

AGENDA

TOWN OF FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION

REGULAR MEETING

April 5, 2022

**FLOWER MOUND TOWN HALL
2121 CROSS TIMBERS ROAD
FLOWER MOUND, TEXAS**

6:30 P.M.

AN AGENDA INFORMATION PACKET IS AVAILABLE ONLINE AT
<https://www.flower-mound.com/agendacenter>

**Comments regarding any item on this agenda can be sent to the Commission Members
by Emailing: ECC@flower-mound.com or Calling: 972.874.6340**

A. CALL REGULAR MEETING TO ORDER – 6:30 PM

B. INVOCATION AND PLEDGE OF ALLEGIANCE

C. PUBLIC COMMENT

The purpose of this item is to allow the public an opportunity to address the ECC on issues that are not indicated as a "Public Hearing" on this agenda. Issues regarding daily operational or administrative matters should first be dealt with by calling Environmental Services at 972-874-6340 during business hours.

D. STAFF REPORT

Update and status report related to environmental issues and events, regulatory activities, and projects.

E. PRESENTATIONS

- 1. Receive a presentation on urban trees and air quality from Dr. Alexandra Ponette-González.**

F. CONSENT AGENDA - CONSENT ITEMS

This agenda consists of non-controversial or "housekeeping" items and may be approved with a single motion. A member of the Environmental Conservation Commission may request an item(s) be withdrawn from the consent agenda and moved to regular agenda for discussion by making such request prior to a motion and vote on the Consent Agenda.

1. Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on February 1, 2022.

G. REGULAR ITEM

2. Consider an application for a tree removal permit (TRP22-0002) for twenty-eight (28) specimen trees on property proposed for development as Cummings Ranch residential development. The property is generally located north of Cross Timbers Road and west of Shiloh Road.
3. Consider a recommendation to the Planning and Zoning Commission and Town Council of an Open Space Management Plan and Concept Plan for the proposed Cummings Ranch cluster development. The property is generally located north of Cross Timbers Road and west of Shiloh Road.

H. ADJOURNMENT- REGULAR SESSION

I. CALL WORK SESSION TO ORDER

J. WORK SESSION ITEM

1. Presentation and discussion on the Town's Cross Timbers Conservation Development District Cluster Development Survey.

K. SUBCOMMITTEE REPORT

Receive updates and status reports related to subcommittee tasks, activities, and projects.

L. COORDINATION OF FUTURE AGENDAS/MEETINGS

M. ADJOURNMENT- REGULAR SESSION

Environmental Conservation Commission Meeting Agenda

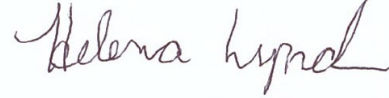
April 5, 2022

Page 3



Matthew Woods
Director of Environmental Services

I do hereby certify that the Notice of Meeting was posted on the bulletin board in Town Hall of the Town of Flower Mound, Texas, a place convenient and readily accessible to the general public at all times and said Notice was posted on the following date and time: April 1, 2022, by 5:00 p.m., at least 72 hours prior to the schedule time of said meeting.



Helena Lynch
Administrative Assistant



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 1

CONSENT ITEM

DATE: April 5, 2022

FROM: Helena Lynch, Administrative Assistant

ITEM: Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on February 1, 2022.

BACKGROUND INFORMATION: This agenda item is to consider approval of the minutes from the February 1, 2022, regular meeting of the Environmental Conservation Commission.

CITIZEN FEEDBACK: N/A

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. A copy of the draft minutes from the February 1, 2022, regular meeting of the Environmental Conservation Commission.

RECOMMENDATION: Move to approve the minutes from the February 1, 2022, regular meeting of the Environmental Conservation Commission.

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF FEBRUARY 1, 2022

THE FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING HELD ON THE 1ST DAY OF FEBRUARY 2022, IN THE FLOWER MOUND TOWN HALL, LOCATED AT 2121 CROSS TIMBERS ROAD IN THE TOWN OF FLOWER MOUND, COUNTY OF DENTON, TEXAS, AT 6:30 PM.

The Environmental Conservation Commission met in regular session, with the following members present constituting a quorum:

James Seastrom	Chair
Marilyn Lawson	Vice Chair
Sandy Fambrough	Commission Member, Place 1
KC Walsh	Commission Member, Place 3
Alton Bowman	Commission Member, Place 5
Deanna Soper	Commission Member, Place 7
Rich Murchek	Commission Member, Place 8

Places 8, 9, and 10 of the Commission do not vote on items unless they sit in place of one of the regular members, Places 1-7.)

Constituting a quorum with the following members absent:

Anna Athappan	Commission Member, Place 9
Ashish Sharma	Commission Member, Place 10
Elaine Takacs	Commission Member, Place 6

And the following members of Town staff present:

Matthew Woods	Director of Environmental Services
Helena Lynch	Administrative Assistant
Jimmy Hoefert	Environmental Review Analyst
Joe Whiteley	Environmental Review Analyst

A. CALL TO ORDER - REGULAR SESSION: 6:30 PM

B. INVOCATION AND PLEDGE OF ALLEGIANCE

C. PUBLIC COMMENT
None.

D. STAFF REPORT

Update and status report related to environmental issues and events, regulatory activities, and projects.

E. PRESENTATION

Rae Lynn Schneider Reinecke, Managing Director of Mitigation Futures Conservancy, 600 Mallard Lakes Dr, McKinney, TX 75072 gave a presentation with the following items and answered questions:

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF FEBRUARY 1, 2022

- Mitigation Futures Conservancy- Town Lake Conservation Easement
- Town Lake Residential Development Conservation Easement
- Conservation Easement – Success
- Conservation Easement – Challenges
- Mitigation Futures Conservancy – Background Information

F. CONSENT AGENDA

1. **Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on January 4, 2022.**

Commission Deliberation

Commission Member Fambrough made a motion to approve the January 4, 2022, minutes as presented. Vice Chair Lawson seconded the motion.

VOTE ON THE MOTION

AYES: Fambrough, Walsh, Lawson, Bowman, Soper, Murchek
NAYS: None
ABSTAIN: None

The motion passed with a vote of 6-0-0

G. REGULAR ITEM

2. **Consider an application for a tree removal permit (TRP21-0040) for two (2) specimen trees on Lot 19, Block E of the Montalcino Estates PH 2 subdivision. The property is located at 5012 Castellano Ct.**

Staff Presenter

Jimmy Hoefert, Environmental Services Review Analyst, gave a presentation with the following items and answered questions:

- 5012 Castellano Ct Tree Removal Permit Application
- Project Information
- General Location
- Detailed Location
- Tree Survey
- Specimen Trees Requested for Removal
- Motion/Recommendation

Applicant Presenter

Verity Cox, McAdams, 111 Hillside Dr, Lewisville, TX, 75057 gave a presentation with the following items and answered questions:

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF FEBRUARY 1, 2022

- 5012 Castellano Court Tree Removal Permit TRP21-0040
- Letter of intent
- Record plat
- Tree removal permit sign
- Tree #101 Post oak
- Tree #102 Post oak
- Tree survey
- Tree survey with aerial
- Tree canopy impact
- Site design and constraints
- House Location
- Tree Credit Opportunity

Commission Deliberation

Vice Chair Lawson made a motion to recommend approval of the requested permit for two (2) specimen trees on Lot 19, Block E of the Montalcino Estates PH 2 subdivision. The property is located at 5012 Castellano Ct. Commission Member Walsh seconded the motion.

VOTE ON THE MOTION

AYES: Murchek, Soper, Bowman, Lawson, Walsh, Fambrough

NAYS: None

ABSTAIN: None

The motion passed with a vote of 6-0-0

The following item was originally item 5 on the agenda. Chair Seastrom decided to reorder this item.

- 3. Consider an application for a tree removal permit (TRP21-0038) for one (1) specimen tree on property proposed for development as Cross Timbers Business Park. The property is generally located north of Cross Timbers Road and west of US 377.**

Staff Presenter

Jimmy Hoefert, Environmental Services Review Analyst, gave a presentation with the following items and answered questions:

- Cross Timbers Business Park Tree Removal Permit Application
- Project Information
- General Location
- Detailed Location
- Specimen Tree Survey
- Specimen Trees Requested for Removal
- Motion/Recommendation

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF FEBRUARY 1, 2022

Applicant Presenter

Chris Tronzano, with Studio Green Spot, Landscape Architect, 1784 McDermott Dr, Allen, TX, 75013, gave a presentation with the following items and answered questions:

- Concept landscape plan

Commission Deliberation

Commission Member Soper made a motion to recommend approval of the requested permit for the removal of one (1) specimen tree on property proposed for development as Cross Timbers Business Park. The property is generally located north of Cross Timbers Road and west of US 377. Vice Chair Lawson seconded the motion.

VOTE ON THE MOTION

AYES: Fambrough, Walsh, Lawson, Bowman, Soper, Murchek

NAYS: None

ABSTAIN: None

The motion passed with a vote of 6-0-0

Chair Seastrom opened the re-ordered items 3 & 4 at the same time.

- 4. Consider a recommendation to the Planning and Zoning Commission and Town Council of an Open Space Management Plan and Concept Plan for the proposed Townlake Phase 5 & 6 cluster development. The property is generally located south of Cross Timbers Road and east of Scenic Drive.**

Staff Presenter

Jimmy Hoefert, Environmental Services Review Analyst, gave a presentation with the following items and answered questions:

- Townlake Phase 5 & 6 Cluster Development Project
- Cluster Development Option
- Project Information
- Site Location
- ESA Map
- Slope Map
- Open Space Management Plan
- Motion/Recommendation

Applicant Presenter

Logan Hostin, with Toll Brothers, 1711 Woodcreek Dr., Richardson, TX, 75082 gave a presentation with the following items and answered questions:

- Townlake 5 & 6 Open Space
- What does the concept plan look like? – Phase 5 site plan

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF FEBRUARY 1, 2022

- What does the concept plan look like? – Phase 6 site plan
- Townlake Open space Plan
- Townlake 5 Open Space Plan
- Townlake 6 Open Space Plan
- Design Criteria – Urban design plan
- Design Criteria- Open space view example
- Townlake 5 concept landscape plans
- Milestones

Mike Boswell with Toll Brothers, 2665 Virginia Parkway, Flower Mound, TX, 75022 answered questions.

Commission Deliberation

Commission Member Walsh made a motion to recommend approval to the Planning and Zoning Commission and Town Council of an Open Space Management Plan and Concept Plan for the Townlake Phase 5 & 6 cluster development. The property is generally located south of Cross Timbers Road and east of Scenic Drive. Commission Member Fambrough seconded the motion.

VOTE ON THE MOTION

AYES: Murchek, Soper, Bowman, Lawson, Walsh, Fambrough

NAYS: None

ABSTAIN: None

The motion passed with a vote of 6-0-0

- 5. Consider an application for a tree removal permit (TRP21-0036) for forty-seven (47) specimen trees on property proposed for development as Townlake Phase 5 & 6 residential development. The property is generally located south of Cross Timbers Road and east of Scenic Drive.**

Staff Presenter

Jimmy Hoefert, Environmental Services Review Analyst, gave a presentation with the following items and answered questions:

- Townlake Phase 5 & 6 Tree Removal Permit Application
- Project Information
- General Location
- Detailed Location
- Specimen Tree Survey
- Motion/Recommendation

Applicant Presenter

Logan Hostin, with Toll Brothers, 1711 Woodcreek Dr., Richardson, TX, 75082 gave a presentation with the following items and answered questions:

- Extension of Town Lake

FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING OF FEBRUARY 1, 2022

- TRP21-0036
- Tree protection plan (Phase 5)
- Tree protection plan (Phase 6)
- Overview of ESG
- Trees: Tree are evaluated by an arborist for recycling and repurposing
- Trees: Repurposing Trees

Mike Boswell with Toll Brothers, 2665 Virginia Parkway, Flower Mound, TX, 75022 answered questions.

Commission Deliberation

Commission Member Walsh made a motion to recommend approval of the requested permit for the removal of forty-seven (47) specimen trees on property proposed for development as Townlake Phase 5 & 6 residential development. The property is generally located south of Cross Timbers Road and east of Scenic Drive. Commission Member Soper seconded the motion.

VOTE ON THE MOTION

AYES: Fambrough, Walsh, Lawson, Bowman, Soper, Murchek

NAYS: None

ABSTAIN: None

The motion passed with a vote of 6-0-0

H. SUBCOMMITTEE REPORT

Receive updates and status reports related to subcommittee tasks, activities, and projects.

I. COORDINATION OF FUTURE AGENDAS/MEETINGS

J. ADJOURNMENT- REGULAR SESSION – 8:57 PM

TOWN OF FLOWER MOUND, TEXAS

JAMES SEASTROM, CHAIR

ATTEST:

HELENA LYNCH, ADMINISTRATIVE ASSISTANT



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 2

REGULAR ITEM

DATE: April 5, 2022
FROM: James Hoefert, Environmental Review Analyst
PRESENTER Dale Ridinger or Jason Kilpatrick, with Ridinger Associates
ITEM: **Consider an application for a tree removal permit (TRP22-0002) for twenty-eight (28) specimen trees on property proposed for development as Cummings Ranch residential development. The property is generally located north of Cross Timbers Road and west of Shiloh Road.**

BACKGROUND INFORMATION:

The Cummings Ranch residential development is generally located north of Cross Timbers Road and west of Shiloh Road. The site is approximately 349.357 acres in size. The site is currently zoned for Agricultural uses and master planned for Cross Timbers Conservation Development District. The applicant is requesting to rezone the property to Planned Development District No. 190 (PD-190) for a cluster development. According to the tree survey for the project, the site contains one hundred forty-five (145) specimen trees. The applicant is requesting to remove twenty-eight (28) specimen trees from the site in order to build a residential subdivision. The specimen trees proposed for removal are all in good condition to fair condition and are located within the proposed buildable area.

The Town's tree ordinance requires that specimen trees removed from the site be replaced at a rate of two times their caliper inches. Based on their size, 1,380" of replacement trees, equaling 460 three-inch caliper trees, will be required for the removal of the twenty-eight (28) specimen trees on this site. In addition, protected trees removed from the buildable area will also require replacement at a tree-for-tree rate. Protected tree mitigation / replacement will be determined with the record plat application – once final engineering has been completed for the project. The developer is proposing to preserve a significant number existing protected and specimen trees on the site, so there will be credits available for the preservation of those trees.

CITIZEN FEEDBACK: As of April 1, 2022, staff has not received feedback related to this item.

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

- 1 Letter of Intent
- 2 Specimen tree removal permit application
- 3 Photographs of approved signage onsite
- 4 Tree Survey

RECOMMENDATION: Move to recommend approval or denial of the requested permit for the removal of twenty-eight (28) specimen trees on property proposed for development as Cummings Ranch residential development. The property is generally located north of Cross Timbers Road and west of Shiloh Road.

February 4, 2022

**Re: Cummings Ranch
Tree removal Permit**

Dear Mr. Hoefert,

Ridinger Associates, Inc. has performed the preliminary engineering with the Zoning PD application for the proposed Cummings Ranch development located at 7100 Cross Timbers Road.

A permit is requested for the tree removal shown on the Cummings Ranch Tree Survey.

It has been determined that the twenty-eight (28) Specimen trees requested to be removed.

These are:

Tree #5 is in a buildable area and is located such that the dripline of the tree is within the pad of the proposed new home.

Tree #15 is in the back of the buildable lot and the dripline of the tree will be within the building pad of the proposed new home.

Tree #22.03 is located within the proposed right of way of a proposed residential street.

Tree #22.04 is located within the pad of the proposed new home and in a buildable area.

Tree #22.06 is in the front of a residential lot in a buildable area and the canopy reaches too far into the pad to be saved. Due to the size of the tree and large dripline of the tree, there is no way to feasibly preserve this tree.

Tree #22.07 is located within the pad of the proposed new home and in a buildable area.

Tree #22SW is in the front of a residential lot and the canopy reaches too far into the pad to be saved.

Tree #385 is in the middle of a residential lot in the middle of the proposed pad for the proposed home.

Tree #390 is located on a buildable lot on the side of the lot, but the tree canopy reaches too far into the pad of the proposed home and can't feasibly be saved.

Tree #391 is located on a buildable lot on the side of the lot, but the tree canopy reaches too far into the pad of the proposed home and can't feasibly be saved.

Tree #429 is in the middle of a proposed residential lot in the middle of the proposed pad for the new proposed home.

Tree #486 is located within the pad of the proposed new home and in a buildable area and can't feasibly be saved.

Tree #492 is located such that the drip line reaches too far into the pad of the proposed new home and can't feasibly be saved.

Tree #499 is located such that the drip line reaches too far into the pad of the proposed new home and can't feasibly be saved.

Tree #1012 is located within the proposed right of way of a proposed residential street.

Tree #1052 is located such that the drip line reaches too far into the pad of the proposed new home and can't feasibly be saved.

Tree #1172 is located close to the right of way of the proposed Jo Fain Blvd. and the dripline reaches too far into the right of way such that the grading will make it such that this tree can't be feasibly saved.

Tree #1365 is located such that the tree and the drip line extends too far into the pad of the proposed new home and can't feasibly be saved.

Tree #1414 is located such that the tree and the drip line extends too far into the pad of the proposed new home and can't feasibly be saved.

Tree #2001 is located in the middle of a proposed residential lot's pad and can't feasibly be saved.

Tree #2003 is located in the middle of a proposed residential lot's pad and can't feasibly be saved.

Tree #2005 is located in the back corner of a residential lot. Due to the size of the tree and the extent of the dripline of the tree, this tree can't feasibly be saved.

Tree #2007 is located on the back of a residential lot and the dripline of the tree extends too far into the pad of the proposed new home and can't feasible be saved.

Tree #2008 is located on the front of a residential lot and the size of the tree and the extent of the dripline of this tree makes it where this tree can't feasible be saved.

Tree #2114 is located such that the tree and the drip line extends too far into the pad of the proposed new home and can't feasibly be saved.

Tree #2127 is in the right of way of the collector and can't be saved.

Tree #2153 is in the right of way of the collector. The extent of the canopy extends too far in to the proposed roadway and can't feasibly be saved.



Tree #2190 is in the right of way of the collector and can't be saved.

We appreciate your consideration of our project and look forward to your favorable approval. Please place the Tree Removal Permit on the March 1st E.C.C. agenda.
Please call if you have any questions.

Respectfully,
Ridinger Associates, Inc.
P.E. Firm No. 1969

A handwritten signature in blue ink, appearing to read "J. Kilpatrick", is written over a faint, illegible stamp.

Mr. Jason Kilpatrick
Engineer



Town of Flower Mound Environmental Services
 Mailing Address: 2121 Cross Timbers Road, Flower Mound, TX 75028
 Telephone: 972-874-6340 Website: www.flower-mound.com

TREE REMOVAL PERMIT

(Effective for Developments submitted 10/6/08 - present)

Check one: ☐ Protected Tree ☒ Specimen Tree ☐ Historic Tree

This application is required to be submitted 30 days prior to the next available ECC hearing.

1. Applicant- Note: Must be an ISA certified arborist, certified forester, or a registered landscape architect.

Name: Matthew Clemons, RCA 523

Address: 3000 S Hulen St R4- 901
FORT WORTH, TX 76109-1934

Phone: 817-471-6945

Applicant's Legal Interest in the Property:
 Consulting Arborist

2. Property Owner(s)

Name(s): 1309 LLC
 Address: P.O. BOX 292873
LEWISVILLE, TX 75029

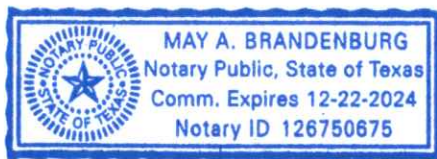
3. Location and Legal Description of Property: 7100 CROSS TIMBERS RD.

349.357 acres in the T.J. Payne Survey, Abstract No. 1056, T. & P. Railroad Co. Survey, Abstract No. 1618,
John West Survey, Abstract No. 1414, John West Survey, Abstract No. 1415, H. Campbell, Abstract No. 1462, and the
B.B.B. & C.C.R. Survey Abstract No. 152 in the Town of Flower Mound, Denton County, Texas

MC

4. Owner's Authorization of Representation

I, Charlie Cummings, the owner of the above described real property, do hereby authorize Matthew Clemons to represent my interests and to file an Application for Tree Removal Permit for said real property, pursuant to the terms and provisions of Chapter 94 (Trees), of the Land Development Regulations of the Town of Flower Mound, Texas Code of Ordinances.



[Signature]
Signature of Owner

Given Under My Hand and Seal of Office
This the 31 Day of January, 20 22
[Signature]
Notary Public
In and For Denton County, Texas.

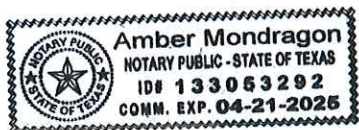
5. Applicants Affidavit- Note: Applicant must be an ISA certified arborist, certified forester, or a registered landscape architect.

Subject to criminal penalties contained in Subpart B, the Land Development Regulations of the Town of Flower Mound, Texas Code of Ordinances, I Matthew Clemons, do hereby swear or affirm that all of the Information contained herein and submitted herein is, to the best of my knowledge, true, correct and complete and that no false, misleading or incomplete information has been intentionally provided or submitted with this Application for a Tree Removal Permit.

[Signature]
Signature of Applicant

Landscape Architect License No. _____
State of Licensure _____
Or ISA Certified Arborist No. TX1340A
Or Certified Forester No. _____

Amber Mondragon



Given Under My Hand and Seal of Office
This the 28 Day of January, 20 22

Notary Public
In and For Tarrant County, Texas

6. Received by Town of Flower Mound on (Date) 1/31/2022 by
(initials) JRH.

Tree Removal Request Signage

One of multiple signs posted along Cross Timbers Road

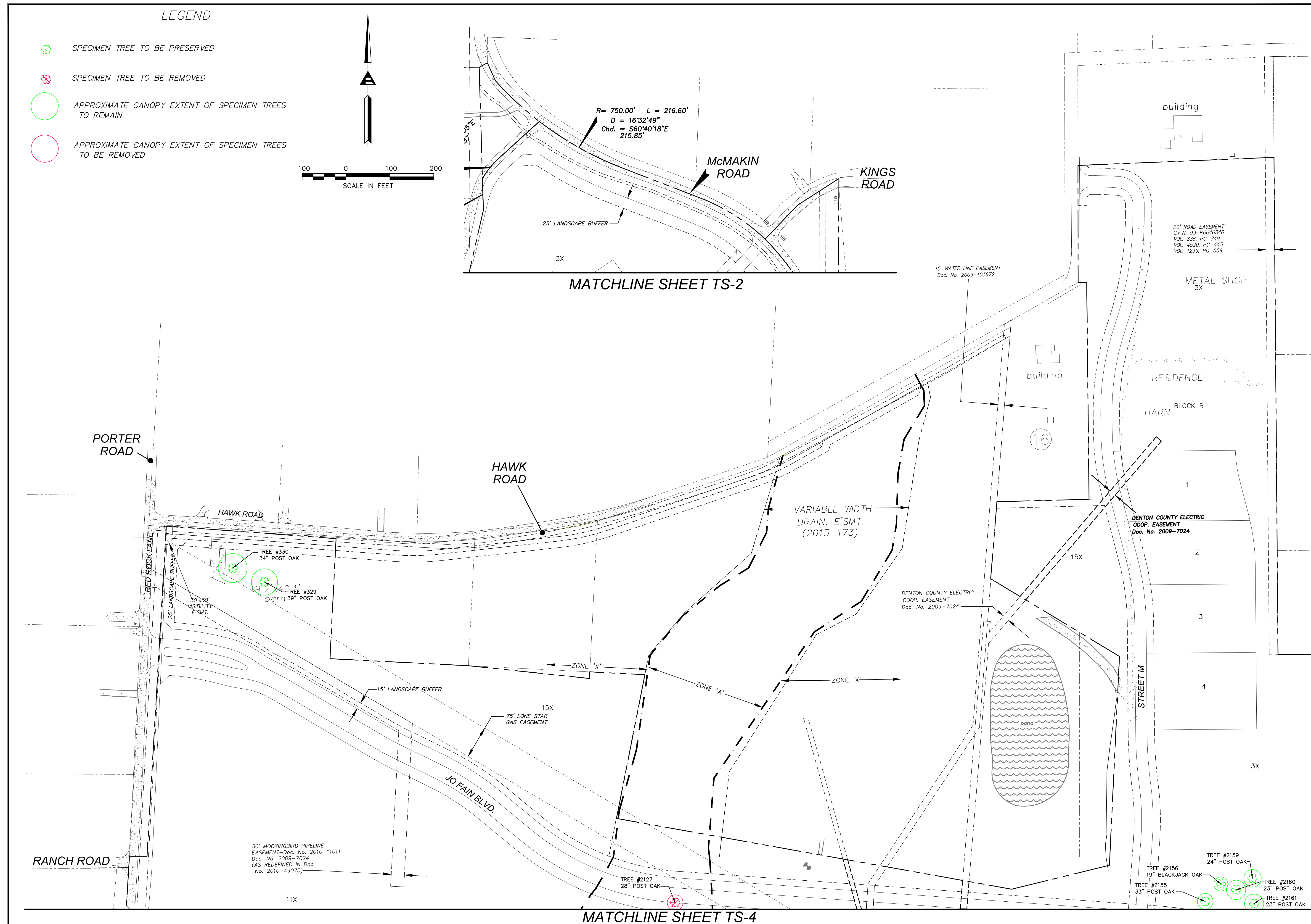


One of multiple signs posted along Shiloh Drive

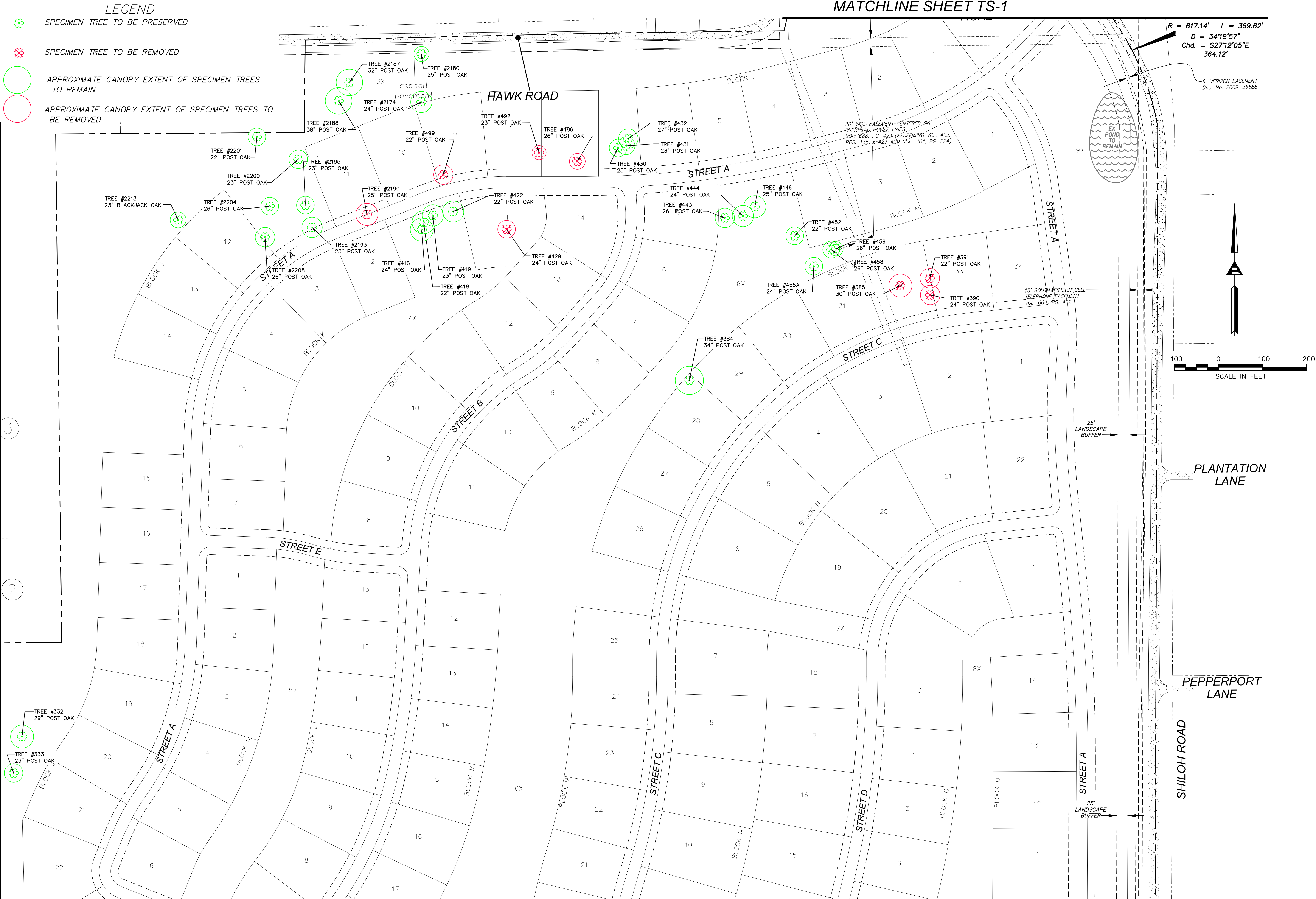


Sign posted near Red Rock Ln. and Hawks Rd.





