



AGENDA

TOWN OF FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION

REGULAR MEETING

July 6, 2021

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

6:30 P.M.

AN AGENDA INFORMATION PACKET IS AVAILABLE ONLINE AT
[HTTPS://TX-FLOWERMOUND.CIVICPLUS.COM/AGENDACENTER](https://tx-flowermound.civicplus.com/agendacenter)

Comments regarding any item on this agenda can be sent to the Commission Members
by Emailing: ECC@flower-mound.com or Calling: 972.874.6005

A. CALL REGULAR MEETING TO ORDER

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. 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 A member of the Environmental Conservation Commission may request an item(s) be withdrawn from the consent agenda and moved to regular agenda for discussion by making such request prior to a motion and vote on the Consent Agenda.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 May 4, 2021.

F. REGULAR ITEM

2. Consider an application for a tree removal permit for forty-eight (48) specimen trees on property proposed for development as Silveron Flower Mound Duke. The property is generally located north of Long Prairie Road and east of Silveron Boulevard.
3. Consider a recommendation to Town Council to increase the per-caliper-inch tree mitigation fee.

G. SUBCOMMITTEE REPORT

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

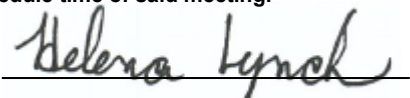
H. COORDINATION OF FUTURE AGENDAS/MEETINGS

I. ADJOURNMENT- REGULAR SESSION



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: July 2, 2021, 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: July 6, 2021

FROM: Helena Lynch, Administrative Assistant

ITEM: Consider approval of minutes from the regular meeting of the Environmental Conservation Commission held on May 4, 2021.

BACKGROUND INFORMATION: This agenda item is to consider approval of the minutes from the May 4, 2021, 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 May 4, 2021, regular meeting of the Environmental Conservation Commission.

RECOMMENDATION: Move to approve the minutes from the May 4, 2021, regular meeting of the Environmental Conservation Commission.

**THE FLOWER MOUND ENVIRONMENTAL CONSERVATION COMMISSION MEETING
HELD ON THE 4TH DAY OF MAY 2021, 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:

Russell McNamer	Chair
James Seastrom	Vice Chair
Sandy Fambrough	Commission Member, Place 1
Marilyn Lawson	Commission Member, Place 4
Alton Bowman	Commission Member, Place 5
Elaine Takacs	Commission Member, Place 6
Deanna Soper	Commission Member, Place 7
Rich Murchek	Commission Member, Place 8
Anna Athappan	Commission Member, Place 9
Kathryn Wells	Commission Member, Place 10

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: None

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. CONSENT AGENDA

- 1. Consider approval of minutes from the regular meeting via video conference of the Environmental Conservation Commission held on March 2, 2021.**

Commission Deliberation

Vice Chairman Seastrom made a motion to approve the March 2, 2021, minutes as presented.
Commission Member Takacs seconded the motion.

VOTE ON THE MOTION

AYES: Fambrough, Lawson, Bowman, Takacs, Seastrom, Soper
NAYS: None
ABSTAIN: None

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

F. SUBCOMMITTEE REPORT

Receive updates and status reports related to subcommittee activities and establish subcommittees as necessary.

G. ADJOURNMENT- REGULAR SESSION – 7:04PM

H. CALL WORK SESSION TO ORDER – 7:04 PM

I. WORK SESSION ITEMS

2. Review the Town of Flower Mound's Stormwater Management Program.

Joe Whiteley, Environmental Review Analyst, gave a presentation with the following items included:

Town of Flower Mound Stormwater Management Program
Stormwater Program Overview
SWMP Requirement
SWMP Revisions
SWMP Minimum Control Measures (MCMs)
Standing vs. Acting SWMPs
MCM #1 – Public Education, Outreach and Involvement
MCM #1 - Public Education, Outreach and Involvement (cont.)
MCM #2 – Illicit Discharge Detection and Elimination (IDDE)
MCM #3 - Construction Site Stormwater Runoff Control
MCM #3 (cont.)
SWPP Erosion Control Plan – BMP Map
MCM #3 - Photos of non-compliant sites
MCM #3 – Photos of compliant sites
MCM #4 - Post-Construction Stormwater Management
MCM #5 - Pollution Prevention and Good Housekeeping
MCM #7 - Authorization for Municipal Construction Activities
Questions/ Comments?

