/adaptive plantings, berming, required fencing, and trails where permitted.
 - a. **Minimum Buffer Zone & Perimeter Setback Widths.** Minimum perimeter Setback & Buffer Zones shall be as follows:
 1. Southern Boundary: minimum 50'-0" buffer.
 2. Northeastern Boundary along Mary’s Creek / Open Space: minimum 50'-0" buffer.
 3. Eastern Boundary: minimum 20'-0" Setback.
 4. Loop 820 frontage (Tract 2 portion): minimum 40'-0" until the southern intersection of the Tract 1 boundary.
 5. Shared boundary between Tract 1 and Tract 2: minimum 20'-0" Setback requirement.

B. Residential Lot Trees

Each residential lot shall provide a minimum of two (2) trees, each with a minimum 2-inch caliper, from acceptable species including Live Oak, Cedar Elm, Texas Red Oak, Bur

Oak, Pecan, Texas Ash, or other City-approved species not classified as a “secondary tree” under Ordinance No. 1410. Lot trees may be credited toward mitigation or replacement obligations under the tree preservation standards of this PD and/or Ordinance No. 1410, as applicable.

C. Restoration of Disturbed Areas

Any areas disturbed by the installation of drainage, trail, or embankment improvements within Open Space or Buffer Zones shall be stabilized and re-vegetated with native or adaptive plant materials.

5. **Lot and Building Standards.** All residential lots and structures shall comply with the following minimum standards:
 - a. **Lot Standards**

All residential lots shall have a minimum lot frontage of seventy-five feet (75') and a minimum lot area of nine thousand (9,000) square feet. Corner lots shall have a minimum lot area of ten thousand eight hundred (10,800) square feet.
 - b. **Setback Standards**

The minimum front yard setback shall be twenty-five feet (25'-0"). Corner lots shall provide a minimum street-side yard setback of fifteen feet (15'-0"). The minimum rear yard setback shall be twenty feet (20'-0"). Side yards shall provide a minimum five feet (5'-0") setback from any building to a side property line, and a minimum combined side yard setback of fifteen feet (15'-0") between buildings.
 - c. **Building Standards**

The maximum building height shall be thirty-five feet (35'-0"), measured to the mid-roof, and structures shall be limited to no more than two and one-half (2.5) stories. Each dwelling shall contain a minimum of one thousand five hundred (1,500) square feet of heated and cooled living area.
 - d. **Lot Coverage**

Maximum lot coverage shall not exceed forty percent (40%) of the total lot area.

6. **Private Streets and Access Control.** All internal streets and alleys within the development may be constructed and maintained as private facilities and shall not be required to be dedicated to the City unless expressly accepted by the City in writing. Private streets shall be designed and constructed to City standards (or other standards approved by the City Engineer) and shall provide emergency access as required by the Fire Code. The Owner/HOA shall be responsible for all maintenance, repair, and replacement of private streets and any associated access-control features.
 - a. **Access-control gates,** if provided, shall be subject to review and approval by the City of Benbrook and applicable emergency access requirements.

7. **Parking.** Unless otherwise provided herein, parking must be provided in accordance with Section 17.88 of the Zoning Ordinance, as amended. Parking regulations shall include the following:
 - a. A tandem parking space is only permitted in front of a garage space;

- b. A minimum of two (2) on-site parking spaces, per dwelling unit, are required;
- c. Minimum parking space dimensions (Width x Depth):
 - i. Head-in parking — 9ft x 18ft;
 - ii. Parallel parking — 9ft x 22ft;
 - iii. Tandem parking — 9ft x 20ft; and
 - iv. Garage parking — 10ft x 20ft.

8. Open Space Preservation. A minimum of 8.0 acres along Mary’s Creek shall be reserved as Open Space for flood risk reduction and associated embankment improvements. The Open Space shall generally parallel the creek boundary and extend no less than fifty feet (50’) and no more than four hundred feet (400’), measured perpendicular from the Mary’s Creek boundary to the adjacent parallel lot line, as shown on the approved concept plan. No residential structures shall be permitted within the Open Space tract.

Permitted uses are limited to flood mitigation and drainage improvements and private open-space amenities for the benefit of the community, including private trails, park features, and similar outdoor facilities. Any structures or amenities located within the floodplain or floodway shall comply with City of Benbrook Code Chapter 15.40 and all other applicable floodplain regulations. Following final acceptance of the LOMR (or other City-accepted verification of the embankment improvements), the Open Space tract shall be encumbered, within a reasonable time, by a recorded restriction acceptable to the City and consistent with the Development Agreement, preserving these uses.

- a. **Maintenance Responsibility and Financial Assurance.** All embankment improvements, drainage features, and Open Space areas shall be privately maintained by the Owner, Developer, HOA, or other City-approved maintenance entity (“Maintenance Entity”). No public maintenance obligation is created unless expressly accepted by the City in writing.

The City retains the right, upon reasonable notice, to inspect such improvements and to require corrective maintenance following written notice and a reasonable cure period.

Prior to the City’s issuance of any development or infrastructure permits, the Owner shall provide financial assurance for the ongoing maintenance and repair of the embankment and associated improvements. The form and amount of such financial assurance (which may include a maintenance bond, letter of credit, or funded maintenance reserve) shall be set forth in the Development Agreement and shall be acceptable to the City Engineer, in an amount not to exceed ten percent (10%) of the embankment construction cost, or such other amount as may be reasonably approved by the City Engineer based on supporting third-party documentation.

Such financial assurance shall be maintained for routine maintenance and necessary repairs and shall not obligate the City to assume maintenance responsibility.

- b. **Neighbor Resilience Program.** As a condition precedent to commencement of any on-site residential construction, the Owner shall fund a Neighbor Resilience Program in the amount of \$500,000, administered by an independent third party, for the benefit of households within the defined “Benefit Area”. Participation in the Program shall not be conditioned on any resident’s support, opposition, testimony, or participation in any public process.

At the City’s election, all or a portion of the Program funds may be conveyed to the City of Benbrook, subject to City acceptance, for use in a community resilience, flood mitigation, or Mary’s Creek–related improvement project, including use as a local match for FEMA or other state or federal grant programs, provided such funds are used for the benefit of residents within or adjacent to the Benefit Area.

Any Program funds remaining after the Program period, or not otherwise conveyed pursuant to the foregoing, shall be dedicated to public safety or community resilience purposes within the City of Benbrook and shall not revert to the Owner under any circumstance.

- c. **Benefit Area.**

The “Benefit Area” shall consist of residential properties located along the affected reaches of the Mary’s Creek corridor, as depicted on a Benefit Area Map. The Benefit Area Map shall be finalized and provided following issuance of the Final LOMR, based on City-accepted floodplain data, and shall be consistent with the final floodplain extents established by the LOMR, as approved by the City.

Finalization of the Benefit Area Map in accordance with this section shall not require an amendment to this Planned Development.

9. Private Trail System

- a. Material – Compacted and stabilized decomposed granite, concrete, or similar hardscape material(s).
- b. Width – 5’-0” minimum
- c. The developer may provide a single 5’-0” minimum width walking trail through the existing vegetation within open space. The trail will meander around trees and connect to the proposed housing development at a minimum of one location accessible by private development sidewalks. To the greatest extent possible, the trail will follow finished topography to minimize the extent of grading. Trail slopes shall generally not exceed 10%. Small culvert crossings may be required in certain locations where drainage swales exist. Culverts will be sized appropriately to convey surface runoff. The trail shall be a minimum distance of 150’0” to the Reata Place at the Team Ranch Property boundary. The minimum and maximum length of the trail shall be at the discretion of the developer.
- d. The trail shall be provided in accordance with the following:

- i. To be located entirely within the development property boundary and maintained by the property owner and/or their designee.
- ii. Barrier-free access to the trail system from the trailhead must be provided and approved by the City of Benbrook
- iii. The trail is exclusively for the access and use of residents and guests of the Rowan Ranch development.

10. Tree Preservation, Replacement, and Mitigation. This section supersedes the tree preservation and mitigation requirements of Sections 16.28.010. 1. 5 and 16. 28. 010. H. 1, including Tables 16-A1 and 16-A2) of the Benbrook Municipal Code. A minimum of fifty percent (50%) of the existing “Large Quality,” “Quality Tree,” and “Quality Tree Stand” trees located on the 61.31-acre Tract 2, as defined in Section 1 of the City of Benbrook Tree Ordinance (Ordinance No. 1410), shall be preserved, relocated, or replaced, unless otherwise exempt under the ordinance. Compliance may be measured by either (i) the total number of qualifying trees or (ii) the total caliper inches (DBH) of qualifying trees, consistent with Ordinance No. 1410.

- a. **Replacement Credit Based on Mature Size.** Where replacement trees are utilized to satisfy preservation/mitigation requirements, replacement credit shall be evaluated at maturity using a DBH-based equivalency as follows:
 - i. **Mature DBH Standard:** For purposes of this PD, a replacement tree shall be considered “mature” when it reaches a minimum eight-inch (8”) DBH (or such other mature threshold recognized by the City under Ordinance No. 1410).
 - ii. **Replacement Equivalency Metric (Mature DBH Ratio):** Replacement trees shall be credited toward mitigation on a 1:1 mature DBH basis, meaning the aggregate mature DBH of replacement trees shall equal or exceed the aggregate DBH removed for which mitigation is required.
 - 1. For tracking at time of installation, replacement trees may be planted at a minimum caliper size permitted by the City, and shall be assigned a maturity credit using the following conversion:
 - a. $\text{Mature DBH Credit} = (\text{Installed Caliper Inches}) \times 2.0$, capped at 8” DBH per tree (unless otherwise approved by the City).
 - 2. The intent of this metric is to ensure replacement is evaluated on the basis of canopy value and mature trunk diameter, not solely on nursery stock size.
 - iii. Trees provided by builders to satisfy residential lot tree requirements may be included in these calculations. Tree relocation may also be utilized as part of preservation credit, consistent with Ordinance No. 1410.
- b. **Payment in Lieu.** If preservation, relocation, or replacement is impractical or infeasible, the developer may satisfy the difference between trees removed and the required 50% standard through payment in lieu of mitigation, using the adopted caliper-inch fee schedule established by the Benbrook City Council in Chapter 1.12 of the Benbrook Municipal Code, as amended.

11. Fencing Regulations. Fencing shall comply with Chapter 17.96 of the Zoning Ordinance, except as modified below for areas fronting Loop 820 and the designated Open Space shown on the Concept Plan:

- a. Loop 820 Frontage (western perimeter): Perimeter fencing along Loop 820 shall be a minimum 8-foot masonry fence, extending 25 feet eastward on both the north and south portions of the frontage.
- b. Open Space Lots – Required Wrought Iron Perimeter and Returns: For all lots that abut or back to the designated Open Space, fencing along the Open Space edge shall be wrought iron with a minimum height of 4'-0". In addition, the perpendicular return fencing from the rear property line on each side lot line shall also be wrought iron and shall extend from the rear property line to the required minimum of 20'-0" rear yard setback line (as established by the "A" Single-Family minimum setback standards).
- c. All other exterior fences must be constructed from cedar or a material with a comparable lifespan and must be at least 6 feet in height. Comparable materials include, but are not limited to: Redwood, Cypress, Tropical hardwoods (e.g., Ipe, Mahogany), Composite materials designed to mimic wood (e.g., Trex), Vinyl (high-quality, UV-resistant), Powder-coated steel, Aluminum, Bamboo (treated for outdoor use), Pressure-treated pine (if treated to withstand weathering), and Recycled plastic lumber. These materials must demonstrate equivalent durability, weather resistance, and aesthetic qualities to cedar, as per allowable materials per City of Benbrook regulations.:
- d. Front Yard: No fences or gates shall be constructed within the required front yard.
- e. Rear Yard (non-Open Space Lots): Rear yard fences for lots not abutting the Open Space may be installed in accordance with the City's requirements for non-permitted fences, as applicable.

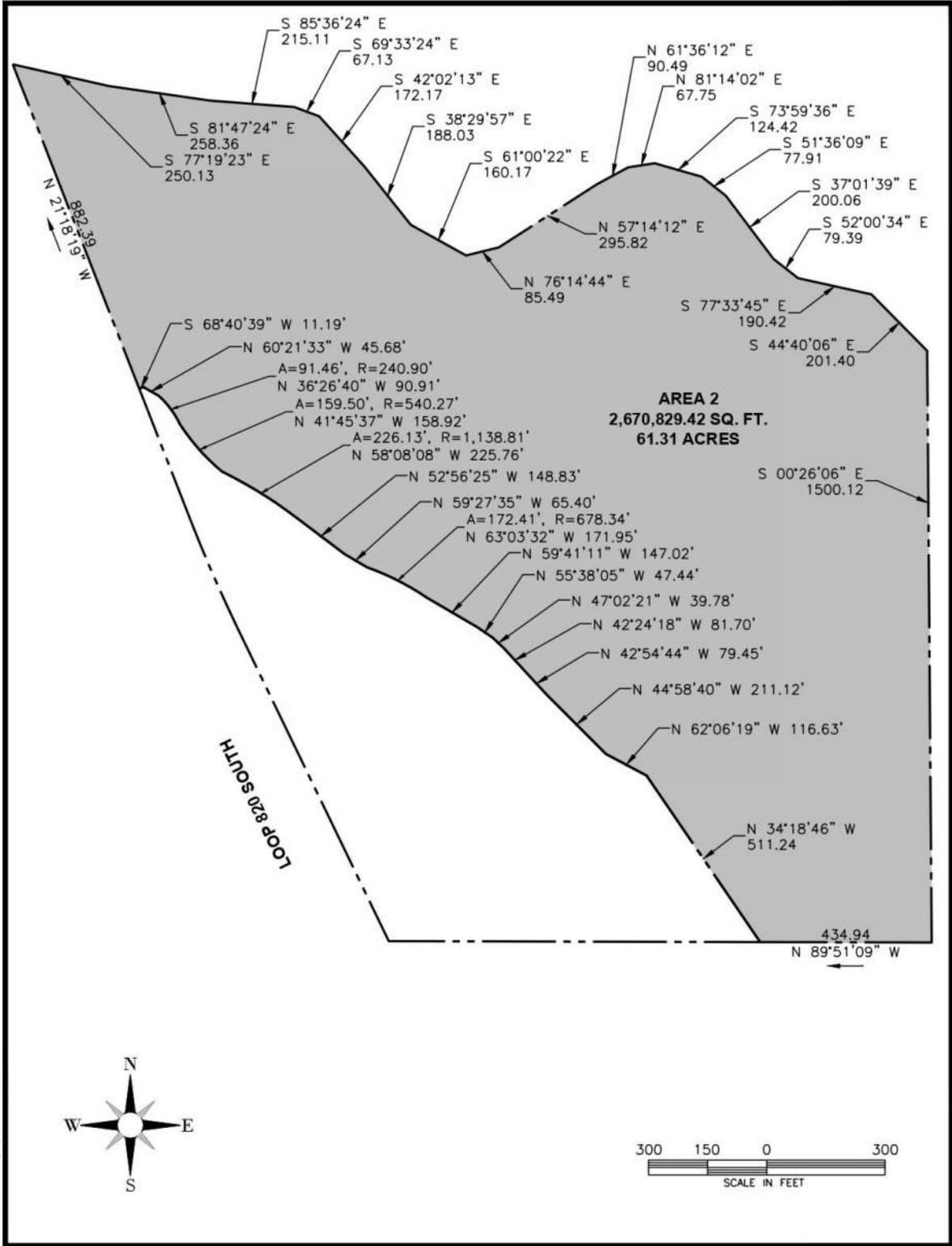
12. General Requirements

- a. Perimeter setbacks shall not exclude accessory structures or pools from the backyard of the residential lots.
- b. All garages must have electric garage door operation mechanisms with Garage or gates no closer than 20'00" to ROW.

13. Site Plan. A site plan review shall be required in accordance with Chapter 17.76 of the Zoning Ordinance. The site plan shall follow the conceptual layout depicted in EXHIBIT (F) however, minor changes to the layout, which still conform to adopted development regulations of the City of Benbrook, are permitted as long as changes do not alter the basic relationship of the proposed development to adjacent property and which do not alter the uses permitted or increase the density, floor - area ratio, height or coverage of the site, or which do not decrease the off-street parking ratio, or reduce the required yards and building setbacks. Regardless of the conceptual layout depicted in EXHIBIT F, the site plan shall comply with all adopted development regulations of the City of Benbrook.

14. Sign Regulations. Signs shall be permitted as allowed under Chapter 17.92.070 (A) for Single-family Zoning Districts.

Exhibit C - "Tract 2" - Survey



SHT-803.DWG., 9/9/2025 12:48 PM

Exhibit D - "Tract 2" - Metes & Bounds

Area 2 Legal Description

From the POINT OF BEGINNING; Thence, South 77° 19' 23" East for a distance of 250.13 feet to a point on a line.

Thence, South 81° 47' 24" East for a distance of 258.36 feet to a point on a line.

Thence, South 85° 36' 24" East for a distance of 215.11 feet to a point on a line.

Thence, South 69° 33' 24" East for a distance of 67.13 feet to a point on a line.

Thence, South 42° 02' 13" East for a distance of 172.17 feet to a point on a line.

Thence, South 38° 29' 57" East for a distance of 188.03 feet to a point on a line.

Thence, South 61° 00' 22" East for a distance of 160.17 feet to a point on a line.

Thence, North 76° 14' 44" East for a distance of 85.49 feet to a point on a line.

Thence, North 57° 14' 12" East for a distance of 295.82 feet to a point on a line.

Thence, North 61° 36' 12" East for a distance of 90.49 feet to a point on a line.

Thence, North 81° 14' 02" East for a distance of 67.75 feet to a point on a line.

Thence, South 73° 59' 36" East for a distance of 124.42 feet to a point on a line.

Thence, South 51° 36' 09" East for a distance of 77.91 feet to a point on a line.

Thence, South 37° 01' 39" East for a distance of 200.06 feet to a point on a line.

Thence, South 52° 00' 34" East for a distance of 79.39 feet to a point on a line.

Thence, South 77° 33' 45" East for a distance of 190.42 feet to a point on a line.

Thence, South 44° 40' 06" East for a distance of 201.40 feet to a point on a line.

Thence, South 00° 26' 06" East for a distance of 1500.12 feet to a point on a line.

Thence, North 89° 51' 09" West for a distance of 434.90 feet to a point on a line.

Thence, North 34° 18' 46" West for a distance of 511.24 feet to a point on a line.

Thence, North 62° 06' 19" West for a distance of 116.63 feet to a point on a line.

Thence, North 44° 58' 40" West for a distance of 211.12 feet to a point on a line.

Thence, North 42° 54' 44" West for a distance of 79.45 feet to a point on a line.

Thence, North 42° 24' 18" West for a distance of 81.70 feet to a point on a line.

Thence, North 47° 02' 21" West for a distance of 39.78 feet to a point on a line.

Thence, North 55° 38' 05" West for a distance of 47.44 feet to a point on a line.

Thence, North 59° 41' 11" West for a distance of 147.02 feet to the beginning of a non-tangential curve,

Said curve turning to the left through an angle of 14° 33' 46.3", having a radius of 678.34 feet, and whose long chord bears North 63° 03' 32" West for a distance of 171.95 feet to a point of intersection with a non-tangential line.

Thence, North 59° 27' 35" West for a distance of 65.40 feet to a point on a line.

Thence, North 52° 56' 25" West for a distance of 148.83 feet to the beginning of a non-tangential curve,

Said curve turning to the left through 11° 22' 37.6", having a radius of 1138.81 feet, and whose long chord bears North 58° 08' 08" West for a distance of 225.76 feet to the beginning of a non-tangential curve.

Said curve turning to the right through 16° 54' 53.5", having a radius of 540.27 feet, and whose long chord bears North 41° 45' 37" West for a distance of 158.92 feet to the beginning of a non-tangential curve.

Said curve turning to the left through an angle of 21° 45' 08.9", having a radius of 240.90 feet, and whose long chord bears North 36° 26' 40" West for a distance of 90.91 feet to a point of intersection with a non-tangential line.

Thence, North 60° 21' 33" West for a distance of 45.68 feet to a point on a line.

Thence, South 68° 40' 39" West for a distance of 11.23 feet to a point on a line.