MATCHLINE SHEET TS-1



Ridinger Associates, Inc.
Civil Engineers - Planners

Firm No. 1969
350 S. Edmonds
Law, Suite 101
Lewisville, Texas 75067

Tel. No. (972) 353-8900
Fax No. (972) 353-8011

Matthew Clemens
American Society of Consulting Engineers

02/28/22

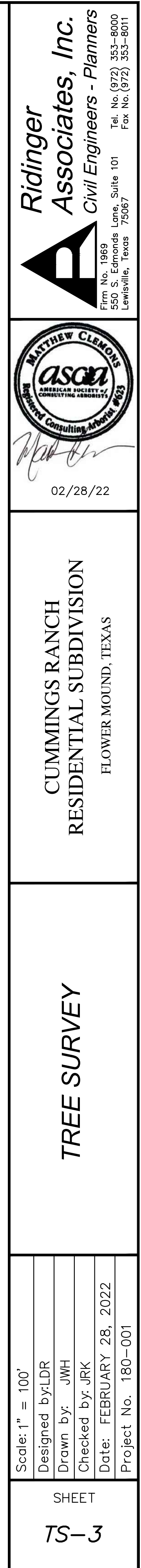
CUMMINGS RANCH
RESIDENTIAL SUBDIVISION
FLOWER MOUND, TEXAS

TREE SURVEY

Scale: 1" = 100'
Designed by: LDR
Drawn by: JWH
Checked by: JPK
Date: FEBRUARY 28, 2022
Project No. 180-001

SHEET
TS-2

MATCHLINE SHEET TS-4



**Ridinger
Associates, Inc.**
Civil Engineers - Planners

Firm No. 1969
550 S. Edmonds Lane, Suite 101
Lewisville, Texas 75067

Tel. No. (972) 353-8000
Fax No. (972) 353-8011

A circular stamp with the name "MATTHEW CLEMONS" at the top and "ASCA" in the center. Below "ASCA" is the text "AMERICAN SOCIETY OF CONSULTING ARBITRATORS". The stamp is signed with a cursive signature and dated "02/28/22".

**CUMMINGS RANCH
RESIDENTIAL SUBDIVISION
FLOWER MOUND, TEXAS**

TREE SURVEY

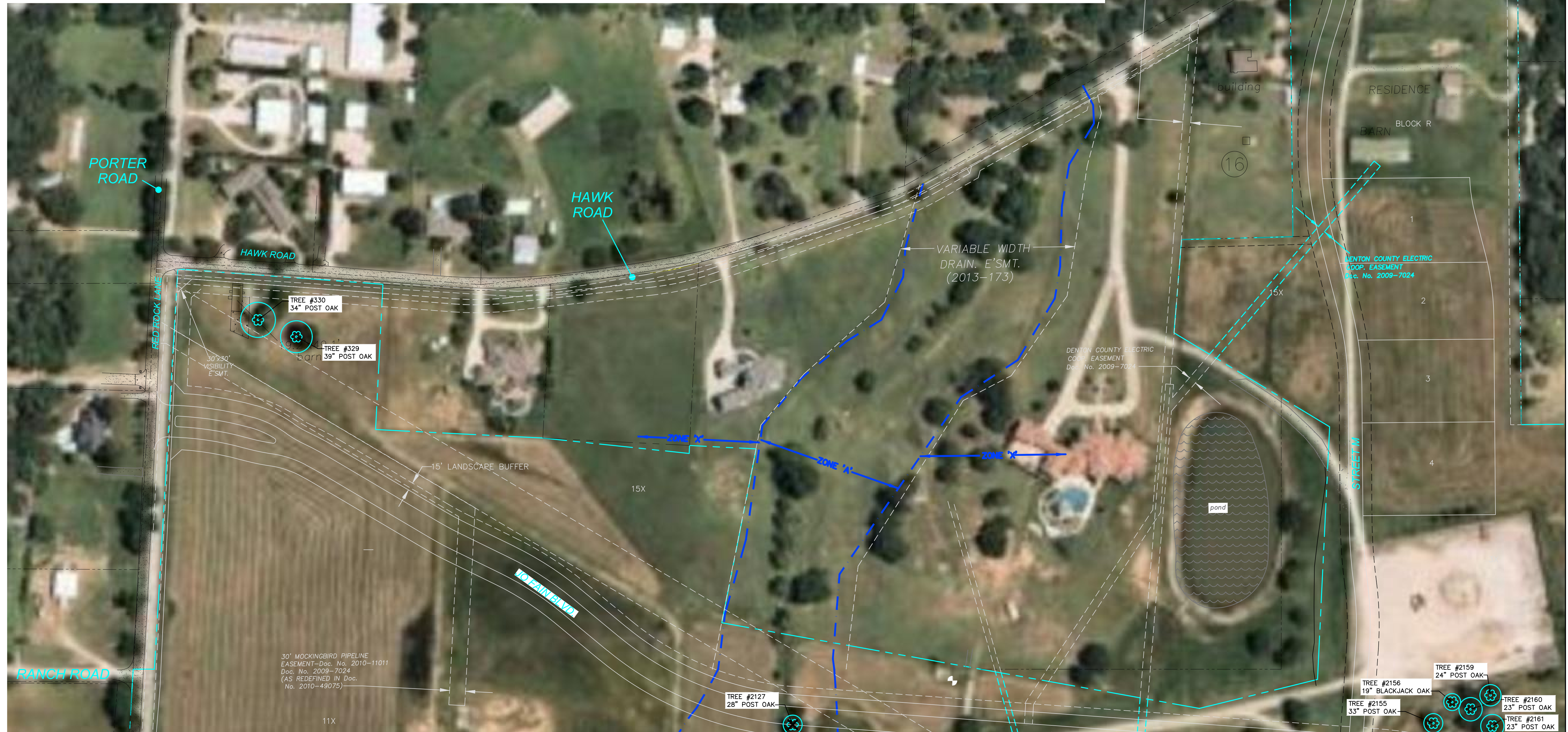
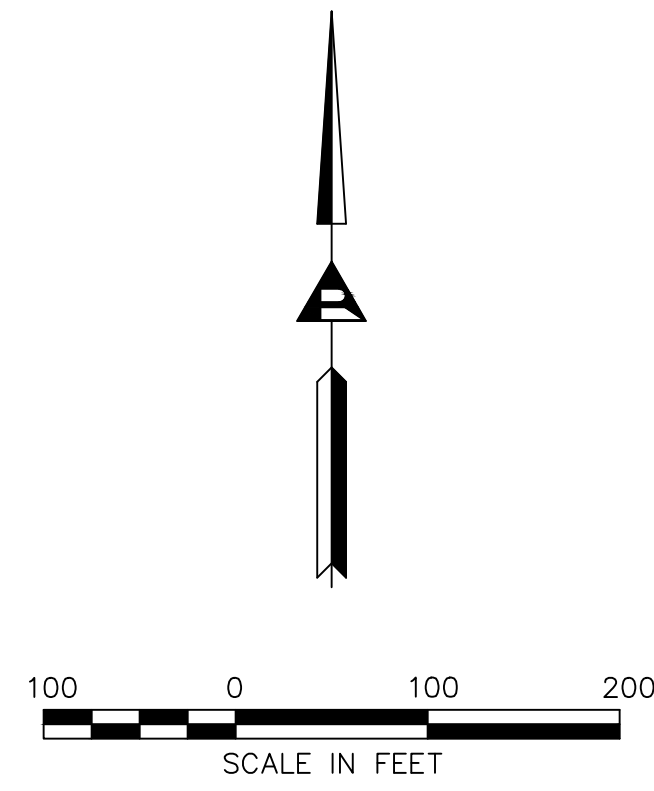
Scale: 1" = 100'
Designed by: LDR
Drawn by: JWH
Checked by: JRK
Date: FEBRUARY 28, 2022
Project No. 180-001

SHEET
TS-3

TAG NO.	CALIPER (IN.)	COMMON NAME / BOTANICAL NAME	PROTECTED / SPECIMEN	LOCATION	STATUS	CONDITION	COMMENTS	AVG RADIUS	CANOPY SQFT
14SW	23	POST OAK / QUERCUS STELLATA	SPECIMEN	OUTSIDE BUILDABLE AREA	PRESERVE	GOOD		22	1520
22SW	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		18	1017
24SW	28	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		23	1661
25SW	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		21	1385
28SW	26	POST OAK / QUERCUS STELLATA	SPECIMEN	OUTSIDE BUILDABLE AREA	PRESERVE	GOOD		24	1809
5	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		26	2123
15	27	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		27	2289
22.01	27	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
22.02	29	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		29	2641
22.03	20	CEDAR ELM / ULMUS CRASSIFOLIA	SPECIMEN	RIGHT OF WAY	REMOVE	GOOD		16	804
22.04	20	CEDAR ELM / ULMUS CRASSIFOLIA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		16	804
22.06	34	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		34	3630
22.07	20	CEDAR ELM / ULMUS CRASSIFOLIA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		20	1256
34	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
41	28	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		25	1963
107	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	FAIR	VISIBLE DECAY	24	1809
144	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
169	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	POOR		20	1256
175	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
217	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
221	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
224	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
239	34	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		34	3630
240	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	FAIR		26	2123
303	22	POST OAK / QUERCUS STELLATA	SPECIMEN	OUTSIDE BUILDABLE AREA	PRESERVE	GOOD		16	804
306	30	PECAN / CARYA ILLINOINENSIS	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		30	2826
307	25	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
308	27	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
309	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
314	24	POST OAK / QUERCUS STELLATA	SPECIMEN	OUTSIDE BUILDABLE AREA	PRESERVE	GOOD		24	1809
321	22	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		18	1017
329	39	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		30	2826
330	34	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	FAIR	POISON IVY VINES	33	3419
332	29	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
333	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		21	1385
339	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		21	1385
340	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
345	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
347	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
348	28	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD	IN CULVERT	26	2123
380	30	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		30	2826
384	34	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		32	3215
385	30	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		26	2123
390	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		20	1256
391	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		22	1520
397	21	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		18	1017
407	30	POST OAK / QUERCUS STELLATA	SPECIMEN	OUTSIDE BUILDABLE AREA	PRESERVE	GOOD		30	2826
416	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
418	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
419	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
422	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
429	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		20	1256
430	25	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
431	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	POOR	DAMAGE	20	1256
432	27	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
443	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
444	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
446	25	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		25	1963
452	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
455A	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
458	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	FAIR	CAVITY	19	1134
459	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	FAIR	IRREGULAR CANOPY	16 ONE SIDE	3
472	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		23	1661
474	25	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		23	1661
475	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
477	31	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
486	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		18	1017
492	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	POOR	ROT	16	804
499	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	POOR	ROT AT BASE	22	1520
616A	28	CEDAR ELM / ULMUS CRASSIFOLIA	SPECIMEN	BUILDABLE AREA	PRESERVE	FAIR	SAPSUCKER DAMAGE	28	2462
686	26	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	OUTSIDE BUILDABLE AREA	PRESERVE	GOOD		20	1256
693	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		18	1017
695	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520

TAG NO.	CALIPER (IN.)	COMMON NAME / BOTANICAL NAME	PROTECTED / SPECIMEN	LOCATION	STATUS	CONDITION	COMMENTS	AVG RADIUS	CANOPY SQFT
695	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
696	30	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		30	2826
1003	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		23	1661
1009	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1012	24	POST OAK / QUERCUS STELLATA	SPECIMEN	RIGHT OF WAY	REMOVE	GOOD		20	1256
1037	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1038	28	LIVE OAK / QUERCUS VIRGIANA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		28	2462
1041	31	LIVE OAK / QUERCUS VIRGIANA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		32	3215
1052	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		20	1256
1093	28	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
1094	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1124	27	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
1158	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
1171	25	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1172	27	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	OUTSIDE BUILDABLE AREA	REMOVE	GOOD		27	2289
1178A	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1182	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
1183	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		23	1661
1199	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1246	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1289	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1293	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
1294	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
1319	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1350	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
1365	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		22	1520
1408	36	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		36	4069
1414	19	CEDAR ELM / ULMUS CRASSIFOLIA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		22	1520
1438	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2001	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		24	1809
2003	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		22	1520
2005	28	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		28	2462
2007	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		22	1520
2008	30	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		28	2462
2009	27	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		28	2462
2010	46	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		46	6644
2011	30	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		30	2826
2016	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2042A	28	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		34	3630
2042B	27	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		27	2289
2046	35	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		21	1385
2053	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
2054	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2055	28	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
2056	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		27	2289
2058	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2060	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2062	22	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
2063	20	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		16	804
2070	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
2075	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
2078	36	PECAN / CARYA ILLINOINENSIS	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		26	2123
2110	28	AMERICAN ELM / ULMUS AMERICANA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		33	3419
2114	28	AMERICAN ELM / ULMUS AMERICANA	SPECIMEN	BUILDABLE AREA	REMOVE	GOOD		30	2826
2127	28	POST OAK / QUERCUS STELLATA	SPECIMEN	RIGHT OF WAY	REMOVE	POOR	POISON IVY	18	1017
2153	23	POST OAK / QUERCUS STELLATA	SPECIMEN	RIGHT OF WAY	REMOVE	GOOD		22	1520
2155	33	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	FAIR	DAMAGE-CAVITY	18	1017
2156	19	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		16	804
2159	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
2160	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2161	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2174	24	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		24	1809
2180	25	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	POOR	DAMAGE	17	907
2187	32	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		30	2826
2188	38	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		30	2826
2190	25	POST OAK / QUERCUS STELLATA	SPECIMEN	RIGHT OF WAY	REMOVE	GOOD		25	1963
2193	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		23	1661
2195	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
2200	23	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2201	22	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
2204	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		20	1256
2208	26	POST OAK / QUERCUS STELLATA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		22	1520
2213	23	BLACKJACK OAK / QUERCUS MARILANDICA	SPECIMEN	BUILDABLE AREA	PRESERVE	GOOD		18	1017

- SPECIMEN TREE TO BE PRESERVED
- SPECIMEN TREE TO BE REMOVED
- APPROXIMATE CANOPY EXTENT OF SPECIMEN TREES



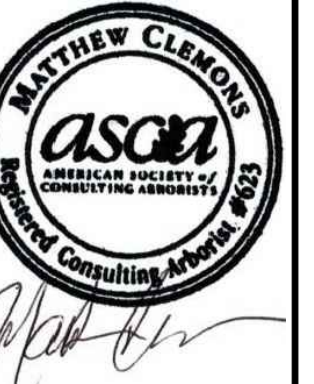
MATCHLINE SHEET TS-4

MATCHLINE SHEET TS-2

**Ridinger
Associates, Inc.**
Civil Engineers - Planners

Firm No. 1969
550 S. Edmonds Lane, Suite 101
Lewisville, Texas 75067

Tel. No. (972) 353-8000
Fax No. (972) 353-8011



02/28/22

CUMMINGS RANCH
RESIDENTIAL SUBDIVISION
FLOWER MOUND, TEXAS

TREE SURVEY

Scale: 1" = 100'
Designed by: LDR
Drawn by: JWH
Checked by: JRK
Date: FEBRUARY 28, 2022
Project No. 180-001

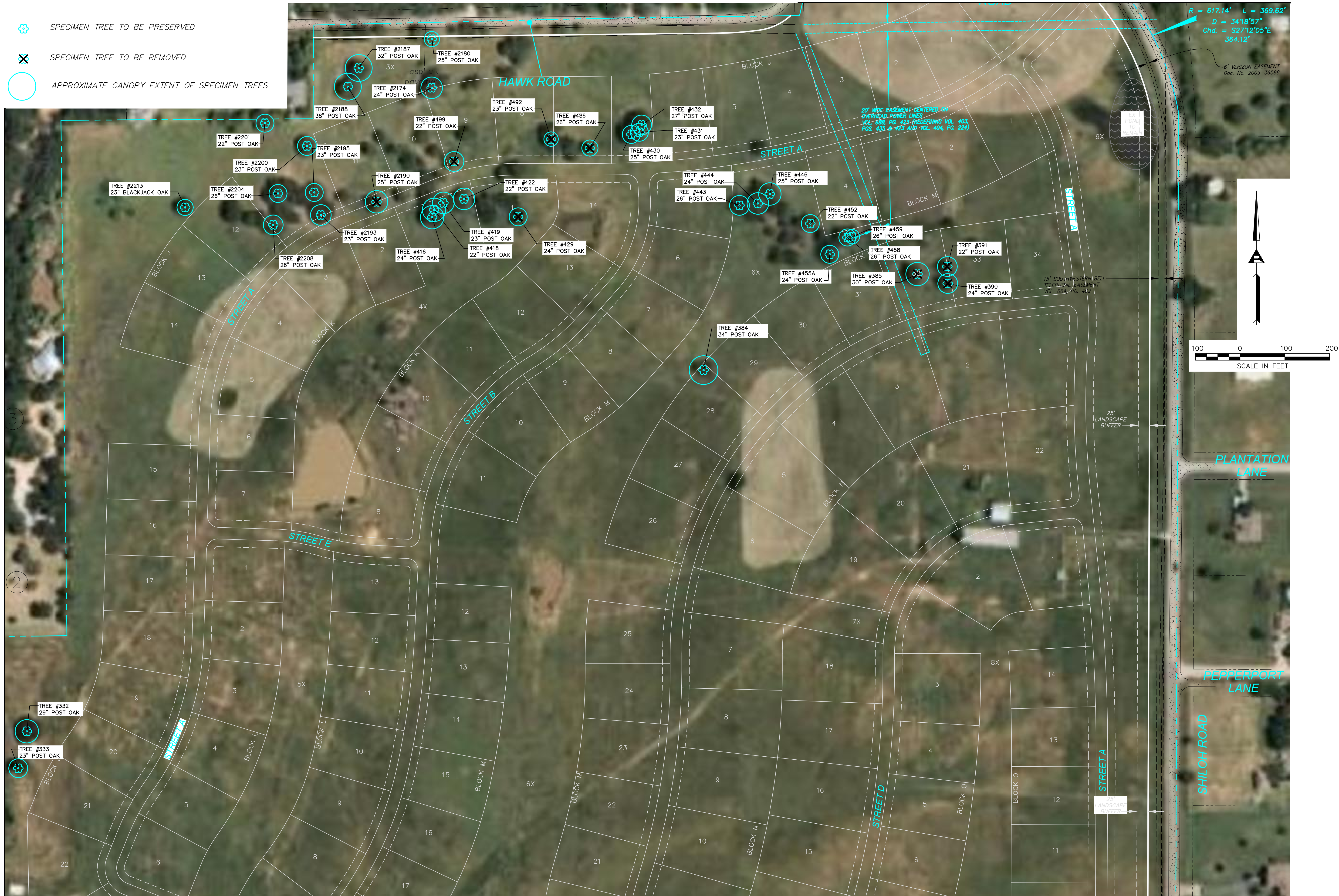
HEET

S-1

MATCHLINE SHEET TS-1

LEGEND

-  SPECIMEN TREE TO BE PRESERVED
-  SPECIMEN TREE TO BE REMOVED
-  APPROXIMATE CANOPY EXTENT OF SPECIMEN TREES



MATCHLINE SHEET TS-3

MATCHLINE SHEET TS-1

Scale: 1" = 100'

Designed by:	LDR
Drawn by:	JWH
Checked by:	JRK
Date:	FEBRUARY 28, 2022
Project No.	180-001

SHEET

TS-2

CUMMINGS RANCH
RESIDENTIAL SUBDIVISION
FLOWER MOUND, TEXAS

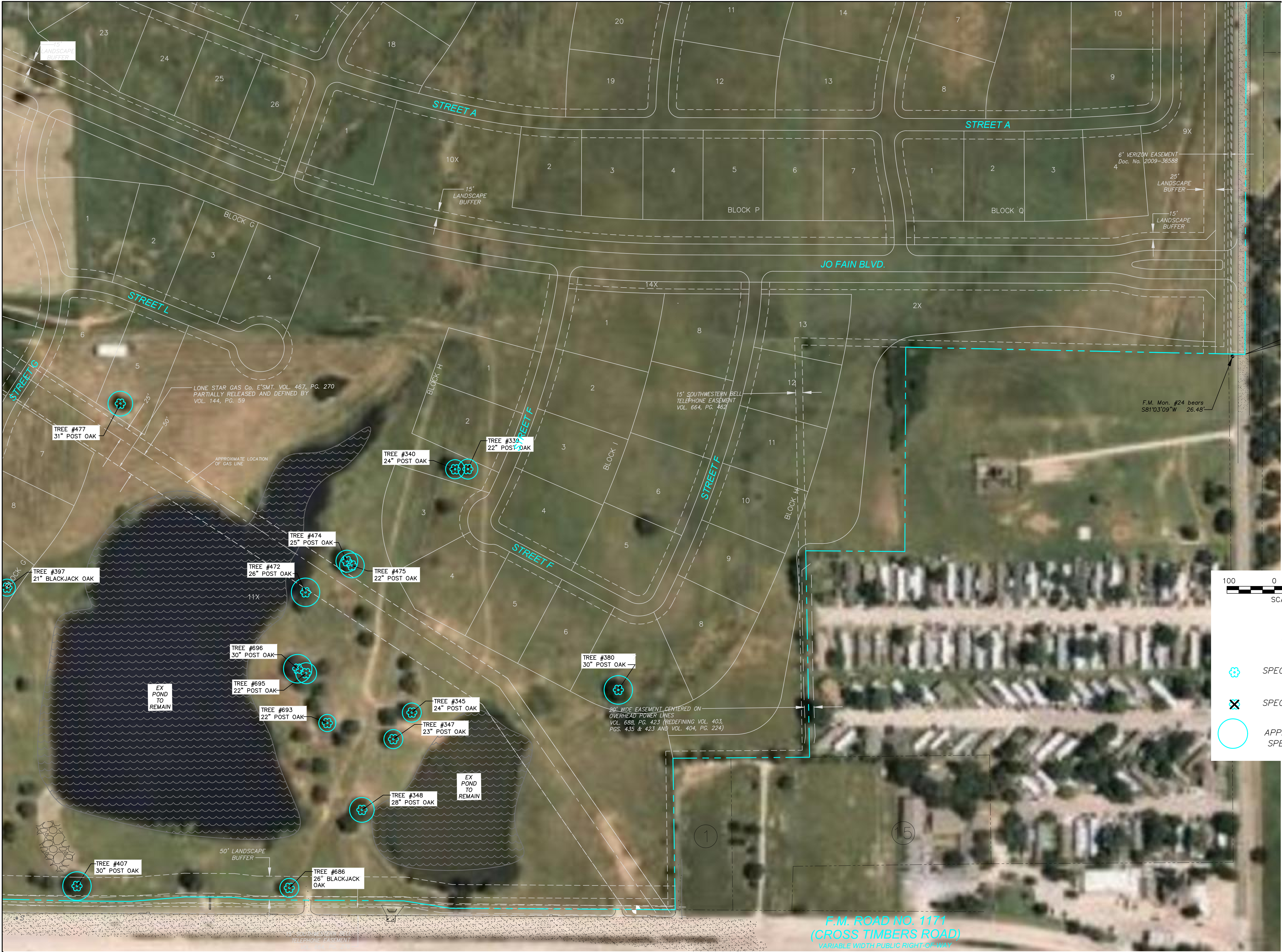
TREE SURVEY

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Matthew Clements
ascan
AMERICAN SOCIETY OF
CONSULTING ENGINEERS
Professional Consulting Engineer 003
02/28/22

MATCHLINE SHEET TS-4

MATCHLINE SHEET TS-2



LEGEND

- SPECIMEN TREE TO BE PRESERVED
- SPECIMEN TREE TO BE REMOVED
- APPROXIMATE CANOPY EXTENT OF SPECIMEN TREES

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Matthew Clements
American Society of Professional Surveyors
Professional Surveyor No. 003

02/28/22

CUMMINGS RANCH
RESIDENTIAL SUBDIVISION
FLOWER MOUND, TEXAS

TREE SURVEY

Scale: 1" = 100'
Designed by: LDR
Drawn by: JWH
Checked by: JPK
Date: FEBRUARY 28, 2022
Project No. 180-001

LEGEND

SPECIMEN TREE TO BE PRESERVED

SPECIMEN TREE TO BE REMOVED

APPROXIMATE CANOPY EXTENT OF SPECIMEN TREES

MATCHLINE SHEET TS-1



Ridinger Associates, Inc.