3. Discuss the Environmental Conservation Commission Powers and Duties related to conservation projects.

Jimmy Hoefert, Environmental Review Analyst, gave a presentation with the following items included:

ECC Work Session Conservation Projects
Power & Duties
Open Space Plan Objectives
Conservation/ Cluster Developments
Development Standards
Development Standards – Conservation Developments
Development Standards- Cluster Developments
Map of Cluster and Conservation Developments
Monitoring Inspection Report
Chimney Rock – Aerial map with parcel overlay
Photos of Chimney Rock entrance, conservation area and pond
Montalcino Estates concept plan with forested areas
Environmentally Sensitive Area Survey Villas Di Montalcino Northern Section
Photos Montalcino Estates entrance, conservation area and pond
High Meadow – Development Plan
Photos of High Meadow entrance, conservation area and pond
Townlake Phase 1-3 Zoning Map with aerial overlay
Photos of Townlake entrance, conservation area and pond
Sanctuary Record Plat Map
Questions & Discussion

J. COORDINATION OF FUTURE AGENDAS/MEETINGS

K. ADJOURNMENT- WORK SESSION – 7:54 PM

TOWN OF FLOWER MOUND, TEXAS

RUSS MCNAMER, CHAIRMAN

ATTEST:

HELENA LYNCH, ADMINISTRATIVE ASSISTANT



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 2

REGULAR ITEM

DATE: July 6, 2021
FROM: James Hoefert, Environmental Review Analyst
PRESENTER Kori Haug, with Belle Firma
ITEM: **Consider an application for a tree removal permit for forty-eight (48) specimen trees on property proposed for development as Silveron Flower Mound Duke. The property is generally located north of Long Prairie Road and east of Silveron Boulevard.**

BACKGROUND INFORMATION:

The Silveron Flower Mound Duke development is generally located north of Long Prairie Road and east of Silveron Boulevard. The site is approximately 66.90 acres in size. The site is currently zoned for Campus Commercial District (CC) uses as a portion of Planned Development District No. 31 (PD-31) and master planned for the Lakeside Business District. The applicant is requesting to change the current land use designation within the Lakeside Business District Area Plan from Campus Commercial uses to Campus Industrial District (CI) uses and rezone the property to Planned Development District No. 181 (PD-181) with Campus Industrial uses. According to the tree survey for the project, the site contains eighty-four (84) specimen trees. The applicant is requesting to remove forty-eight (48) specimen trees from the site in order to build two buildings that will consist of warehouse and office uses. The specimen trees proposed for removal are located within the proposed buildable area. There are a few specimen trees listed as declining or hazard and the condition of those trees will be re-evaluated with the record plat application. The remaining specimen trees are listed as being in good health.

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, 1,284" of replacement trees, equaling 428 three-inch caliper trees, will be required for the removal of the twenty-four (24) specimen trees that are located outside of Upland Habitat on this site. In addition, protected trees removed from the buildable area, and located outside of Upland Habitat, will also require replacement at a tree-for-tree rate. The mitigation for the removal of specimen and protected trees located within the defined Upland Habitat is addressed separately through the Upland Habitat mitigation requirements. Any additional protected tree mitigation / replacement will be determined with the record plat application – once final engineering has been completed for the project. As part of the applicant's mitigation plan, they are proposing to plant 233 three-inch caliper mitigation trees onsite and the remaining mitigation will be addressed through payment into the Town's Tree Preservation Fund.

CITIZEN FEEDBACK: As of July 2, 2021, staff has not received feedback related to this item.

ALTERNATIVES/OPTIONS: N/A

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Letter from the applicant indicating the reason(s) for the tree removal permit request.
2. Specimen tree removal permit application.

3. Photographs of approved signage onsite.
4. Tree Survey.
5. Landscape Plan.

RECOMMENDATION: Move to recommend approval or denial of the requested permit for the removal of forty-eight (48) specimen trees on property proposed for development as Silveron Flower Mound Duke. The property is generally located north of Long Prairie Road and east of Silveron Boulevard.