Thence North 21° 18' 19" West a distance of 882.40 feet to the POINT OF BEGINNING;

Containing 61.312 acres

Exhibit E - "Tract 2" - Buffer & Setback Concept Visual

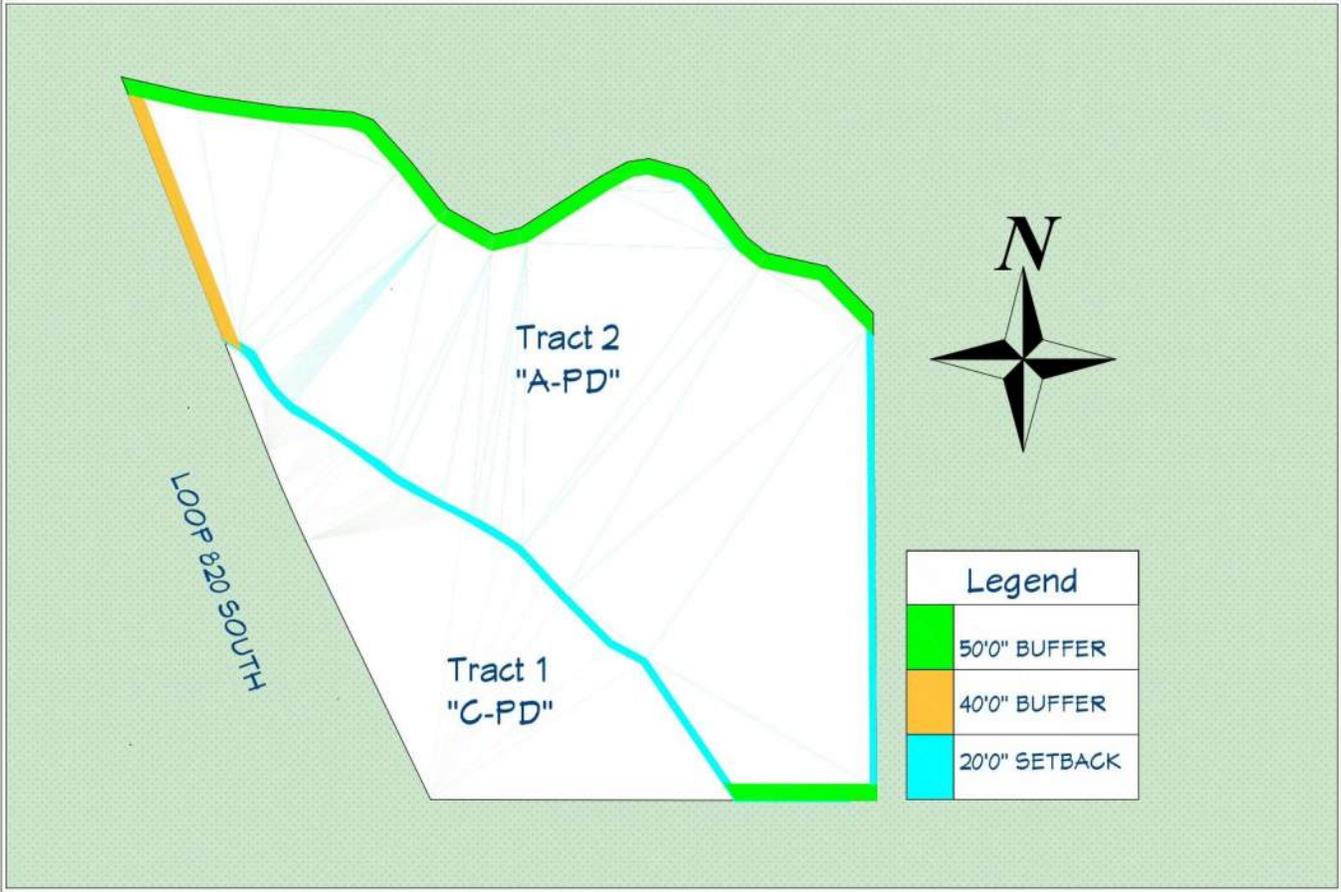


Exhibit F - "Tract 2" - Concept Plan



1st Floor

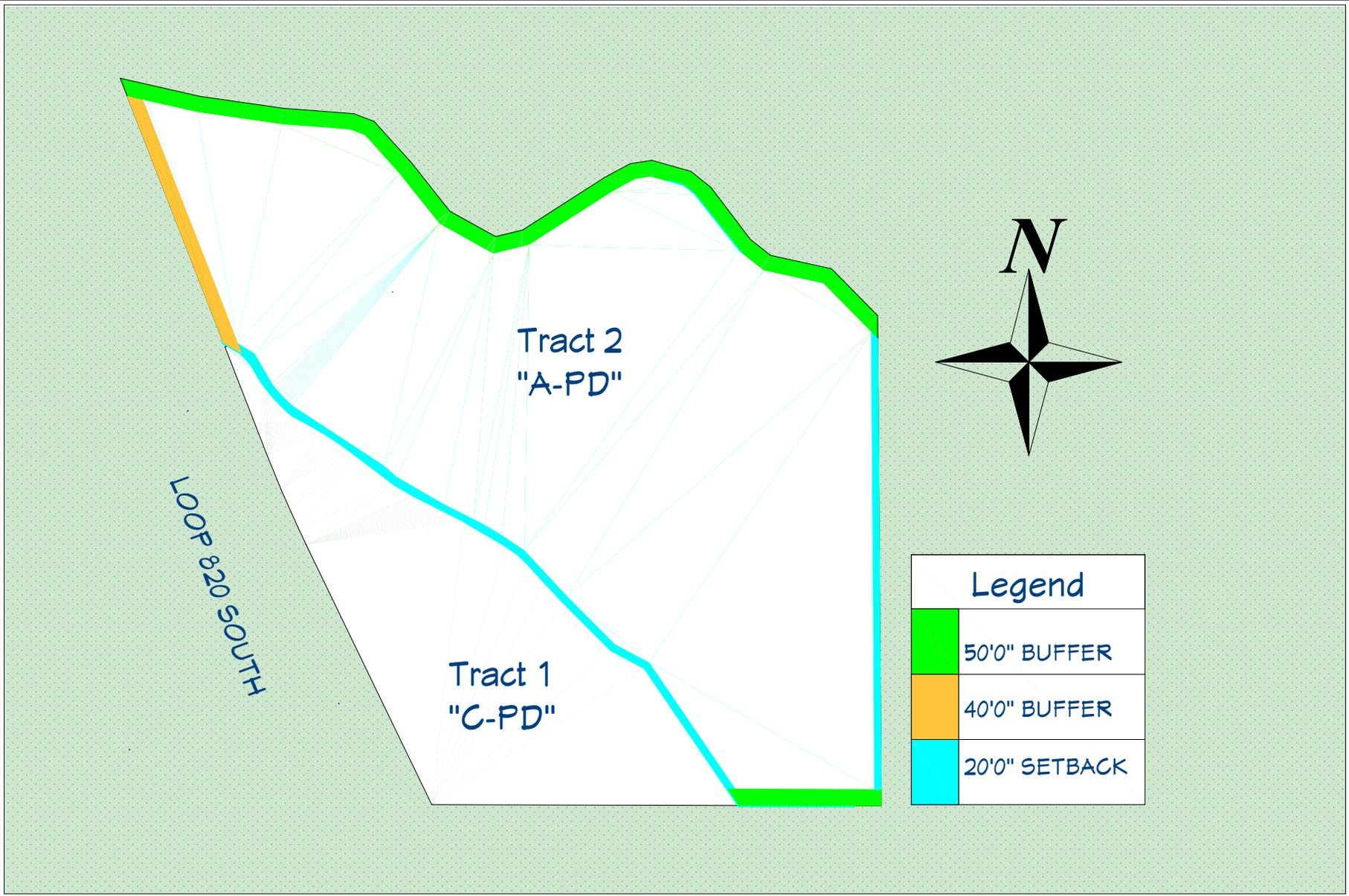
"C-PD" Planned Development Regulations

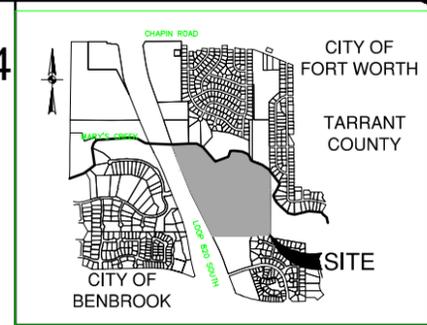
1. Base Zoning District. The base zoning district for this Planned Development District (PD) is the "C" Multiple-Family District. Unless otherwise stated herein, the definitions and regulations set forth in the City Zoning Ordinance in Title 17 of the Benbrook Municipal Code (the "Zoning Ordinance"), as amended, apply to this PD. In the event of conflict between the regulations set forth in this PD and the Zoning Ordinance, the regulations in this PD apply. Unless otherwise stated herein, all regulations of the City of Benbrook applicable to the "C" District apply to this District.
2. Allowed Principal Use. Single or Two-family dwellings.
3. Accessory Uses. A structure or use that: (1) is subordinate in area, extent, and purpose to the principal use; (2) contributes to the comfort, convenience, or necessity of the principal use; and (3) is located on the same lot and in the same zoning district as the principal use; including, but not necessarily limited to: a leasing office, clubhouse, carports, detached garages, storage buildings, and recreational amenities.
4. Density. The maximum density of Area 1 of this district shall not exceed 12.5 dwelling units per acre.
5. Parking. Unless otherwise provided herein, parking must be provided in accordance with Section 17.88 of the Zoning Ordinance, as amended. Parking regulations shall include the following:
 - a. A tandem parking space is only permitted in front of a garage space;
 - b. A minimum of two (2) on-site parking spaces, per dwelling unit, are required;
 - c. Minimum parking space dimensions (Width x Depth):
 - i. Head-in parking - 9ft x 18ft;
 - ii. Parallel parking - 9ft x 22ft;
 - iii. Tandem parking - 9ft x 20ft; and
 - iv. Garage parking - 10ft x 20ft.
6. Maximum Lot Coverage. The maximum lot coverage of the developable area of this district shall be 25%.
7. Minimum Perimeter Setbacks. No building or structure, except for signs allowed by this ordinance, may be located within the following setback distances from the specified property lines, as depicted in EXHIBIT B:
 - a. North property line (adjacent to Marys Creek) - 25ft;
 - b. South property line - 25ft;
 - c. East property line - 20ft; and

- d. West property line, which shall be considered the front property line (adjacent to the I.H. 820 frontage road) - 40ft, which shall also be considered the required front yard.
8. Maximum Building Height. The maximum building height shall be 30ft.
 9. Fencing. Fencing shall comply with Chapter 17.96 of the Zoning Ordinance.
 10. Signs. Sign regulations for this PD shall follow the same regulations as allowed within the "D" Multiple-Family District (See Section 17.92.080.B of the Zoning Ordinance, as amended). Monument signs may not be located within any side or rear perimeter setback.
 11. Landscaping. Landscaping shall comply with Chapter 17.98 of the Zoning Ordinance except for the following regulations:
 - a. The only required bufferyards shall include the west property line and south property line. Minimum bufferyard requirements shall be as follows:
 - i. West property line (along I.H. 820 Frontage Road):
 1. Minimum width - 40ft
 2. Canopy trees per 100 linear feet - 1.5
 3. Understory trees per 100 linear feet - 2.5
 4. Shrubs per 100 linear feet - 8
 - ii. South property line, adjacent to non-residential property:
 1. Minimum width - 5ft
 2. Canopy trees per 100 linear feet - 1
 3. Understory trees per 100 linear feet - 2.5
 4. Shrubs per 100 linear feet - 6
 - iii. South property line, adjacent to residential property:
 1. F2 bufferyard, as defined by Chapter 17.98 of the Benbrook Zoning Ordinance, is not required.
 - b. Total landscape area. The total landscape area shall cover 40% of the total lot area.
 - c. Tree canopy coverage. The total tree canopy coverage of the lot shall be 30%.
 - d. Interior landscaping. Minimum interior landscaping requirements shall be as follows:
 - i. Interior landscape area shall equal 10% of the total building footprint of the site
 - ii. Canopy trees per 600sqft of required landscape area - 1
 - iii. Understory trees per 500sqft of required landscape area - 1
 - iv. Shrubs per 120sqft of required landscape area - 1

- v. Groundcover area of the required landscape area - 5%
 - e. Parking lot landscaping. Minimum parking lot landscaping requirements shall be as follows:
 - i. Endcap islands installed at the end of each parking row. 1 canopy tree, measuring at least 3 caliper-inches, shall be planted within each endcap island
 - ii. Parking lot landscape area. Landscape area within the parking area islands shall be equal to 20sqft of landscaping per parking space
12. Tree Preservation and Mitigation. This section supersedes the tree preservation and mitigation requirements of Sections 16.28.010.1.5 and 16.28.010.H.1 (including Tables 16-A1 and 16-A2) of the Benbrook Municipal Code.
- a. Preserved trees in Area 2, located within the “Open Space Preservation” area, as depicted in the development standards in the “A-PD” and in the area described in EXHIBIT E, shall satisfy any tree preservation requirements of the City of Benbrook.
 - b. Tree mitigation requirements shall be satisfied by providing tree canopy cover, at maturity, for a minimum of 50% of all open space within this planned development district, excluding the preservation area as shown in EXHIBITS C and E. Open space shall be defined as all areas of the developed site excluding parking spaces, drive aisles, utility easements, and building footprints. Proposed trees may be planted within the preservation area if needed, and may include required interior landscaping, bufferyards, and parking lot trees in the canopy coverage calculation.
13. Site Plan. A site plan review shall be required in accordance with Chapter 17.76 of the Zoning Ordinance; the site plan shall comply with all adopted development regulations of the City of Benbrook.







LOCATION MAP NOT-TO-SCALE

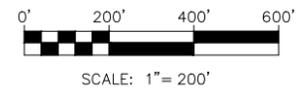


Table with columns: NO., REVISION, DATE

PAPE-DAWSON ENGINEERS logo and address: 201 MAIN ST, STE 901 | FT. WORTH, TX 76102 | 817.870.3868

ALTA/NSPS LAND TITLE SURVEY information including job number 61438-00, date May 2024, and sheet 2 of 2.

REFERENCES:

This survey was prepared in conjunction with, but not solely relying on, the Title Commitment listed below.

Title Company: FIDELITY NATIONAL TITLE INSURANCE COMPANY
Title Commitment: G.F.# FT-44122-9001222400288-LE
Date Issued: March 4, 2024 at 8:00 AM
Effective Date: February 21, 2024 at 8:00 AM

Only those matters identified in the Title Commitment and those that the surveyor was aware of at the time of this survey are shown.

10. THE FOLLOWING MATTERS AND ALL TERMS OF THE DOCUMENTS CREATING OR OFFERING EVIDENCE OF THE MATTERS:

f. All leases, grants, exceptions or reservations of the geothermal energy and associated resources below the surface of the Land, together with all rights, privileges, and immunities relating thereto, appearing in the Public Records whether listed in Schedule B or not. There may be leases, grants, exceptions or reservations of the geothermal energy and associated resources below the surface of the Land that are not listed.

g. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: Texas Electric Service Company
Purpose: As provided in said document
Recording Date: June 19, 1947
Recording No. in Volume 1917, Page 546, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

h. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: City of Fort Worth
Purpose: As provided in said document
Recording Date: July 2, 1969
Recording No. in Volume 4747, Page 326, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

i. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: Texas Electric Service Company
Purpose: As provided in said document
Recording Date: March 20, 1967
Recording No. in Volume 4376, Page 783, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

j. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: City of Fort Worth
Purpose: As provided in said document
Recording Date: April 14, 1978
Recording No. in Volume 6460, Page 600, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

k. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: Texas Electric Service Company
Purpose: As provided in said document
Recording Date: February 20, 1963
Recording No. in Volume 3778, Page 423, Deed Records, Tarrant County, Texas (UNABLE TO LOCATE DUE TO VAGUE DESCRIPTION)

l. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: City of Fort Worth
Purpose: As provided in said document
Recording Date: July 2, 1969
Recording No. in Volume 4747, Page 321, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

m. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: City of Fort Worth
Purpose: As provided in said document
Recording Date: April 17, 1978
Recording No. in Volume 6460, Page 605, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

n. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: City of Fort Worth
Purpose: As provided in said document
Recording Date: March 8, 1985
Recording No. in Volume 8113, Page 2034, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

o. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: City of Fort Worth
Purpose: As provided in said document
Recording Date: April 2, 1985
Recording No. in Volume 8137, Page 1646, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

p. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: City of Fort Worth
Purpose: As provided in said document
Recording Date: April 27, 1989
Recording No. in Volume 9577, Page 1010, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

q. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: Benbrook Water and Sewer Authority
Purpose: As provided in said document
Recording Date: August 23, 1982
Recording No. in Volume 7344, Page 2286, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

r. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: Barnett Gathering, LP
Purpose: As provided in said document
Recording Date: August 6, 2007
Recording No. in Document D207275019, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

s. Easement(s) and rights incidental thereto, as granted in a document:
Granted to: XTO Energy Inc
Purpose: As provided in said document
Recording Date: November 18, 2010
Recording No. in Document D210286446, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

l. Easement(s) and rights incidental thereto, as granted in a document:

Granted to: City of Fort Worth
Purpose: As provided in said document
Recording Date: July 14, 2011
Recording No. in Document D211168663, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

u. Matters contained in that certain document
Entitled: Non Exclusive Easement Agreement
Date: February 20, 2019
Executed by: Rowan Altgelt Laughlin Group, Ltd. and Cellico Partnership db/a Verizon Wireless
Recording Date: October 22, 2019
Recording No. in Document D219241238, Deed Records, Tarrant County, Texas
Reference is hereby made to said document for full particulars. (DOES NOT APPLY)

v. Matters contained in that certain document
Entitled: Memorandum of Surface Use Agreement
Date: October 26, 2022
Executed by: Rowan Altgelt Laughlin Group, Ltd., a Texas limited partnership and BKV North Texas, LLC, a Texas limited liability company
Recording Date: November 11, 2022
Recording No. in Document D222266242, Deed Records, Tarrant County, Texas (DOES NOT APPLY)

NOTES

THE BEARINGS FOR THIS SURVEY ARE BASED ON THE NAD 83 (NAD2011) EPOCH 2010.00, FROM THE TEXAS STATE PLANE COORDINATE SYSTEM ESTABLISHED FOR THE NORTH CENTRAL ZONE, DERIVED FROM SMARTNET RTK-VRS NETWORK. THE UNIT OF MEASURE IS US SURVEY FEET.

ALTA/NSPS TABLE A NOTES:

ITEM 1: 1/2" IRON ROD WITH YELLOW CAP MARKED "PAPE-DAWSON" SET AT SUBJECT PROPERTY CORNERS UNLESS NOTED OTHERWISE

ITEM 2: SUBJECT PROPERTY ADDRESS: NO KNOWN ADDRESS

ITEM 3: THE SUBJECT PROPERTY IS WITHIN THE FOLLOWING FLOOD ZONE(S) AS DEPICTED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP NUMBER 48439C0280K, DATED SEPTEMBER 25, 2009 FOR TARRANT COUNTY, TEXAS AND INCORPORATED AREAS. THIS DATA IS AVAILABLE ON THE WEBSITE WWW.MSC.FEMA.GOV.

ZONE X (UNSHADED), DEFINED AS: "OTHER AREAS; AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOODPLAIN."

ZONE X (SHADED), DEFINED AS: "OTHER FLOOD AREA; AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD.

ZONE AE BASE FLOOD ELEVATIONS DETERMINED.

ZONE AE (CROSS-HATCHED SHADING) THE FLOODWAY IS THE CHANNEL OF A STREAM PLUS AN ANY ADJACENT FLOODPLAIN AREAS THAT MUST BE KEPT FREE OF ENCROACHMENT SO THAT THE 1% ANNUAL CHANCE FLOOD CAN BE CARRIED WITHOUT SUBSTANTIAL INCREASES IN FLOOD HEIGHTS.

FLOOD LIMIT LINES DO NOT REPRESENT THAT THE PROPERTY WILL OR WILL NOT FLOOD. SUCH LINES AND AREAS ARE FROM SAID FEDERAL EMERGENCY MANAGEMENT AGENCY DATA SOURCES AND ARE ONLY STATISTICAL. THE SURVEYOR ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF SAID DATA.

ITEM 7(a) & (b): NO BUILDINGS ON THE SUBJECT PROPERTY

ITEM 8: SUBSTANTIAL FEATURES OBSERVED IN THE PROCESS OF CONDUCTION THE FIELDWORK ARE SHOWN ON THE SURVEY.

ITEM 9: PARKING COUNT:
STANDARD: 0
HANDICAP: 0
TOTAL: 0

ITEM 14: DISTANCE TO THE NEAREST INTERSECTION FROM THE POINT OF BEGINNING IS SOUTHEASTERLY ALONG US 820 APPROXIMATELY 1000 FEET TO VETERANS PARKWAY.

ITEM 16: THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

SURVEYORS CERTIFICATE:

TO: ROWAN ALTGELT LAUGHLIN GROUP, LTD, A TEXAS LIMITED PARTNERSHIP AND A.H. ROWAN, JR. AS THEIR INTEREST MAP APPEAR, FORT WORTH DALLAS REAL ESTATE LLC AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.