Civil Engineers - Planners

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Fax No. (913) 353-8011

MATTHEW CLEMONS

ASCA

AMERICAN SOCIETY OF
CONSULTING ARCHITECTS

Member

02/28/22

CUMMINGS RANCH
RESIDENTIAL SUBDIVISION
FLOWER MOUND, TEXAS

TREE SURVEY

Scale: 1" = 100'

Designed by: LDR

Drawn by: JWH

Checked by: JPK

Date: FEBRUARY 28, 2022

Project No. 180-001

SHEET

TS-4



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 3

REGULAR ITEM

DATE: April 5, 2022
FROM: James Hoefert, Environmental Review Analyst
PRESENTER: Dale Ridinger or Jason Kilpatrick, with Ridinger Associates
ITEM: **Consider a recommendation to the Planning and Zoning Commission and Town Council of an Open Space Management Plan and Concept Plan for the proposed Cummings Ranch cluster development. The property is generally located north of Cross Timbers Road and west of Shiloh Road.**

BACKGROUND INFORMATION: The applicant will present the conceptual plan and Open Space Management Plan for the proposed Cummings Ranch cluster development. The site is currently zoned for Agricultural uses and master planned for Cross Timbers Conservation Development District. The applicant is requesting to rezone the property to Planned Development District No. 190 (PD-190) for a cluster development. The Cummings Ranch cluster development project consists of approximately 349.357 acres. The property is generally located north of Cross Timbers Road and west of Shiloh Road.

The project site is located in the Cross Timbers Conservation Development District, as designated within the Town's Master Plan. This site contains some characteristics of the Eastern Cross Timbers Forest that are found in this part of Texas, throughout eastern Oklahoma, and into Kansas. The current zoning for the property is agricultural with a minimum two acre lot size. The Town's cluster development option provides standards for residential development projects in which dwelling units are clustered on smaller lots than would otherwise be allowed for the purpose of preserving open or natural lands.

For projects with agricultural zoning within the Cross Timbers Conservation Development District, the preservation of 50% of the gross land as open space is established within the Town's conservation development standards and is also applied to the cluster development model as the preservation objective. The Cummings Ranch application designates approximately 50% of the gross land as open space. The portion of the site that is left undeveloped may be placed in a conservation easement that is held by a third-party land trust or other qualified entity, or through other approved methods established within the cluster development standards such as a Homeowners' Association. The applicant is requesting to donate 100.179 acres of open space to the Town for park land. The remaining 75.723 acres of open space areas within the proposed subdivision would be maintained by the Homeowners' Association.

Some of the Environmentally Sensitive Areas (ESAs) defined in the Town's SMARTGrowth Program are located on this property, and the predominant tree species on the property include: post oak, and cedar elm trees. ESAs located on the property include: Waters of the State, Waters of the US, wetlands, water impoundments, and topographical slope protection. The applicant has submitted their Environmental Protection Plan (EPP) as part of the development application.

The current design and layout of the development proposes to preserve most of the wetlands, water impoundments, woodland habitat, and a majority of the topographical slope. The applicant is requesting an exception from Town Council to the slope protection requirements as outlined in the Town's SMARTGrowth requirements. The applicant is also required to comply with any U.S. Army Corps of Engineers requirements and permitting relative to any impacts to regulated wetlands or other protected waters.

BOARD REVIEW/CITIZEN FEEDBACK: The Park Land Dedication for this development was considered by the Parks Board at its March 3, 2022, meeting. The Parks Board recommended approval with conditions. The Parks Board meeting can be viewed at:

<https://flowermoundtx.swagit.com/play/03042022-583>

As of April 1, 2022, staff has not received feedback related to this item.

ALTERNATIVES/OPTIONS: The Environmental Conservation Commission may recommend revisions to the proposed Open Space Management Plan and conceptual plan relative to open space preservation.

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

- 1 Letter of Intent
- 2 Draft Open Space Management Plan
- 3 Environmental Protection Plan

RECOMMENDATION: Move to recommend approval or denial to the Planning and Zoning Commission and Town Council of an Open Space Management Plan and Concept Plan for the proposed Cummings Ranch cluster development. The property is generally located north of Cross Timbers Road and west of Shiloh Road.

February 11, 2022

Chuck Russell
Principal Planner
Planning Division
2121 Cross Timbers Road
Flower Mound, TX 75028

RE: Cummings Ranch Flower Mound (Community)
Flower Mound, Texas

Dear Mr. Russell,

Please accept this as our formal Letter of Intent to describe the requested Zoning Planned Development. Cummings Ranch Flower Mound community will be a high-quality, beautiful open-space community, consisting of a +/- 349.357 acre tract of land near the Intersection of Shiloh Road, along Cross Timbers Road (FM 1171). The proposed community is consistent with the Town's Master Plan and ordinance 63-14. We are utilizing site features such as topography, size, shape, and floodplain to plan this community. We have prepared a Zoning Planned Development Exhibit, Landscape Plan, and Concept Plan. We are preserving the natural topography, a portion of large canopy trees, scenic vistas, large parcels of open space which includes five lakes while maintaining the beauty and views along Cross Timbers Road.

The above-mentioned tracts are currently identified on the Town's Master Land Use Plan as Cross Timbers Conservation Development District (CTCDD). The existing zoning is agricultural. The proposed zoning is for a single-family cluster residential development, which is consistent with the updated 2013 Master Plan. The Cummings Ranch community will consist of 218 lots, with fifteen (15) open space lots, two of which we are proposing as park dedication. We are proposing to change the Zoning of the property from agricultural to a Planned Development. Proposed uses and development standards exceed and are consistent with the purposes of ordinance 63-14.

The proposed Planned Development District is consistent with the Town's vision, goals, objectives, and policies adopted in the Master Plan. Density of the proposed community shall not exceed 1 unit per 1.6 acres. Our plans conform to the Town's land development regulations.

We are providing approximately 176 acres (50%) of open space along with preserving the five large lakes on site. We are also providing a minimum 125' buffer along Cross Timbers Rd and 111' along Shiloh Rd; both of which are much more than the required.

This site has over 1,200 protected and specimen trees, as indicated in the specimen tree survey included in our application. The majority of trees are located near Cross Timbers or in the center of the property near the existing residence. The Concept Plan provided protects many of these trees.



Our plan includes a proposed 80' ROW rural collector through the property and 16" water line per the Town's Master Plans.

It is our plan, for the Home Owners Association (HOA) Board of Directors, in conjunction with a Certified Arborist, manages thirteen Open Space lots related to Cummings Ranch Flower Mound project. The remaining two open space lots totaling 100.003 acres are proposed dedication as Town Park.

Should you have any questions, please feel free to contact us.

Sincerely,
Jason Kilpatrick

Respectfully,
Ridinger Associates, Inc.
P.E. Firm No. 1969

A handwritten signature in blue ink, appearing to read "J. Kilpatrick", is written over a faint, larger blue signature.

Mr. Jason Kilpatrick
Engineer

OPEN SPACE MANAGEMENT PLAN

Planned Development District 190 (PD-190)

Cummings Ranch

Property Description

As set forth in the Concept Plan (Exhibit “A”) hereto, which is hereby incorporated herein by reference for all purposes. This Open Space Management Plan applies to Open Space/X-lots as set forth in Exhibit A.

As set forth in the Open Space Plan (Exhibit “B”) hereto, which is hereby incorporated herein by reference for all purposes.

As set forth in the Landscape Plan (Exhibit “C”) hereto, which is hereby incorporated herein by reference for all purposes.

Present Condition of the Property

The natural characteristics of the Property will be outlined in a report (Exhibit “D”) completed on December 17, 2021, Revised February 11, 2022 (the “EPP”), by Groundwater & Environmental Services, Inc. (GES)

Introduction

As set forth in the Open Space Plan (Exhibit “B”), there are thirteen open space lots, including potential parks, consisting of 176.450 acres.

There are 13 open space lots, lots 2X, 3X, 4X, 5X, 6X, 7X, 8X, 9X, 10X, 12X, 13X, 14X and 15X, consisting of approximately 76.271 acres, to be managed by the HOA. The 13 HOA open space lots are planned for the Home Owners Association (HOA) Board of Directors in conjunction with a ISA Certified Arborist to manage and maintain the Open Space related to Cummings Ranch.

There are 2 open space lots, lots 1X and 11X consisting of approximately 100.179 acres, to be managed and maintained by the Town of Flower Mound Parks Department.

Purpose

The purpose of the preservation of open space includes but is not limited to one or more of the following:

- Retaining or protecting the relatively natural habitat of wildlife, plants, and similar ecosystems on the Property;
- Protecting natural resources, maintaining or enhancing air and water quality;
- Preserving the historical, architectural, archaeological, or cultural aspects of the Property;
- Preserving the open space characteristic of Property pursuant to The Town of Flower Mound’s Master Plan 2001 (including, but not limited to, the Land Use Plan for the “Cross Timbers Conservation Development District”), Open Space Plan,

SMARTGrowth Management Plan, Land Development Regulations governing the Cross Timbers Conservation Developments, and Planned Development District No. 190;

- Permitting the Property (as suitable) for non-intensive outdoor recreation by the public, including hiking, horseback riding, nature observation, and enjoyment of open space, all in accordance with applicable laws and regulations.
- Land in its natural state requires little to no maintenance and carries minimal costs for maintenance.

Prohibited Activities

Any activity on, or use of, the Property inconsistent with the purpose of the open space is prohibited. The Property shall be preserved, to the extent practicable, in its natural condition and restricted from any development that would impair or interfere with the values of the Property. The following activities and uses are expressly prohibited, restricted, or reserved as indicated hereunder:

Vegetation: There shall be no large-scale removing, destroying, cutting, trimming, burning, harming, or altering of any vegetation, or disturbing or changing in any way the natural habitat existing on the Property after the Final Acceptance Date by the Town. The use of pesticides, biocides, insecticides, fungicides, rodenticides, and herbicides on the Property shall be limited so as to preserve the natural characteristics of the Property. The use of such products and/or mowing of the Property, as necessary to control pests or vermin, may be allowed. Mowing and/or trimming may be conducted along boundary lines to allow access for maintenance. If any trails are constructed on the Property, trail boundaries may be maintained through trimming or mowing. In the event that vegetation must be altered in order to or remedy a condition which presents a danger to persons, such alterations shall be allowed, notwithstanding the foregoing.

Uses: No commercial, residential or industrial activity shall be conducted upon the Property. There shall be no storing or dumping of soil, trash, ashes, garbage, waste, abandoned vehicles, appliances, machinery, hazardous or toxic substances or waste, or any placement of underground or above ground storage tanks or other materials on the Property that may negatively impact or be detrimental to the Property or to the surface or subsurface waters of the Property. Livestock animals shall not be allowed on the property.

Topography: After the Final Acceptance Date by the Town, there shall be no change in the topography of the Property. There shall be no filling, excavating, grading, or dredging upon the Property. There shall be no removing of topsoil, peat, sand, gravel, rock or other materials from the Property.

Soil or Water Degradation: After the final acceptance date by the Town, there shall be no use of or the conducting of any activity on the Property that is likely to cause soil degradation, erosion, depletion or pollution of, or siltation on, any surface or subsurface waters of the Property, and there shall be no change to the surface or subsurface hydrology of the Property.

Construction: There shall be no constructing or placing of any building, mobile home, asphalt or concrete pavement, permanent billboard or other advertising display, antenna, utility pole, tower, conduit, line, pier, landing, dock, or any other temporary or permanent structure or

facility or any other man-made structures on the HOA maintained property.

Roads: There shall be no construction of new roads on the Property or any enlargement, widening, or modification to any existing roads on the Property.

Waters: There shall be no polluting, altering, manipulating, depleting or extracting of surface or subsurface water (including, but not limited to, ponds, creeks or other water courses) or any other water bodies on the Property. There shall be no conducting or allowing any entity or person to conduct activities on the Property that would be detrimental to water purity or that alter the natural water level or flow in or over the Property (including, but not limited to, damming or construction in any free flowing water body, nor any manipulation or alteration of natural water courses, fresh water lake and pond shores, marshes or other water bodies).

Vehicles: After the Final Acceptance Date by the Town, and subject to compliance with the Americans with Disabilities Act, there shall be no operating or allowing the operation of any motorized vehicles on the Property, except for maintenance.

Easements: There shall be no new easements on, over, under, across, along or through the Property, including, but not limited to, access easements and utility easements provided.

Signage: No permanent signage shall be permitted on or over the Property, except the posting of no trespassing signs, signs giving directions or proscribing rules and regulations for use of the Property and/or signs identifying the purpose of the preserved property. Until the sale of the last of the lots owned by developer in the Cummings Ranch subdivision, the developer or his designee may place "For Sale" signs on the Property, provided that the total number of such signs does not exceed the total number of such lots owned by the developer. Signs must be in accordance with the Town's code.

Exceptions to the Above Listed Prohibited Activities: Exceptions to the above listed prohibited activities may be requested by the HOA. Exceptions must be approved by the Town.

Duration

Perpetual.

General Provisions

(l) Amendment.

1. Maintenance of Common Areas:

- a. All Common Areas (X-Lots) that are to be conveyed to the Homeowners Association (HOA) by the Developer; the HOA will be established by the Developer as a Nonprofit Corporation. The members will be the Cummings Ranch lot owners with one (1) vote for each Lot Owner in all matters. The initial Board of Directors will be appointed by the developer. Once the Cummings Ranch community is 80% complete (174 homes occupied), a Board of Directors will be elected by the Homeowners to manage and oversee the business and all other matters of the HOA, including the conservation (Open Space) requirements of the

Town.

- b. The structure and guidelines for the HOA will be defined by the Dedications and Restrictions (Deed Restrictions), which will be recorded by the Developer after the Final Plat is approved, as required by the Town. The Covenants, Conditions and Restrictions shall set forth all enforcement guidelines.
- c. The maintenance and management of the Common Areas (X-Lots 2X thru 10X & 12X thru 15X) will be the responsibility of the HOA Board of Directors. The Common Areas (X-Lots 2X thru 10X & 12X thru 15X) and their care will be as follows:

HOA Open Space (X-Lots)

- 1. Lot 2X, excluding 25' Landscape Buffer along Shiloh, excluding 25' Landscape Buffer along proposed Jo Fain Blvd., excluding the eco-fringe buffer, and excluding the necessary efforts to construct and maintain the required equestrian trail, shall remain in its natural state and mowed approximately 2 to 3 times per year as determined by the HOA. In addition, a living screen will be planted along adjacent properties to the east and south.
- 2. Lot 3X, excluding 25' Landscape Buffer along proposed Jo Fain Blvd, excluding Bar Ditch Open Space, excluding Eco-fringe buffer, and excluding maintenance to existing maintenance structures, shall remain in its natural state and mowed approximately 2 to 3 times per year as determined by the HOA. In addition, a living screen may be planted and maintained along adjacent properties.
- 3. Lot 4X, excluding the Eco-fringe buffer, and excluding Bar Ditch Open Space, to remain in its natural state and be mowed 2 to 3 times per year as determined by the HOA.
- 4. Lot 5X, excluding the Eco-fringe buffer, and excluding Bar Ditch Open Space, to remain in its natural state and be mowed 2 to 3 times per year as determined by the HOA.
- 5. Lot 6X, excluding the Eco-fringe buffer, and excluding Bar Ditch Open Space, to remain in its natural state and be mowed 2 to 3 times per year as determined by the HOA.
- 6. Lot 7X, excluding the Eco-fringe buffer, and excluding Bar Ditch Open Space, to remain in its natural state and be mowed 2 to 3 times per year as determined by the HOA.
- 7. Lot 8X, excluding the Eco-fringe buffer, and excluding Bar Ditch Open Space, to remain in its natural state and be mowed 2 to 3 times per year as determined by the HOA.
- 8. Lot 9X, excluding the 25' Landscape buffer along Shiloh Rd, excluding HOA Maintained Pond, excluding Eco-fringe buffer, and excluding Bar Ditch Open Space, to remain in its natural state and to be mowed 2 to 3 times per year as determined by the HOA.
- 9. Lot 10X, excluding 25' Landscape Buffer along proposed Jo Fain Blvd.,

excluding Eco-fringe buffer, and excluding Bar Ditch Open Space, to remain in its natural state and to be mowed 2 to 3 times per year as determined by the HOA.

10. Lot 12X, excluding 25' Landscape Buffer along Red Rock Ln., and excluding Bar Ditch Open Space, to remain in its natural state and be mowed 2 to 3 times per year as determined by the HOA.
 11. Lot 13X, excluding 25' Landscape Buffer along Red Rock Ln., and excluding Bar Ditch Open Space, to remain in its natural state and mowed 2 to 3 times per year as determined by the HOA.
 12. Lot 14X, to be maintained as 25' Landscape Buffer along proposed Jo Fain Blvd.
 13. Lot 15X, excluding 25' Landscape Buffer along proposed Jo Fain Blvd., excluding 25' Landscape Buffer along Red Rock Ln., and excluding Bar Ditch Open Space, to remain in its natural state and to be mowed 2 to 3 times per year as determined by the HOA. In addition, a living screen may be planted and maintained along adjacent property. Maintenance of 100-year floodplain shall be limited to maintaining proper drainage, mowing as specified above, and clearing any blockages, debris, or trash. Maintenance of Riparian habitat identified in EPP shall be limited to clearing debris trash.
- d. Existing Structures
1. There are four existing structures located on the far north portion of the western side of lot 3X, near Hawk Road. These four structures are planned to be utilized as HOA maintenance facilities and shall remain on HOA maintained open space (Lot 3X).
- e. Bar Ditches in Open Space
1. To be maintained by HOA during regular maintenance.
 2. Mowing as needed
- f. Riparian Habitat and 100-year Floodplain
1. Located on Lot 15X
 2. To be maintained by HOA during regular maintenance
 3. Maintenance shall be kept to a minimum such as clearing blockages, trash, and debris and maintaining proper drainage
- g. Drainage Culverts in Open Space
1. To be maintained by the HOA during regular maintenance.
- h. Landscape Buffer in Open Space
1. Located 25' outside of ROW along Shiloh Rd, Red Rock Ln, and proposed Jo Fain Blvd.
 2. To be maintained by the HOA during regular maintenance
 3. Mowing as needed

- i. Drainage Culverts in Open Space
 - 1. To be maintained by the HOA during regular maintenance.
- j. Fencing in Open Space
 - 1. All fencing to be maintained by HOA during regular maintenance.
- k. Masonry Entry Feature in Open Space
 - 1. All masonry features in open space to be maintained by the HOA during regular maintenance.
- l. Pond in HOA Open Space
 - 1. To be maintained by HOA during regular maintenance.
 - 2. Pond water level will be maintained by rainfall and a water well.

All open space areas Lots 2X thru 10X, Lots 12X thru 15X shall be supervised and managed by the HOA Board of Directors. The HOA Board of Directors must be under the direction of a ISA Certified Arborist.

The HOA will fulfill the conservation covenants as provided in the deed restrictions.

OPEN SPACE LOT TABLE	
PRIVATE OPEN SPACE LOTS:	
LOT 2X	5.888 ACRES
LOT 3X	24.926 ACRES
LOT 4X	2.995 ACRES
LOT 5X	2.197 ACRES
LOT 6X	10.086 ACRES
LOT 7X	0.813 ACRES
LOT 8X	2.914 ACRES
LOT 9X	8.166 ACRES
LOT 10X	2.501 ACRES
LOT 12X	2.488 ACRES
LOT 13X	0.802 ACRES
LOT 15X	11.947 ACRES
TOTAL PRIVATE OPEN SPACE AREA 75.723 ACRES	
POTENTIAL TOWN PARK OR OPEN SPACE LOTS:	
LOT 1X	13.822 ACRES
LOT 11X	86.357 ACRES
TOTAL POTENTIAL TOWN PARK OR OPEN SPACE AREA 100.179 ACRES	
TOTAL OPEN SPACE AREA 175.902 ACRES	

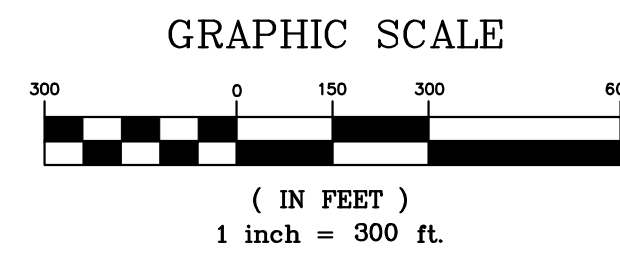
LEGEND

—	LOT LINE
D.R.D.C.T.	DEED RECORDS, DENTON COUNTY, TEXAS
P.R.D.C.T.	PLAT RECORDS, DENTON COUNTY, TEXAS
R.P.R.D.C.T.	REPLAT RECORD DENTON COUNTY, TEXAS
---	PROPERTY BOUNDARY
---	ADJACENT PROPERTY BOUNDARY
---	PROPOSED R.O.W.
---	PROPOSED BACK OF CURB

AREA DATA TABLE

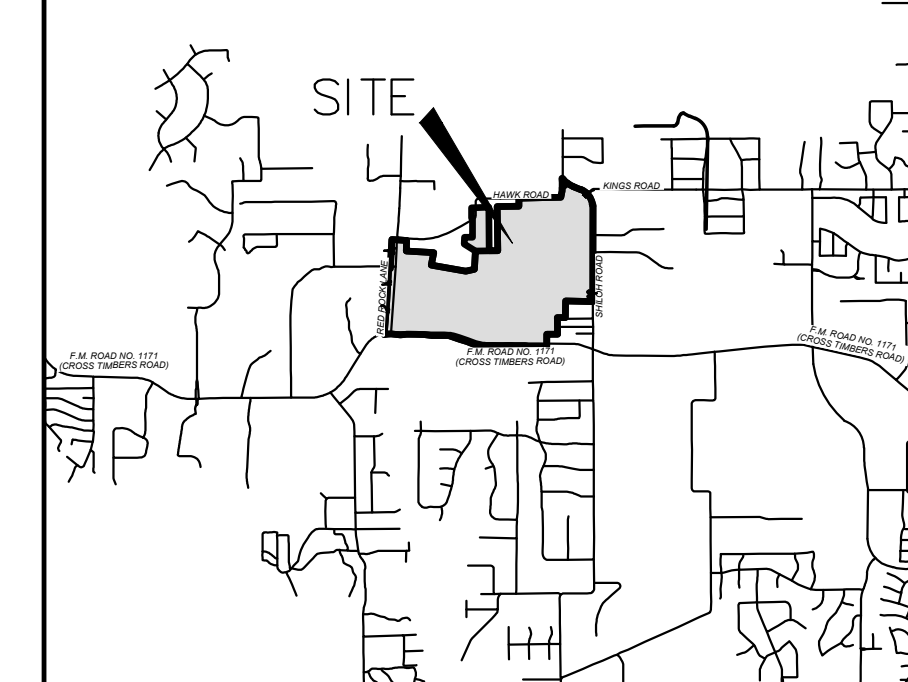
GROSS SITE AREA	349.357 ACRES
SHILOH RD. R.O.W. DEDICATION	4.853 ACRES
RED ROCK LANE R.O.W. DEDICATION	1.815 ACRES
HAWK ROAD R.O.W. DEDICATION	1.101 ACRES
INTERNAL COLLECTOR R.O.W. DEDICATION	10.005 ACRES
TOTAL R.O.W. DEDICATION	17.774 ACRES
NET SITE AREA	331.583 ACRES
TOTAL OPEN SPACE AREA	175.902 ACRES

	POTENTIAL TOWN PARK
	H.O.A. MAINTAINED OPEN SPACE
	25' LANDSCAPE BUFFER
	17' BAR DITCH CREDIT
	10' ECO-FRIDGE BUFFER ALONG RESIDENTIAL LOTS



PROJECT DATA TABLE

GROSS SITE AREA	349.357 ACRES
PROPOSED USE	SINGLE FAMILY RES.
CURRENT ZONING	AGRICULTURAL
EXTERNAL/COLLECTOR RIGHT-OF-WAY	
SHILOH ROAD	4.853 ACRES
RED ROCK LANE	1.815 ACRES
HAWK ROAD	1.101 ACRES
INTERNAL COLLECTOR	10.005 ACRES
TOTAL RIGHT-OF-WAY	17.774 ACRES
OPEN SPACE	
POTENTIAL TOWN PARK	100.179 ACRES
PRIVATE OPEN SPACE LOTS	75.723 ACRES
TOTAL OPEN SPACE	175.902 ACRES
PROPOSED LOTS	
RESIDENTIAL	218 LOTS
RESIDENTIAL LOTS AREA	138.86 ACRES
MIN. RESIDENTIAL LOT SIZE	23,019 S.F.
MAX. RESIDENTIAL LOT SIZE	44,458 S.F.
AVG. RESIDENTIAL LOTS SIZE	27,746 S.F.
POTENTIAL TOWN PARK	2 LOTS
PRIVATE OPEN SPACE	12 LOTS
TOTAL ALL LOTS	233 LOTS

LOCATION MAP
NOT TO SCALECUMMINGS RANCH
Residential Subdivision

349.357 acres

in the

T.J. Payne Survey, Abstract No. 1056
T & P. Railroad Co. Survey, Abstract
No. 1618, John West Survey, Abstract
No. 1414, John West Survey, Abstract
No. 1415, H. Campbell, Abstract No.
1462, and the B.B.B. & C.R.R. Survey
Abstract No. 152

in the

Town of Flower Mound
Denton County, Texas

ENGINEER/APPLICANT:

RIDINGER ASSOCIATES, INC.
550 S. EDMONDS LANE, SUITE 101
LEWISVILLE, TX 75067
972-353-8000
CONTACT: DALE RIDINGER

OWNERS:

1309 LLC
P.O. BOX 292873
LEWISVILLE, TX 75029

Scale: 1"=300'
Designed by: LDR
Drawn by: MAB
Checked by: LDR
Date: FEBRUARY 21, 2022
Project No. 180-001

SHEET

1

CUMMINGS RANCH
RESIDENTIAL SUBDIVISION
FLOWER MOUND, TEXAS

OPEN SPACE PLAN

App.