July 2, 2021

Mr. James Hoefert

Environmental Review Analyst
Town of Flower Mound
2121 Cross Timbers Road
Flower Mound, TX 75028

Re: **Letter of Intent – Specimen Tree Removal for Duke Silveron**
86.557 acre tract
Silveron Boulevard and Long Prairie Road (FM 2499) Flower Mound, Texas

Dear Mr. Hoefert:

Duke Realty has proposed development for a two-building development with a combined square footage of approximately 690,000 s.f. on 66.9 acres along Silveron Boulevard and Long Prairie Road (FM 2499). This is a challenging site to develop, so we are requesting to remove several specimen and protected trees. We have worked closely with the civil engineer, architect, and developer to save as many trees on site as possible.

The intent of this letter is to summarize the total amount of Specimen Trees located for the above-mentioned property and to individually identify those trees being proposed for removal along with an explanation why removal is necessary and comments on tree health if applicable. All tree information listed below references the Tree Survey Field Data, tree locations, and proposed site development as reflected on sheet L1.00, "Specimen Tree Plan" dated May 26, 2021. Also attached to this letter are labeled photos of the existing specimen trees listed below.

TREES OUTSIDE OF THE ESA

The site contains a total of thirty-three (33) Specimen Trees outside of the Environmentally Sensitive Area (ESA) and twenty-four (24) of these trees are being proposed for removal, four (4) of which are in declining condition. The remainder are identified to be in good health. The trees are individually identified with reason for removal as follows:

5360	27.8	POST OAK	<i>Quercus stellata</i>	Healthy	Grading
5361	27.2	POST OAK	<i>Quercus stellata</i>	Healthy	Grading
5362	25.3	POST OAK	<i>Quercus stellata</i>	Healthy	Grading
5374	27.8	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5375	24.7	POST OAK	<i>Quercus stellata</i>	Healthy	Grading
5376	24.1	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5377	38.1	POST OAK	<i>Quercus stellata</i>	Declining	Parking
5379	24.0	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5380	24.2	POST OAK	<i>Quercus stellata</i>	Declining	Drive Aisle
5381	24.0	POST OAK	<i>Quercus stellata</i>	Healthy	Grading
5389	25.4	POST OAK	<i>Quercus stellata</i>	Healthy	Parking
5391	26.8	CEDAR ELM	<i>Ulmus crassifolia</i>	Healthy	Drive Aisle

5392	31.2	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5393	31.9	POST OAK	<i>Quercus stellata</i>	Declining	Drive Aisle
5394	22.3	CEDAR ELM	<i>Ulmus crassifolia</i>	Healthy	Drive Aisle
5396	30.9	BLACKJACK OAK	<i>Quercus marilandica</i>	Hazard	Drive Aisle
5397	20.5	CEDAR ELM	<i>Ulmus crassifolia</i>	Healthy	Drive Aisle
5398	40.7	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5400	30.7	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5404	22.3	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5405	27.8	POST OAK	<i>Quercus stellata</i>	Healthy	Parking Lot
5406	24.3	POST OAK	<i>Quercus stellata</i>	Healthy	Parking Lot
5407	26.5	BLACKJACK OAK	<i>Quercus marilandica</i>	Healthy	Parking Lot / Grading
5408	24.9	POST OAK	<i>Quercus stellata</i>	Healthy	Grading

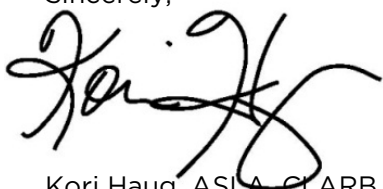
TREES INSIDE OF THE ESA

The site contains a total of fifty (50) Specimen Trees inside the Environmentally Sensitive Area (ESA) and twenty-four (24) of these trees are being proposed for removal, four (4) of which are in declining condition. The remainder are identified to be in good health. The trees are individually identified with reason for removal as follows:

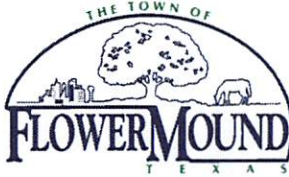
2299	23.1	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5365	23.8	POST OAK	<i>Quercus stellata</i>	Declining	Grading / Utility
5371	23.5	POST OAK	<i>Quercus stellata</i>	Declining	Parking
5409	32.1	POST OAK	<i>Quercus stellata</i>	Healthy	Grading
5410	19.4	CEDAR ELM	<i>Ulmus crassifolia</i>	Declining	Building
5411	25.8	POST OAK	<i>Quercus stellata</i>	Healthy	Building
5412	25.9	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5414	32.5	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5415	22.5	POST OAK	<i>Quercus stellata</i>	Healthy	Parking
5416	23.2	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5417	22.9	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5418	22.7	POST OAK	<i>Quercus stellata</i>	Healthy	Grading / Utility
5421	22.9	POST OAK	<i>Quercus stellata</i>	Healthy	Grading / Utility
5426	23.6	POST OAK	<i>Quercus stellata</i>	Healthy	Building
5427	25.3	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5428	22.3	BLACKJACK OAK	<i>Quercus marilandica</i>	Declining	Drive Aisle
5429	27.5	POST OAK	<i>Quercus stellata</i>	Healthy	Parking
5430	23.6	POST OAK	<i>Quercus stellata</i>	Healthy	Parking
5432	28.8	POST OAK	<i>Quercus stellata</i>	Healthy	Building
5439	25.4	POST OAK	<i>Quercus stellata</i>	Healthy	Grading
5441	25.9	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5442	24.0	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
5443	28.6	POST OAK	<i>Quercus stellata</i>	Healthy	Drive Aisle
8659	19.1	CEDAR ELM	<i>Ulmus crassifolia</i>	Healthy	Grading

Thank you for your time and consideration with this matter and please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kori Haug', with a stylized flourish at the end.

Kori Haug, ASLA, CLARB
President
Belle Firma, Inc.



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:

Kori Haug, ASLA, CLARB - Belle Firma

Address:

4245 North Central Expy

Suite 501

Dallas, TX 75205

Phone:

214.865.7192

Applicant's Legal Interest in the Property:

Landscape Architect - Texas Registration #2246

2. Property Owner(s)

Name(s):

Robert Yu - Pacific Summit Properties, LLC

Address:

on behalf of PS Silveron / RMR L.P.

212 S. Palm Ave., Suite 200

Alhambra, CA 91801

3. Location and Legal Description of Property:

part of a 86.557 acre tract of land described in Special Warranty Deed to

PS Silveron / RMR. L.P., recorded in Document No. 2018-9044, Official Records, Denton County, Texas,
and Instrument No. D218017563, Official Public Records, Tarrant County, Texas

4. Owner's Authorization of Representation

I, Robert Yu, the owner of the above described real property, do hereby authorize Kori Haug 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.

State of California, County of Los Angeles
Subscribed and sworn to (or affirmed) before me
on this 25th day of May, 20 21,
by Robert Yu,
proved to me on the basis of satisfactory evidence
to be the person(s) who appeared before me.
Signature: [Signature]

[Signature]
Signature of Owner

Given Under My Hand and Seal of Office
This the 25th Day of May, 20 21

[Signature]
Notary Public
In and For Los Angeles 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
Kori Haug, 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. 2246

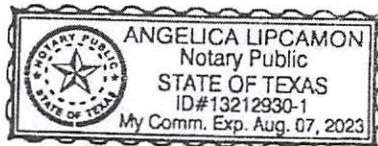
State of Licensure Texas

Or ISA Certified Arborist No. _____

Or Certified Forester No. _____

Given Under My Hand and Seal of Office
This the 24th Day of May, 20 21

[Signature]
Notary Public
In and For Dallas County, Texas



6. Received by Town of Flower Mound on (Date) 5/27/2021 by
(initials) JRH.

Tree Removal Request Signage

Along Long Prairie Rd.



Three along Silveron Pkwy.







14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (P) • 972.361.6800 (F)