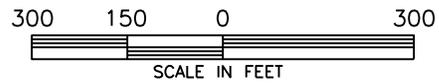
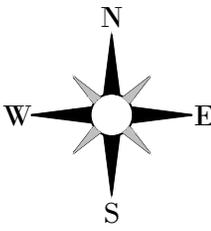
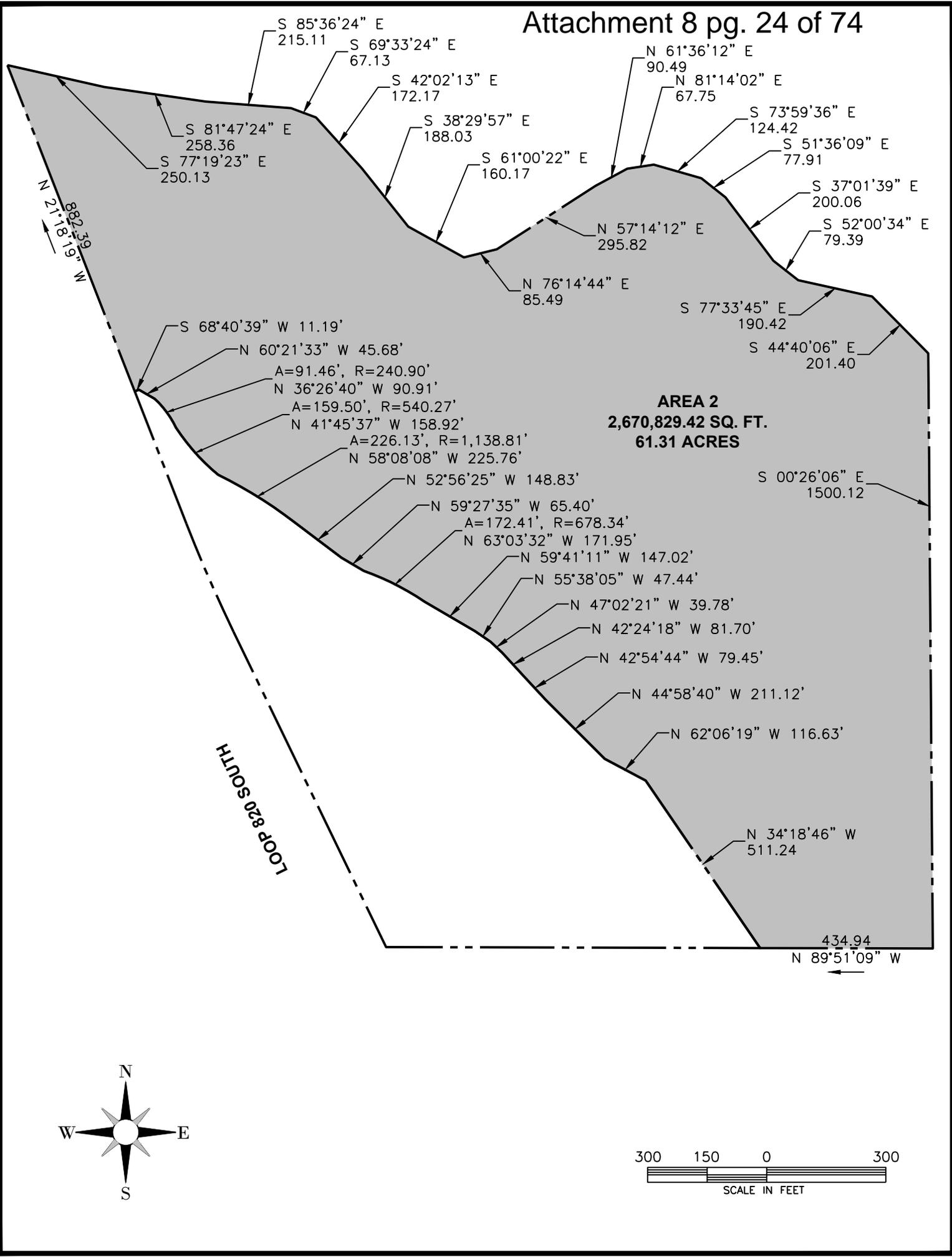
THIS IS TO CERTIFY THAT THIS MAP OR PLAN AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1-4, 7(a), 7(b)(1), 7(c), 8, 9, 14, AND 16 OF TABLE A THEREOF.

THE FIELD WORK WAS COMPLETED ON MAY 3RD, 2024.

DATE OF MAP OR PLAN: MAY 10TH, 2024

Signature of Elliott Pat Busby
ELLIOTT PAT BUSBY
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5561
EBUSBY@PAPE-DAWSON.COM
TEXAS SURVEYING FIRM # 10028800





Area 2 Legal Description

From the POINT OF BEGINNING; Thence, South 77° 19' 23" East for a distance of 250.13 feet to a point on a line.

Thence, South 81° 47' 24" East for a distance of 258.36 feet to a point on a line.

Thence, South 85° 36' 24" East for a distance of 215.11 feet to a point on a line.

Thence, South 69° 33' 24" East for a distance of 67.13 feet to a point on a line.

Thence, South 42° 02' 13" East for a distance of 172.17 feet to a point on a line.

Thence, South 38° 29' 57" East for a distance of 188.03 feet to a point on a line.

Thence, South 61° 00' 22" East for a distance of 160.17 feet to a point on a line.

Thence, North 76° 14' 44" East for a distance of 85.49 feet to a point on a line.

Thence, North 57° 14' 12" East for a distance of 295.82 feet to a point on a line.

Thence, North 61° 36' 12" East for a distance of 90.49 feet to a point on a line.

Thence, North 81° 14' 02" East for a distance of 67.75 feet to a point on a line.

Thence, South 73° 59' 36" East for a distance of 124.42 feet to a point on a line.

Thence, South 51° 36' 09" East for a distance of 77.91 feet to a point on a line.

Thence, South 37° 01' 39" East for a distance of 200.06 feet to a point on a line.

Thence, South 52° 00' 34" East for a distance of 79.39 feet to a point on a line.

Thence, South 77° 33' 45" East for a distance of 190.42 feet to a point on a line.

Thence, South 44° 40' 06" East for a distance of 201.40 feet to a point on a line.

Thence, South 00° 26' 06" East for a distance of 1500.12 feet to a point on a line.

Thence, North 89° 51' 09" West for a distance of 434.90 feet to a point on a line.

Thence, North 34° 18' 46" West for a distance of 511.24 feet to a point on a line.

Thence, North 62° 06' 19" West for a distance of 116.63 feet to a point on a line.

Thence, North 44° 58' 40" West for a distance of 211.12 feet to a point on a line.

Thence, North 42° 54' 44" West for a distance of 79.45 feet to a point on a line.

Thence, North 42° 24' 18" West for a distance of 81.70 feet to a point on a line.

Thence, North 47° 02' 21" West for a distance of 39.78 feet to a point on a line.

Thence, North 55° 38' 05" West for a distance of 47.44 feet to a point on a line.

Thence, North 59° 41' 11" West for a distance of 147.02 feet to the beginning of a non-tangential curve,

Said curve turning to the left through an angle of 14° 33' 46.3", having a radius of 678.34 feet, and whose long chord bears North 63° 03' 32" West for a distance of 171.95 feet to a point of intersection with a non-tangential line.

Thence, North 59° 27' 35" West for a distance of 65.40 feet to a point on a line.

Thence, North 52° 56' 25" West for a distance of 148.83 feet to the beginning of a non-tangential curve,

Said curve turning to the left through 11° 22' 37.6", having a radius of 1138.81 feet, and whose long chord bears North 58° 08' 08" West for a distance of 225.76 feet to the beginning of a non-tangential curve.

Said curve turning to the right through 16° 54' 53.5", having a radius of 540.27 feet, and whose long chord bears North 41° 45' 37" West for a distance of 158.92 feet to the beginning of a non-tangential curve.

Said curve turning to the left through an angle of 21° 45' 08.9", having a radius of 240.90 feet, and whose long chord bears North 36° 26' 40" West for a distance of 90.91 feet to a point of intersection with a non-tangential line.

Thence, North 60° 21' 33" West for a distance of 45.68 feet to a point on a line.

Thence, South 68° 40' 39" West for a distance of 11.23 feet to a point on a line.

Thence North 21° 18' 19" West a distance of 882.40 feet to the POINT OF BEGINNING;

Containing 61.312 acres

Mary's Creek Neighbor Resilience Program Implementation Outline

1. Purpose

The Mary's Creek Neighbor Resilience Program ("Program") is established to provide targeted, non-political community benefits to residential properties impacted by the Mary's Creek embankment and associated infrastructure improvements. The Program is intended to support neighborhood resilience, post-project flood documentation, and property mitigation measures following project approval, while maintaining transparency, fairness, and independence from any public or political process.

2. Benefit Area

The Program shall benefit residential properties located within the defined Benefit Area.

The Benefit Area shall consist of residential properties located along the affected reaches of the Mary's Creek corridor, as depicted on a Benefit Area Map. The Benefit Area Map shall be finalized and provided following issuance of the Final LOMR, based on City-accepted floodplain data, and shall be consistent with the final floodplain extents established by the LOMR, as approved by the City.

Finalization of the Benefit Area Map in accordance with this section shall not require an amendment to the Planned Development.

Eligibility for participation in the Program shall be voluntary and based solely on property location within the finalized Benefit Area.

3. Program Funding

- **Total Program Funding: \$500,000**
- **Funding Trigger:** As set forth in the Planned Development and Development Agreement, Program funding shall occur prior to commencement of any vertical on-site residential construction.
- Program funds shall be deposited into a restricted account dedicated exclusively to Program purposes.

4. Program Administration

The Program shall be administered by an independent third-party administrator, such as a community foundation or comparable neutral entity, acceptable to the City (“Administrator”).

The Administrator shall be responsible for:

- Establishing Program guidelines and application procedures;
- Reviewing applications for eligibility and compliance;
- Awarding micro-grants in accordance with Program criteria;
- Disbursing funds and maintaining appropriate records; and
- Providing periodic aggregate reporting on Program activity, without disclosure of personal or private homeowner information.

Neither the City nor the Owner shall control individual grant decisions.

4A. City Coordination; Opt-In / Opt-Out; Program Finalization

The final Program guidelines and implementation shall be developed in coordination with the City, including the City’s election to opt in or opt out of receiving all or a portion of Program funds pursuant to Section 8 of this Exhibit. The City may provide reasonable input through the City Manager or designee, as directed by City Council; provided, however, that such coordination shall not extend to control over individual grant awards.

The Program shall be finalized and formally opened within a reasonable time following the City’s issuance of applicable development or infrastructure permits, as reasonably determined by the Administrator, in consultation with the City Manager (or designee), consistent with City Council direction.

5. Eligible Uses of Program Funds

Micro-grants awarded under the Program may be used for the following categories of improvements and services, as further defined in the Program guidelines:

A. Property Resilience Improvements

- Yard drainage and erosion mitigation (including French drains, surface drains, downspout connections, minor grading, and stabilization);
- Minor landscaping, tree replacement, or restoration related to construction impacts; and
- Other similar resilience-related improvements determined eligible by the Administrator.

B. Post-Project Flood-Risk Documentation

- Post-construction Elevation Certificates prepared by licensed professionals;
- Limited resurveys or flood-related documentation supporting flood insurance rating determinations; and

- Documentation used to support FEMA map amendment or verification requests following completion and acceptance of the embankment improvements.

Program funding supports documentation and professional services only and does not guarantee flood insurance rate changes, FEMA determinations, or floodplain map revisions.

6. Participation Safeguards

Participation in the Program:

- Is **voluntary**;
- Shall **not be conditioned on** any resident's support, opposition, testimony, correspondence, attendance, or participation in any public or political process; and
- Shall be available on **equal terms** to all eligible households within the Benefit Area, subject to Program guidelines and available funding.

7. Program Duration

The Program shall remain open for applications for a period of twenty-four (24) months following the date the Program is formally opened by the Administrator ("Program Period"), unless extended by the Administrator using available funds.

The Administrator shall provide reasonable public notice regarding Program availability and upcoming sunset.

8. Optional Conveyance to the City for Grant Leveraging

At the City's election, all or a portion of the Program funds may be conveyed to the City of Benbrook, subject to City acceptance, for use in a community resilience, flood mitigation, or Mary's Creek-related improvement project, including use as a local match for FEMA or other state or federal grant programs, provided such funds are used for the benefit of residents within or adjacent to the Benefit Area.

9. Unused Funds

Any Program funds remaining unawarded after the conclusion of the Program Period, or not otherwise conveyed pursuant to Section 8, shall be dedicated, through the Administrator, to public safety or community resilience purposes within the City of Benbrook, including flood response, emergency preparedness, or related public safety initiatives.

Under no circumstances shall unused Program funds revert to the Owner.

10. Relationship to Other Approvals

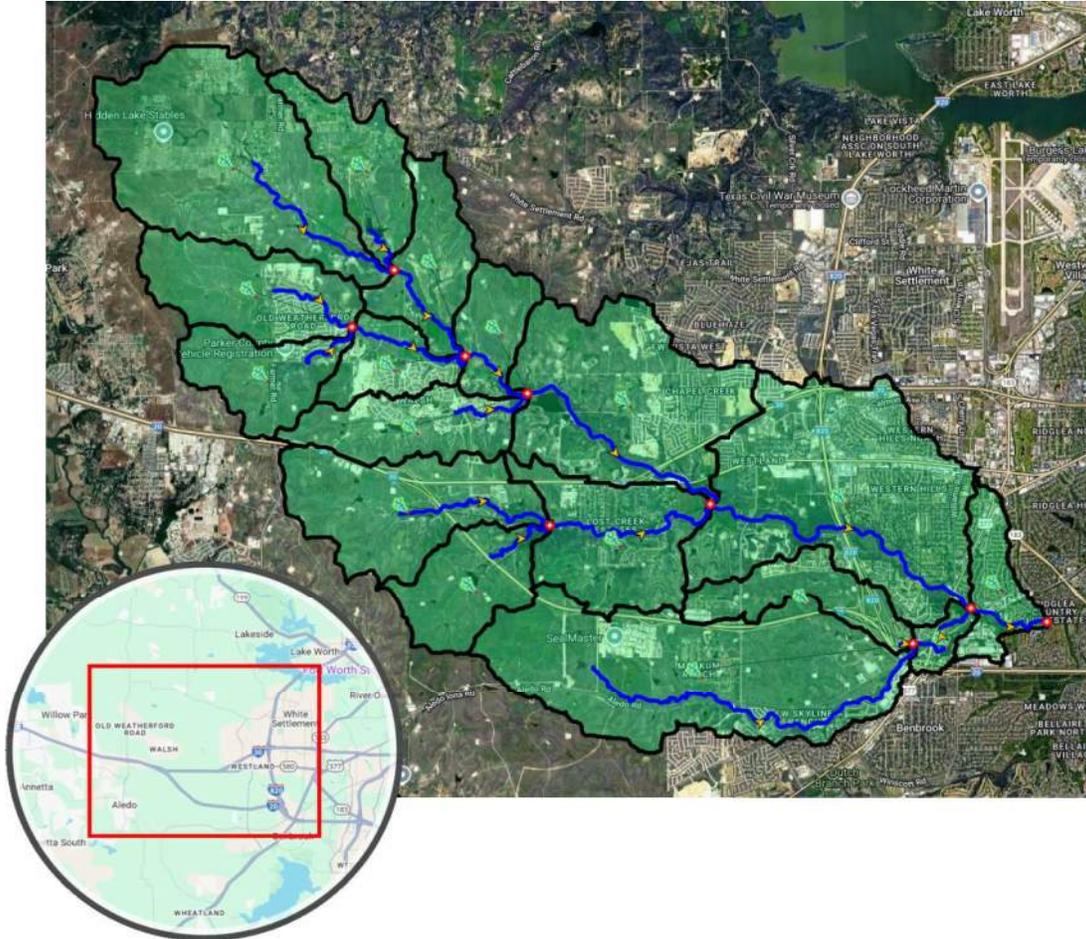
This Exhibit summarizes the Program framework. Specific funding timing, proof of funding, maintenance obligations, enforcement mechanisms, and financial assurances are governed by the Planned Development conditions and the Development Agreement.

11. No Third-Party Rights

Nothing herein shall be construed to create third-party beneficiary rights or obligations beyond those expressly set forth in the Planned Development or Development Agreement.

Attachment 8 pg. 31 of 74
**Mary's Creek Floodplain Development and CLOMR Technical
Report**

*Hydraulic Modeling and Flood Risk Mitigation for Rowan Ranch and Lago Cantera
City of Benbrook, Tarrant County, Texas*



Prepared for:
FEMA Region VI
City of Benbrook, Texas
City of Fort Worth, Texas

Prepared by:



Samantha Renz, P.E., C.F.M.
December 10, 2025

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Executive Summary - FEMA Reviewer

This technical memorandum supports a Conditional Letter of Map Revision (CLOMR) request for channel and floodplain improvements along Mary's Creek within the City of Benbrook, Tarrant County, Texas, serving the Rowan Ranch and Lago Cantera developments. The project reach extends approximately 11,500 feet along Mary's Creek, beginning about 2,500 feet upstream of Loop 820 and continuing downstream past two spillway structures (DAM01 and DAM02) to approximately 1,000 feet below DAM02 and about 1,700 feet upstream of Benbrook Boulevard/Highway. The reach includes three bridges (two service bridges and Loop 820) and two inline spillway/overflow structures.

Purpose

The purpose of this CLOMR is to:

1. Document the hydrologic and hydraulic basis for revised 1% annual-chance (100-year) flood conditions on Mary's Creek within the project corridor.
2. Demonstrate that the proposed channel widening, bank stabilization, and embankment improvements:
 - Do not increase Base Flood Elevations (BFEs) beyond FEMA-allowable limits.
 - Do not cause adverse hydraulic impacts upstream or downstream.
 - Reduce floodplain width and remove multiple existing structures from the mapped floodplain.
3. Support revised floodplain and floodway mapping through an MT-2 CLOMR/LOMR process.

Model Lineage and Hydrologic Basis

The effective FEMA model for this Mary's Creek reach originates from early 1980s HEC-2 analyses and associated FIS flows. Subsequent work by Freese and Nichols, Inc. (FNI) in 2016 and 2023, and particularly the 2024 City-recognized FNI HEC-RAS/HEC-HMS model, incorporates NOAA Atlas 14 rainfall, updated soils and Curve Numbers, modern high-resolution LiDAR terrain, and revised watershed boundaries and development assumptions. Comparison of 100-year peak discharges shows that the 2024 FNI hydrology consistently produces higher and more conservative flows than the FEMA Effective FIS values. Those City-accepted FNI-2024 flows are adopted as the governing hydrology for this CLOMR. An independent Evolving Texas 2025 HEC-HMS model was developed for site-specific validation and incremental runoff confirmation; results corroborate the FNI-2024 flows.

Hydraulic Modeling Framework

All hydraulic analyses were performed using HEC-RAS Version 6.7. Five primary modeling scenarios were evaluated:

- Effective FEMA – 100-Year: Original HEC-2 based FEMA effective model and FIS flows.
- Corrected Effective – Base Conditions (Existing): Updated terrain (survey + LiDAR) and City-approved FNI-2024 100-year flows.
- Proposed Conditions – 100-Year: Same flows as Corrected Effective plus channel widening, right-bank embankment/retaining-gabion system, localized grading, and roughness adjustments.
- Existing Conditions – 100-Year Ultimate: Updated terrain with “ultimate” watershed flows for regional planning context.
- Proposed Conditions – 100-Year Ultimate: Proposed geometry under ultimate flows, for City reference.

Normal-depth boundary conditions were applied using a downstream slope of 0.00154. Manning's n values were assigned using field reconnaissance and 2021 NLCD land cover mapped in RAS- Mapper, with higher composite n values (approximately 0.12) assigned at rock-ramp and roughened segments where velocities were previously elevated.

Key Findings

- No Rise in BFEs: Proposed 100-year model shows no increase in BFEs above Corrected Effective conditions at regulatory cross sections.
- Reduced Floodplain Width and Risk: Proposed improvements reduce the lateral extent of the 1% annual-chance floodplain, particularly on the right bank, and remove multiple structures from flood risk.
- No Adverse Upstream/Downstream Impacts: Water-surface elevations upstream and downstream of the project limits remain within allowable tolerances.
- Velocity Mitigation Achieved: Rock ramps and roughened surfaces reduce velocities to at or below existing conditions at critical locations.
- Floodway Re-mapping: Revised floodway encroachments are more symmetric and remain within surcharge limits.
- Valley Storage Preserved or Increased: Comparison of existing and proposed DEM-based valley storage shows an increase in storage volume.

Conclusion for FEMA

The proposed Mary's Creek improvements for Rowan Ranch and Lago Cantera use a conservative, City-endorsed hydrologic basis; are modeled with current best-practice HEC-RAS methods; demonstrate no-rise, no adverse impact, and improved floodplain performance; and are consistent with FEMA regulations and NFIP criteria for CLOMR and subsequent LOMR issuance.

Executive Summary – City of Benbrook Floodplain Administrator

This project proposes targeted channel and floodplain improvements along Mary's Creek in Benbrook to protect existing and planned development at Rowan Ranch and Lago Cantera while meeting or exceeding the City's Flood Hazard Ordinance (Ordinance 1498) requirements.