Revisions

Date

No.

GENERAL LANDSCAPE NOTES

- All landscape areas are to be received within .1' of proposed finish grade and free from all trash and debris.
 - All trees are to be planted in pits twice the diameter of the tree ball and no deeper than the depth of the ball. Scarify all tree pit sides prior to planting. All trees are to be planted plumb and at or slightly above finish grade. All tree pits are to have a 3" watering saucer formed around the perimeter of the pit. All tree pits are to be top dressed with a 2" layer of shredded hardwood mulch. Stake and / or guy trees only at the direction of the landscape architect.
 - Rotovate the existing soil of all planting beds to a minimum depth of 6". Add a 3" layer of premium compost as supplied by Living Earth Technology and till into the top 3" of the existing soil. Install all shrubs 1" above finish grade and fertilize with Agri-form slow release fertilizer tablets at the manufacturer's recommended rates of application. Top dress all planting beds with a 2" layer of shredded hardwood mulch.
 - All planting beds not formed by a concrete curb or sidewalk are to be edged with Steel Edging (1/8"x4" painted green) or an approved equal. All edging stakes are to be placed to the inside of the bed and the top of the edging is to be no less than 1" and no more than 1.5" above proposed finish grade.
 - All turf areas are to be hydromulch Bermudagrass, unless otherwise noted on the plan.
 - Hydromulch with Bermudagrass seed at a rate of two (2) pounds per one thousand (1,000) square feet. If installation occurs between September 1 and April 1, all hydromulch areas to be Winter Ryegrass at a rate of four (4) pounds per thousand square feet. Contractor shall be required to re-hydromulch with Bermudagrass the following growing season.
 - All sodded areas are to receive common bermuda sod laid parallel to the contour of the land. All sod on slopes greater than 1:4 is to be pinned with 1"x1"x12" wooden stakes. All sod is to be laid with tight joints and with all joints staggered. Roll all sod with a water ballast lawn roller upon installation and fertilize with a complete fertilizer (13-13-13) at the rate of 1.5# actual nitrogen per 1000 square feet. Water all sod thoroughly.
 - All irrigation meter(s) are to be by utility contractors as per local codes. Irrigation sleeves to be installed by licensed irrigation contractor as per the plan.
 - All irrigation controllers are to have mini-click freeze and rain stats installed as per manufacturer's recommendations.
 - All irrigation sleeves to be by licensed irrigation contractor. All sleeves to be PVC schedule 40 with 90 degree elbows on both ends with extensions protruding 18" above proposed finish grade.
 - All turf and planting beds to be zoned separately. All planting bed heads to be on 12" pop-up risers. All turf heads to be on 4" pop-up risers. All valves to be plastic valves. All equipment to be Rainbird or approved equal.
 - All mainline and lateral line to have a minimum of 12" of cover and to be SDR (class 200) pipe.
 - Quantities shown on plant list are landscape architect's estimate only and should be verified prior to bidding. Contractor shall be responsible for bidding and providing quantity of plants required at spacing designated for bed sizes and configurations shown on the plans regardless of quantities designated on plant list.
- IRRIGATION NOTES:
- All landscaped areas shall be irrigated with an irrigation system capable of providing the proper amount of water for the particular for the particular type of plant material used. Irrigation will be provided by an underground sprinkler system, or a subterranean drip drip system as approved by the City Arborist.
 - Automatic underground irrigation system shall be equipped with freeze guard set at 38 degrees F.
 - Areas of open space which contain preserved trees need not be irrigated if the City Arborist determines irrigation would be harmful to the preserved trees.

LANDSCAPE BUFFER REQUIREMENT		
STREET	REQUIRED	PROVIDED
FM 1171	50' BUFFER	50' BUFFER
RED ROCK LANE	25' BUFFER	25' BUFFER
HAWK ROAD	25' BUFFER	25' BUFFER
McMAKIN ROAD	25' BUFFER	25' BUFFER
SHILOH ROAD	25' BUFFER	25' BUFFER
INTERIOR COLLECTOR	15' BUFFER	15' BUFFER

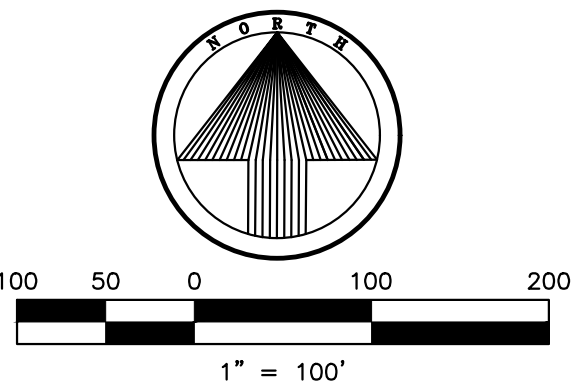
LANDSCAPE BUFFER TREE REQUIREMENT			
STANDARD	STREET FRONTAGE (LINEAR FEET)	REQUIRED	PROVIDED
1 PER 30 L.F.	FM 1171 = 3695 L.F. EXCLUDING FLOODPLAIN	123 TREES	48 CREDITS - 8 LARGE EXIST. POST OAKS IN BUFFER 75 ADDITIONAL TREES PROVIDED
1 PER 30 L.F.	RED ROCK LANE = 2473 L.F.	82 TREES	6 CREDITS FOR 1-25" EXIST. POST OAK IN BUFFER 76 ADDITIONAL TREES PROVIDED
1 PER 30 L.F.	HAWK ROAD = 1802 L.F.	60 TREES	6 CREDITS FOR 1-25" EXIST. POST OAK IN BUFFER 54 ADDITIONAL TREES PROVIDED
1 PER 30 L.F.	McMAKIN ROAD = 571 L.F.	19 TREES	19 TREES PROVIDED
1 PER 30 L.F.	SHILOH ROAD = 2839 L.F.	94 TREES	94 TREES PROVIDED
1 PER 30 L.F.	INTERIOR COLLECTOR = 5290 L.F.	176 TREES	176 TREES PROVIDED

NOTE: BUFFER AND STREET TREES ARE NOT REQUIRED ON DEDICATED PARKLAND. BUFFER TREES SHOWN ARE ILLUSTRATIVE OF REQUIRED TREES BASED ON LENGTH OF FRONTAGE. FINAL PLANTINGS OF REQUIRED TREES WILL BE DETERMINED BY THE FINAL DESIGNATION OF DEDICATED PARKLAND.

NOTE: LANDSCAPE AREAS SHOWN WITHIN LIMITS OF FLOODPLAIN ARE TO REMAIN NATURALIZED.

MAINTENANCE NOTE:

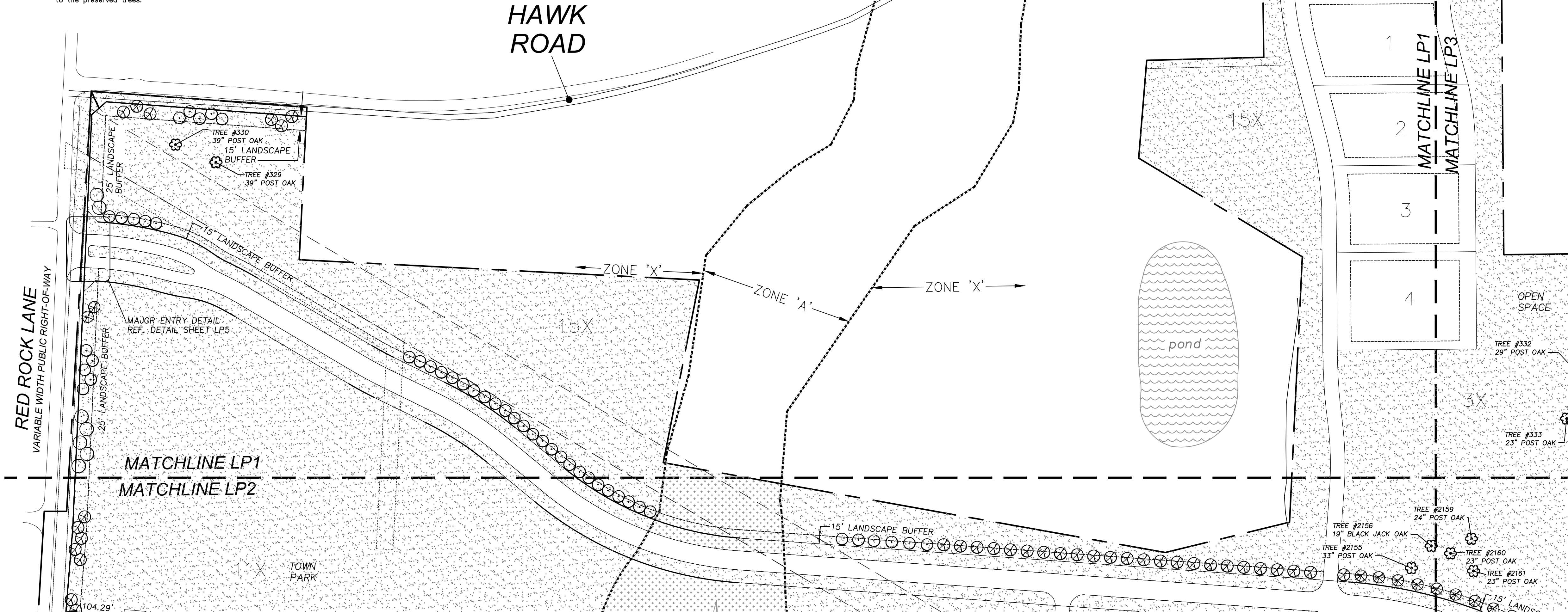
THE OWNER, TENANT AND THEIR AGENT, IF ANY, SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPING AND IRRIGATION. ALL REQUIRED LANDSCAPING SHALL BE MAINTAINED IN A NEAT AND ORDERLY MANNER AT ALL TIMES. THIS SHALL INCLUDE MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING AND OTHER SUCH ACTIVITIES COMMON THE THE MAINTENANCE OF LANDSCAPING. LANDSCAPED AREAS SHALL BE KEPT FREE OF TRASH, LITTER, WEEDS AND OTHER SUCH MATERIAL OR PLANTS NOT A PART OF THE LANDSCAPING. ALL PLANT MATERIALS SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION AS IS APPROPRIATE FOR THE SEASON OF THE YEAR. ALL IRRIGATION HEADS WHICH ARE BROKEN AND FLOW WATER SHALL BE REPLACED OR REPAIRED IMMEDIATELY TO PREVENT THE WASTE OF WATER.



No.	Date	Revisions	App.
No.1	9-2-21	Per Revised Site Plan	
No.2	11-7-21		
No.3	11-23-21		
No.4	01-21-22	REVISED SITE PLAN	
No.5	02-01-22	REVISED SITE PLAN	
No.6	02-03-22	REVISED SITE PLAN	
No.7	03-11-22	TOWN COMMENTS	

PLAN LEGEND

- DENOTES LANDSCAPED AREA
- DENOTES LANDSCAPED AREA WITHIN FLOOD PLAIN TO REMAIN NATURALIZED
- DENOTES TEXAS ASH BUFFER TREES
- DENOTES RED OAK BUFFER TREES
- DENOTES BALD CYPRESS BUFFER TREES
- DENOTES LIVE OAK BUFFER TREES
- DENOTES SPECIMEN POST OAK TO PRESERVE



ST. CLAIR DESIGN GROUP, INC

Landscape Architecture

P. O. Box 12519
Dallas, Texas 75225
T. 214-454-9834

DATE SEALED: 03-11-22

DESIGN BY: JBS
DRAWN BY: JBS
CHECKED BY: SCOD
DATE: JULY 21, 2021

CUMMINGS RANCH
Residential Subdivision
349.357 acres
in the
T. J. Payne Survey, Abstract No. 1056
T. & P. Railroad Co. Survey, Abstract
No. 1618, John West Survey, Abstract
No. 1414, John West Survey, Abstract
No. 1415, H. Campbell, Abstract No.
1462, and the B.B.B. & C.R.R. Survey
Abstract No. 152
in the
Town of Flower Mound
Denton County, Texas

Ridinger
Associates, Inc.
Civil Engineers - Planners

Firm No. 1969
550 S. Edwards Lane, Suite 101
Lewisville, Texas 75067
Tel. No. (972) 353-8000
Fax No. (972) 353-8011

CUMMINGS RANCH
Residential Subdivision
FLOWER MOUND, TEXAS

CONCEPTUAL
LANDSCAPE PLAN

Scale: 1"=100'-0"
Designed by: JBS
Drawn by: JBS
Checked by: SCOD
Date: JULY 21, 2021
Project No. 035-033

RED ROCK LANE
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY

RED ROCK LANE
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY

MATCHLINE LP1
MATCHLINE LP2

11X TOWN PARK

MINOR ENTRY DETAIL
REF. DETAIL SHEET LP5

OPEN SPACE

MINOR ENTRY DETAIL
REF. DETAIL SHEET LP5

OPEN SPACE

F.M. ROAD NO. 1171
(CROSS TIMBERS ROAD)
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY

pond

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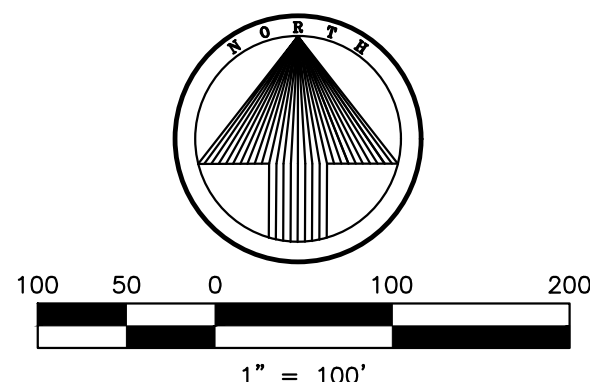
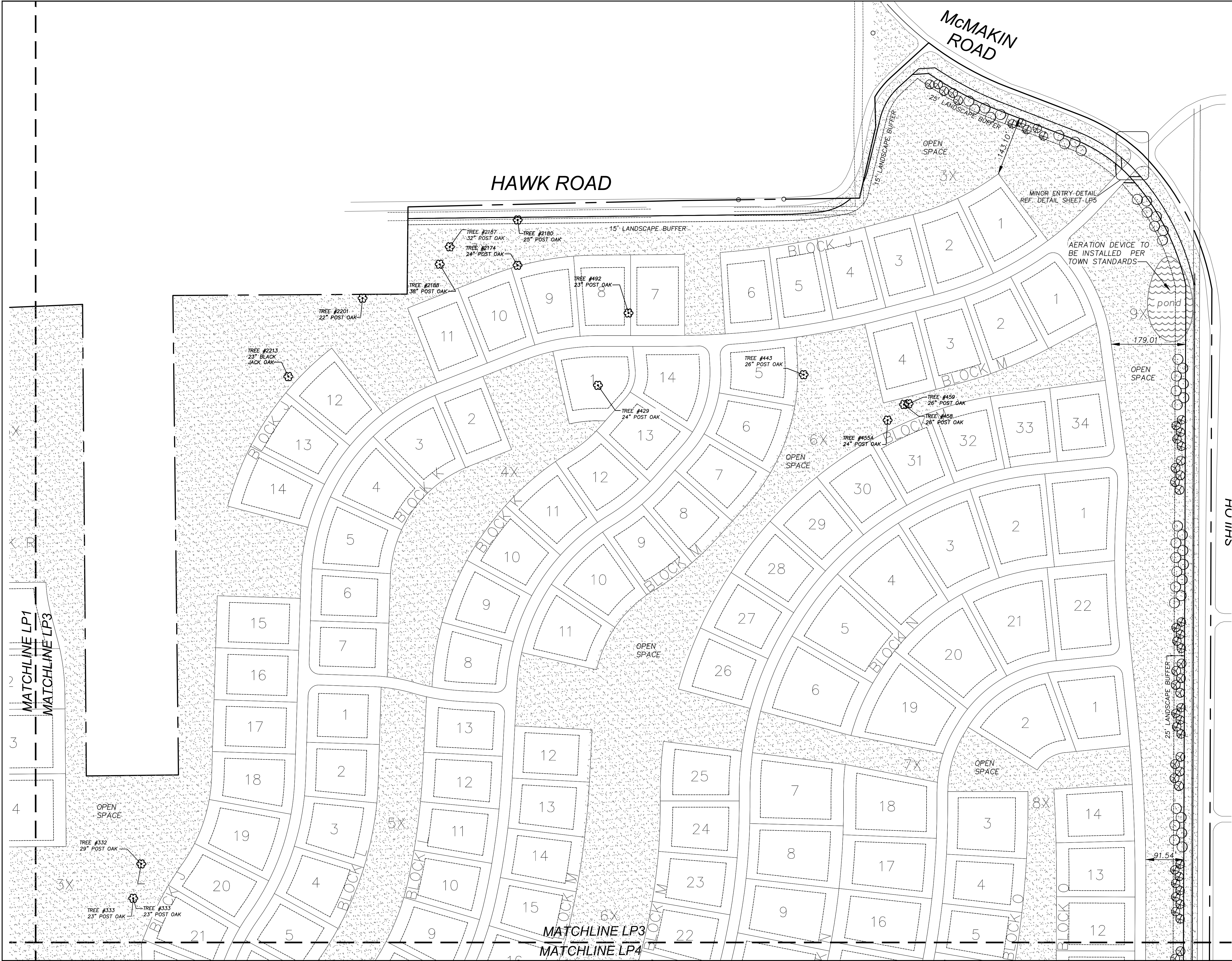
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ST. CLAIR DESIGN GROUP, INC.

Landscape Architecture

P. O. Box 12519
Dallas, Texas 75225
T. 214-454-9934

DATE SEALED: 03-11-22
DESIGN BY: JBS
DRAWN BY: JBS
CHECKED BY: SCOD
DATE: JULY 21, 2021

CUMMINGS RANCH
Residential Subdivision
349.357 acres
in the
T. J. Payne Survey, Abstract No. 1056
T. & P. Railroad Co. Survey, Abstract
No. 1618, John West Survey, Abstract
No. 1414, John West Survey, Abstract
No. 1415, H. Campbell, Abstract No.
1462, and the B.B.B. & C.R.R. Survey
Abstract No. 152
in the
Town of Flower Mound
Denton County, Texas

No.	Date	Revisions	App.
No.7	03-11-22	TOWN COMMENTS	
No.6	02-03-22	REVISED SITE PLAN	
No.5	02-01-22	REVISED SITE PLAN	
No.4	01-21-22	REVISED SITE PLAN	
No.3	11-23-21	REVISED SITE PLAN	
No.2	11-7-21	PER CITY COMMENTS	
No.1	9-2-21	Per Revised Site Plan	

Ridinger
Associates, Inc.
Civil Engineers - Planners

Firm No. 1969
550 S. Edwards Lane, Suite 101
Lewisville, Texas 75067

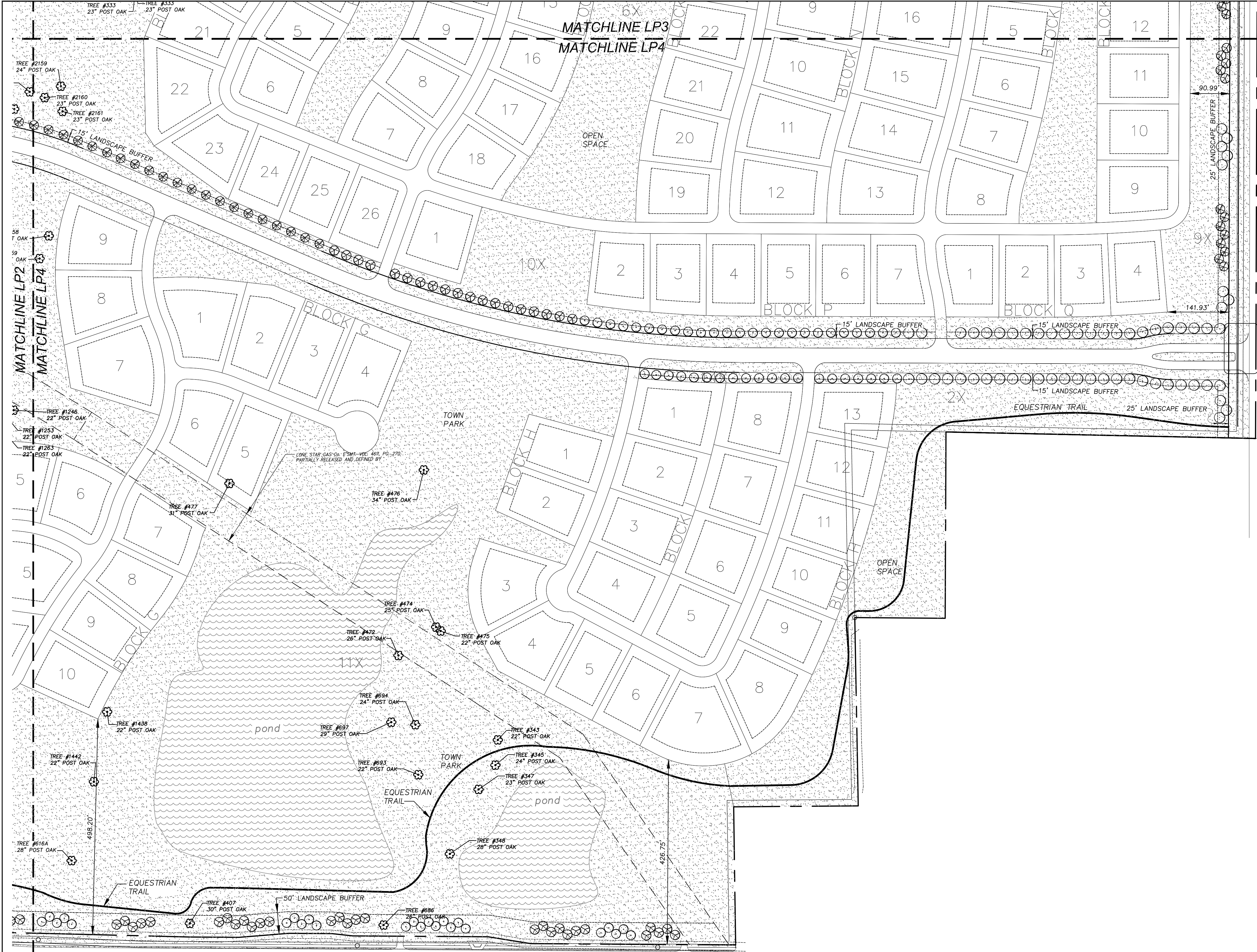
Tel. No. (972) 353-8000
Fax No. (972) 353-8011

CUMMINGS RANCH
Residential Subdivision
FLOWER MOUND, TEXAS

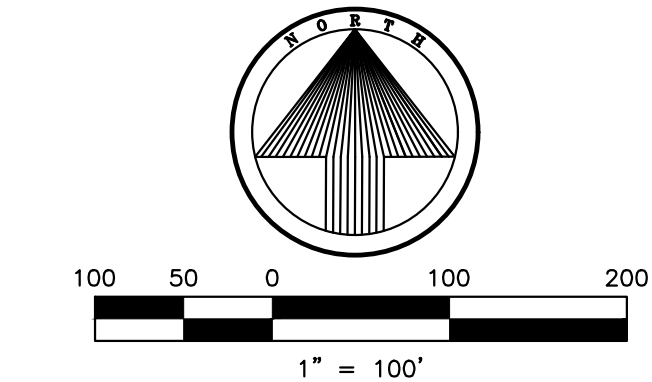
CONCEPTUAL
LANDSCAPE PLAN

Scale: 1"=100'-0"
Designed by: JBS
Drawn by: JBS
Checked by: SCOD
Date: JULY 21, 2021
Project No. 035-033

SHEET
LP-3

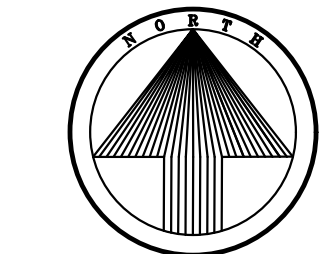


F.M. ROAD NO. 1171
(CROSS TIMBERS ROAD)
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY



MAJOR ENTRY DETAIL
REF. DETAIL SHEET LP5

No.	Date	Revisions	App.
No.7	03-11-22	TOWN COMMENTS	
No.6	02-03-22	REVISED SITE PLAN	
No.5	02-01-22	REVISED SITE PLAN	
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ST. CLAIR DESIGN GROUP, INC

Landscape Architecture

P. O. Box 12519
Dallas, Texas 75225
T. 214-454-9934

DATE SEALED: 03-11-22

DESIGN BY: JBS
DRAWN BY: JBS
CHECKED BY: SCOG
DATE: JULY 21, 2021

CUMMINGS RANCH
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349.357 acres
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T. J. Payne Survey, Abstract No. 1056
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Town of Flower Mound
Denton County, Texas

Ridinger
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Tel. No. (972) 353-8000
Fax No. (972) 353-8011

CUMMINGS RANCH
Residential Subdivision
FLOWER MOUND, TEXAS

CONCEPTUAL
LANDSCAPE PLAN

Scale: 1"=100'-0"
Designed by: JBS
Drawn by: JBS
Checked by: SCOG
Date: JULY 21, 2021
Project No. 035-033

SHEET
LP-4

EXHIBIT D
ENVIRONMENTAL PROTECTION PLAN
(See separate attachment)



Groundwater & Environmental Services, Inc.
810 Office Park Circle, Suite 113
Lewisville, TX 75057
T. 800.871.6417

February 28, 2022

Dale Ridinger, P.E.
Ridinger Associates
550 S. Edmonds Lane, Suite 101
Lewisville, TX 75067

Subject: Revised Environmental Protection Plan for the Proposed Cummings Ranch
Development, Flower Mound, Texas

Dear Mr. Ridinger:

This revised Environmental Protection Plan (EPP), for the proposed Cummings Ranch residential development (Site), was prepared to satisfy the Town of Flower Mound (Town) development requirements and in accordance with the Town of Flower Mound SMARTGrowth Program, Category E Environmental Quality. This EPP summarizes a field assessment performed to identify the potential presence of any Environmentally Sensitive Areas (ESAs) on the project site. In addition, the EPP details mitigation efforts to compensate for impacts to those ESAs. ESAs, as defined by the Town, include upland habitat, riparian habitat, waters of the state, prairie habitat, and developed and undeveloped floodplain. Of these, riparian habitat, waters of the state, and undeveloped floodplain ESAs have been identified by the Town as being present on site. Other applicable protections include water impoundment protection and topographical slope protection.