Professional Seal

SILVERON
FLOWER MOUND, TEXAS

SPECIMEN TREE PRESERVATION PLAN

ISSUANCES

DRAWING INFORMATION

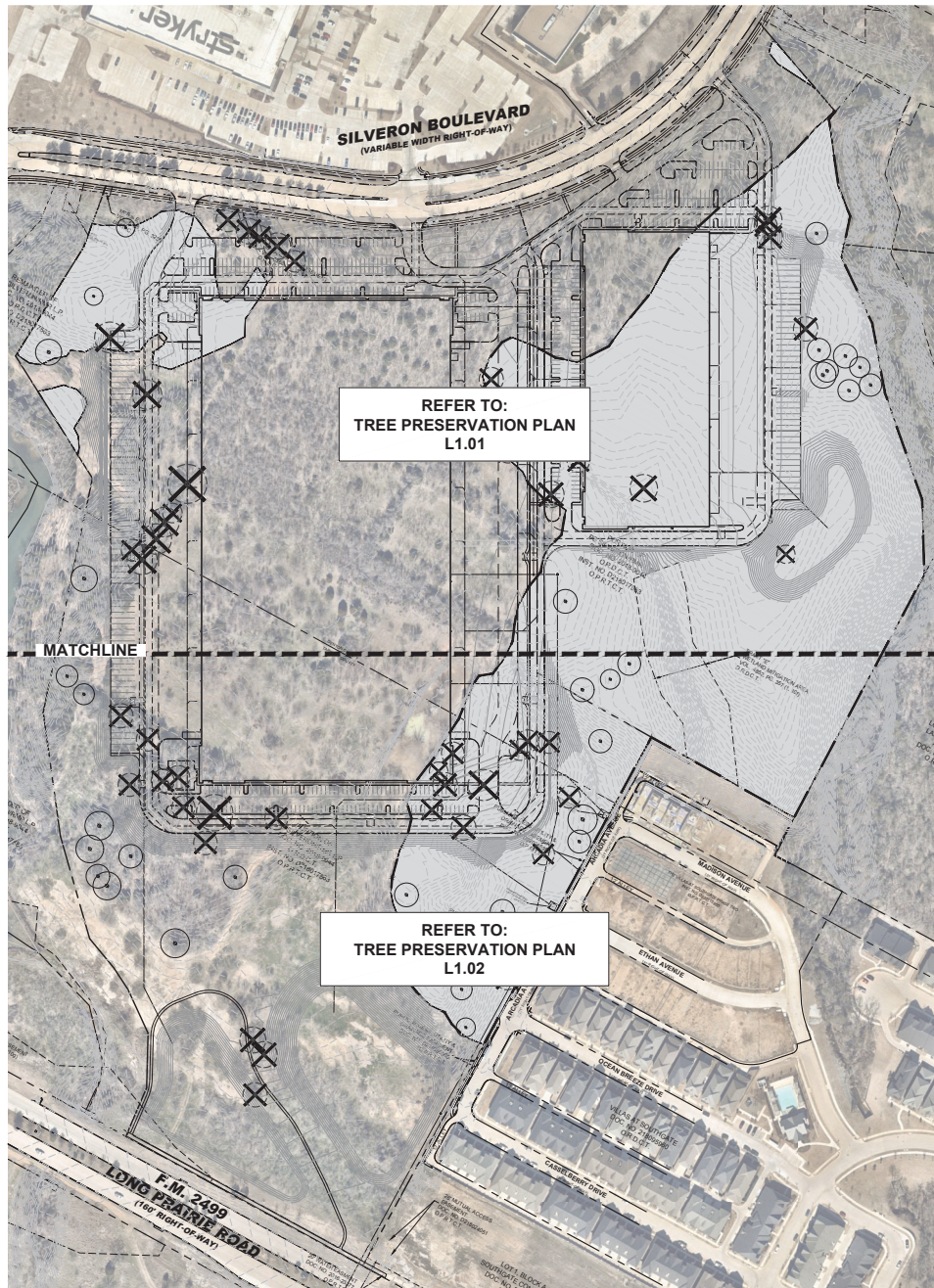
Scale: 1" = 120'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #: AVE Job #:

DRAWING / SHEET TITLE

SPECIMEN TREE
PLAN

SHEET NUMBER

L1.00



TREE SURVEY FIELD DATA - SPECIMEN TREES (EXCLUDING ESA)						
No.	Dia. (inches)	Species (common name)	Species (botanical name)	Status	Health	Tree Credits
5143	21.8	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Healthy	4
5353	28.9	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5354	24.7	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5355	24.6	POST OAK	Quercus stellata	TO REMAIN	Declining	6
5356	29.2	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5357	34.8	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5359	30.2	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Healthy	6
5360	27.8	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5361	27.2	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5374	27.8	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5375	24.7	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5376	24.1	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5377	38.1	POST OAK	Quercus stellata	TO BE REMOVED	Declining	6
5379	24.0	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5380	24.2	POST OAK	Quercus stellata	TO BE REMOVED	Declining	6
5381	24.0	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5382	29.6	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5388	22.7	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5389	25.4	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5391	28.8	CEDAR ELM	Ulmus crassifolia	TO BE REMOVED	Healthy	6
5392	31.2	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5393	31.9	POST OAK	Quercus stellata	TO BE REMOVED	Declining	6
5394	22.3	CEDAR ELM	Ulmus crassifolia	TO BE REMOVED	Healthy	6
5395	27.8	POST OAK	Quercus stellata	TO REMAIN	Declining	6
5396	30.9	BLACKJACK OAK	Quercus marilandica	TO BE REMOVED	Hazard	6
5397	25.5	CEDAR ELM	Ulmus crassifolia	TO BE REMOVED	Healthy	6
5398	20.9	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5400	30.7	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5401	22.3	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5405	27.8	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5406	24.3	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5407	28.5	BLACKJACK OAK	Quercus marilandica	TO BE REMOVED	Healthy	6
5408	24.9	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
Total Caliper Inches of Specimen Trees (Total: 33 Specimen Trees Excluding ESA)						892
Total Caliper Inches of Specimen Trees to be Removed (Excluding HAZARD / DECLINING Trees)						503.0
Total Mitigation Required for Specimen Trees Removed						1,006
Replacement Trees Required for Specimen Trees to be Removed						335.3
Total Tree Credits for Specimen Trees to be Removed						46
Total Specimen Mitigation Trees Required						289

TREE SURVEY FIELD DATA - SPECIMEN TREES WITHIN ESA						
No.	Dia. (inches)	Species (common name)	Species (botanical name)	Status	Health	Tree Credits
2299	23.1	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
4885	19.3	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Healthy	6
5363	19.8	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Healthy	6
5364	21.9	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5365	23.8	POST OAK	Quercus stellata	TO BE REMOVED	Declining	6
5366	22.0	POST OAK	Quercus stellata	TO REMAIN	Declining	6
5367	18.1	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Hazard	6
5368	22.6	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5369	20.5	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Declining	6
5370	25.8	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5371	23.5	POST OAK	Quercus stellata	TO BE REMOVED	Declining	6
5373	24.9	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Healthy	6
5409	32.1	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5410	19.4	CEDAR ELM	Ulmus crassifolia	TO BE REMOVED	Declining	6
5411	23.8	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5412	25.9	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5414	32.5	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5415	22.5	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5418	23.2	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5417	22.9	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5419	22.7	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5419	23.9	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5420	30.2	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5421	22.9	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5422	24.2	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5423	24.0	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5424	20.6	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Healthy	6
5425	24.5	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5426	23.9	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5427	25.3	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5428	22.3	BLACKJACK OAK	Quercus marilandica	TO BE REMOVED	Declining	6
5429	27.5	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5430	23.6	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5431	26.5	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Healthy	6
5432	23.8	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5433	22.9	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5434	23.3	POST OAK	Quercus stellata	TO REMAIN	Hazard	6
5435	22.0	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5438	23.7	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5437	27.3	POST OAK	Quercus stellata	TO REMAIN	Declining	6
5439	24.4	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
5439	25.4	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5441	25.9	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5442	24.0	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5443	28.6	POST OAK	Quercus stellata	TO BE REMOVED	Healthy	6
5444	19.9	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
6538	19.1	CEDAR ELM	Ulmus crassifolia	TO REMAIN	Healthy	6
6539	27.2	POST OAK	Quercus stellata	TO REMAIN	Healthy	6
6555	21.4	HEALTHY CANE ELM	Ulmus americana	TO REMAIN	Healthy	6
6559	19.1	CEDAR ELM	Ulmus crassifolia	TO BE REMOVED	Healthy	6
Total Caliper Inches of Specimen Trees within ESA (Total: 53 Specimen Trees)						1,392
Total Acreage of Upland Habitat ESA						26.37
Total Monetary Value of ESA (\$15,000.00 / Acre)						\$395,550.00