Local Context

The project reach lies wholly within the City of Benbrook corporate limits and is mapped as Zone AE on FEMA FIRM panel 48439C0280K (effective September 25, 2009). Mary's Creek is currently modeled using an older FEMA Effective model based on 1980s-era data. The City has since adopted updated hydrology and hydraulics via the FNI 2024 model, which uses NOAA Atlas 14 rainfall and modern LiDAR. This CLOMR submittal starts from the FNI-2024 baseline hydrology and terrain, updates the channel geometry with current survey, and evaluates both Corrected Effective (existing) and Proposed conditions.

Ordinance 1498 – Key Requirements Addressed

- No Increase in Flood Elevations / No Adverse Impact: Proposed conditions maintain or reduce 1% annual-chance water-surface elevations relative to Corrected Effective and do not create adverse impacts upstream or downstream.
- No Loss of Valley Storage: DEM-based valley-storage calculations show that valley storage increases within the 1% annual-chance floodplain under proposed conditions.
- Velocity Control and No Localized Adverse Impacts: Velocity hotspots were mitigated with rock ramps and roughened segments such that velocities match or fall below existing conditions.
- Floodway Encroachment Management: Recomputed floodway encroachments are more symmetric and remain within FEMA surcharge limits.

Project Benefits to Benbrook

- Reduces flood risk and mapped floodplain extents on both banks.
- Removes multiple existing or planned structures from the 1% annual-chance floodplain.
- Improves channel stability with gabion systems and nature-based roughening.
- Increases valley storage while limiting velocities, providing greater resilience.
- Aligns floodplain mapping with current terrain, hydrology, and development.

Summary

The project complies with Ordinance 1498, uses the City-recognized FNI 2024 hydrologic baseline, and results in a safer, more stable, and more predictable floodplain condition within Benbrook city limits.

Compliance Matrix (FEMA and City of Benbrook)

Requirement / Standard	Governing Citation / Policy	Condition Evaluated	Result	Location in Report
No increase in BFEs (no-rise)	44 CFR §60.3(d)	Corrected Effective vs. Proposed (100-year)	Met – No rise above allowable tolerances at regulatory cross sections	Section 7; Appendix D
No adverse upstream/downstream impact	NFIP / FEMA MT-2 Guidance	Upstream/downstream WSEs and velocities vs. Corrected Effective	Met – No adverse surcharges or erosive velocities	Section 7; Appendix D
Floodway surcharge limits	FEMA MT-2; 44 CFR §65.7	Revised floodway with encroachments	Met – Surcharge within allowable limits	Section 8; Appendix E
Use of conservative hydrology	FEMA / City of Fort Worth standards	FNI-2024 vs. FEMA Effective	Met – FNI-2024 adopted; more conservative than Effective	Section 3
No loss of valley storage	City of Benbrook Ordinance 1498	1% annual-chance fully developed floodplain	Met – Storage increased (Existing vs. Proposed)	Section 9
Velocity control (no increased erosive risk)	City of Benbrook Ordinance 1498	Main channel velocities under Q100	Met – Localized increases mitigated via rock ramps and roughening	Section 7
Structural stability of modified banks	Engineering practice; local design criteria	Embankments and gabion walls	Met – Factors of safety exceed minimums	Section 6; Appendix G

Key Modeling Inputs Summary

- Software and Data Sources:
 - Hydrology: HEC-HMS (Evolving Texas validation), FNI-2024 watershed model.
 - Hydraulics: HEC-RAS 6.7, 1D steady flow.
- Terrain: USGS 3DEP LiDAR (1-m tiles), City/consultant survey, bathymetry.
- Land Cover: NLCD 2021.
- Rainfall: NOAA Atlas 14.
- Modeled Scenarios:
 - ✓ Effective FEMA – 100-Year.
 - ✓ Corrected Effective – Base Conditions.
 - ✓ Proposed – 100-Year.
 - ✓ Existing – 100-Year Ultimate Conditions.
 - ✓ Proposed – 100-Year Ultimate Conditions.

PROJECT INTRODUCTION AND DESCRIPTION

The purpose of this submittal is to request a Conditional Letter of Map Revision (CLOMR) for proposed improvements within the Mary's Creek floodplain. This submittal includes all necessary hydraulic modeling to evaluate the impacts of proposed cut-and-fill activities within the existing FEMA-designated "Zone AE" floodplain.

The project site is located on the east side of Interstate 820 in the City of Benbrook, Tarrant County, Texas. Figure 1 shows the project location on Google Satellite.



Figure 1: Project Location Map

The proposed development is located on FEMA FIRM panel 48439C0280K, dated September 25, 2009. The subject tributary is classified as Zone AE. The FEMA Effective Firm Panel is included in Appendix A.

The total length of the project area is approximately 11,500 feet—extending about 2,500 feet upstream from Loop 820 and ending approximately 1,000 feet downstream of dam structure DAM02 and 1700 ft upstream of Benbrook Highway/Blvd. This area captures the full hydraulic picture and all relevant structures within the project corridor, including two service bridges near Loop 820, the main bridge at Loop 820, and two spillway structures (DAM01 and DAM02).

The project analysis includes:

- Development of a mathematical hydraulic model for both existing and proposed channel conditions.

- Evaluation of all relevant hydraulic parameters for Mary's Creek under design flood conditions in the existing channel.
- Hydraulic capacity analysis of bridge openings and spillway structures.
- Evaluation of all relevant hydraulic parameters for Mary's Creek under the proposed conditions, which include channel widening and embankment improvements to protect the subject parcels.
- Comparison of results with the effective FEMA model for the 100-year flood, as well as with the existing conditions model developed using updated LiDAR and bathymetric data.

Review of Existing Project Documentation

The effective FEMA hydraulic model for this reach of Mary's Creek was originally developed in the early 1980s using HEC-2. In 2013, Freese and Nichols, Inc. (FNI) prepared a draft HEC-RAS model with improved geometry and structure data; however, it was never formally submitted to FEMA. Building on this foundation, the City of Fort Worth provided a shared FNI model from August 11th, 2023, and later revised on November 1st, 2024 that incorporated updated survey, hydrology, and terrain data, establishing a modern regulatory baseline.

Subsequent refinements by FNI (2016, 2023) and project-specific analysis by Evolving Texas (2025) confirmed that the FEMA effective flows were outdated and that the 2024 FNI model provides the most accurate and conservative basis for analysis.

Corporate Limits

The project area lies entirely within the corporate limits of the City of Benbrook (Tarrant County, Texas). Floodplain permitting and review are administered by Benbrook as a participating NFIP community in accordance with 44 CFR Parts 59–60, 65, and 72. Benbrook's local ordinance (Ordinance 1498, as amended) applies where its provisions are more restrictive than NFIP minimum standards. No construction is located within the City of Fort Worth; any coordination with Fort Worth pertains to mapping and administrative consistency as an adjacent community with the jurisdictional boundary.

Hydrology Analysis and Basis of Flows

Watershed delineation was based on USGS 3DEP LiDAR (1-m resolution) processed in QGIS to define subbasin boundaries, drainage divides, and flow paths. Multiple hydrologic datasets were reviewed, including FEMA Effective hydrology, FNI 2016 and 2023 studies, the FNI 2024 model update, and an Evolving Texas 2025 HEC-HMS model. The FNI-2024 hydrology produces higher, more conservative 100-year peak discharges than FEMA Effective flows and closely matches the Evolving Texas HEC-HMS results. Given its modern basis and City acceptance, FNI-2024 hydrology is adopted as the governing flow dataset for this CLOMR. Ultimate-condition flows were also evaluated for City planning purposes. The summary of flows is shown in *Table 1* on page 11, for reference.

Hydrologic Models / Datasets

- **FEMA Effective hydrology** (baseline, outdated, underestimates flows)
- **FNI 2016** (draft LOMR hydrology/hydraulics)
- **FNI 2023 – Walsh Ranch Regional Stormwater Plan** (updated CNs, soils, watershed assumptions)
- **FNI 2024 Model Update** (City-approved; governing hydrology; highest flows)
- **Evolving Texas Hydrology 2025** (site-specific HMS validation + ΔQ computation)
- **On-Ground Survey Data** (control of elevations & critical drainage features)
- **Regional LiDAR / DEM** (terrain basis for HMS and RAS)
- **Additional Supporting Studies** (supplemental soils, watershed data, topography)

FEMA Effective & Feese & Nichols 100-YR Flow Total Comparison with supplemental flow

Reach	Local Authority	River station	FEMA FIS River station	FEMA Letter	Profile	100-YR Q Total FEMA FIS Flows CFS	100-YR Corrective Effective (FNI-2024) Flows CFS	Δ Q Total (Fema - FNI) CFS	Δ Percent Change (Fema / FNI)	100-YR Proposed Flows (Supplemental Runoff Increment Superimposed on FNI Flows)	Δ Q Total (FNI - Supplemental Aggregate) CFS	Δ Percent Change (FNI / Supplemental)
Mary's Creek	Fort Worth	23029			100-YR	38100	42984	4884	12.82%	42984	0	0.00%
Mary's Creek	Fort Worth	21907	22080 L		100-YR	38100	45720	7620	20.00%	45720	0	0.00%
Mary's Creek	Benbrook	19820			100-YR	38100	46658	8558	22.46%	46658	0	0.00%
Mary's Creek	Benbrook	17963	18260 K		100-YR	37900	46658	8758	23.11%	46658	0	0.00%
Mary's Creek	Benbrook	16610			100-YR	37900	46708	8808	23.24%	46708	0	0.00%
Mary's Creek	Benbrook	14882	15030 I		100-YR	38100	48154	10054	26.39%	48204	50	0.10%
Mary's Creek	Benbrook	13893			100-YR	37500	48154	10654	28.41%	48204	50	0.10%

Table 1 FEMA Effective & FNI-2024 Flow chart comparison

Hydraulic Modeling Inputs and Boundary Conditions

Hydraulic modeling was completed using HEC-RAS Version 6.7 in 1D steady-flow mode for the 100-year design event. Five scenarios were modeled: Effective FEMA, Corrected Effective, Proposed (100-year), Existing Ultimate, and Proposed Ultimate. Channel cross-sections, bank stations, ineffective areas, and storage areas were derived from field survey, bathymetry, and LiDAR. Bridges and spillway structures were modeled using standard HEC-RAS routines with typical energy loss coefficients.

A downstream boundary condition of normal depth was applied using a slope of 0.00154. Manning’s n values were assigned based on site reconnaissance and 2021 NLCD land cover, with composite n values increased in proposed rock-ramp and roughened segments to approximately 0.12.

#	Model Name	Description and Topo	Flows Used
1	Effective FEMA - 100-Year	Original FEMA model using 1980s USACE HEC-2 modeling and FEMA’s effective Flood Insurance Study (FIS) flow.	FEMA FIS Flows (100-YR)
2	Corrected Effective Base Conditions (Existing Conditions)	Uses updated topography – surveyed and LIDAR data	Adopted Flows (100-YR) (Table 1)
3	Proposed Conditions - 100-Year	Proposed topography (includes widened channel, sloped right overbank, retaining/gabion walls, filled depressions and boulder clusters) for improved hydraulics and stable subcritical flow conditions.	Adopted Flows (100-YR) (table 1)
4	Existing Conditions – 100-Year Ultimate	Uses updated topography – surveyed and LIDAR data	Ultimate Flows (100-YR) (table 1)
5	Proposed Conditions – 100- Year Ultimate	Proposed topography (includes widened channel, sloped right overbank, retaining walls/gabion walls, filled depressions and boulder clusters) for improved hydraulics and stable subcritical flow conditions.	Ultimate Flows (100-YR) (table 1)

Table 2 Model/Plan Names and Descriptions

Existing Conditions (Corrected Effective) Analysis

The Corrected Effective model represents current hydraulic conditions in Mary’s Creek using updated terrain, FNI-2024 100-year flows, and existing channel and floodplain configuration. Under the 1% annual-chance event, floodwaters overtop the right bank and occupy a broad overbank corridor. The left bank includes established residential development at risk of inundation. Conveyance is governed primarily by overbank roughness and subtle topographic relief. No flood protection features are present in this configuration.

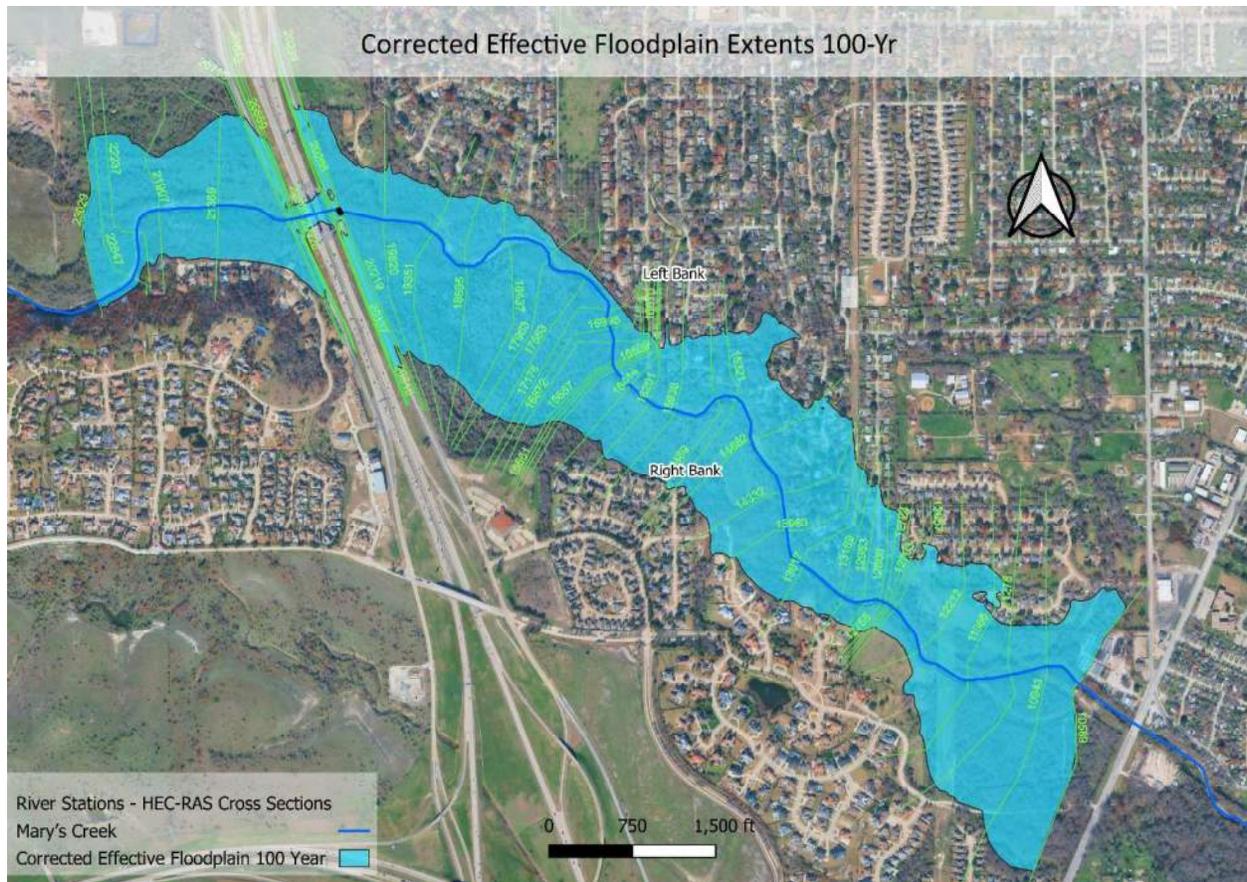


Figure 2 – Corrected Effective Floodplain Extents.

Proposed Conditions Analysis

The proposed floodplain improvements are intended to protect Rowan Ranch and Lago Cantera from the 1% annual-chance event, reduce floodplain extents, comply with FEMA and City requirements, and maintain channel stability. Primary geometric changes include targeted channel widening (primarily on the right bank), a modular gabion wall system along critical segments, localized grading and fill to remove depressions, and vegetation and roughness adjustments. Geotechnical investigations performed in April 2024, including boreholes and Standard Penetration testing, informed slope stability analyses in GeoStudio (SLOPE/W) using the Morgenstern-Price method. Factors of safety exceeded the required minimums under normal, 100-year flood, and rapid drawdown conditions, confirming slope and embankment stability. Figure 4 below shows a typical cross section of the proposed widening and gabion wall.

Refer to Appendix G for the Geotechnical Report and Slope Stability Outputs.

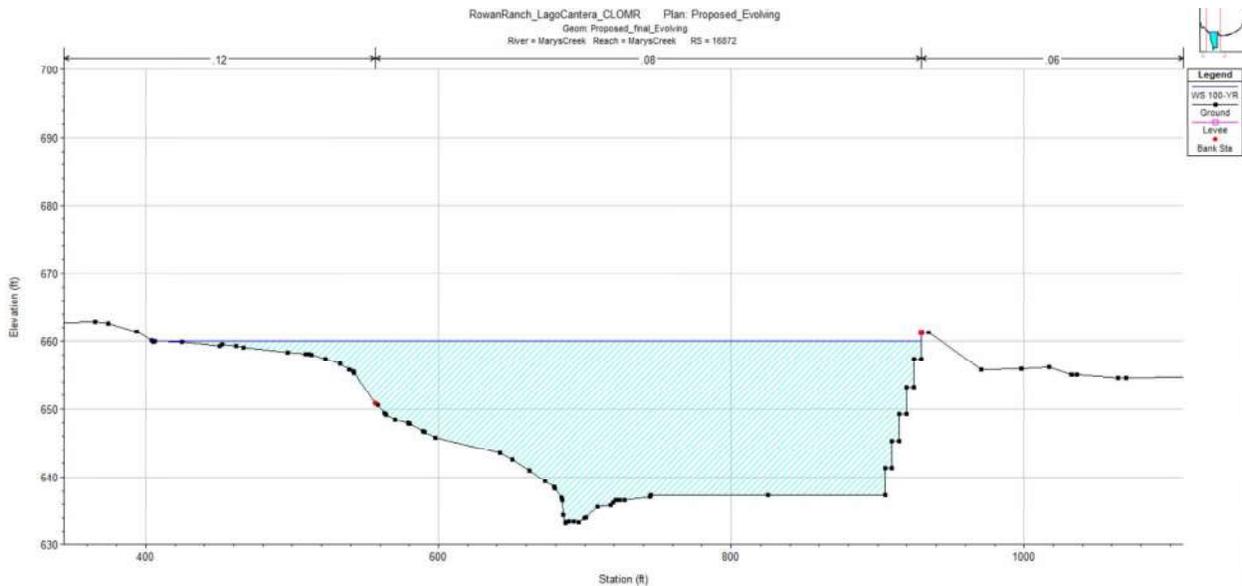


Figure 3 - Schematic of typical proposed solution – Channel widening and gabion wall system on the right bank

Velocity Mitigation and Ordinance Compliance

Initial proposed-channel iterations, which focused on right-bank confinement and elimination of overbank inundation, reduced effective flow area and increased main-channel velocities. To comply with the City of Benbrook Flood Hazard Ordinance, Evolving Texas identified velocity hotspots, introduced rock-ramp features and roughened segments with composite Manning's n of approximately 0.12, and considered equivalent vegetated roughening treatments. Post-mitigation hydraulic modeling shows that velocities in critical segments match or fall below Corrected Effective values, satisfying local velocity control requirements. Refer to Appendix D for Comparative Velocity Tables (Corrected Effective vs. Proposed).

Floodway Analysis

Floodway limits were re-evaluated using HEC-RAS 1D steady-state methods in accordance with FEMA MT-2 guidance. The effective model was updated with surveyed cross-sections, bathymetry, and LiDAR, and proposed improvements were incorporated to assess changes to conveyance, water-surface elevations, and valley storage. Encroachment analysis was performed in HEC-RAS Mapper by iteratively adjusting left and right encroachments to the allowable surcharge threshold.

Under proposed conditions, channel widening and grading improved conveyance and reduced the effective floodplain width. Floodway encroachments redistribute more symmetrically around the channel centerline, correcting irregularities in the effective model and reducing the overall inundation area for the 1% annual-chance event. Updated floodway limits were mapped in HEC-RAS Mapper, exported to GIS, and prepared for MT-2 submittal.

The revised floodway provides four primary benefits: reduced overbank inundation, balanced encroachment from both banks, improved in-channel conveyance, and full compliance with FEMA

and City of Benbrook “no adverse impact” standards. Refer to Appendix E – Floodway Work Maps and Encroachment Plots.

Valley Storage Analysis

Benbrook Ordinance 1498 requires no loss of valley storage within the fully developed 1% annual-chance floodplain. Existing and proposed DEMs were subtracted from the Corrected Effective Base Flood Elevation raster in RAS-Mapper to compute valley storage rasters, which were then quantified in QGIS using the Raster Surface Volume tool. Existing valley storage was computed as approximately 83,339,364 cubic feet, and proposed valley storage as approximately 91,408,291 cubic feet. Valley storage therefore increases under the proposed condition, meeting and exceeding the ordinance requirement.