Site Description

On December 6 - 7, 2021, Ryan Cohen and Madison Peters of Groundwater and Environmental Services, Inc. (GES), performed a site investigation of the project site to assess environmental features, and to determine whether there were any ESAs, as described in the SMARTGrowth Program, located on site. The project site is an approximately 350-acre tract located northeast of FM 1171 and Red Rock Lane in Flower Mound, Denton County, Texas (**Figure 1**). The site is an active cattle ranch and consists of mostly pasture with a few residential and agricultural structures in the central portion of the site. Three streams and twelve ponds, four of which are on-channel, are located on site. In addition, five emergent wetlands are located on site. The site is bordered by residential development and Hawk Road to the north, Shiloh Road followed by residential development to the east, FM 1171 followed by residential development to the south, and Red Rock Lane followed by residential development to the west. The proposed Cummings Ranch residential development concept plan is provided as **Figure 2**.

The United States Geologic Survey (USGS) topographic map that includes the project site (Denton County Mosaic, Natural Resource Conservation Service (NRCS)) depicts two unnamed tributaries flowing generally south across the southwest portion and south-central portion of the site (**Figure 3**). In addition, 11 ponds are depicted throughout the site. Three of

the ponds are depicted as on-channel ponds. Elevation on site ranges from 620 feet above mean sea level (msl) to 680 feet above msl.

The US Fish and Wildlife Service National Wetland Inventory (NWI) Map depicts surface waters regardless of their federal or state jurisdiction. The NWI map that includes this site depicts 20 aquatic features on site. NWI features are depicted on **Figure 4** and are summarized below.

Feature Type	Description	Location(s)
R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded	Three are depicted flowing generally south, into and out of on-channel ponds, through the southern portion of the site.
R5UBH	Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded	Four are depicted immediately upstream and downstream of the four on-channel ponds depicted on site.
PUBHh	Palustrine, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded	Ten are located throughout the site.
PUBFh	Palustrine, Unconsolidated Bottom, Semipermanently Flooded, Diked/Impounded	One is located in the northern portion of the site; and one is located in the central portion of the site.
PSS1Fh	Palustrine, Scrub-Shrub, Broad-Leaved Deciduous, Semipermanently Flooded, Diked/Impounded	One is located in the southeastern portion of the site.

Soils on the site described in the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) were reviewed to characterize the project site soils. Soils onsite consist of mainly of sandy loams. Nine soil types and Water [W] are mapped for the site by the United States Department of Agriculture (USDA) Soil Conservation Service for Denton County. Soil types are depicted on **Figure 5** and are summarized below. None of the soil types are considered hydric by the USDA.

Map Unit Symbol	Map Unit Name	Landform	Natural Drainage Class	Frequency of Ponding	Frequency of Flooding	Depth to Water Table	Hydric Soil Rating
11	Birome fine sandy loam, 1 to 3 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No
12	Birome fine sandy loam, 3 to 5 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No
13	Birome-Rayex-Aubrey complex, 2 to 15 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No
23	Callisburg fine sandy loam, 1 to 3 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No
24	Callisburg fine sandy loam, 3 to 5 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No
35	Gasil fine sandy loam, 1 to 3 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No

36	Gasil fine sandy loam, 3 to 8 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No
50	Konsil fine sandy loam, 1 to 3 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No
51	Konsil fine sandy loam, 3 to 8 percent slopes	Ridges	Well drained	None	None	More than 80 inches	No

The majority of the project site is located within “Zone X”, areas determined to be outside the 500-year floodplain. The southwestern portion of the site is located within “Zone A”, areas determined to be within the 100-year floodplain as mapped by the Federal Emergency Management Agency (FEMA WMS Web Server Data 2021) (**Figure 6**).

Field Assessment

The majority of the site consists of undeveloped upland grassland with some sparsely forested areas. Dominant vegetation observed during the field reconnaissance included: *Ambrosia artemisiifolia* (annual ragweed), *Ambrosia trifida* (giant ragweed), *Bothriochloa ischaemum* (King Ranch bluestem), *Bromus arvensis* (field brome), *Celtis laevigata* (sugarberry), *Chloris ciliate* (fringed windmill grass), *Cynodon dactylon* (Bermuda grass), *Elymus virginicus* (Virginia wild rye), *Lolium perenne* (perennial ryegrass), *Maclura pomifera* (osage orange), *Quercus marilandica* (blackjack oak), *Quercus stellata* (post oak), *Rubus trivialis* (southern dewberry), *Schizachyrium scoparium* (little bluestem), *Smilax bona-nox* (saw greenbrier), *Solidago altissima* (tall goldenrod), *Taxodium distichum* (bald cypress), *Ulmus crassifolia* (cedar elm), and *Ulmus americana* (American elm). Dominant vegetation observed in water-related habitat areas is discussed below in the Environmentally Sensitive Areas section.

One intermittent stream (Stream A), three ephemeral streams (Stream B, Stream C, and Tributary 1), five emergent wetlands (Wetland 1 - Wetland 5), and 12 ponds (Pond 1 - Pond 12) are located on site. Stream A originates offsite and enters the site across the northern property boundary and flows generally south into an on-channel pond (Pond 2). Stream A exits Pond 2 and flows into another on-channel pond (Pond 1) before exiting Pond 1 and flowing south across the southern property boundary. Stream A flows into Sharps Branch and ultimately flows into the Trinity River, a traditionally navigable water. Ponds 1, 2, 5, and 6 ultimately drain into the Trinity River via Stream A, Stream B, and Stream C, and are therefore, considered Waters of the United States (WOTUS). Ponds 3, 4, 7, 8, 9, 10, 11, and 12 are isolated stock ponds in the north and northeastern portions of the site and are not considered Waters of the United States but meet the Town’s definition of Waters of the State. Wetlands 1, 2, and 3 ultimately drain into the Trinity River via Stream A, and are therefore, considered WOTUS. Wetlands 4 and 5 are non-jurisdictional fringe wetlands around Pond 11 and Pond 12, respectively, and would not be considered WOTUS or Waters of the State. Transects and plot locations from the field assessment are depicted on **Figures 7a – 7c**.

Habitat Evaluation

A habitat evaluation was conducted to assess the presence, or likely presence, of federal and state-listed threatened or endangered species potentially occurring at the site. Lists of protected species for Denton County were obtained from the United States Fish and Wildlife Service (USFWS) and Texas Parks and Wildlife Department (TPWD) prior to the site visit. The evaluation considered the habitat provided by the site compared to the location of critical



habitat and habitat preferences of the listed species. There are nine species designated by the USFWS and/or the TPWD as threatened or endangered species in Denton County, as shown in **Table 1**.

Table 1: Threatened and/or Endangered Species Listed for Denton County, Texas

Species (Scientific Name) Federal, State Status	Species Habitat Description	Habitat Present	Effect	Pertinent Information
Birds				
Black Rail (<i>Laterallus jamaicensis</i>) T, T	Prefers salt, brackish, and freshwater marshes, pond borders, wet meadows, and grassy swamps. Nests in or along edge of marshes. Only the Eastern Black Rail (<i>Laterallus jamaicensis jamaicensis</i>) is federally-listed as threatened.	Potential	No	This species could potentially utilize the wetlands on site during migration; however, species generally prefers more expansive wetland habitat. The suitable ponds and adjacent wetland habitat are not proposed to be altered by the proposed development.
Piping Plover (<i>Charadrius melodus</i>) T, T	Breeding area extends along the eastern coast of the United States south to southern Texas and includes the Great Lakes region, the northern Midwestern states, and south central Canada. Winters along the eastern Mexico coast. Nests on sandy beaches along the ocean or inland lakes; bare to sparsely vegetated areas on dredge-created and natural alluvial islands in rivers; gravel pits along rivers; and salt-encrusted bare areas of sand, gravel, or pebbly mud on alkaline interior lakes and ponds.	No	No	Conditional species, adversely affected with conditions or activities related to wind energy projects. No preferred habitat for this species is located within the project boundary and the project is not related to wind energy.



Species (Scientific Name) Federal, State Status	Species Habitat Description	Habitat Present	Effect	Pertinent Information
Red Knot (<i>Calidris canutus</i>) T, T	Migratory and may stopover in gulf coast. Breeding habitat consist of slightly vegetated land in tundra. Wintering habitats consist of large sandy tidal flats and coastlines. Only the Rufa Red Knot (<i>Calidris canutus rufa</i>) is state-listed as threatened.	No	No	Conditional species, adversely affected with conditions or activities related to wind energy projects. No preferred habitat for this species is located within the project boundary and the project is not related to wind energy.
White-faced Ibis (<i>Plegadis chihi</i>) NL, T	Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats; nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats. Species breeds in the northern-central portion of the country, migrating south in the winter months.	Potential	No	This species could potentially utilize the wetlands on site during migration; however, species generally prefers more expansive wetland habitat. The suitable ponds and adjacent wetland habitat are not proposed to be altered by the proposed development.
Whooping Crane (<i>Grus americana</i>) E, E	Prefers small ponds, marshes, and flooded grain fields for both roosting and foraging. Potential migrant via plains throughout most of the state to the coast; winters in coastal marshes of Aransas, Calhoun, and Refugio counties.	Potential	No	This species could potentially utilize the pond and wetlands on site during migration; however, species generally prefers more expansive wetland habitat. The suitable ponds and adjacent wetland habitat are not proposed to be altered by the proposed development.

Mollusks				
Louisiana Pigtoe (<i>Pleurobema riddellii</i>) NL, T	Moderate-size rivers, usually flowing water on substrates of mud, sand, and gravel; not generally known from impoundments; Sabine, Neches, and Trinity (historic) River basins.	No	No	No rivers are located within the project boundary.
Sandbank Pocketbook (<i>Lampsilis satura</i>) NL, T	Found in small streams to large rivers in slow to moderate current in sandy mud to sand and gravel substrate.	Potential	No	Although an intermittent stream with perennial pools is located on site, the stream will remain unimpacted by the proposed development.
Texas Heelsplitter (<i>Potamilus amphichaenus</i>) NL, T	Typically found in quiet waters in mud or sand and also in reservoirs. Sabine, Neches, and Trinity River basins.	Yes	No	Several of the on-channel ponds on site likely to contain adequate habitat; however, these larger ponds will remain unimpacted by the proposed development. The smaller ponds are not likely to provide adequate habitat due to their size and because they do not contain flowing water.
Reptiles				
Texas Horned Lizard (<i>Phrynosoma cornutum</i>) NL, T	Prefers open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees; soil may vary in texture from sandy to rocky; burrows into soil, enters rodent burrows, or hides under rock when inactive.	No	No	No preferred habitat for this species is located within the project boundary.

T = Threatened NL = Not listed
E = Endangered

Based on the site visit, the site appears to offer potential habitat for the following threatened or endangered species:

- Black Rail (USFWS and TPWD “threatened”), potential migrant;
- White-faced Ibis (TPWD “threatened”), potential migrant;
- Whooping Crane (USFWS and TPWD “endangered”), potential migrant;
- Sandbank Pocketbook (TPWD “threatened”), potential resident; and,
- Texas Heelsplitter (TPWD “threatened”), potential resident.

Although the site offers potential habitat for the above-noted species, habitat on the project site is not unique in the area and surrounding, undeveloped land will provide adequate habitat. Additionally, the pond and wetland habitat potentially available to the Black Rail, White-faced Ibis, and Whooping Crane as well as the pond and stream habitat potentially available to the Texas Heelsplitter and Sandbank Pocketbook are not proposed to be impacted. None of the species listed were observed on the site and no field observations indicate their presence. Therefore, it is GES's opinion that the proposed development will not affect the listed species potentially present in Denton County.

Environmentally Sensitive Areas

GES conducted a desktop analysis and field assessment of the site and identified the following ESAs on the site:

Riparian Habitat

The Town defines riparian habitat as:

“Areas designated within the FEMA 100-year floodplain or interconnected and adjacent to wetland, tree and understory vegetation and including significant stands of predominately native water related habitat. These areas include wetlands.”

The Town of Flower Mound's ESA Survey (**Appendix A**) indicated a floodplain (Zone A) extended along an unnamed stream in the western portion of the site. According to the Town's ESA Survey, “though ponds and streams are present on the site, they are manmade or ephemeral and therefore mostly devoid of riparian habitat. There is, however, floodplain present so there is a strong likelihood riparian habitat exists.” GES's site evaluation confirmed areas on site that meet the definition of riparian habitat. The riparian habitat consisted of approximately 1.29 acres of native water-related habitat along Stream A and Ponds 1 and 2 within the 100-year floodplain (**Figures 8a – 8c**).

The riparian habitat included emergent wetland habitat as well as forested areas dominated by native bottomland hardwood species. Emergent wetlands were dominated by *Eleocharis palustris* (common spike-rush), *Paspalum dilatatum* (Dallas grass), *Persicaria hydropiperoides* (swamp smartweed), *Rumex crispus* (curly dock) and *Xanthium strumarium* (rough cocklebur). Forested riparian areas were dominated by *Elymus virginicus* (Virginia wildrye), *Quercus stellata* (post oak), *Salix nigra* (black willow), *Smilax bona-nox* (saw greenbrier), *Taxodium distichum* (bald cypress), and *Ulmus americana* (American elm). The riparian vegetation observed appeared to be in good health.

Based on the vegetation present, these areas considered ESAs by the Town's definition of riparian habitat. Although there are approximately 1.29 acres of riparian habitat on site, only 0.07 acres are proposed to be impacted by the development. The impacted ESA includes the portion of the emergent wetland to be crossed by the proposed Jo Fain Boulevard. The remaining 1.22 acres of riparian habitat will be preserved (**Figures 9a – 9c**).



Waters of the State

The Town defines waters of the State as:

“Groundwater, percolating or otherwise, lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Gulf of Mexico, inside the territorial limits of the state, and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all watercourses and banks of all watercourses and bodies of surface water, that are wholly or partially inside or bordering the state or inside the jurisdiction of the state.”

The Town of Flower Mound’s ESA Survey (**Appendix A**) indicated that twelve ponds and three intermittent streams were located on site. GES performed a jurisdictional determination of wetlands and other waters of the United States (as defined by the Clean Water Act) of the project site and identified one intermittent stream (Stream A), three ephemeral streams (Stream B, Stream C, and Tributary 1), five emergent wetlands (Wetland 1 - Wetland 5), and 12 ponds (Pond 1 - Pond 12) on site. (**Figures 7a – 7c**). Stream A, B, and C and Tributary 1 are considered both Waters of the United States and Waters of the State. Of the ponds, only Ponds 1, 2, 5, and 6 drained offsite and were considered Waters of the United States; however, all ponds on site (Ponds 1 – 12) meet the Town’s definition of Waters of the State.

The Town defines wetlands as:

“Jurisdictional wetlands as defined by the federal Clean Water Act and the standards and guidelines in use by the United States Army Corps of Engineers, including the Federal Manual for Identifying and Delineating Jurisdictional Wetlands.”

Wetlands 1 - 3 were considered Waters of the United States, and are therefore, also considered Waters of the State. Since Wetlands 4 and 5 were determined to be non-jurisdictional, they do not meet the Town’s definition of wetlands and are not considered Waters of the State.

Therefore, all streams onsite (Streams A, B, and C and Tributary 1) all ponds on site (Ponds 1 – 12), and three emergent wetlands (Wetlands 1 – 3) are considered Waters of the State (**Figures 8a – 8c**). Impacts to Waters of the State (**Figures 9a – 9c**) are described below.

- Approximately 58 lf of Stream A (intermittent stream) is proposed to be impacted by routing the stream through a culvert beneath the proposed Jo Fain Boulevard. None of the perennial portion of Stream A is proposed to be impacted and approximately 952 lf of Stream A will be preserved onsite.
- Stream B is not proposed to be impacted and the 424 lf will be preserved on site.
- Stream C is not proposed to be impacted and the 155 lf will be preserved on site.
- Tributary 1 is not proposed to be impacted and the 49 lf will be preserved on site.
- Wetlands 1 and 2 are not proposed to be impacted and will be preserved on site. Approximately 0.21 acres of Wetland 3 is proposed to be impacted by the development. The remaining approximately 0.42 acres of wetlands will be preserved on site.

- Ponds 1 – 12 are considered Waters of the State and encompass 17.1 acres on site. Of these, only Ponds 3,4, 7, 8, 9, 10, and 11 (1.7 acres) are proposed to be impacted. The remaining 15.4 acres of ponds will be preserved on site.

Undeveloped Floodplain

The Town defines the undeveloped floodplain as:

“Areas within the FEMA 100-year floodplain, or other floodplain that are undeveloped and in their natural state.”

The Town of Flower Mound’s ESA Survey (**Appendix A**) indicated a floodplain (Zone A) extended along an unnamed stream in the western portion of the site. The majority of the project site is located within “Zone X”, areas determined to be outside the 500-year floodplain. The southwest portion of the site is located within “Zone A”, areas determined to be within the 100-year floodplain as mapped by the Federal Emergency Management Agency (FEMA WMS Web Server Data 2021) (**Figure 6**). The FEMA-mapped 100-year floodplain located on site totals approximately 16.3 acres (**Figure 8a**). Approximately 0.428 acres of undeveloped floodplain is proposed to be developed by the construction of Jo Fain Boulevard (**Figure 9a**). The culverts under Jo Fain Boulevard will be designed to allow anticipated high flows to pass downstream unimpeded.

Topographical Slope Protection

The Town of Flower Mound’s SmartGrowth Implementation manual states:

“No development application or project shall be approved that proposes development on any existing topographical slopes of twelve percent (12.0%) or greater, or that proposes to alter any existing topographical slopes that are less than twelve percent (12.0%) but equal to or greater than five percent (5.0%) (other than within five feet of the footprint of the proposed structure or structures).”

Several locations on the proposed Cummings Ranch residential development have been mapped as areas having naturally occurring slopes that are between 5% and 12% (74.73 acres) (**Figure 10**). Areas with slopes of between 5% and 12% are generally in the central and southwestern portions of the site. These areas are considered an ESA by the Town and meet the criterion for topographic slope protection. In addition, there are slopes greater than 5% located in the ponds and drainage ditches on site. However, these slopes are man-made and are not considered an ESA by the town. Additionally, some man-made slopes greater than 5% are located near the existing structures, roads, and well pad on site.

Approximately 74.73 acres on site have naturally occurring topographic slopes between 5% and 12%. Of the 74.73 acres, 9.99 acres of the impacted slopes are not located within 5 ft. of the footprint of the structures (**Figure 10**). An exception for the 9.99 acres of impacted topographic slopes between 5% and 12% is being requested.



Water Impoundment Protection

The Town of Flower Mound's SmartGrowth Implementation manual states:

"No development application or project shall be approved that proposes to eliminate, or to alter or discontinue recharge flows to, existing impoundments of water with a surface area capacity of one-half acre or more (regardless of whether such impoundments are naturally occurring or constructed), unless an exception is granted by town council. All such impoundments shall be integrated into the proposed development and addressed in the development's environmental protection plan, if applicable, which shall at a minimum include such enhancements and restoration as are necessary to provide or maintain reasonable wildlife habitat, to improve the aesthetic quality in areas of shoreline transition and to stabilize shoreline areas subject to erosion."

Ponds 1, 2, 5, 6, and 12 encompass one-half acre or more and would meet the requirements by the Town to be eligible for water impoundment protection. As required by SMARTGrowth, the protected ponds will be enhanced and integrated into the proposed development. Ponds 3, 4, 7, 8, 9, 10, and 11 do not meet the minimum surface area requirements (**Figures 8a – 8c**). Ponds 1, 2, 5, and 6 are not proposed to be impacted by the development and will be preserved in a Town Park (to be maintained by the Town). The proposed development plan will slightly alter the shape of Pond 12; however, the overall acreage and recharge rate of the pond will not be decreased (**Figure 9c**) and the pond will be preserved in an HOA-maintained Open Space.

Proposed Development Plan

The proposed site plan calls for the property to be developed as a residential development. In an attempt to preserve the natural habitat on the proposed Cummings Ranch residential development, tree and vegetation removal will be limited to only those trees and natural vegetation that would be affected by the proposed construction of the onsite roads, utilities, and structures. Several mitigation strategies are proposed to compensate for any permanent impacts to environmentally sensitive areas. Best Management Practices (BMPs) will also be employed to retain sediments and other pollutants onsite during construction activities. The overall development plan with impacts to the Town-defined ESAs is provided as **Figure 9a – 9c**.

Mitigation Measures During Project Planning and Construction

The following mitigation measures will be employed throughout the planning and construction phases of the project:

- The development plan has been designed to preserve as many trees and natural vegetation as possible while still allowing an economically viable development.
- Approximately 1.29 acres of Town-defined Riparian Habitat exists on the site. The development plan has been designed to preserve as much natural vegetation as possible while still allowing an economically viable development. Approximately 0.07 acres of riparian habitat is proposed to be impacted and approximately 1.22 acres of riparian habitat will be preserved. The amount of riparian habitat preserved more than



compensates for the habitat to be impacted; therefore, no mitigation for impacts to riparian habitat is proposed.

- Approximately 58 linear feet of Stream A will be impacted to allow for the construction of Jo Fain Boulevard in association with the residential development. The 58 lf will be routed through a culvert and no changes in flow rates are anticipated. Nationwide Permit (NWP) 14 (Linear Transportation Projects) is the applicable permit from the USACE for WOTUS impacts related to road crossings. Based on the amount of impacts anticipated, a Pre-Construction Notification (PCN) may be required and all General Conditions of the permit will apply and will be adhered to during development. The remain streams on site will be preserved in a Town Park.
- Approximately 0.48 acres of non-jurisdictional wetlands associated with Ponds 11 and 12 will be filled. However, these wetlands are not considered WOTUS or Waters of the State and are, therefore, not ESAs. No mitigation is required for these impacts.
- Although every attempt has been made to minimize the number of trees damaged or removed during development, some impacts to trees will occur. The removal of trees will be limited to stressed or dead trees, trees within the footprint of proposed structures and roads, and trees needed to be removed to level the building lots. To reduce impacts, roads will be constructed to minimize the number of trees needing to be removed. Mitigation for the impact to trees that must be removed will include tree preservation (where possible), additional tree and other native vegetation plantings, and open space preservation in the form of a Town Park (Town-maintained) and HOA-maintained Open Spaces.
- The proposed development will comply with requirements of Section 98-147 (topographical slope protection) of the Town of Flower Mound Zoning Ordinance. As such, no areas with naturally occurring topographic slopes between 5% and 12% will be altered unless they are within five feet of a proposed structure or an exception of this requirement is issued by the Town. An exception of this requirement is being requested for approximately 9.99 acres of land with slopes between 5% and 12.
- Silt fencing will be installed and maintained in compliance with TCEQ Construction General Permit requirements. This structural feature will minimize sediments from entering the Town's storm sewer system.
- Silt fencing will be installed perpendicular to the direction of flow, especially along roadways and drainage/low elevation areas.
- Stabilized construction entrances will be installed at appropriate locations on site. These structural features will reduce the risk of transporting mud or sediment onto the adjacent roads and other nearby roadways.
- Major soil disturbing activities will be sequenced to preserve existing vegetation.
- Stormwater control devices will be installed to limit runoff and reduce the velocity of concentrated flows to reduce erosion and scouring to onsite and adjacent drainages.



- Stormwater control devices will be maintained until disturbed areas have achieved final stabilization.
- Active migratory bird nesting areas will not be disturbed during site development. Although not anticipated, if a threatened or endangered species is encountered during site development, the USFWS and/or TPWD authorities will be contacted immediately.

Conclusions

Based on the site visit, the ESA Survey performed by the Town of Flower Mound (**Appendix A**), and proposed zoning for the site, GES concludes the following:

- Based on the site visit, the site appears to offer potential habitat for the Black Rail, White-faced Ibis, Whooping Crane, Sandbank Pocketbook, and Texas Heelsplitter; however, habitat on the project site is not unique in the area and surrounding, undeveloped land will provide adequate habitat. Additionally, the pond and wetland habitat potentially available to the Black Rail, White-faced Ibis, and Whooping Crane as well as the pond and stream habitat potentially available to the Texas Heelsplitter and Sandbank Pocketbook are not proposed to be impacted. None of the species listed were observed on the site and no field observations indicate their presence. Therefore, it is GES's opinion that that the proposed development will not affect the listed species potentially present in Denton County.
- Town-defined Environmentally Sensitive Areas exist on the project site. Riparian habitat, waters of the state, undeveloped floodplain, water impoundment protection areas, and topographical slope protection areas were identified on site by GES. No other environmentally sensitive areas were observed on the site. Although some impacts to these areas are anticipated, mitigation measures that compensate for these impacts will be conducted.
- The project will strictly adhere to the Town's tree ordinance and other environmental mandates.

The proposed Cummings Ranch residential development will be designed to allow for the partial preservation of existing natural habitat. The preserved trees will provide an aesthetic value to the site and continue to provide habitat for a variety of biota including songbirds, mammals, reptiles, and insects.

Please let either of us know if any additional information would be helpful.

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

Sincerely,

A handwritten signature in blue ink, appearing to read "M. Peters".

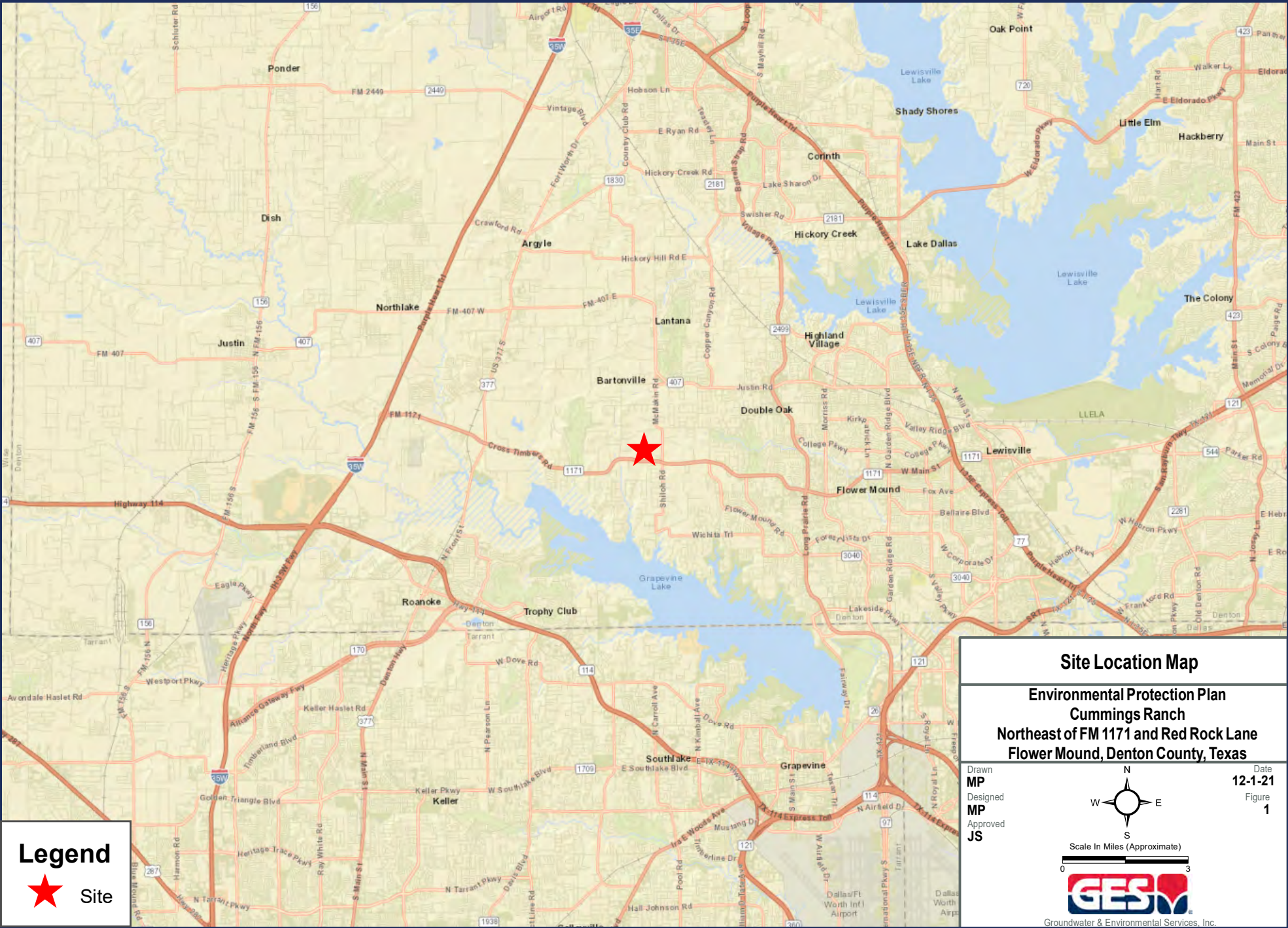
Madison Peters, WPIT
Staff Environmental Scientist

A handwritten signature in blue ink, appearing to read "Joseph Schwartz".

Joseph Schwartz
Principal Environmental Scientist



FIGURES



MASTER PLAN FEATURES	
Land Use Plan	Cross Timbers Conservation Development District
Specific Plans	None
Urban Design Plan	Cross Timbers Conservation Development District
Parks and Trails	Proposed Park Land Dedication, Proposed Equestrian Trail, Proposed Bike Trail
Open Space Plan	
Thoroughfare Plan	Cross Timbers Road (F.M. 1171) – Major Arterial, ROW Width Varies Shiloh Road – Rural Collector, 80' ROW. Red Rock Lane – Rural Collector, 80' ROW. Proposed East-West Rural Collector, 80' ROW.
Water Plan	Long Prairie District, Existing 20" WM, N Side of Cross Timbers Road, Existing 16" WM, East side of Shiloh Rd., Proposed 16" WM along Prop. East-West Rural Collector. Proposed 16" WM Connection to EX 16" WM on East side of Shiloh Rd., Proposed 16" WM to be connected to 16" WM in Red Rock Ln.
Wastewater Plan	Unsewered Area. Cross Timbers Conservation District.

LOT BLOCK/LOT SQ. FT.

LEGEND

—	LOT LINE
—	D.R.D.C.T. DEED RECORDS, DENTON COUNTY, TEXAS
—	P.R.D.C.T. PLAT RECORDS, DENTON COUNTY, TEXAS
—	R.P.R.D.C.T. REPLAT RECORD DENTON COUNTY, TEXAS
---	PROPERTY BOUNDARY
---	ADJACENT PROPERTY BOUNDARY
---	PROPOSED R.O.W.
---	PROPOSED BACK OF CURB

AREA DATA TABLE	
GROSS SITE AREA	349.357 ACRES
SHILOH RD. R.O.W. DEDICATION	4.853 ACRES
RED ROCK LANE R.O.W. DEDICATION	1.815 ACRES
HAWK ROAD R.O.W. DEDICATION	1.101 ACRES
INTERNAL COLLECTOR R.O.W. DEDICATION	10.005 ACRES
TOTAL R.O.W. DEDICATION	17.774 ACRES
NET SITE AREA	331.583 ACRES
TOTAL OPEN SPACE AREA	176.450 ACRES (50.507%)

ENGINEER/APPLICANT:

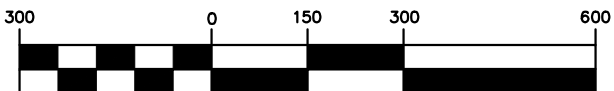
RIDINGER ASSOCIATES, INC.
550 S. EDMONDS LANE, SUITE 101
LEWISVILLE, TX 75067
972-353-8000
CONTACT: DALE RIDINGER

OWNERS:

1309 LLC
P.O. BOX 292873
LEWISVILLE, TX 75029



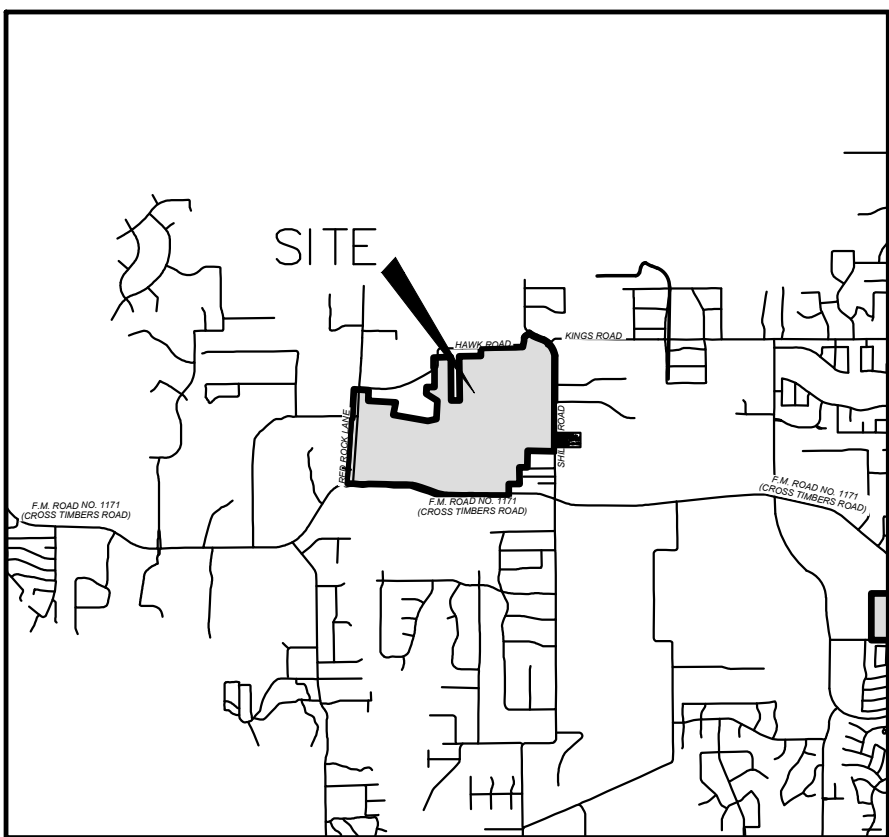
GRAPHIC SCALE



(IN FEET)
1 inch = 300 ft.

PROJECT DATA TABLE

GROSS SITE AREA	349.357 ACRES
PROPOSED USE	SINGLE FAMILY RES.
CURRENT ZONING	AGRICULTURAL
EXTERNAL/COLLECTOR RIGHT-OF-WAY	
SHILOH ROAD	4.853 ACRES
RED ROCK LANE	1.815 ACRES
HAWK ROAD	1.101 ACRES
INTERNAL COLLECTOR	10.005 ACRES
TOTAL RIGHT-OF-WAY	17.774 ACRES
OPEN SPACE	
POTENTIAL TOWN PARK	100.179 ACRES
PRIVATE OPEN SPACE LOTS	76.271 ACRES
TOTAL OPEN SPACE	176.450 ACRES
PROPOSED LOTS	
RESIDENTIAL	218 LOTS
RESIDENTIAL LOTS AREA	138.86 ACRES
MIN. RESIDENTIAL LOT SIZE	23,019 S.F.
MAX. RESIDENTIAL LOT SIZE	44,458 S.F.
AVG. RESIDENTIAL LOTS SIZE	27,747 S.F.
POTENTIAL TOWN PARK	2 LOTS
PRIVATE OPEN SPACE	13 LOTS
TOTAL ALL LOTS	233 LOTS

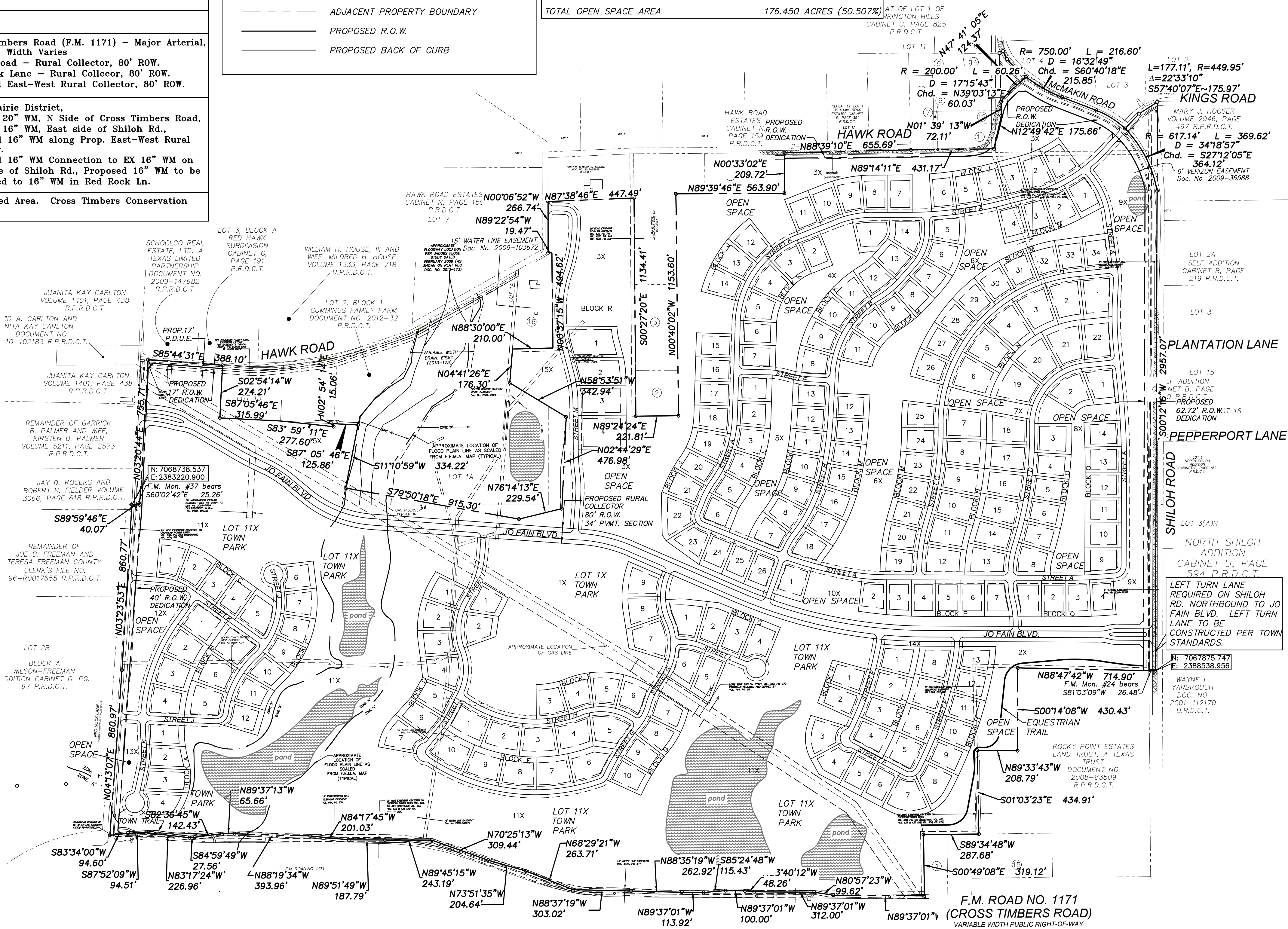


LOCATION MAP
NOT TO SCALE

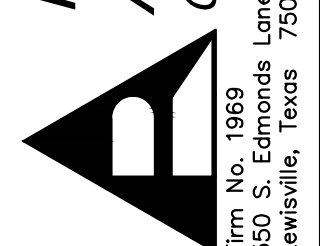
CUMMINGS RANCH
Residential Subdivision
349.357 acres
in the

T.J. Payne Survey, Abstract No. 1056
T & P. Railroad Co. Survey, Abstract
No. 1618, John West Survey, Abstract
No. 1414, John West Survey, Abstract
No. 1415, H. Campbell, Abstract No.
1462, and the B.B.B. & C.R.R. Survey
Abstract No. 152
in the
Town of Flower Mound
Denton County, Texas

Figure 2.
Concept Plan

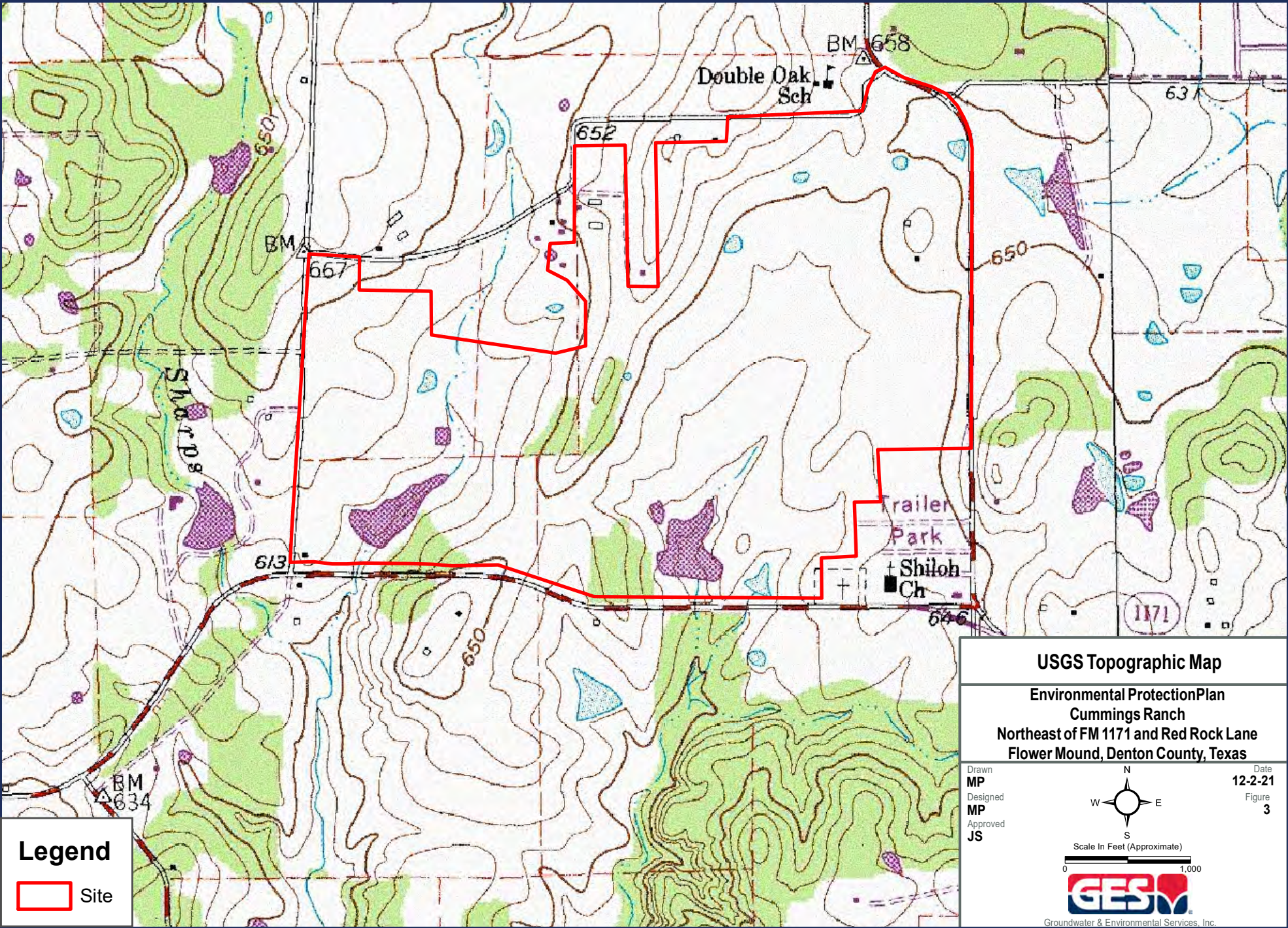


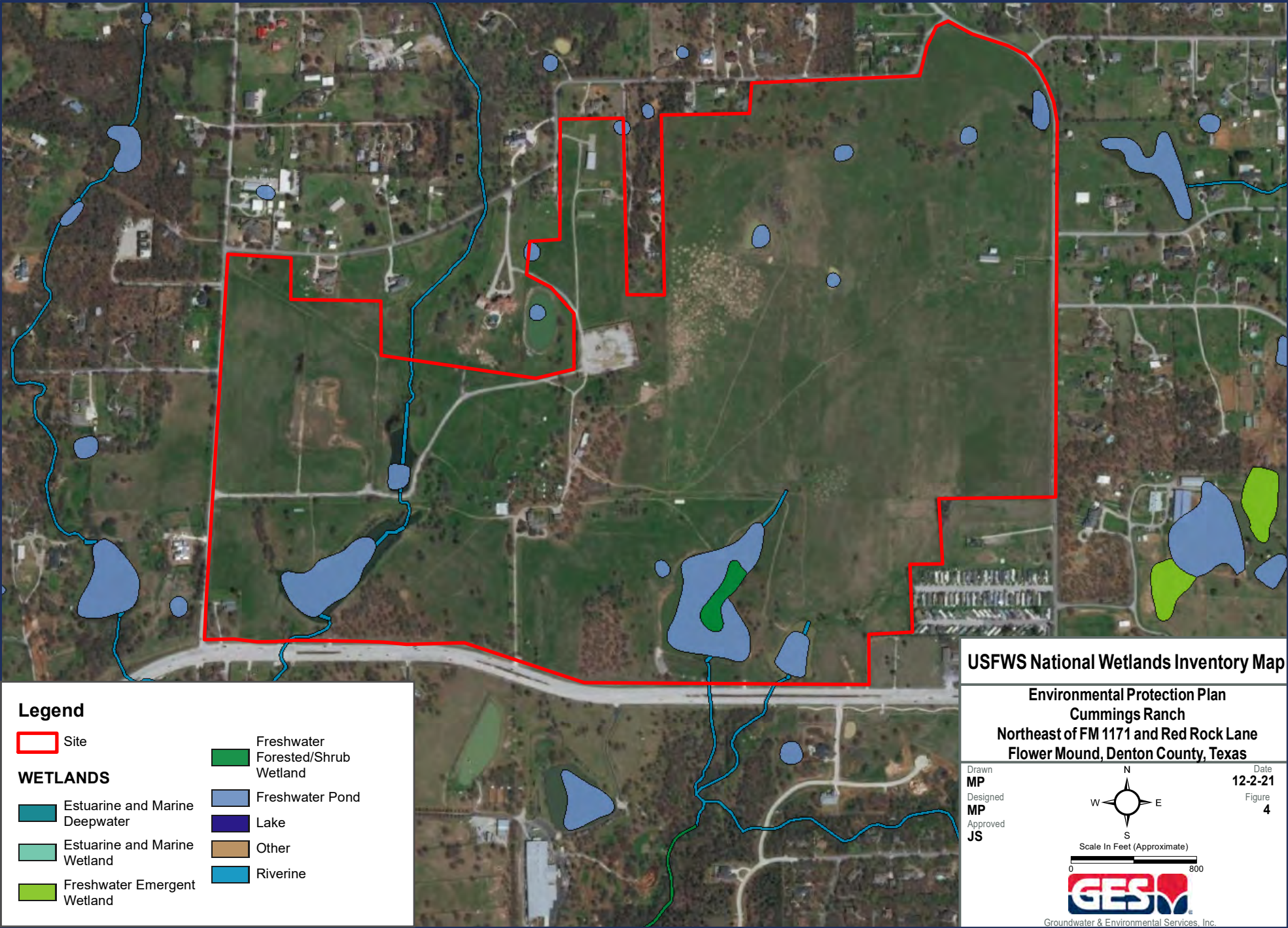
Ridinger
Associates, Inc.
Civil Engineers - Planners
Firm No. 1969
550 S. Edmonds Lane, Suite 101
Lewisville, Texas 75067
Tel. No. (972) 553-8000
Fax No. (972) 553-8001