Summary of Findings/Compliance

The analyses demonstrate that:

- FNI-2024 hydrology is conservative and appropriate for use as the governing flow dataset.
- Corrected Effective conditions show existing flood risks under the 1% annual-chance event.
- Proposed conditions provide flood protection for Rowan Ranch and Lago Cantera, reduce floodplain extents, and remove multiple properties from risk.
- Velocity increases due to confinement are mitigated through rock ramps and roughening, bringing velocities back to at or below existing levels.
- Revised floodway limits improve alignment with the conveyance corridor and remain within FEMA surcharge limits.
- Valley storage increases under proposed conditions, satisfying Ordinance 1498.
- No increase in BFEs above allowable limits and no adverse upstream or downstream impacts are observed.

Conclusion

The hydrologic and hydraulic analyses described in this memorandum demonstrate that the proposed Mary’s Creek improvements associated with Rowan Ranch and Lago Cantera are based on conservative, modern hydrology and high-resolution terrain; meet FEMA NFIP requirements for CLOMR/LOMR applications; comply with City of Benbrook Ordinance 1498; reduce floodplain extents and risk for existing and planned development; and provide stable, constructible, and maintainable floodplain improvements supported by geotechnical analysis. Accordingly, Evolving Texas respectfully submits this CLOMR package to FEMA Region VI, with the expectation that, upon approval and as-built confirmation, a LOMR will be pursued to revise the effective FIRM and floodway mapping for Mary’s Creek in this corridor.

Respectfully submitted,

Samantha Renz
Samantha Renz, P.E., C.E.M.

12/10/2025



5/10/2024

Traffic Impact Analysis

Chapin Rd Mixed Residential Benbrook, TX



Prepared by:

Zegeye Kebede, PE, PTOE
ZEETEK ENGINEERING, LLC.
P.O. Box 217,
Lavon TX 75166
Texas Registered Firm # F- 23894



Pape-Dawson Engineers
201 Main Street, Suite 901, Fort
Worth, TX 76102



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EXECUTIVE SUMMARY

Zeetek Engineering, LLC was retained to perform a traffic impact analysis (TIA) for an upcoming Chapin Rd Mixed Residential development, to be situated near IH 820 Northbound Frontage Road (IH 820 NBFR) north of Team Ranch Rd in Benbrook, Texas. This TIA was conducted to aid in the approval of the site plan and two driveway connections to IH 820 NBFR.

In this TIA, the following study intersections were analyzed:

- IH 820 SBFR at Camp Bowie Blvd (Signalized)
- IH 820 NBFR at Camp Bowie Blvd (Signalized)
- IH 820 SBFR at Chapin Rd
- IH 820 NBFR at Chapin Rd
- IH 820 SBFR at Team Ranch Rd
- IH 820 NBFR at Team Ranch Rd
- IH 820 NBFR at Site Driveway 1
- IH 820 NBFR at Site Driveway 2

A 2.0 % annual growth rate was applied to the existing traffic volumes to project future background volumes. The following study scenarios were analyzed during the weekday AM and PM peak hours:

- 2024 Existing Condition
- 2027 Buildout Year – Background (No-Build)
- 2027 Buildout Year – Background-Plus-Site (Build)
- 2032 Horizon Year – Background (No-Build)
- 2032 Horizon Year – Background-Plus-Site (Build)

The development is slated for completion by 2027 and will comprise 331 multifamily units occupying around 18.5 acres of land, along with 104 single-family homes spread across approximately 25.9 acres.

The development is expected to produce 225 trips during the morning peak hour, with 56 entering trips and 169 exiting trips. During the afternoon peak hour, it is projected to generate 282 trips, consisting of 176 entering trips and 106 exiting trips.

A summary of findings from the analyses are presented below:

- The analysis of intersection level of service (LOS) indicates that all study intersections and approaches within the City of Benbrook limits are expected to operate at an overall LOS C or better during peak hours for existing, no-build, and build scenarios.
- Driveway 1 meets the TxDOT's criteria for potentially justifying a right-turn lane installation. However, since the projected northbound background volumes on IH 820 NBFR remain low (under 50 vehicles per hour) during both AM and PM peak hours, a right-turn deceleration lane is not recommended.
- Aerial overviews, and a review of the proposed driveway locations show no sight distance concerns at the site access points, satisfying AASHTO's criteria.
- According to the criteria set forth by TxDOT in the Access Management Manual, the proposed site driveways fulfill the minimum access spacing requirements.

According to the findings of this traffic impact analysis, it is expected that the proposed development will have a minimal impact on the adjacent roadway network.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

MARYS CREEK



Interstate Highway (IH) 820,
Benbrook, Tarrant County, Texas

Latitude: 32.710395°

Longitude: -97.475662°

Prepared for:

By:



Motiv Ventures LLC
4909 Camp Bowie Blvd
Fort Worth, Texas 76107



Integrated Environmental Solutions
301 W El Dorado Parkway
Suite 101
McKinney, Texas 75069

03 October 2023

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ATTACHMENT D – HISTORIC AERIAL PHOTOGRAPHS

ATTACHMENT E – HISTORIC TOPOGRAPHIC MAPS

ATTACHMENT F – LOCAL GOVERNMENT OPEN RECORDS SEARCH

ATTACHMENT G – ENVIRONMENTAL LIEN AND AUL SEARCH

ATTACHMENT H – CITY DIRECTORY REPORT

ATTACHMENT I – PROPERTY TAX RECORD REPORT

ATTACHMENT J – FIRE INSURANCE MAP REPORT

ATTACHMENT K – BUILDING PERMITS

ATTACHMENT L – CORRESPONDENCE AND INTERVIEWS

ATTACHMENT M – QUALIFICATIONS

1.0 EXECUTIVE SUMMARY

Integrated Environmental Solutions, LLC (IES) performed a Phase I Environmental Site Assessment (ESA) on approximately 80 acres (ac) of historically agricultural land that had been left fallow and is now dominated by grasses and woody vegetation (Subject Property) comprised of one partial parcel located east of Interstate Highway (IH) 820 and west of Marys Creek Drive in the City of Benbrook, Tarrant County, Texas in accordance with ASTM International E 1527-21 *Standard Practice for Environmental Site Assessments*.

1.1 SUBJECT PROPERTY LOCATION AND DESCRIPTION

The Subject Property is located east of IH 820 and west of Marys Creek Drive in the City of Benbrook. The Subject Property is approximately 80 ac of historically agricultural land that had been left fallow and is now dominated by grasses and woody vegetation comprised of one partial parcel. The Tarrant County, Texas parcel ID is 06143245 / 05576997. Parcels to the north are agricultural and residential use. To the east, parcels are agricultural and residential use. Parcels to the south are residential use and a religious center (Capstone Church [Benbrook]; 4600 Veterans Parkway). Further southwest is the office for an oil and gas exploration service (Vintage Oil & Gas, LLC; 4701 Marbella Drive). Parcels to the west are commercial and residential use. Commercial use includes offices for a dermatologist (Keehan Dermatology; 4625 St Amand Circle), a salon (Salons of Volterra Fort Worth at Montserrat 9336 Team Ranch Road), and a contractor (HGC Development; 4624 St Amand Circle).

1.2 FINDINGS

The Subject Property has no records that indicate any environmental concern and Subject Property reconnaissance observations did not indicate any environmentally sensitive areas. Subject Property reconnaissance indicated there was no presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing significant release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water. Debris, particularly in the northwest, was located on the Subject Property. These materials should be classified and disposed of properly, but there was no indication of leaks, spills, or immediate hazards which would indicate a recognized environmental condition. No data gaps were found that were deemed critical to the outcome of the ESA.

1.3 CONCLUSIONS

Per ASTM International Standard E 1527-21 Section 12.8, "We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM International Standard E 1527-21 on the property described as the Tarrant County, Texas parcel ID is 06143245 / 05576997. Any exceptions to, or deletions from, Standard E 1527-21 are described in Section 6.0. This assessment has revealed no evidence of recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the property".

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2.0 INTRODUCTION

2.1 PURPOSE

This assessment is designed and intended to provide an objective, independent, and professional opinion of the presence of recognized environmental conditions (REC), if any, at the Subject Property. REC means (1) the presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment. The term does not include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an environmental action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not REC. In addition, this Phase I Environmental Site Assessment (ESA) is to constitute all appropriate inquiry (AAI) in the assessment of REC for purposes of the Landowner Liability Protections (LLPs) under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA establishes the potential liabilities for owners of commercial properties contaminated by the release of hazardous substances or petroleum products. This liability may exist even if a prior owner of the property caused the contamination and the current owner had no responsibility for causing the contamination. LLPs include the bona fide prospective purchaser liability protection, contiguous property owner liability protection, and innocent landowner defense from CERCLA liability.

2.2 DEFINITIONS

All appropriate inquiry (AAI): that inquiry constituting “all appropriate inquiry into the previous ownership and uses of the subject property consistent with good commercial or customary practice” as defined in CERCLA, 42 U.S. Code (USC) §9601(35)(B) that will qualify a party to a commercial real estate transaction for one of threshold criteria for satisfying LLPs to CERCLA liability.

Business environmental risk (BER): means a risk which can have material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated under ASTM 1527-21.

Bona fide prospective purchaser liability protection: a person may qualify as a bona fide prospective purchaser if, among other requirements, such person made per ASTM International Standard E 1527-21 “all appropriate inquiries into the previous ownership and uses of the facility in accordance with generally accepted good commercial and customary standards and practices.” Knowledge of contamination resulting from AAI would not generally preclude this liability protection. A person must make AAI on or before the date of purchase. The facility must have been purchased after 11 January 2002.

Contiguous property owner liability protection: a person may qualify for the contiguous property owner liability protection if, among other requirements, such person owns real property that is contiguous to, and that is or may be contaminated by hazardous substances from other real property that is not owned by that person. Furthermore, such person conducted AAI at the time of acquisition of the property and did not know or have reason to know that the property was or could be contaminated by a release or threatened release from the contiguous property. The AAI must not result in knowledge of contamination. If it does, then such person did “know” or “had reason to know” of contamination and would not be eligible for contiguous property owner liability protection.

Innocent landowner defense: a person may qualify as one of three types of innocent landowners: (i) a person who “did not know and had no reason to know” that contamination existed on the property at the time the purchaser acquired the property; (ii) a government entity which acquired the property by escheat, or through any other involuntary transfer or acquisition, or through the exercise of eminent domain authority by purchase or condemnation; and (iii) a person who “acquired the facility by inheritance or bequest.” To qualify for the innocent landowner defense, such person must have made all appropriate inquiry on or before the date of purchase. Furthermore, the appropriate inquiry must not

have resulted in knowledge of contamination. If it does, then such person did “know” or “had reason to know” of contamination and would not be eligible for the innocent landowner defense.

Landowner Liability Protections (LLPs): LLPs under CERCLA; these protections include the bona fide prospective purchaser liability protection, contiguous property owner liability protection, and innocent landowner defense from CERCLA liability.

Recognized environmental conditions (REC): means (1) the presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment. Conditions determined to be *de minimis* are not REC.

2.3 SCOPE OF WORK

This ESA’s scope is limited to visually accessible property conditions and readily available and reasonably obtainable documents in the time permitted by the project schedule. The ESA was conducted in accordance with ASTM International Standard E 1527-21, Standard Practice for Environmental Site Assessments: Phase I ESA Process (ASTM International 2021). The scope of work for this Phase I ESA included:

- Reviewing reasonably ascertainable, publicly available, and practically reviewable environmental and historical records;
- Conducting a Subject Property visit to observe the property, property boundary, and adjoining properties;
- Interviewing local regulatory personnel and persons familiar with the property history and operations;
- Assessment of the degree of obviousness of the presence or likely presence of contamination at the property and the ability to detect the contamination;
- Identification of any significant data gaps in information collected that affects the ability of the environmental professional to identify conditions indicative of releases or potential releases of contaminants; and
- Preparing a report describing the findings and conclusions of this Phase I ESA.

2.4 SIGNIFICANT ASSUMPTIONS

There is a possibility that even with the proper application of these methodologies that there may be conditions that exist on the subject property that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. Integrated Environmental Solutions, LLC (IES) believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, IES cannot and does not warrant or guarantee that the information provided by these sources is accurate or complete. The methodologies of this assessment are not intended to produce all-inclusive or comprehensive results, but rather to provide the Client with information relating to the subject property.

2.5 LIMITATIONS AND EXCEPTIONS

This ESA report was prepared by IES for the exclusive use and benefit of an IES Client as named on this report. No additions or deletions are permitted without the written consent of IES. In accordance with the ASTM International standard, this ESA report meeting or exceeding the ASTM standard is presumed viable when conducted within 180 prior to the date of acquisition of the Subject Property. Completion dates for major report components are provided **Table 1**. This ESA was conducted with all due care as is normally provided by professionals involved in environmental site assessments for a property of this size and type within the allocated time and project budget. Information obtained

from public records review, the site inspection, and interviews were used to characterize the property. Although the services provided are extensive, findings and conclusions are limited to and by the information obtained. This ESA follows the standard principles of Phase I ESA, fully detailed in Section 4.5 of the ASTM International Standard E 1527-21.

TABLE 1. PHASE I ESA COMPONENT COMPLETION DATES

Component	Date Completed
Owner, occupant, or operator interview(s)	18 March 2024
User interview(s)	3 April 2024
Reconnaissance of Subject Property and visual inspection of adjoining properties	20 March 2024
Reviews of federal, tribal, state, local government, physical setting, and historical records.	1 April 2024
The declaration by the environmental professional responsible for the assessment or update	03 April 2024

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3.0 USER PROVIDED INFORMATION

Under the AAI Final Rule (40 CFR 312), the User of this report is required to perform certain tasks or have a qualified third party perform these tasks to qualify for an LLP to CERCLA liability and EPA Brownfield Assessment and Characterization grantees. A User Questionnaire was provided to Corey Waldrop, the buyer's representative, via email on 13 March 2024. His reply via email on 3 April 2024 indicated that there were no records regarding environmental concerns with the property (see **Attachment L**).

The User is responsible for providing the following items or having a qualified third party provide these items.

1. A review of land title records and judicial records for environmental liens and activity and use limitations (AUL).
2. Specialized knowledge or experience of the User to identify conditions indicative of releases or threatened releases.
3. Actual knowledge of the User, including any known environmental liens or AULs that encumber the property.
4. Reasons for a significantly lower purchase price in a commercial real estate transaction.
5. Commonly known or reasonably ascertainable information on the Subject Property.
6. Degree of obviousness of the presence or likely presence of releases or threatened releases.
7. The User should also make known why the User wants a Phase I ESA performed for the Subject Property. If not specifically provided then the assumption is that the User is seeking to qualify for an LLP to CERCLA liability.

3.1 REPORT USER IDENTIFICATION AND PURPOSE

The User for this report is Motiv Ventures LLC and its associated entities and designees. The assumed purpose of this Phase I ESA to provide an LLP to CERCLA liability.

3.2 USER QUESTIONNAIRE SUMMARY

Corey Waldrop identified the past land use activities on the Subject Property as agricultural. There was no knowledge of chemical spills, contamination, fires, or other environmental impacts. There was no knowledge of any environmental liens, or AULs. There was no specialized knowledge or experience related to the Subject Property. The purchase price was not known to have been affected by any environmental concerns.

3.3 ENVIRONMENTAL LIENS AND AUL RECORDS

An environmental lien and AUL record search was obtained from Environmental Data Resources, Inc. (EDR) for parcel Tarrant County, Texas parcel ID is 06143245 / 05576997. This search does not date back to 1980 and does not satisfy ASTM International Standard E 1527-21 land title record, environmental lien, and AUL search User requirements. A land title record, environmental lien, and AUL search and evaluation should be conducted by the User. Review of property deed records for parcel Tarrant County, Texas parcel ID is 06143245 / 05576997 within the Subject Property did not identify any current or previously recorded environmental liens (see **Attachment G - Environmental Lien Search**). The search returned one deed indicating a transfer of property, executed 20 October 2010. This deed did not on its face, present indication of an existing, historic REC, or Controlled REC (CREC) on the Subject Property.

4.0 SUBJECT PROPERTY DESCRIPTION

The Subject Property is located east of Interstate Highway (IH) 820 and west of Marys Creek Drive in the City of Benbrook. The Subject Property is approximately 80 acres (ac) of historically agricultural land that had been left fallow and is now dominated by grasses and woody vegetation comprised of one partial parcel. The Tarrant County, Texas parcel ID is 06143245 / 05576997. Parcels to the north are agricultural and residential use. To the east, parcels are agricultural and residential use. Parcels to the south are residential use and a religious center (Capstone Church [Benbrook]; 4600 Veterans Parkway). Further southwest is the office for an oil and gas exploration service (Vintage Oil & Gas, LLC; 4701 Marbella Drive). Parcels to the west are commercial and residential use. Commercial use includes offices for a dermatologist (Keehan Dermatology; 4625 St Amand Circle), a salon (Salons of Volterra Fort Worth at Montserrat 9336 Team Ranch Road), and a contractor (HGC Development; 4624 St Amand Circle) (**Attachment A, Figure 1 – Subject Property Location Map**).

5.0 SUBJECT PROPERTY RECONNAISSANCE

5.1 METHODOLOGY

Subject Property reconnaissance was conducted by Holly Wilson and Veronica Silva of IES on 20 March 2024. Qualifications of the professionals who have performed Subject Property reconnaissance, interviews, and the environmental professional associated with this report are included in **Attachment M - Qualifications**. The Subject Property was accessed from IH 820. A Subject Property walkthrough was conducted to observe any potentially hazardous conditions. Photographs were taken to document representative conditions throughout the Subject Property and surrounding properties (see **Attachment B – Subject Property Photographs 1 through 140**). All interviews about the Subject Property conditions were performed by email and telephone (see **Attachment L – Correspondence and Interviews**).

5.2 CURRENT LAND USE

The Subject Property is approximately 80 ac of agricultural land comprised of one partial parcel within Tarrant County, Texas. The Tarrant County, Texas parcel ID is 06143245 / 05576997 (see **Attachment A – Figure 1**). The partial parcel was historically agricultural land that had been left fallow and is now dominated by grasses and woody vegetation (**Photographs 23 through 140**). In the northwest was a homeless encampment (**Photographs 3, 5 through 15, 17, and 20**). Marys Creek is along the northern boundary of the Subject Property (**Photographs 1, 2, 21, 22, 38, 39, 81, 90, and 95**). A water spigot was in the northwest (**Photographs 18 and 19**). Scrap materials and tires were observed in various locations (**Photographs 29, 30, 36, 37, 47, 65 through 68, and 129**). A few deer blinds were stationed north-centrally (**Photographs 71, 72, and 78**). Underground cables are between the fence line and the highway access road (**Photograph 46**). A sunken area was observed near where a pond had been excavated historically (**Photographs 57 and 58**). At the time of evaluation, no leaks or spills were observed. Additionally, no active or abandoned oil or gas wells, potable water supplies/sources, sewage disposal systems, strong odors, standing surface water/pools/sumps, drums, unidentified substance containers, PCB-containing items, drains, stained soil or pavement, stressed vegetation, solid waste, water/wastewater, or septic tanks were identified on the Subject Property.

5.3 ADJACENT AND ADJOINING PROPERTIES CURRENT LAND USE

- North of property – Agricultural and residential use.
- East of property – Agricultural and residential use.
- South of property – Residential use and a religious center (Capstone Church). Further southwest is the office for an oil and gas exploration service (Vintage Oil & Gas, LLC).
- West of property – Commercial and residential use. Commercial use includes offices for a dermatologist (Keehan Dermatology), a salon (Salons of Volterra Fort Worth at Montserrat), and a contractor (HGC Development).

6.0 RECORDS REVIEW

6.1 FEDERAL AND STATE RECORDS

Information from standard federal and state environmental databases was obtained from EDR included as **Attachment C – Government Records Report**. The federal and state databases searched, and specified radii, are:

TABLE 2. GOVERNMENT RECORDS REPORT FINDINGS

Federal Database	Specified Search Radii	No. Of Sites Identified
Federal NPL Site List	1 mile	0
Federal Delisted NPL Site List	1 mile	0
Federal Sites Subject to CERCLA Removals and CERCLA Orders	0.5 mile	0
Federal CERCLA Sites with NFRAP	0.5 mile	0
Federal RCRA Corrective Action Facilities List	1 mile	0
Federal RCRA TSD Facilities List	0.5 mile	0
Federal RCRA Generators List	0.25 mile	0
Federal Institutional Controls/Engineering Controls Registries	0.5 mile	0
Federal ERNS List	Target Property (TP)	0
State, Tribal, and Local Databases	Specified Search Radii	No. Of Sites Identified
State and Tribal – Equivalent NPL	1 mile	0
State and Tribal Landfill and/or Solid Waste Disposal Site List	0.5 mile	0
State and Tribal Leaking Storage Tanks List	0.5 mile	0
State and Tribal Registered Storage Tanks List	0.25 mile	0
State and Tribal Institutional Controls/Engineering Controls Registries	0.5 mile	0
State and Tribal Voluntary Cleanup Sites List	0.5 mile	0
State and Tribal Brownfield Sites	0.5 mile	0
Local Brownfield List	0.5 mile	0
Local Lists of Landfill/Solid Waste Disposal Sites	0.5 mile	0
Local List of Hazardous Waste/Contaminated Sites	TP	0
Local List of Registered Storage Tanks	0.25 mile	0
Local Land Records	TP	0
Records of Emergency Release Reports	0.001 mile	0
Other Ascertainable Records	1 mile	0

All database records were evaluated based on the following criteria:

- The topographic elevation of the identified record in relation to the Subject Property,
- The direction and distance of the identified record from the Subject Property,
- The local soil conditions and characteristics on and around the Subject Property,
- The known or inferred groundwater flow direction on and around the Subject Property,
- Surface and subsurface features (natural and manmade) that may contribute to the obstruction and diversion of RECs to the Subject Property,
- The type of database record cited in the search,
- The status of the database record cited in the search.