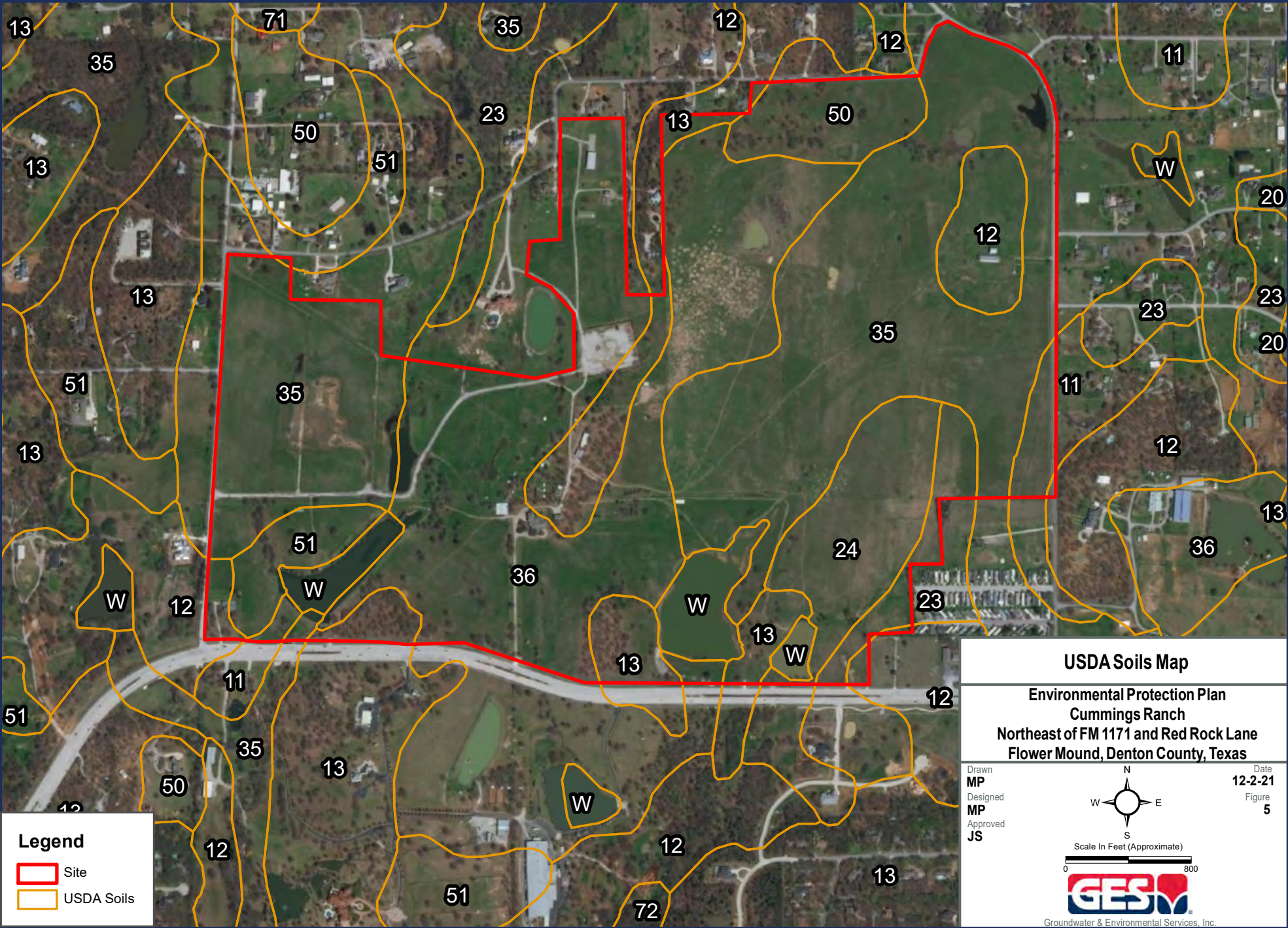


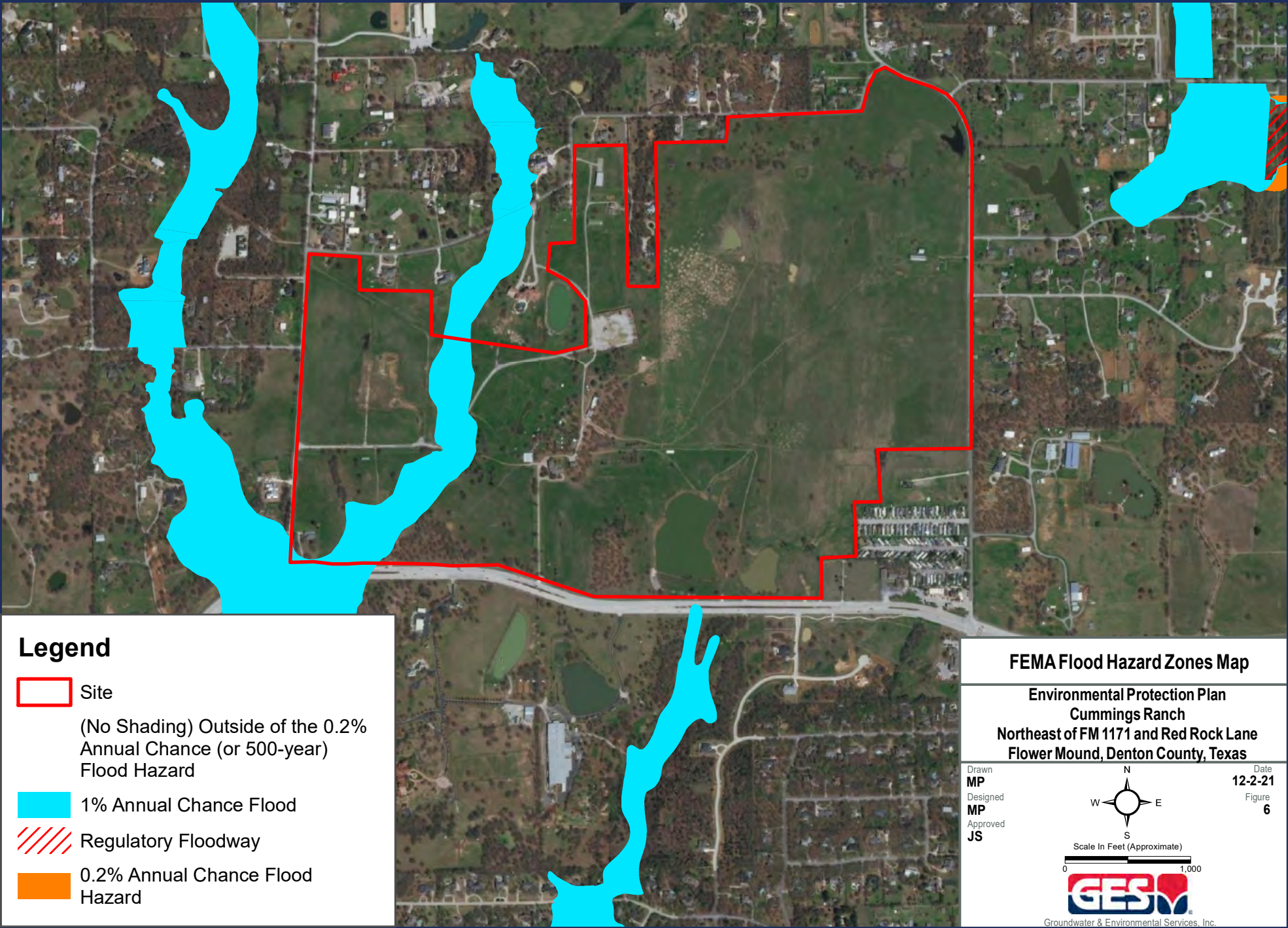
No. Date Revisions App.

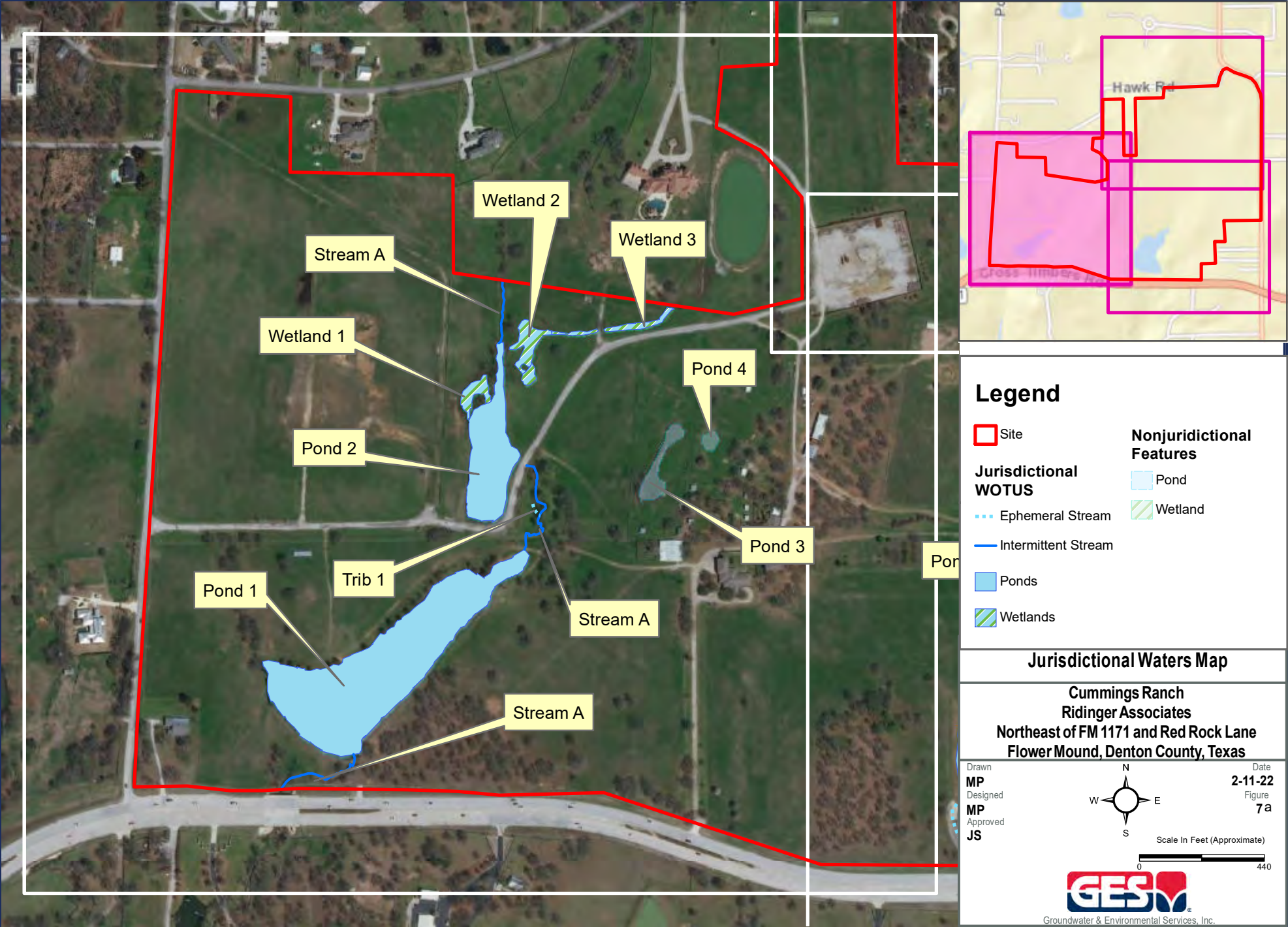
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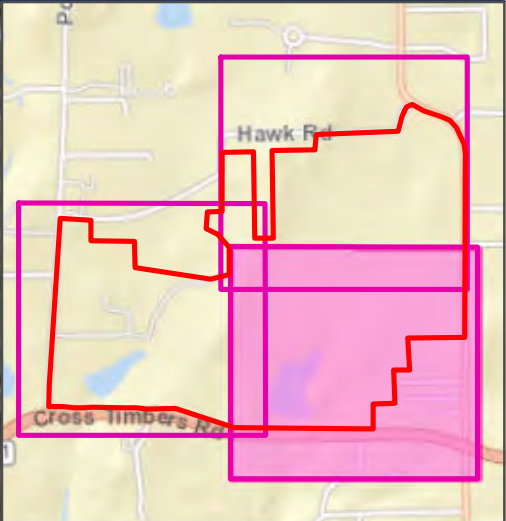












Legend

- Site

Jurisdictional WOTUS

Ephemeral Stream

Intermittent Stream

Ponds

Wetlands
- Nonjurisdictional Features**

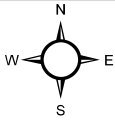
Pond

Wetland

Jurisdictional Waters Map

Cummings Ranch
Ridinger Associates
Northeast of FM 1171 and Red Rock Lane
Flower Mound, Denton County, Texas

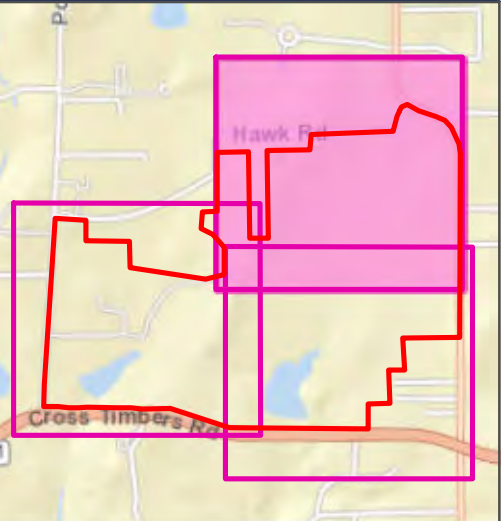
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MP
Designed
MP
Approved
JS



Date
2-11-22
Figure
7b

Scale In Feet (Approximate)
0 440





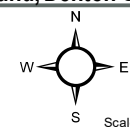
Legend

- | | |
|-----------------------------|-----------------------------------|
| Site | Nonjurisdictional Features |
| Jurisdictional WOTUS | Pond |
| Ephemeral Stream | Wetland |
| Intermittent Stream | |
| Ponds | |
| Wetlands | |

Jurisdictional Waters Map

Cummings Ranch
Ridinger Associates
Northeast of FM 1171 and Red Rock Lane
Flower Mound, Denton County, Texas

Drawn
MP
Designed
MP
Approved
JS

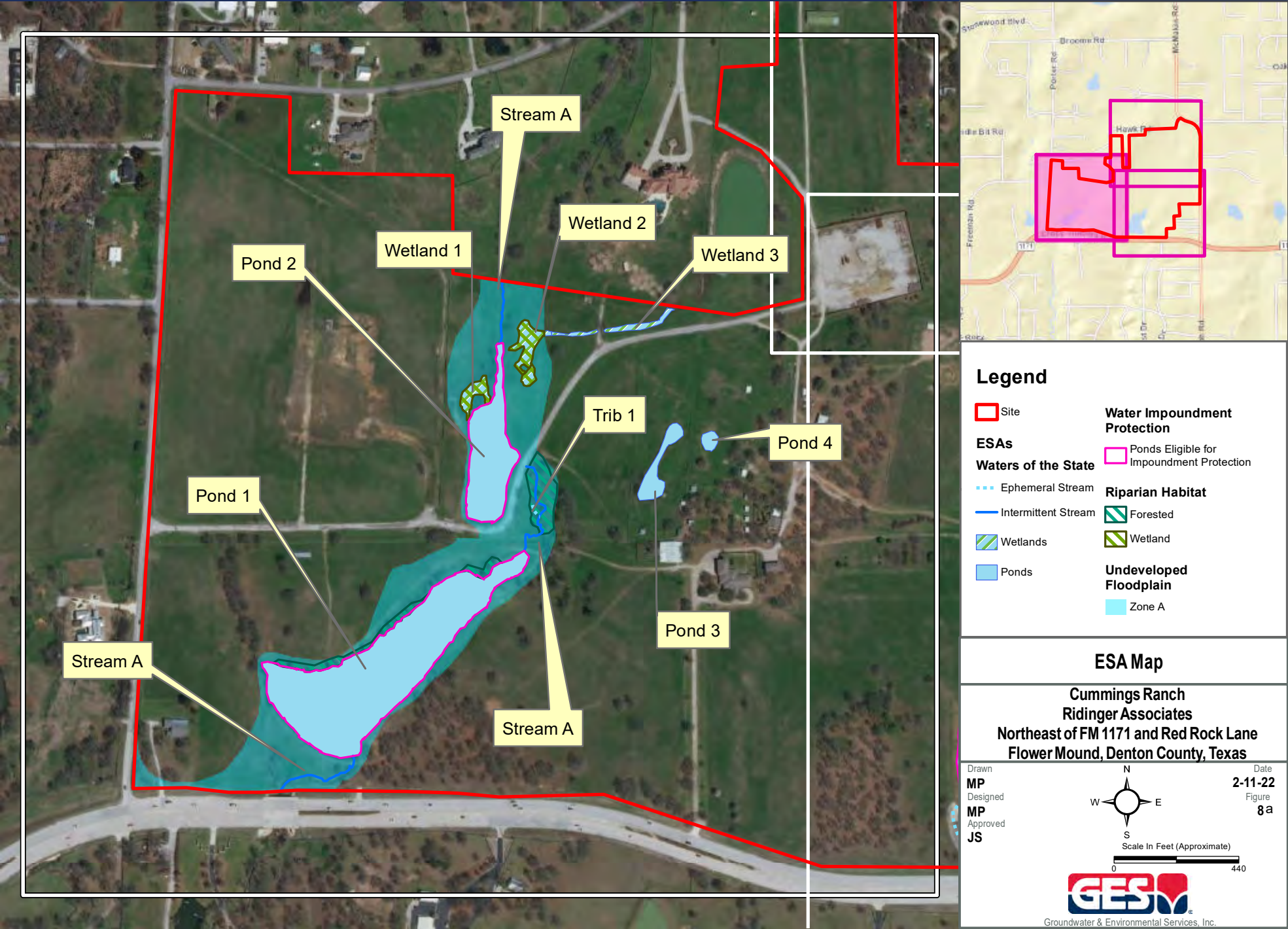


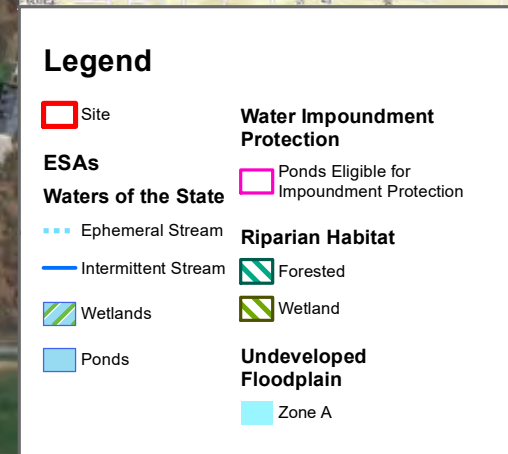
Scale In Feet (Approximate)



Groundwater & Environmental Services, Inc.

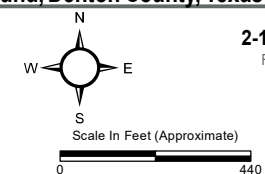
Date
2-11-22
Figure
7c



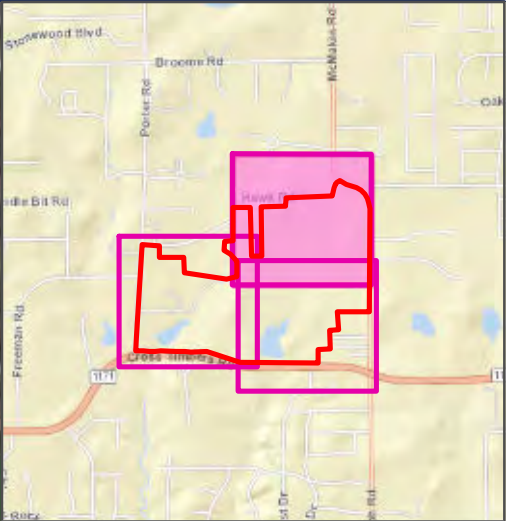


**Cummings Ranch
Ridinger Associates
Northeast of FM 1171 and Red Rock Lane
Flower Mound, Denton County, Texas**

Date
2-11-22
Figure
8b



Groundwater & Environmental Services, Inc.



Legend

- | | |
|----------------------------|---|
| Site | Water Impoundment Protection |
| ESAs | Ponds Eligible for Impoundment Protection |
| Waters of the State | Riparian Habitat |
| Ephemeral Stream | Forested |
| Intermittent Stream | Wetland |
| Wetlands | Undeveloped Floodplain |
| Ponds | Zone A |

ESA Map

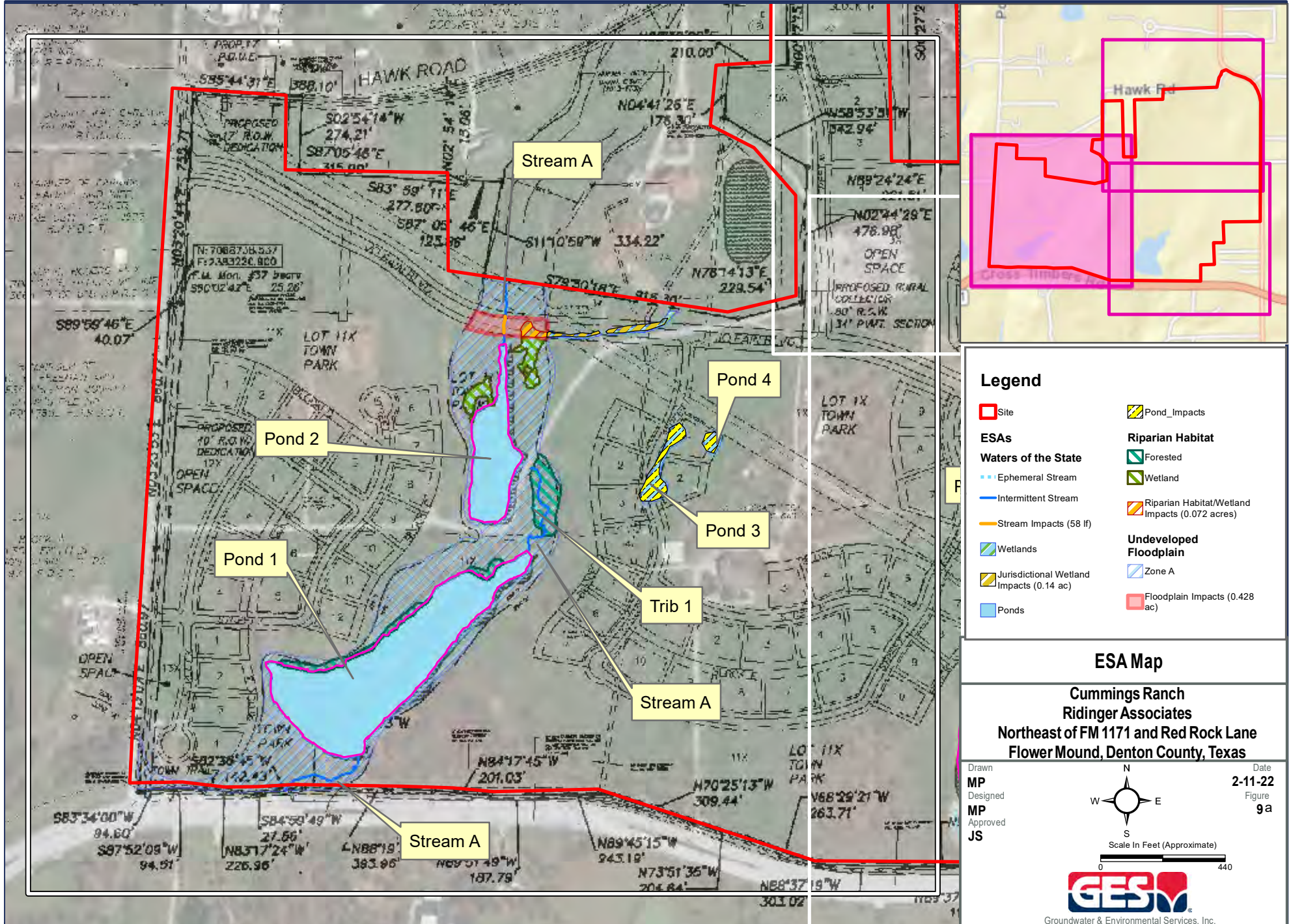
Cummings Ranch
Ridinger Associates
Northeast of FM 1171 and Red Rock Lane
Flower Mound, Denton County, Texas

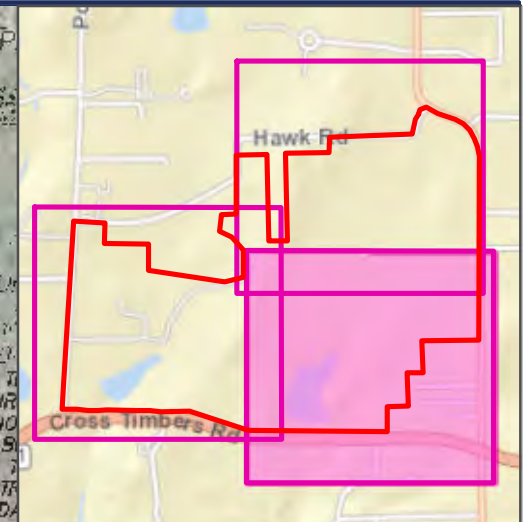
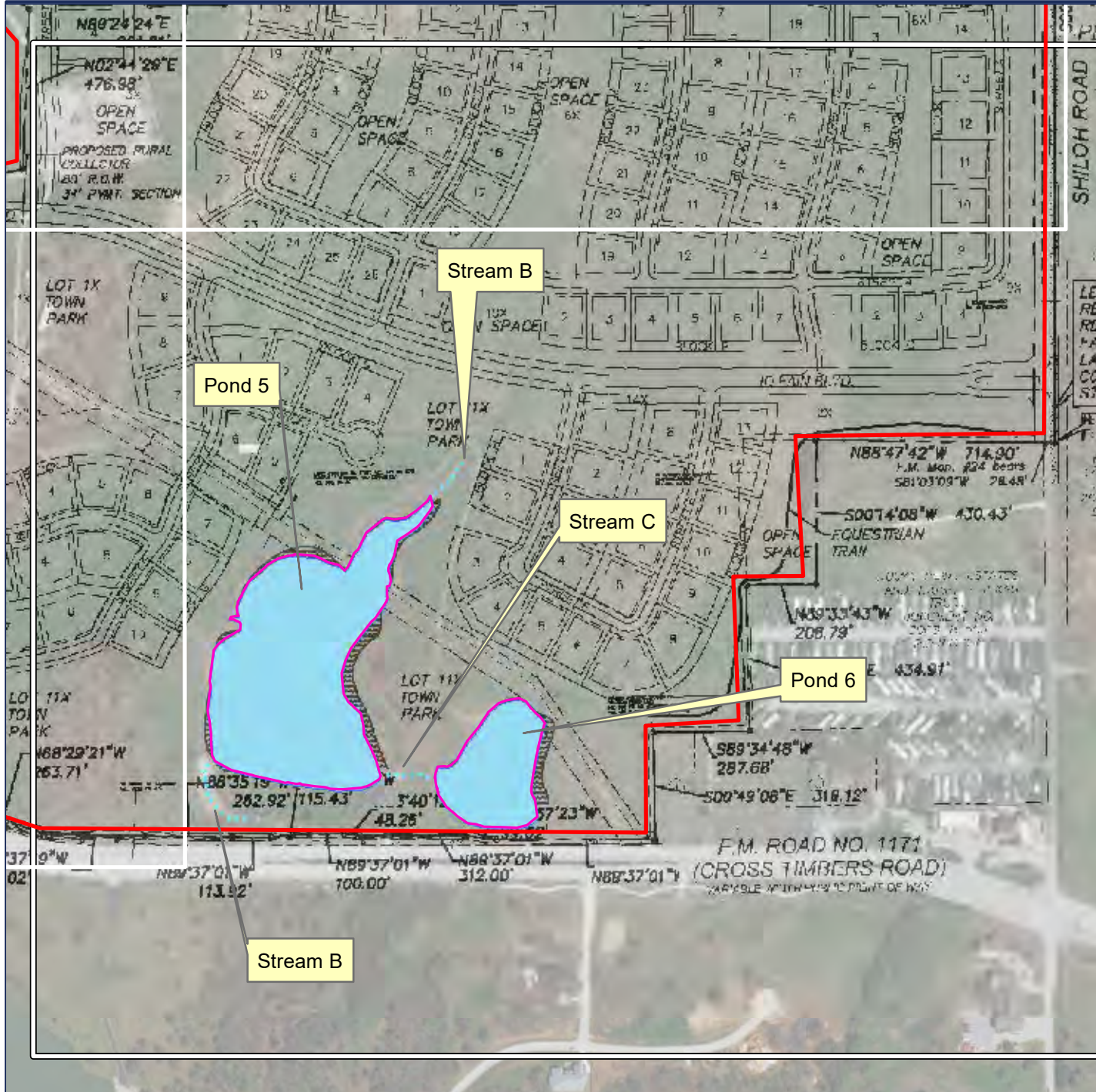
Drawn
MP
Designed
MP
Approved
JS

Date
2-11-22
Figure
8 C



Groundwater & Environmental Services, Inc.