No violations were identified in any of the environmental database records provided by EDR.

No records from sites were judged to present the potential or likelihood for RECs.

6.2 HISTORICAL AERIAL PHOTOGRAPHY

IES conducted a review of the 1942 through 2020 historical aerial photographs for the Subject Property (**Attachment D – Historical Aerial Photo Report**).

- *1942-1950* – The Subject Property is dominated by agricultural fields. Marys Creek defines the northern boundary of the Subject Property. A line of tree cover is visible along Marys Creek. The surrounding areas are also agricultural. A few homesteads are visible north of the Subject Property. In 1950, a new homestead is visible to the north.
- *1968-1973* – A significant amount of residential development has taken place to the north, northeast, and east. Areas surrounding the Subject Property to the south and west appear similar to previous aerial photographs. Land within the Subject Property remains agricultural. In 1973, the Subject Property and surrounding areas do not exhibit any change.
- *1979-1990* – A pond has been excavated in the northwest of the Subject Property. The remainder of the land has been left fallow. Construction for a major road has begun to the west. Otherwise, surrounding areas are similar to previous aerial photographs. In 1984, the road has been completed and the excavated pond has been filled in. In 1990, land clearing and construction has begun for additional roads to the south.
- *1995-2020* – Construction of the roads to the south is complete. Land within the Subject Property has increased in tree cover. In 2005, the roads to the south are surrounded by residential development. Additional development has begun to the west. By 2008, almost all of the remaining undeveloped land has been cleared and prepared for development. The Subject Property has become more heavily wooded. In 2012, the cleared land has been developed. Little change is seen from 2016 to 2020. The Subject Property remains undeveloped and land is heavily treed.

6.3 HISTORICAL TOPOGRAPHIC MAP REPORT

The U.S. Geological Survey (USGS) historic topographic maps from 1894 through 2022 are included as **Attachment E – Historical Topographic Map Report**. High-level observations across the dataset include:

- *1894* – This topographic map (Fort Worth) is at the 30-minute scale. A railroad is depicted to the southeast and a light duty road is to the east. Marys Creek is to the north of the Subject Property.
- *1955* – This topographic map (Benbrook) is at the 7.5-minute scale. Topographic slope is generally northeast-to-southwest across the Subject Property with elevations between 690 feet (ft) and 660 ft above mean sea level (amsl). A few structures are depicted directly north of the Subject Property. Several residential roads with associated structures are depicted to the north, northeast, and northwest. There is very little development other than unimproved roads to the south of the Subject Property. A secondary highway is north of the Subject Property and a large highway, World War II Veterans Highway / U.S. Highway (US) 80/180, is further north. A primary and a secondary highway are depicted to the east. A railroad is to the southeast.
- *1968-1981* – These topographic maps (Benbrook) are at the 7.5-minute scale. Additional residential development has taken place to the northeast and northwest. A gravel pit is depicted to the southeast. In 1972 and 1981, residential areas expand slightly to the north of the Subject Property.
- *1995-2022* – These topographic maps (Benbrook) are at the 7.5-minute scale. IH 820 has been constructed directly west of the Subject Property and IH 20 to the southwest. Development has increased southeast of US 377. Power transmission lines are depicted to the southeast. In 2012, development has begun to the southeast and west of the Subject Property. In 2016, 2019, and 2022 residential areas expand to the southeast and west.

6.4 FLOODPLAIN MAPS

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) indicates the Subject Property and surrounding properties are in Zone X (Areas determined to be outside the 0.2 percent annual chance floodplain; and Areas of 0.2 percent annual chance flood; areas of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mi; and areas protected by levees from 1 percent annual chance flood); and Zone AE (Special flood hazard areas subject to inundation by the 1 percent annual chance flood; base flood elevations determined; and Floodway areas in Zone AE) (**Attachment A, Figure 2 – FEMA FIRM**).

6.5 SOILS MAP

The Soil Survey of Tarrant County, Texas illustrated four soil map units within the Subject Property, Bolar-Aledo complex, 3 to 20 percent slopes Bolar clay loam, 3 to 5 percent slopes; Frio silty clay, 0 to 1 percent slopes, occasionally flooded; and Maloterre, Aledo, and Brackett soils, 3 to 20 percent slopes (**Table 3, Attachment A, Figure 3 – Soils Map**).

TABLE 3. SOIL MAP UNITS LOCATED ON THE SUBJECT PROPERTY

Soil Component Name	SSURGO Soil Map ID ¹	Soil Survey Map ID ²	Soil Surface Texture	Hydrologic Group	Drainage	Hydric
Bolar-Aledo complex, 3 to 20 percent slopes	3	AbE	Stony clay loam	Class C	Well drained	Not hydric
Bolar clay loam, 3 to 5 percent slopes	2	BoC	Clay loam	Class C	Well drained	Not hydric
Frio silty clay, 0 to 1 percent slopes, occasionally flooded	1	FriA	Silty clay	Class C	Well drained	Not hydric
Maloterre, Aledo, and Brackett soils, 3 to 20 percent slopes	4	MaC	Gravelly clay loam	Class D	Somewhat excessively drained	Not hydric

Notes:

- 1 EDR Geospatial Physical Settings SSURGO Soil Map – 7600016.2s
- 2 Attachment A, Figure 3

Hydrologic Group:

- Class C – Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.
- Class D – Very slow infiltration rates. Soils are clayey, have a high water table, or are shall to an impervious layer.

The Bolar series consists of moderately deep, well drained, moderately permeable soils formed in interbedded limestones and calcareous marls formed in residuum. These soils account for 12.7 percent of the Subject Property land area. These occur on summits, shoulders, and backslopes of ridges on hills. The slopes range is 1 to 15 percent. Given the moderate permeability, these soils are considered to have medium to rapid runoff potential (USDA NRCS 2022, https://soilseries.sc.egov.usda.gov/OSD_Docs/B/BOLAR.html).

The Aledo series consists of shallow to very shallow, well drained, moderately permeable soils that formed in interbedded limestones and marls of Cretaceous age. These soils account for 4.2 percent of the Subject Property land area. These soils are on gently sloping to steep uplands. Slope is mostly less than 8 percent, but ranges from 1 to 40 percent. Given the moderate permeability, these soils are considered to have medium to rapid runoff potential (USDA NRCS 1992, https://soilseries.sc.egov.usda.gov/OSD_Docs/A/ALEDO.html).

Frio soils consist of very deep, well drained, moderately slowly permeable soils that formed in calcareous loamy and clayey alluvium. These soils account for 87.2 percent of the Subject Property land area. These nearly level to very gently sloping soils occur on flood plains. Slopes range from 0 to 2 percent. Given the moderately slow permeability,

runoff potential is considered to be low on 0 to less than 1 percent slopes and medium on 1 to 2 percent slopes (USDA NRCS 2021, https://soilseries.sc.egov.usda.gov/OSD_Docs/F/FRIO.html).

Malorre series soils are very shallow, somewhat excessively drained. These soils formed in residuum weathered from Lower Cretaceous age limestone. Malorre soils account for less than 1 percent of the Subject Property and are on summits, shoulders, and backslopes of ridges and hills. The slope ranges from 1 to 20 percent and permeability is moderately slow with rapid runoff (USDA NRCS 2022, https://soilseries.sc.egov.usda.gov/OSD_Docs/M/MALOTERRE.html).

The Brackett series consists of shallow to paralithic bedrock, well drained, very slowly permeable soils that formed in residuum weathered from limestone of Cretaceous age, mainly from the Glen Rose formation. These soils account for less than 1 percent of the Subject Property land area. These nearly level to very steep soils are located on backslopes of ridges on dissected plateaus of the Edwards Plateau. Slopes range from 1 to 60 percent slopes, however slopes are typically 1 to 20 percent. Given that the Brackett soils are generally well drained with moderate permeability, although permeability in the petrocalcic horizon is slow to very slow, runoff is very low on 1 to 3 percent slopes, low on 3 to 5 percent slopes, medium on 5 to 20 percent slopes, and high on 20 to 60 percent slopes (USDA NRCS 1997, USDA NRCS 2010, https://soilseries.sc.egov.usda.gov/OSD_Docs/B/BRACKETT.html).

Soil characteristics are important in determining the potential for groundwater contamination through how a contaminant decomposes and whether it will leach into groundwater. Soils with larger pore spaces and small surface area, like sands, allow for the rapid movement of flowing substances through the soil column into groundwater. Soils with extremely small particles with larger surface area slow movement and allow for more chemical decomposition to take place before reaching groundwater. In addition to soil characteristics, soil amendments, such as high organic matter will also factor into contaminant decomposition. Greater amounts of soil organic matter provide greater amount of material for contaminants to “cling to” which allows for naturally occurring microorganisms to start decomposition. In addition to surface soils, bedrock permeability will also factor into groundwater contamination potential.

Most soils within the Subject Property are well drained and moderately permeable with moderate to rapid runoff. All constituents contain clay, which is prone to cracking when dry and the remaining components are a larger particle size. Contaminants within the Subject Property would have a medium likelihood of reaching groundwater and likelihood would increase when soils are dry.

6.6 TEXAS RAILROAD COMMISSION RECORDS

IES reviewed the RRC online database to identify any active oil/gas wells and/or pipelines on the Subject Property. One horizontal gas well is within the Subject Property. This well originates off-site and travels underground, entering the Subject Property from the west. It is operated by XTO Energy, Inc. This horizontal well does not present a REC to the Subject Property. Two well records are located to the west. One of these is a permitted location and the other is an active gas well. No other wells or pipelines were found within 0.25 mile (mi). The RRC Map is included as **Attachment A, Figure 4**.

6.7 TEXAS WATER DEVELOPMENT BOARD RECORDS

Review of the Texas Water Development Board (TWDB) online found no plugged or active groundwater well records on the Subject Property (**Attachment A, Figure 5**). EDR, Inc. records indicate 72 wells are present within a 1-mi radius. This includes 47 water wells and 25 oil and gas wells. The EDR, Inc. Map is included as **Attachment C – Physical Setting Source Map**.

6.8 U.S. ENVIRONMENTAL PROTECTION AGENCY RECORDS

The U.S. Environmental Protection Agency (EPA) Facility Registry Service (FRS) provides information regarding facilities that may be of environmental interest based on a general set of parameters that categorizes facilities based on use. This service is provided online as the EPA EnviroMapper for Envirofacts at the EPA website

<https://www.epa.gov/enviro/myenviomapper>. Environmental interest types include, but are not limited to, waste facilities, recycling and water treatment plants, generator sites, air monitoring sites, hazardous materials storage facilities, and surface water sites. The purpose of the EPA search is to supplement and verify the accuracy and completeness of **Attachment C – Government Records Report** provided by EDR. A search of the EPA EnviroMapper report revealed no records on the Subject Property. Six records were found within 0.25 mi of the Subject Property. Fourteen records were found within a 0.25 mi to 0.50 mi radius. Forty-four records were found within a 0.50 mi to 1 mi radius. Records were identified within Integrated Compliance Information System (ICIS), Occupational Safety and Health Act I (OSHA), Texas Commission on Environmental Quality Agency Central Registry (TCEQ ACR), Resource Conservation and Recovery Act Information (RCRAINFO), and National Pollutant Discharge Elimination System (NPDES). Most records were related to single-family home construction, stormwater, or air quality. However, several pertained to underground storage tanks at auto shops. Additionally, three records were associated with permitting for dry cleaners. All auto shops and dry cleaners were outside 0.25 mi from the Subject Property and were not in the up gradient. All sites were evaluated based on the nature of the database, activity status, and information provided within the EPA facility detail reports. None of these sites were judged to present a REC to the Subject Property. The EPA EnviroMapper map is included as **Attachment A, Figure 6**.

6.9 OPEN RECORDS

The City of Benbrook required that an open records request be submitted via an online request form to obtain information regarding the Subject Property's history. IES submitted an open records request to the City of Benbrook regarding fires, hazardous material spills, hazardous material storage, and any general environmental concerns documented for the property on 13 March 2024. The Benbrook Fire Department returned a public open records request for any information on the Subject Property or adjoining areas in reference to fires, hazardous material spills, hazardous materials storage, and any other general environmental concerns or records, and no records were found for any of the requested addresses within the Subject Property (see **Attachment F**).

6.10 CITY DIRECTORY IMAGE REPORT

The City Directory Report, included in **Attachment H**, indicates all addresses within the Subject Property and cross streets of adjoining properties were searched through the EDR Digital Archive for the year 2020, Cole Information for years 1992 through 2017, Cole Criss-Cross Directory for 1964 through 1989, Polk's City Directory for 1960, and Morrison-Fourmy City Directory for 1930 through 1955. No record was found that would indicate a REC on the Subject Property.

6.11 PROPERTY TAX MAP REPORT

Records review indicated no coverage for the Property Tax Map Report. The EDR, Inc. report is included in **Attachment I**.

6.12 FIRE INSURANCE MAP REPORT

The Sanborn Library collection was searched for Fire Insurance Maps (FIM), real estate atlases, and similar maps for the Subject Property and adjoining properties. There were no FIMs or similar maps identified for the Subject Property (see **Attachment J – Fire Insurance Map**).

6.13 BUILDING PERMIT REPORT

Records review indicated no permits identified for the Subject Property. The EDR, Inc. report is included in **Attachment K – Building Permit Report**.

6.14 PREVIOUS PHASE I ESA REPORTS AND OTHER ASSOCIATED REPORTS

No associated or previous Phase I ESA reports were available.

7.0 EXCEPTIONS/DELETIONS

There are no exceptions or deletions from the ASTM International Standard E 1527-21.

8.0 DATA GAPS IN THE DATA RECORD

No data gaps were present. All standard database reports were returned with records or a finding of no records available.

9.0 DEVIATIONS

No deviations from the recommended scope of ASTM International Standard E 1527-21 were performed as part of this Phase I ESA.

10.0 ADDITIONAL SERVICES

A waters of the United States delineation was conducted in addition to this Phase I ESA.

11.0 INTERVIEWS

Austin Reilly, the seller's representative, was contacted via email on 13 March 2024. His reply via email on 18 March 2024 indicated that there were no records regarding environmental concerns with the property (see **Attachment L**).

12.0 FINDINGS

12.1 SUMMARY OF RECORDS AND OBSERVATIONS

Subject Property reconnaissance indicated there was no presence or likely presence of any hazardous substances or petroleum products under conditions that indicate an existing significant release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water. Debris, particularly in the northwest, was located on the Subject Property. These materials should be classified and disposed of properly, but there was no indication of leaks, spills, or immediate hazards which would indicate a REC. A search of reasonably ascertainable and practically reviewable information revealed no records on the Subject Property and adjoining properties were found. Further review and screening of the found records indicate that the presence or likely presence of any RECs would not exist on the Subject Property.

12.2 OPINIONS

In IES's professional opinion:

- No database record was found that indicated the likely presence or potential for a REC to exist,
- No REC was observed during the Subject Property reconnaissance that would pose a risk to the Subject Property,
- No data gaps were found that were deemed critical to the outcome of this Phase I ESA.

12.3 CONCLUSION

Per ASTM International Standard E 1527-21 Section 12.8, "We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM International Standard E 1527-21 on the property described as the Tarrant County, Texas parcel ID is 06143245 / 05576997. Any exceptions to, or deletions from, Standard E 1527-21 are described in Section 6.0. This assessment has revealed no evidence of REC, CREC, or significant data gaps in connection with the property".

13.0 SIGNATURES AND CERTIFICATION STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 Code of Federal Regulations (CFR) §312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR §312.

IES appreciates the opportunity to work with you on this project and hope we may be of assistance to you in the future. If you have any comments, questions, or concerns, please do not hesitate to contact Rae Lynn Schneider at 972-562-7672 or rschneider@intenvsol.com.

Sincerely,

Integrated Environmental Solutions, LLC.

A handwritten signature in black ink, appearing to read 'Rae Lynn Schneider', written in a cursive style.

Rae Lynn Schneider, PMP

President

file ref: 04.351.037



25 November 2024

Mr. Corey Waldrop
Motiv Ventures
4909 Camp Bowie Boulevard
Fort Worth, Texas 76107

Re: Rowan Ranch – Federal Protected Species Habitat Assessment
Approximately 82 acres located northeast of the intersection of Interstate Highway 820 Loop and Team Ranch Road in the City of Fort Worth, Tarrant County, Texas

Dear Mr. Waldrop,

Integrated Environmental Solutions, LLC (IES) performed a protected species habitat assessment on approximately 82 acres located northeast of the intersection of Interstate Highway (IH) 820 Loop and Team Ranch Road in the City of Fort Worth, Tarrant County, Texas (**Attachment A, Figure 1**) to satisfy Federal Emergency Management Agency (FEMA) and Endangered Species Act (ESA) requirements. The following report lists the federally protected species for Tarrant County, their preferred vegetation assemblages, a summary of vegetation communities identified on the site, an evaluation of whether those vegetation communities could support a protected species, and whether proposed actions would affect listed species.

INTRODUCTION

Federal Protected Species

The ESA of 1973 (Public Law [P.L.] 93-205) and amendments of 1988 (P.L. 100-578) were enacted to provide a program of preservation for endangered and threatened species and to provide protection for ecosystems upon which these species depend for their survival. The ESA requires all federal agencies to implement protection programs for designated species and to use their authorities to further the purposes of the Act. Responsibility for the listing of an endangered or threatened species and for the development of recovery plans lies with the Secretary of Interior and Secretary of Commerce. The U.S. Fish and Wildlife Service (USFWS) is responsible for implementing the ESA within the United States.

An endangered species is defined as a species in danger of extinction throughout all or a significant portion of its range. A threatened species is defined as a species likely to become endangered within the near future throughout all or a significant portion of its range. Proposed species are defined as those that have been formally submitted to Congress for official listing as endangered or threatened.

The USFWS has identified species that are candidates for possible addition to the list of Endangered and Threatened Wildlife and Plants (50 Code of Federal Regulations [CFR] 17.11 and 17.12) under the ESA. The USFWS maintains a candidate list to: (1) provide advance knowledge of potential listings that could affect land planning decisions, (2) solicit input to identify candidate species that may require protection under the ESA, and (3) solicit information needed to prioritize the order in which species will be proposed for listing. Candidate species have no legal protection under the ESA.

Federal Emergency Management Agency

On August 28, 2010, FEMA issued a memo (Procedure Memorandum 64) mandating that Conditional Letters of Map Revision (CLOMR) submittals after October 1, 2010, must show how proposed action complies with the ESA. FEMA will process a map change request only after FEMA receives documentation from the requestor that they have demonstrated compliance with the ESA. The requestor may demonstrate ESA compliance by submitting to FEMA either an Incidental Take Permit, Incidental Take Statement, “not likely to adversely affect” determination from USFWS or an official letter from USFWS concurring that the project has “no effect” on listed species or critical habitat. Take as defined under the ESA means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” As the USFWS does not typically write official letters for “no effect” on listed species, sufficient documentation must be provided that demonstrates a proposed project would not affect a Federally listed species or their critical habitat. In the experience of IES, these documentation requirements have been met sufficiently through an assessment of habitat located within a proposed project area and a finding as to whether a species is expected to occur within a project area based on this assessment.

METHODOLOGY

Prior to conducting fieldwork, the list of ESA Endangered and Threatened Wildlife and Plants was obtained through the USFWS Information, Planning, and Conservation System (IPaC). Vegetation communities used by each species are detailed below. Mr. Tyler Frohlich and Ms. Holly Wilson of IES evaluated the survey area on 13 November 2024. During the field survey, vegetation composition within and adjacent to the project site was noted to determine the potential for protected species habitat. While this survey was not designed to identify protected species’ presence, such presence was recorded if any species were observed. Photographic documentation was recorded at representative points to illustrate common vegetation communities within the survey area (**Attachment B**). **Attachment C** identifies the federally protected species that could potentially occur within Tarrant County from the IPaC list.

RESULTS

Literature Review

According to the USFWS, three species; Piping Plover (*Charadrius melodus*), Red Knot (*Calidris canutus rufa*), and Whooping Crane (*Grus americana*) are listed as federally protected (i.e., threatened or endangered) with the potential to occur within the proposed project area. Two of these species are conditionally listed as threatened within Tarrant County on the basis that the proposed project is for wind energy production, Red Knot and Piping Plover. The tricolored bat (*Perimyotis subflavus*) is listed as proposed endangered. The alligator snapping turtle (*Macrochelys temminckii*) is listed as proposed threatened. The monarch butterfly (*Danaus plexippus*) is listed as a candidate species. No federally listed critical habitat for these species is located within the proposed project area vicinity.

Site Survey

The survey area was characterized by two distinct vegetation communities, **forested riparian corridor** and **upland forest**. The **forested riparian corridor** was primarily in the north along Marys Creek and was dominated by woody species including American elm (*Ulmus americana*), cedar elm (*Ulmus crassifolia*), eastern redcedar (*Juniperus virginiana*), green ash (*Fraxinus pennsylvanica*), honey locust (*Gleditsia triacanthos*), Osage-orange (*Maclura pomifera*), Shumard’s oak (*Quercus shumardii*), sugarberry (*Celtis laevigata*), and gum bumelia (*Sideroxylon lanuginosum*). Shrub species observed within the forested riparian corridor community included Chinese privet (*Ligustrum sinense*) and Japanese privet (*Ligustrum japonicum*). The understory included grasses and herbaceous species such as eastern poison ivy (*Toxicodendron radicans*), coralberry (*Symphoricarpos orbiculatus*), Bermudagrass (*Cynodon dactylon*), catchweed (*Galium aparine*), wild onion (*Allium canadense*), crowpoison (*Nothoscordum bivalve*), and spreading hedgeparsley (*Torilis arvensis*). Vine species observed included saw greenbrier (*Smilax bona-nox*). The **upland forest** dominated the survey area. Woody species observed in this community included honey mesquite (*Prosopis glandulosa*), gum bumelia, honey locust, sugarberry, and cedar elm. Shrubs observed included Chinese privet. Grasses and forbs observed included Bermudagrass, spreading hedgeparsley, and Texas prickly-pear (*Opuntia engelmannii*).

Protected Species Preferred Habitat Assessment

No habitats located within the survey area met the defined preferred habitats for any species listed as federally threatened or endangered and potentially occurring in Tarrant County. Although not the focus of this report, it is worth noting that no protected species were identified on the site at the time of the survey. As such, it is unlikely that federally listed species would utilize the survey area.

The following outlines the preferred habitat requirements of each listed species as it compares to the available habitat within the project site:

- Piping Plover and Red Knot are protected conditionally on the basis that a proposed project involves the production of wind energy. Because this project does not meet that condition, no further consideration was required for these species.
- Whooping Cranes occur only in North America with the only known habitats in three locations, Wood Buffalo National Park, Canada; Aransas National Wildlife Refuge, Texas; and a non-migratory population in central Florida. Whooping Cranes utilize estuaries, prairie marshes, savannah, grasslands, croplands, pastures; they also use large wetland areas associated with lakes for roosting and feeding. The site does not contain adequate structure for this species. USFWS has determined that Whooping Cranes generally prefer croplands and grassland interspersed with wetlands that are generally shallow (less than 20 inches). As such, it is not likely that Whooping Cranes would occupy the site as the conditions present do not meet the parameters of their habitat.
- The tricolored bat in the Southern United States, hibernates in caves, mines, and potentially in culverts, tree cavities, and abandoned water wells, where caves or mines are scarce. In the Spring, Summer, and Fall, the bat is usually found in forests, primarily roosting among deciduous hardwood tree leaves, but also has been found in Spanish moss (*Tillandsia usneoides*), pines, eastern red cedar, and occasionally artificial roosts like barns, beneath porch roofs, bridges, and concrete bunkers. The forested riparian corridor and upland forest vegetation communities could provide roosting habitat for this species. However, the tricolored bat maintains the status of proposed endangered. It is not currently afforded protection under the ESA, at the time of this report, and no further consideration is required for this species.
- The alligator snapping turtle prefers perennial water bodies including rivers, canals, lakes, and oxbows as well as swamps, bayous, and ponds near running water. It sometimes enters brackish coastal waters. Marys Creek, meandering along the northern boundary of the survey area, was identified as suitable habitat. However, the alligator snapping turtle maintains the status of proposed threatened. It is not currently afforded protection under the ESA, at the time of this report, and no further consideration is required for this species.
- Monarch butterflies are found in a variety of habitats including native prairies, pastures, open woodlands and savannas, desert scrub, roadsides, and other habitats with abundant nectar plants, including urbanized areas. Open areas of the upland forest community identified within the site may comprise a suitable habitat for this species. However, the monarch butterfly is a candidate species. It is not currently afforded protection under the ESA, at the time of this report, and no further consideration is required for this species.

PROPOSED ACTION AND SPECIES EFFECT

The proposed project will be a residential development that will impact a portion of the project site. To complete the project will require the modification of the FEMA-mapped floodplain through the FEMA CLOMR application process.

The Whooping Crane was the only species listed as protected in Tarrant County for this type of project. Suitable habitat for the Whooping Crane includes “grasslands,” which refers to large areas of undisturbed grassland or prairie, typically isolated from human activity. The project site did not include any large grassland areas and was near IH 820 Loop and commercial and residential development. As such, it was determined the habitat would not be a suitable stopover habitat for the Whooping Crane.

The forested riparian corridor and upland forest vegetation communities could provide roosting habitat for the tricolored bat. Because this species is currently proposed and not listed as an endangered species, it is not afforded any protection yet. However, there is a high likelihood the species will be listed in the near future, in which case a formal presence absence survey may be required to determine if the habitat is occupied or coordination with the USFWS will be required. Until a listing decision is announced, all tricolored bat surveys and USFWS coordination are voluntary. If the tricolored bat were to be listed, protection would go into effect immediately, regardless of if a project has already begun. As this project currently does not have a federal nexus, it is up to the applicant to determine the project effects to federally endangered species. If the project were to remove the habitat outside of hibernation (i.e., November 16 through March 14) and pupping (i.e., May 15 and July 31) seasons, the project will not result in a “take”.

As previously noted, habitat meeting the characteristics of the alligator snapping turtle was identified within the survey area. Assuming minimal impacts are made below the ordinary high water mark of Marys Creek, the project’s construction would not result in a species effect. Furthermore, as a proposed threatened species the alligator snapping turtle is not currently afforded protection under the ESA.

Table 1 provides a summary of the federally listed species that could potentially occur within Tarrant County, as well as a brief description of their preferred habitat, whether this habitat is present within the project site, and whether the proposed action would result in a “take” of the listed species. Based on the information provided by USFWS, site survey, and the proposed action, it is IES’ professional opinion that the project would not result in the “take” of an ESA listed species.

CONCLUSIONS

Piping Plover, Red Knot, and Whooping Crane were listed as federally threatened and endangered species for Tarrant County. As this project will not be related to the production of wind energy, Red Knot and Piping Plover will not be affected. The habitats present within the project site were not suitable for the home environment, nesting, feeding, or stopover migration of any of the listed species. Based on the lack of suitable habitat and no known occurrences of species near the project site, it is the professional opinion of IES that the proposed project would have a **“No Take” determination** on any of the currently listed federally listed threatened or endangered species.

IES appreciates the opportunity to work with you and Motiv Ventures on this project, and we hope we may be of assistance to you in the future. If you have any comments, questions, or concerns, please do not hesitate to contact myself or Rudi Reinecke at 972-562-7672 (ereasoner@intenvsol.com or rreinecke@intenvsol.com).

Sincerely,

Integrated Environmental Solutions, LLC.


A handwritten signature in black ink, appearing to read 'Emma Reasoner', is written over a light blue rectangular background. A vertical yellow line is positioned to the right of the signature.

Ms. Emma Reasoner
Biologist
File ref: 04.442.003.002

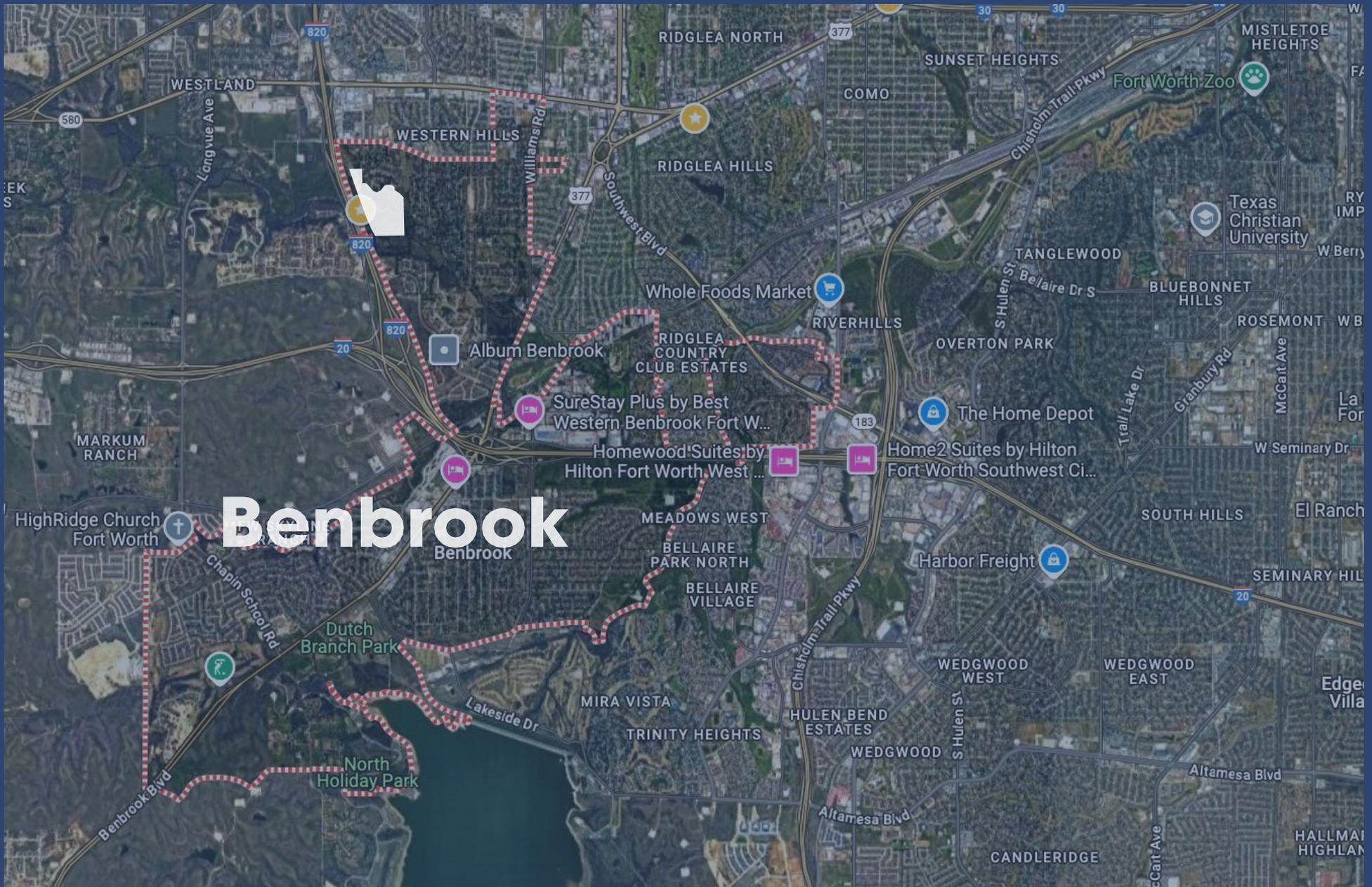
March 12, 2026 P&Z Presentation

Action request

1. Approve zoning for the 61.31-acre Area 2 portion of the property, “A-PD” as requested, in a manner consistent with the Future Land Use Map and Benbrook’s Comprehensive Plan, allowing the City’s standard development review process to proceed; and
2. Confirm and maintain the existing PD framework for Area 1 as previously established, and authorize City staff to make language, formatting, or boundary clarifications to each PD, as necessary, to ensure this Area 2 rezoning does not create conflict, while preserving the intent and substance of prior City approvals.



Subject Property



The Request Objective

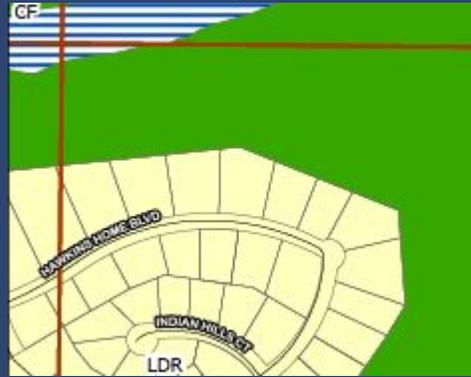
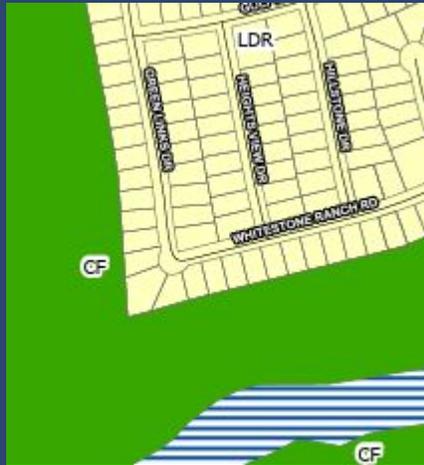
Attachment 9 pg. 4 of 25

- Aligns exactly with the City's Vision.
- Updates zoning to match the 2020 Comprehensive Plan and "FLUM".
- Supports Uniform Zoning Standards
- Brings the property into compliance with Texas Local Government Code §211.004.
- Corrects Outdated Classifications.

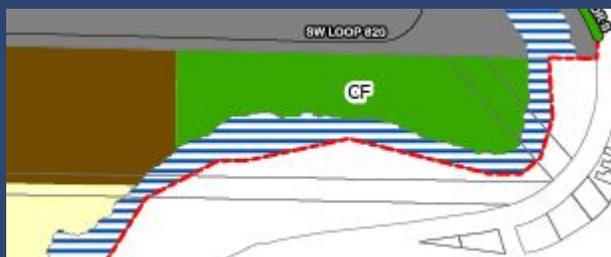


Appropriate Areas Designated for “Open Space” in the Future Land Use Map (FLUM)

Attachment 9 pg. 5 of 25



A couple of examples shown from various pages of the “FLUM”



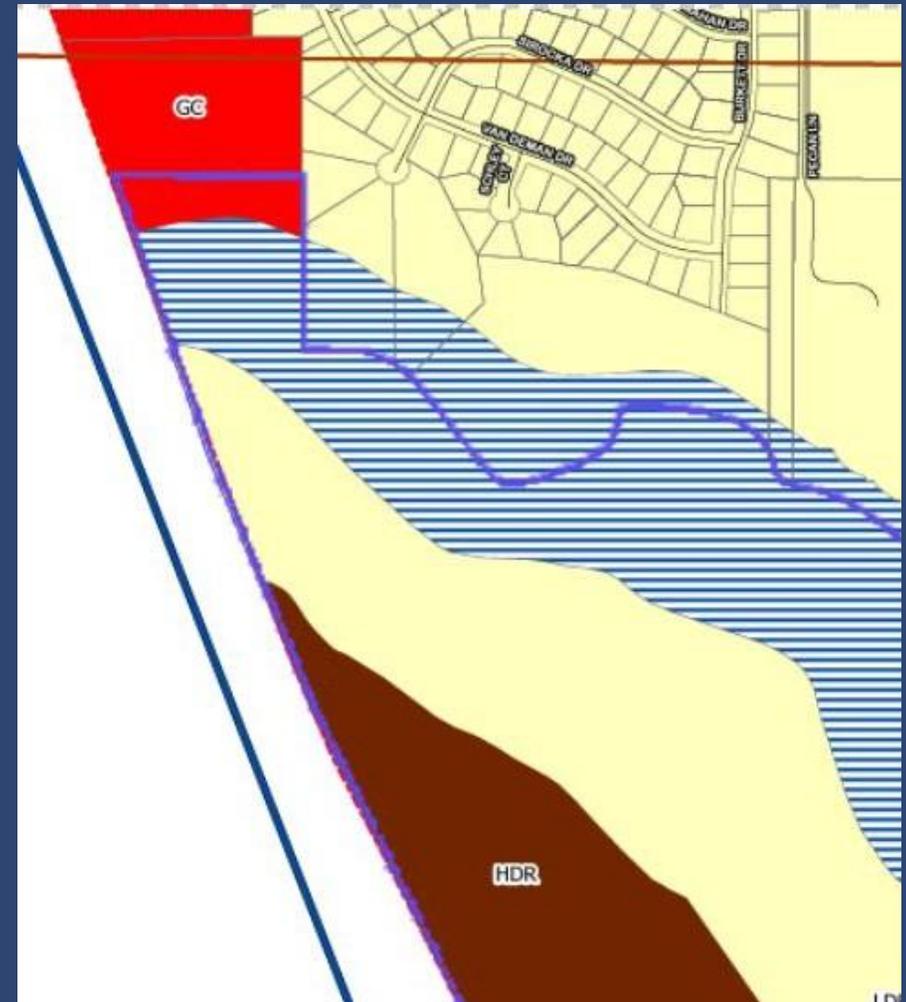
City of Benbrook Comprehensive Plan (Dec. 2020) – FLUM & Thoroughfare Plan 2040



FLUM designates Area 2 for residential use

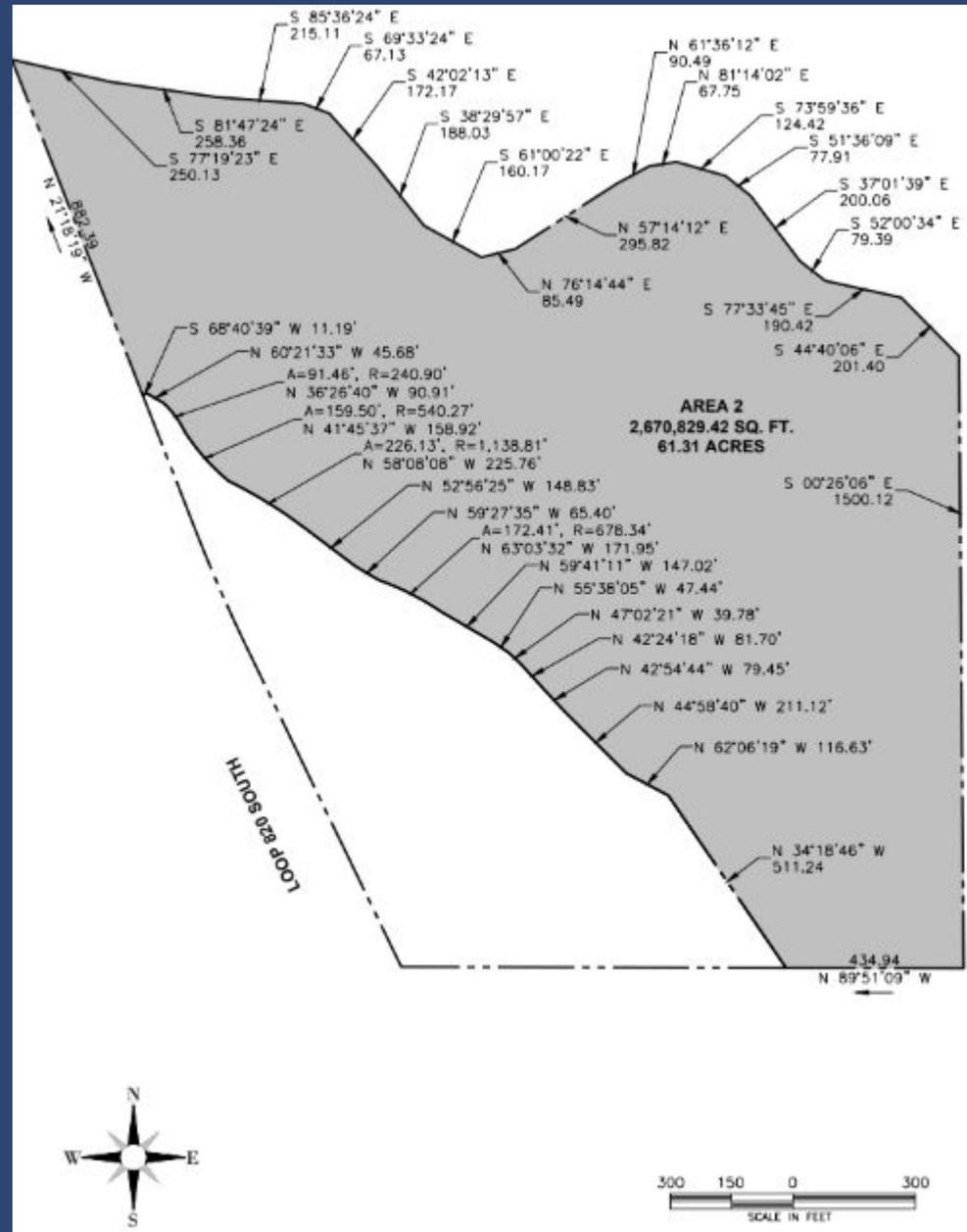
Attachment 9 pg. 6 of 25

Area 2 is designated for residential use on the Comprehensive Plan's Future Land Use Map. Maintaining this area solely as open space would not be consistent with the City's adopted land-use framework, which anticipates residential development with integrated open space.