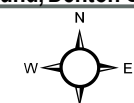
Legend

- | | |
|--|--|
| Site | Pond_Impacts |
| ESAs | Riparian Habitat |
| Waters of the State | Forested |
| Ephemeral Stream | Wetland |
| Intermittent Stream | Riparian Habitat/Wetland Impacts (0.072 acres) |
| Stream Impacts (58 lf) | Undeveloped Floodplain |
| Wetlands | Zone A |
| Jurisdictional Wetland Impacts (0.14 ac) | Floodplain Impacts (0.428 ac) |
| Ponds | |

ESA Map

Cummings Ranch
Ridinger Associates
 Northeast of FM 1171 and Red Rock Lane
 Flower Mound, Denton County, Texas

Drawn
 MP
 Designed
 MP
 Approved
 JS

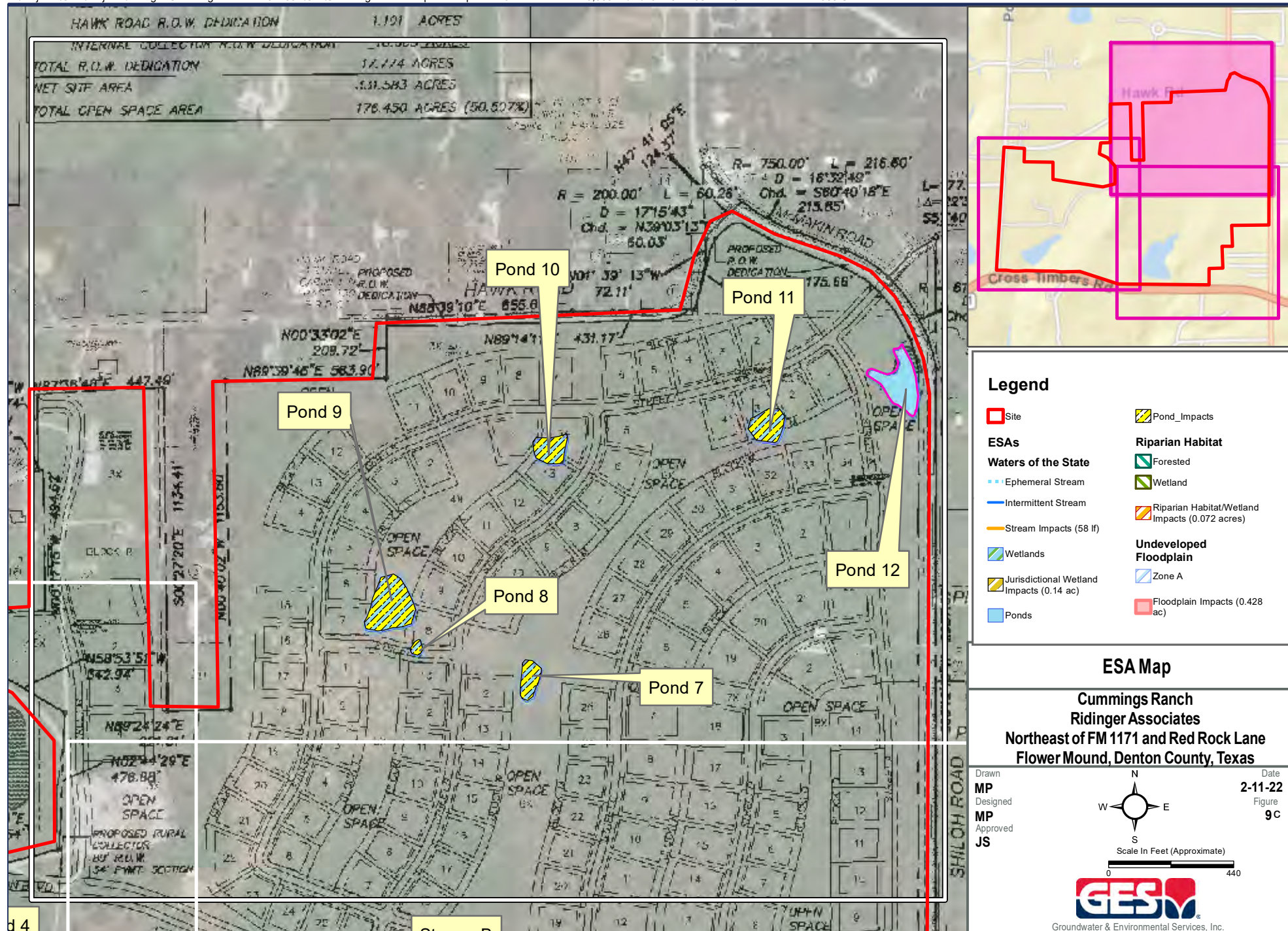


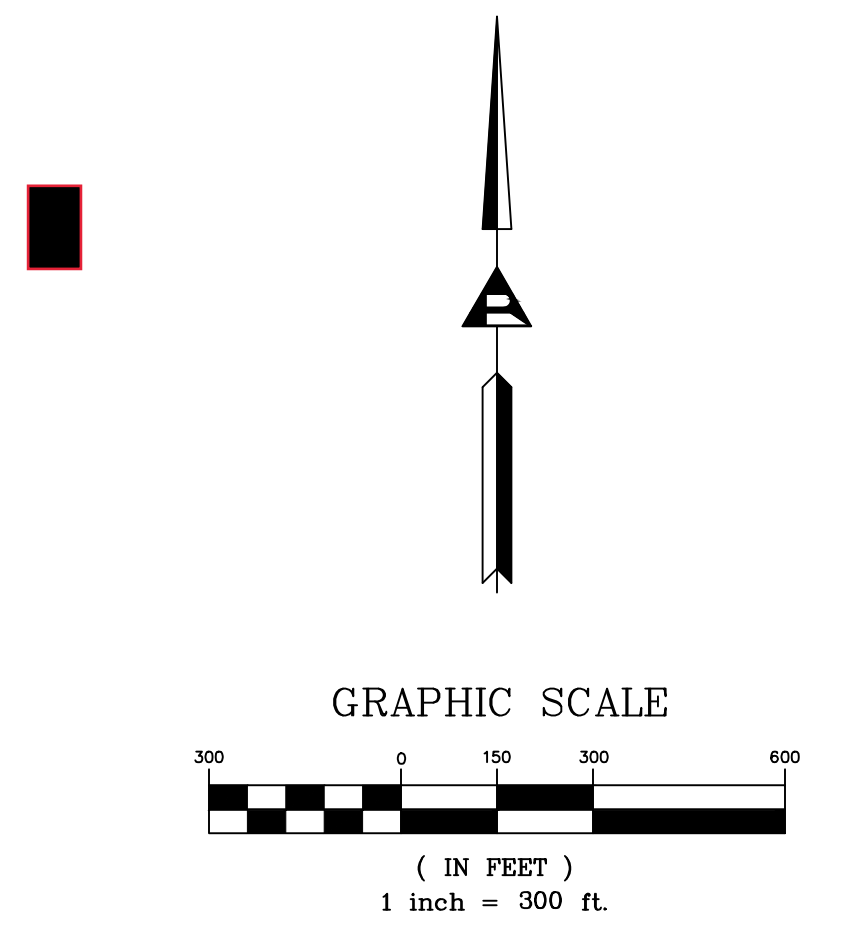
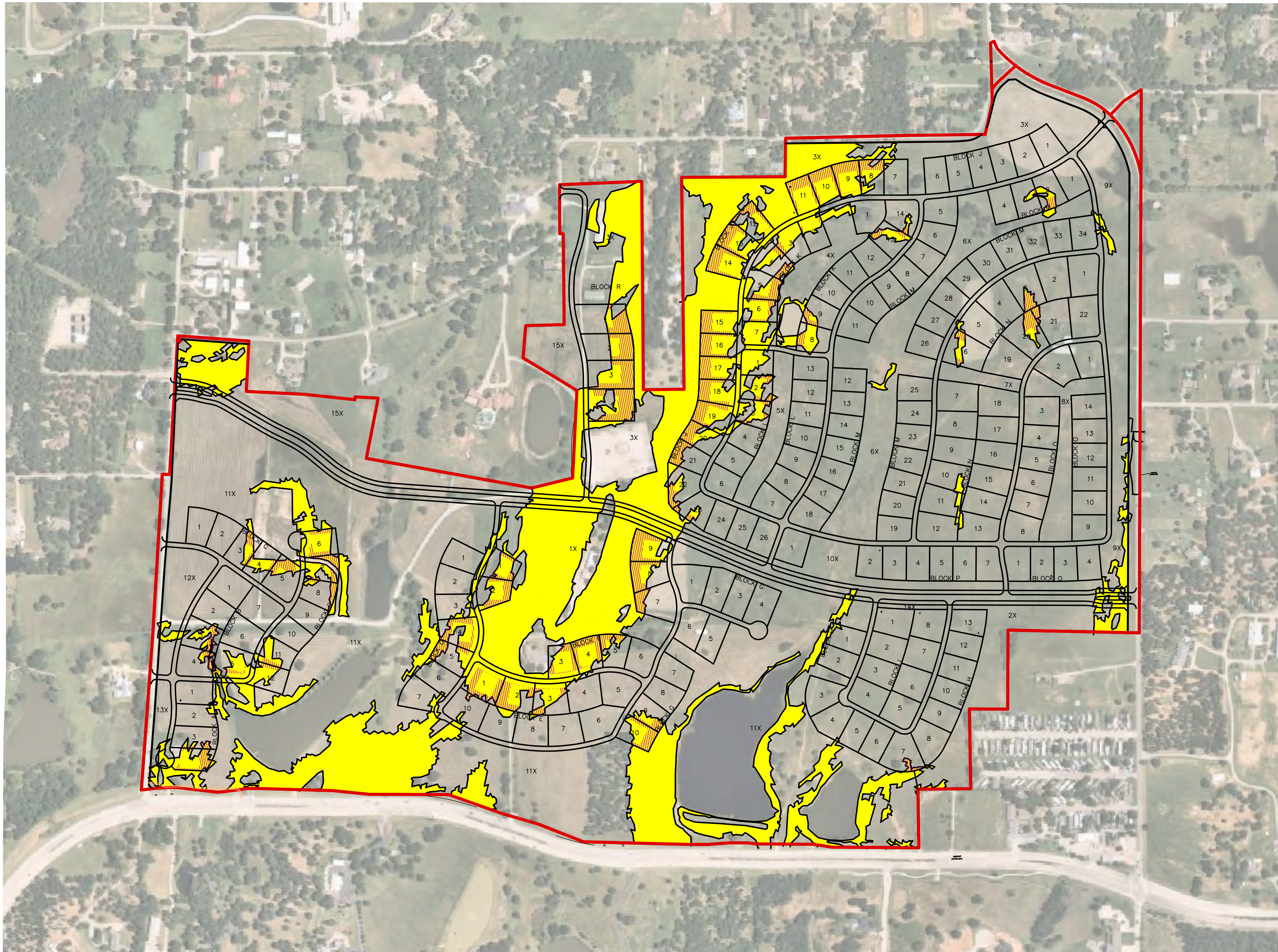
Scale In Feet (Approximate)



Groundwater & Environmental Services, Inc.

Date
 2-11-22
 Figure
 9b





DATA TABLE	
TOTAL ACREAGE	349.357
OPEN SPACE (HOA)	76,271 AC.
OPEN SPACE (PARK)	100.003 AC.
TOTAL OPEN SPACE	176.274 AC. (50.457%)
LOT SIZE	
SMALLEST	23,000 S.F.
AVERAGE	27,743 S.F.
LARGEST	44,458 S.F.
218 RESIDENTIAL LOTS	

Figure 10
Topographic
Slopes Map

5-12% Slopes (74.73 ac)
Area of Impact not 5' from structure or road (9.99 Ac)

OWNER:
1.) 1309 LLC
Managing Member:
Charlie Cummings
7100 Cross Timbers
Flower Mound, TX 75022



Appendix A

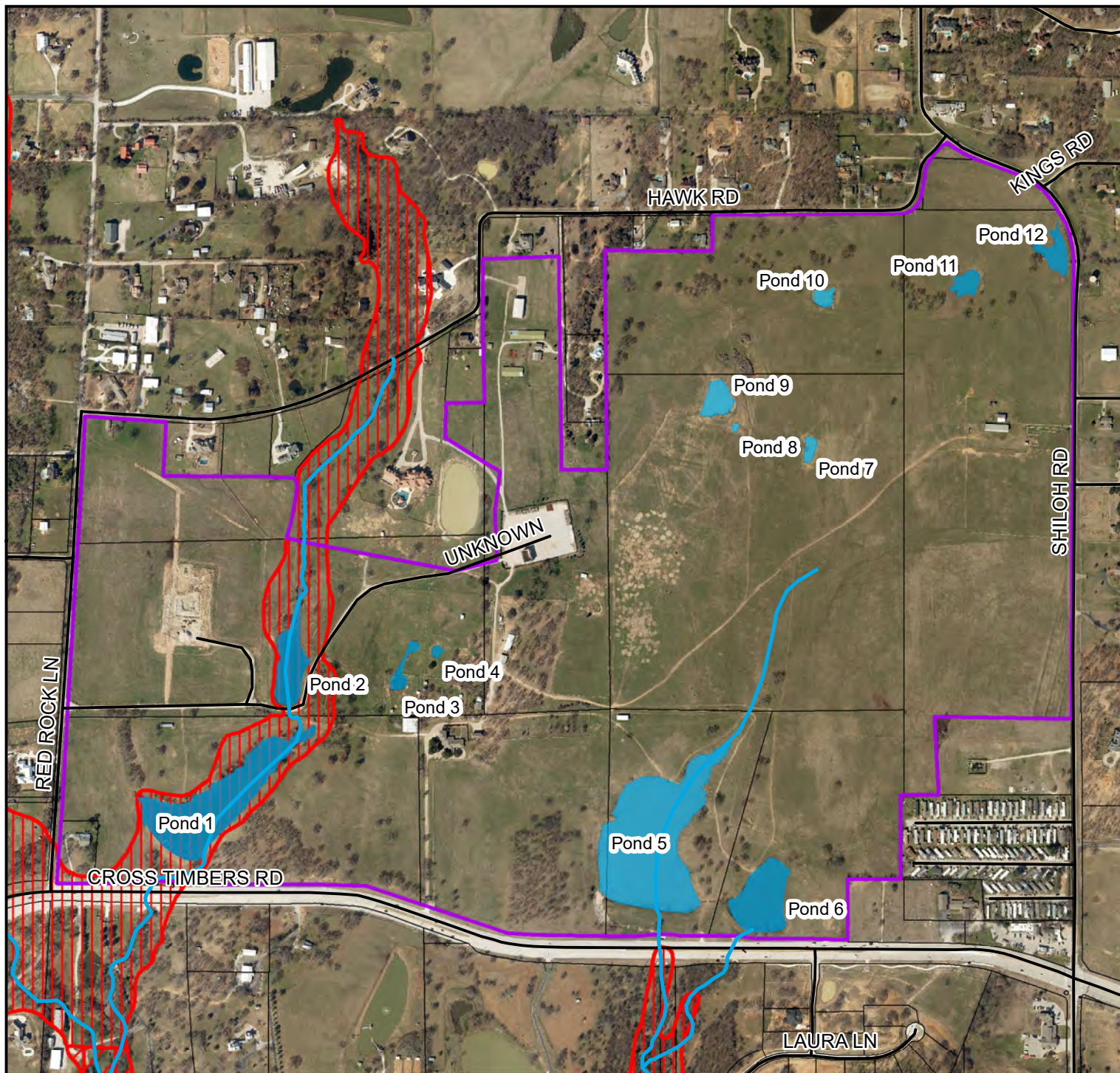
Town of Flower Mound ESA Survey



Environmentally Sensitive Area Survey

Property Name: Cummings Ranch		Contact: Dale Ridinger with Ridinger Associates
Property Address: Generally located north of Cross Timbers Road, between Red Rock Ln. and Shiloh Rd.		
Environmentally Sensitive Area Criteria	ESA Criteria Description & Notes	
<u>Upland Habitat</u> Criteria Present? ☐ Yes ☒ No	None.	
<u>Riparian Habitat</u> Criteria Present? ☒ Yes ☐ No	Though ponds and streams are present on the site, they are man-made or ephemeral and therefore mostly devoid of riparian habitat. There is, however, floodplain present so there is a strong likelihood riparian habitat exists.	
<u>Prairie Habitat</u> Criteria Present? ☐ Yes ☒ No	None	
<u>Waters of the State</u> Criteria Present? ☒ Yes ☐ No	There are twelve (12) ponds and three (3) intermittent streams on the site.	
<u>Floodplain</u> Criteria Present? ☒ Yes ☐ No	FEMA 100yr floodplain runs north/south through much of the western portion of the site.	
<u>Wetlands</u> Criteria Present? ☒ Yes* ☐ No	Wetlands could be present within the 100 yr. floodplain boundary.	
<u>Water Impoundment Protection</u> Criteria Present? ☒ Yes ☐ No	The surface area of Ponds 1, 2, 5, 6, and 12 exceed ½ acre in size.	
<u>Topographical Slope Protection</u> Criteria Present? ☒ Yes ☐ No	There could be several areas on the site that are between 5% and 12% in slope. The estimated location of these areas is shown on the slope map provided. This map shows areas where these slope conditions could exist. The Town's SMARTGrowth Program allows modification of slopes between 5% and 12% - but only up to 5 feet outside the footprint of the structure or structures being built. The objective of this provision of SMARTGrowth is to preserve topographic features and the topographic character of each site, and to avoid the "balancing" or flattening of sites. It is the responsibility of the applicant / developer to locate these areas and design accordingly.	
Action Steps/Additional Notes		
Since there are existing ponds over a ½ acre in size, intermittent streams, topographic slope protection, riparian habitat, FEMA floodplain present, and potential wetlands, an EPP is required. Please have the EPP identify how Ponds 1, 2, 5, 6, and 12 will be incorporated into amenities for the new development. As mentioned above, the applicant's consultant must provide Town staff a thorough analysis of all areas on the site with slopes greater than or equal to 5% and what measures will be taken to mitigate impacts to those areas based on the proposed development. The construction plans will need to show that the developer is working with existing slopes on the site. The applicant needs to demonstrate that the development complies with the topographic slope requirements found in the Town's SMARTGrowth Program – Environmental Quality Section. If the development will impact any areas with slopes 12% or greater, an exemption must be requested from Town Council. The topographic slope protection can be addressed by the developer's engineering consultant, with the drainage plan and grading plan. The FEMA 100 yr. floodplain encumbers the western portion of this property. Please see comments by Blake Hummel regarding the requirements associated with floodplain.		
EPP Required? ☒ Yes ☐ No	Attachments ☒ Site Orthographic Aerial Photograph ☐ Other:	

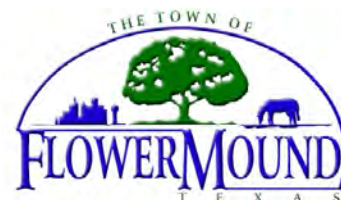
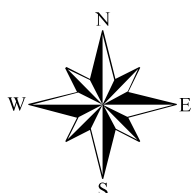
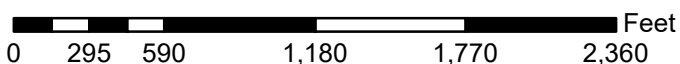
EPP Consultant: N/A			
Submitted by: (print) Joseph Whiteley		Signature & Date: Joseph Whiteley 10/14/2021	
Forwarded to EPP Consultant: N/A	Filed with Development Services & Environmental Services	Last Modified: 10/14/2021	



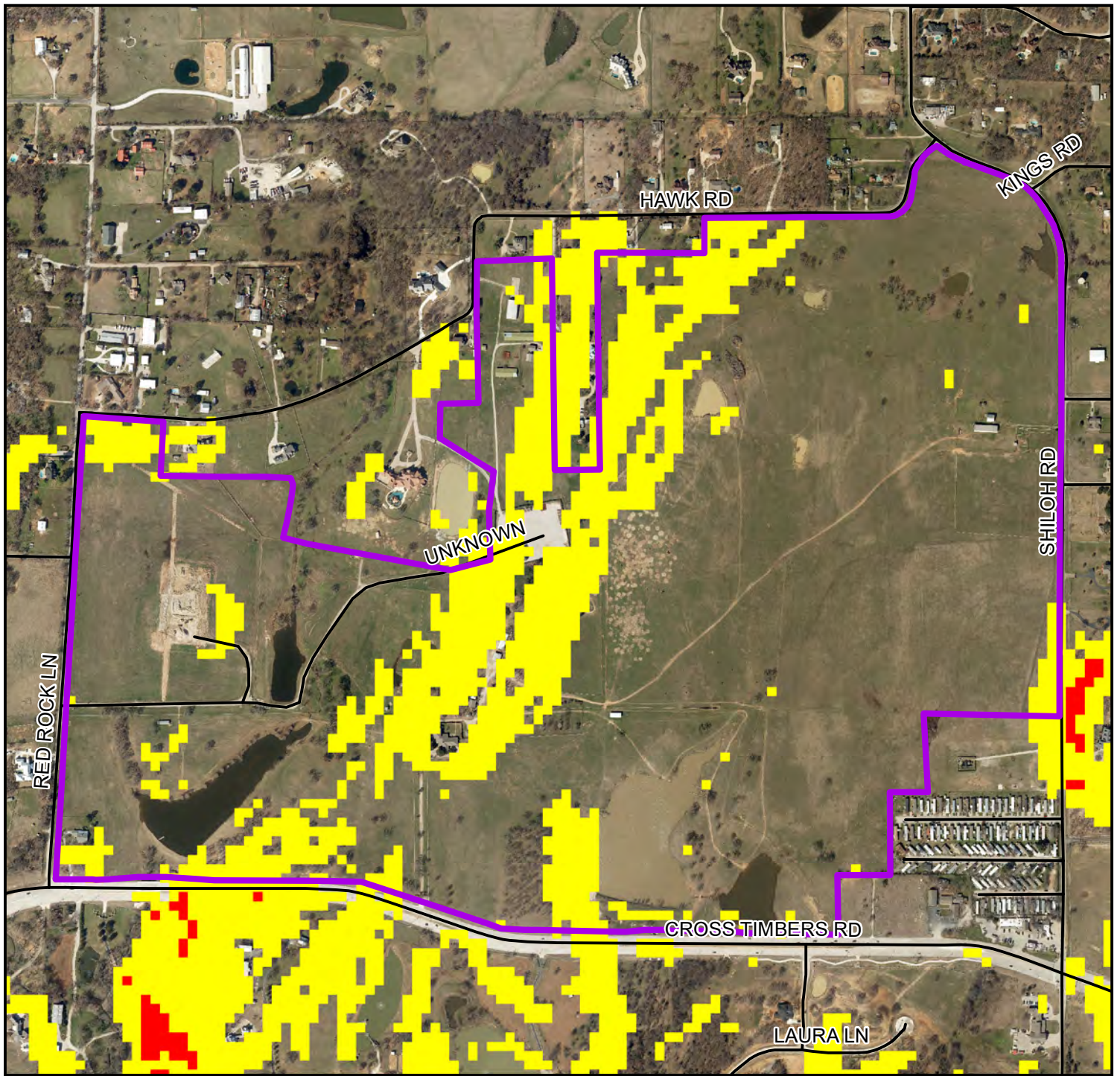
Environmentally Sensitive Area Survey Cummings Ranch

Map Created: October 14, 2021
Environmental Services Department
Town of Flower Mound

1 inch = 753 feet



- | | | | | |
|----------|---------|------|---------|-------------|
| Property | Streams | Pond | Streets | AE 100 Year |
| | | | | A 100 Year |



Cummings Ranch - Slope Map

Map Created: October 14, 2021
Environmental Services Department
Town of Flower Mound

1 inch = 766 feet