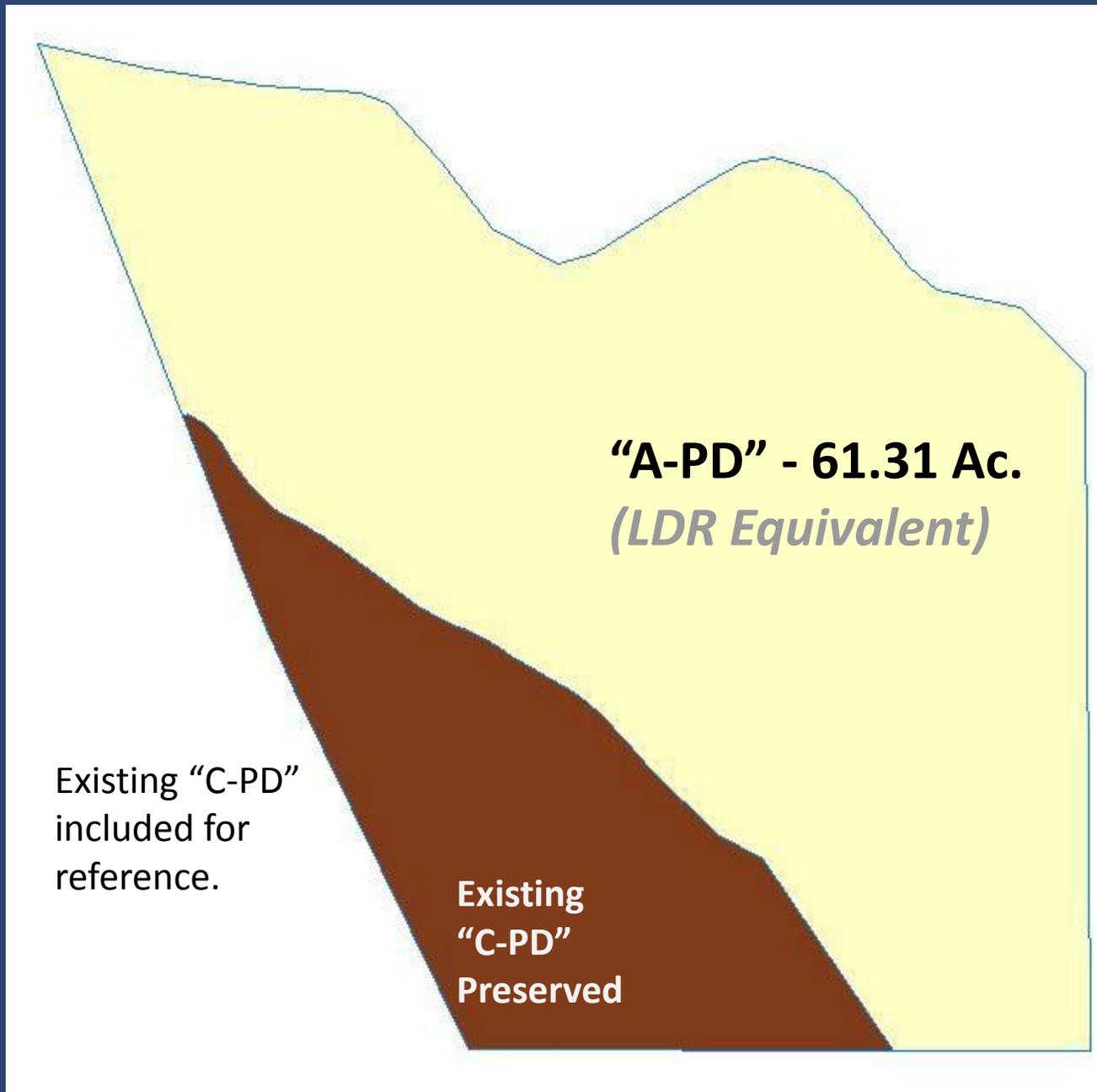
Proposed Zoning

“A-PD” Single-Family Residential (LDR) For all Area included as part of Area (tract) “2”.



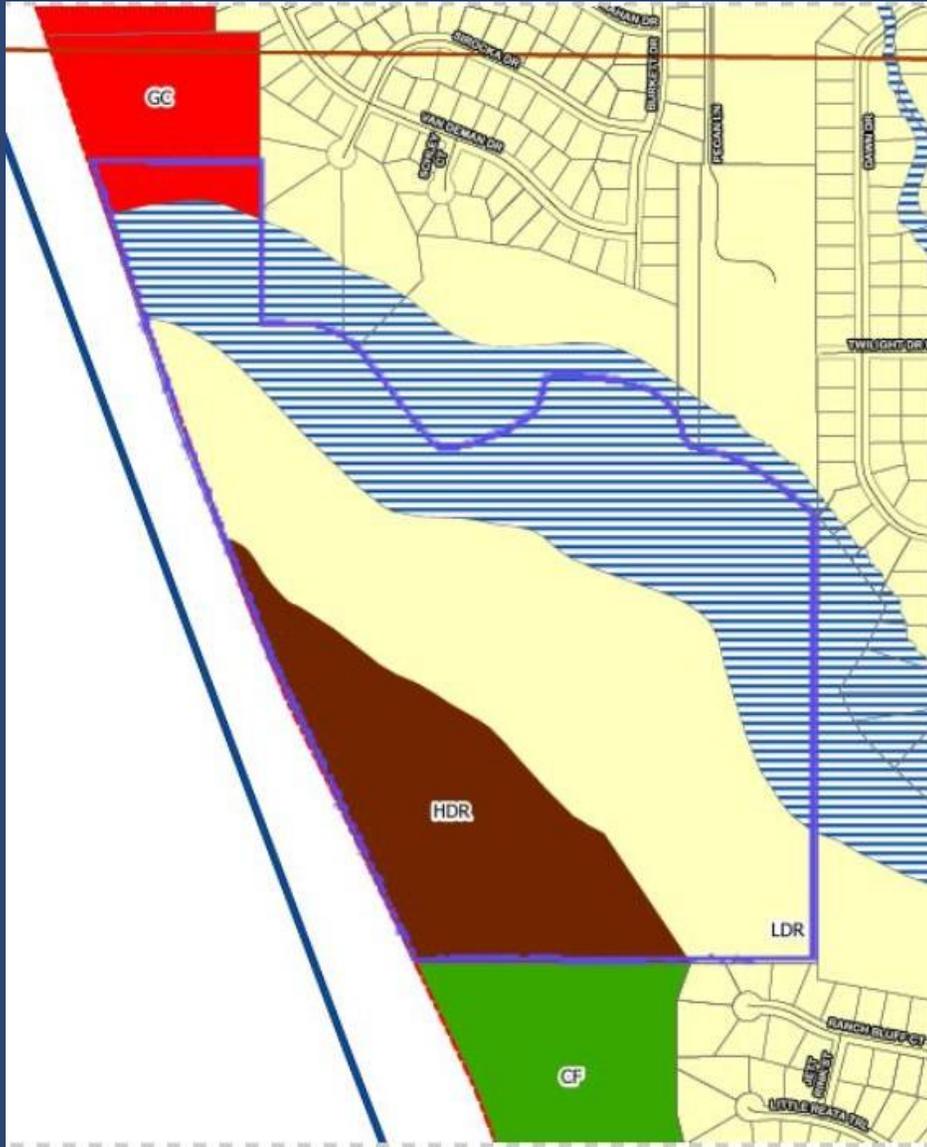
Rowan Ranch – Area 2 Boundary in Relation to Area 1 (*Existing C-PD*)

Attachment 9 pg. 8 of 25



FLUM & Existing Zoning

Attachment 9 pg. 9 of 25



Future Land Use Map

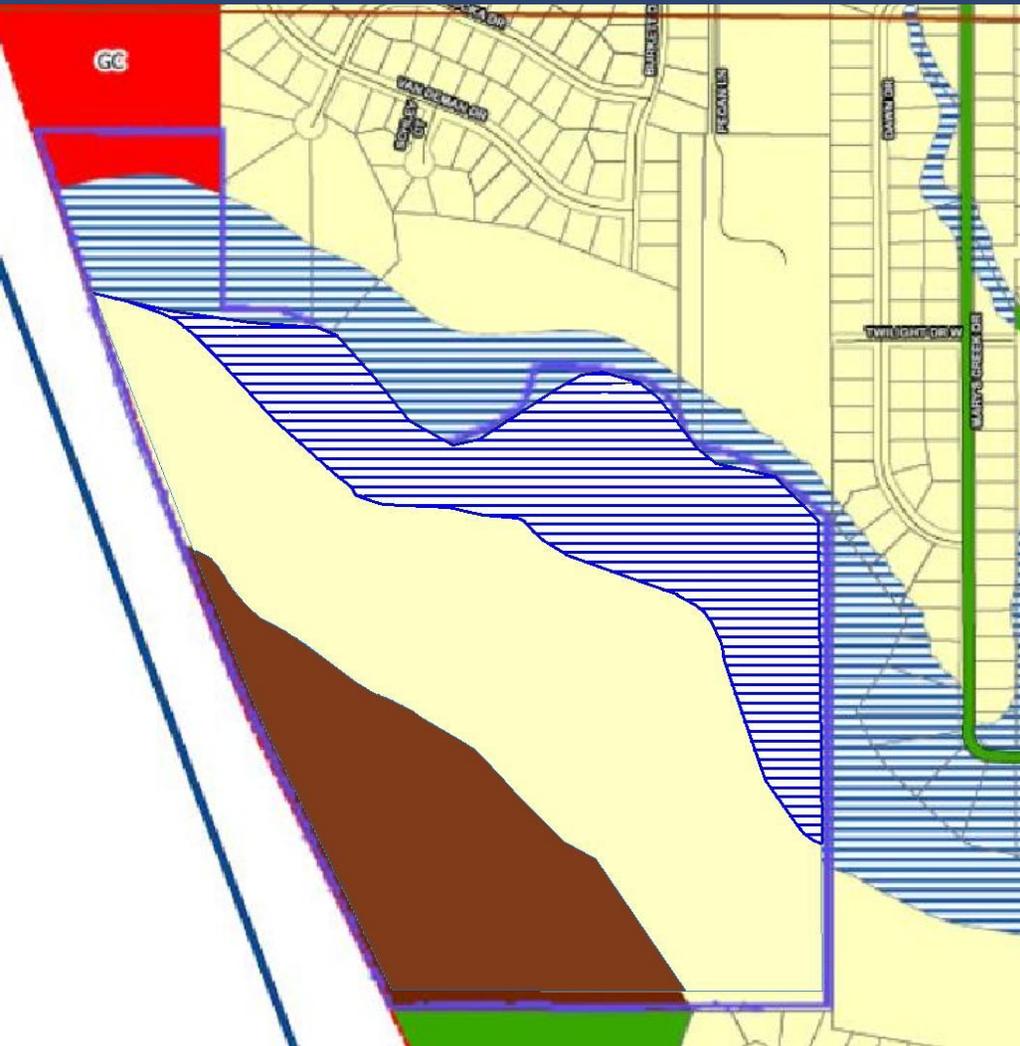


Existing Obsolete Zoning

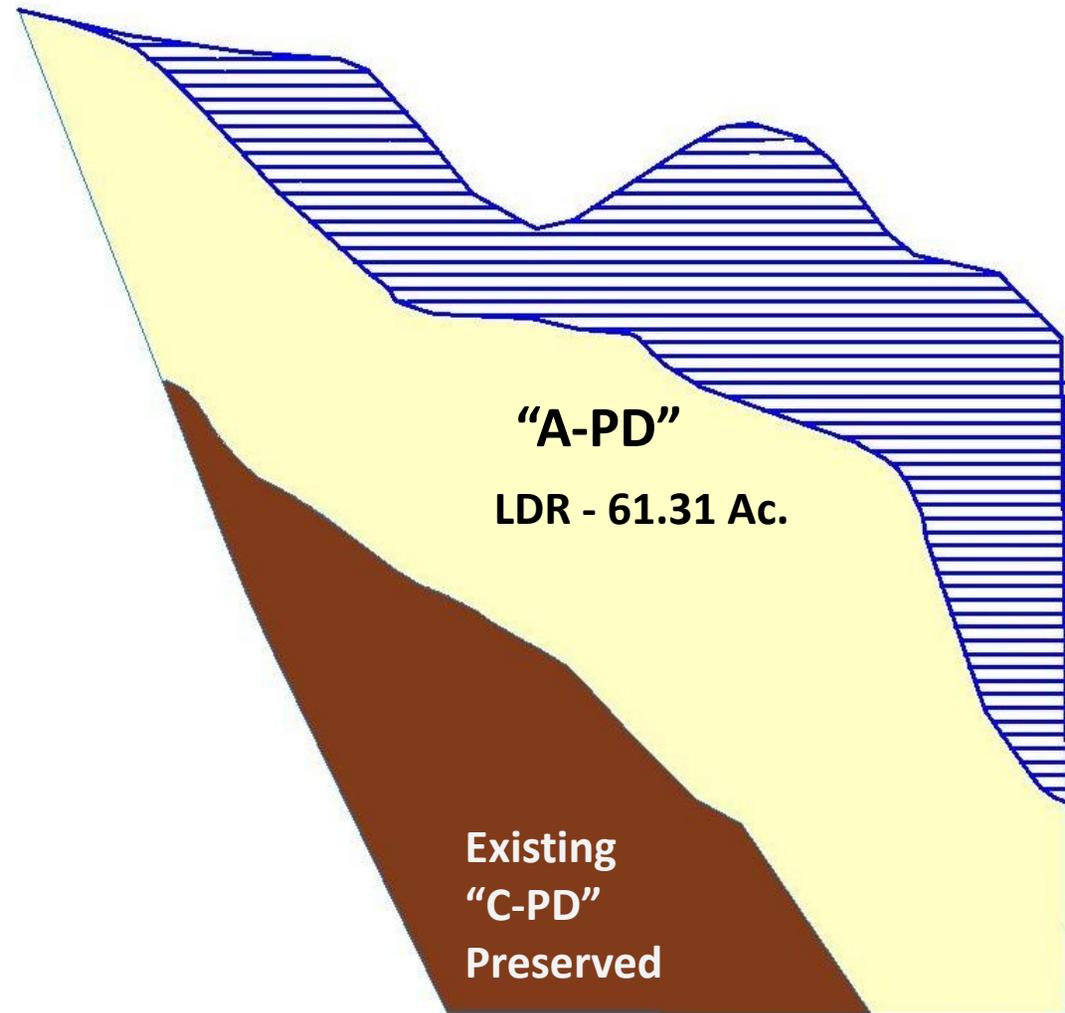


FLUM & Proposed Zoning Equivalent

Attachment 9 pg. 10 of 25



Future Land Use Map



Proposed Zoning Equivalent



Density Comparison

Potential Maximum:

"A" District - 3.63 DU/AC

"B" District - 3.89 DU/AC

"BR" District - 4.01 DU/AC



Zoned Density:

Pecan Valley Subdivision :
2.84 DU/AC

Russ LO Valley Subdivision :
2.60 DU/AC

Reata Place Subdivision:
2.25 DU/AC

Proposed "A-PD" as shown in Concept Plan :

2.68 DU/AC



What's Different?

Attachment 9 pg. 12 of 25

- **Area 2 only:** zone 61.31 acres so standard review can proceed.
- **Plan-aligned:** A-Residential base + limited PD flexibility.
- **Prior approvals preserved:** Tract 1 stays C-PD; Area 2 only.
- **Neighborhood fit:** enhanced buffers, setbacks, open space.
- **Community benefit:** Resilience Program for the community.



New Submission Evolution

Attachment 9 pg. 13 of 25

Previous Feedback Areas	Key Refinement Updates In this Submittal
1 Plan / FLUM Consistency	Aligned to the FLUM boundary and Comprehensive Plan
2 Technical Documentation / Public Bene	Expanded technical + environmental support, plus a clear community benefit program
3 Neighborhood Compatibility	Enhanced buffers, screening, privacy measures, and open-space preservation
4 Density / Zoning Intensity	A-Residential base zoning (lowest applicable) with PD controls; no density beyond base
5 Implementation Clarity	PD standards tailored to site conditions



Proposed Setbacks & Buffers

Attachment 9 pg. 14 of 25

Southern Boundary:

minimum 50'-0" buffer.

Northeastern Boundary *(along Mary's Creek):*

minimum 50'-0" buffer.

Eastern Boundary:

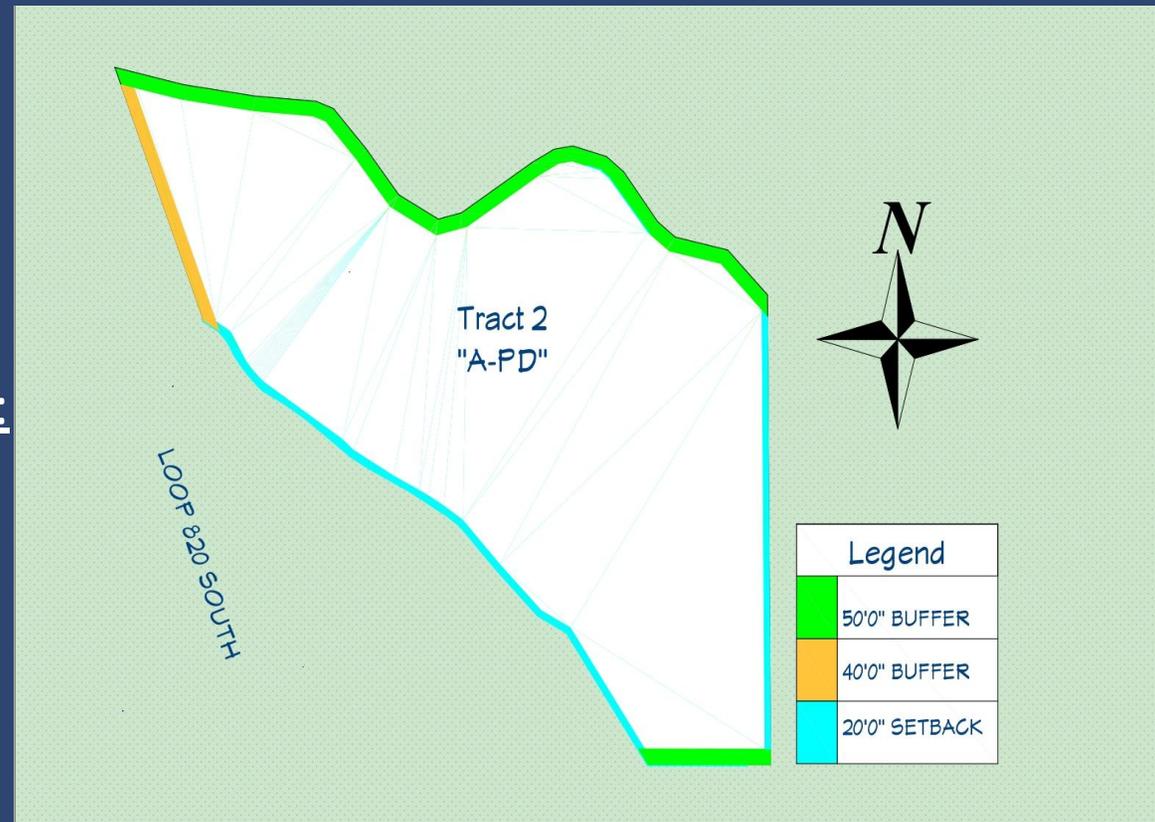
minimum 20'-0" Setback.

Loop 820 frontage (Tract 2 portion):

minimum 40'-0" until the southern intersection of the Tract 1 boundary.

Shared boundary between Tract 1 and Tract 2:

minimum 20'-0" Setback requirement.



The following slides provide illustrative imagery intended to demonstrate the quality and character of homes envisioned for future Benbrook residents of the LDR portion of Rowan Ranch as part of the proposed “A-PD” Zoning.



Single Family - "The Lankford"

Attachment 9 pg. 16 of 25



Single Family - "The Lankford"

Attachment 9 pg. 17 of 25



Single Family - "The Whitlock"

Attachment 9 pg. 18 of 25



Single Family - "The Whitlock"

Attachment 9 pg. 19 of 25



Single Family - "The Saratoga"

Attachment 9 pg. 20 of 25



Single Family - "The Saratoga"

Attachment 9 pg. 21 of 25



Single Family - "The Pin Oak"

Attachment 9 pg. 22 of 25



Single Family - "The Pin Oak"

Attachment 9 pg. 23 of 25



Concept Plan



Action request

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