TREE PRESERVATION NOTES

- EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION FROM TREE STRUCTURE DAMAGE AND COMPACTION OF SOIL UNDER AND AROUND DRIP LINE. CANOPY OF TREE.
- IF ANY ROOT STRUCTURE IS DAMAGED DURING ADJACENT EXCAVATION / CONSTRUCTION, NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY. IT IS RECOMMENDED THAT A LICENSED ARBORIST BE SECURED FOR THE TREATMENT OF ANY POSSIBLE TREE WOUNDS.
- NO DISTURBANCE OF THE SOIL GREATER THAN 4" SHALL BE LOCATED CLOSER TO THE TREE TRUNK THAN 1/2 THE DISTANCE OF THE DRIP LINE TO THE TREE TRUNK. A MINIMUM OF 75% OF THE DRIP LINE AND ROOT ZONE SHALL BE PRESERVED AT NATURAL GRADE.
- ANY FINE GRADING DONE WITHIN THE CRITICAL ROOT ZONES OF THE PROTECTED TREES MUST BE DONE WITH LIGHT MACHINERY SUCH AS A BOBCAT OR LIGHT TRACTOR. NO EARTH MOVING EQUIPMENT WITH TRACKS IS ALLOWED WITHIN THE CRITICAL ROOT ZONE OF THE TREES.
- NO MATERIALS INTENDED FOR USE IN CONSTRUCTION OR WASTE MATERIALS ACCUMULATED DUE TO EXCAVATION OR DEMOLITION SHALL BE PLACED WITHIN THE LIMITS OF THE DRIP LINE OF ANY TREE.
- NO EQUIPMENT MAY BE CLEANED OR TOXIC SOLUTIONS, OR OTHER LIQUID CHEMICALS, SHALL BE DEPOSITED WITHIN THE LIMITS OF THE DRIP LINE OF A TREE, INCLUDING BUT NOT LIMITED TO: PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR, PRIMERS, ETC.
- NO SIGNS, WIRES OR OTHER ATTACHMENTS, OTHER THAN THOSE OF A PROTECTIVE NATURE, SHALL BE ATTACHED TO ANY TREE.
- NO VEHICULAR / CONSTRUCTION EQUIPMENT TRAFFIC OR PARKING IS ALLOWED WITHIN THE LIMITS OF THE DRIP LINE OF TREES.
- BORING OF UTILITIES MAY BE PERMITTED UNDER PROTECTED TREES IN CERTAIN CIRCUMSTANCES. THE MINIMUM LENGTH OF THE BORE SHALL BE THE WIDTH OF THE TREE'S CANOPY AND SHALL BE A MINIMUM DEPTH OF FORTY-EIGHT (48") INCHES.
- IRRIGATION TRENCHING WHICH MUST BE DONE WITHIN THE CRITICAL ROOT ZONE OF A TREE SHALL BE DONE BY HAND AND ENTER THE AREA IN A RADIAL MANNER.
- ALL TREES TO BE REMOVED FROM THE SITE SHALL BE FLAGGED BY THE CONTRACTOR WITH BRIGHT RED VINYL TAPES 12" WIDE WRAPPED AROUND THE MAIN TRUNK AT A HEIGHT OF FOUR (4') FEET ABOVE GRADE. FLAGGING SHALL BE APPROVED BY OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO ANY TREE REMOVAL. CONTRACTOR SHALL CONTACT OWNER'S AUTHORIZED REPRESENTATIVE WITH 72 HOURS NOTICE TO SCHEDULE ON-SITE MEETING.
- ALL TREES TO REMAIN, AS NOTED ON DRAWINGS, SHALL HAVE PROTECTIVE FENCING LOCATED AT THE TREE'S DRIP LINE. THE PROTECTIVE FENCING MAY BE COMPOSED OF SNOW FENCING, ORANGE CONSTRUCTION FENCING, CHAIN LINK FENCE OR OTHER SIMILAR FENCING WITH A FOUR (4') FOOT APPROXIMATE HEIGHT. THE PROTECTIVE FENCING SHALL BE LOCATED AS INDICATED ON THE TREE PROTECTION DETAIL.
- WHEN A LOW HANGING LIMB IS BROKEN DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE OWNER'S AUTHORIZED REPRESENTATIVE IMMEDIATELY. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR PRUNE ANY PORTION OF THE DAMAGED TREE WITHOUT THE PRIOR APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

EXISTING TREE LEGEND

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- TREE PROTECTION FENCING TO REMAIN DURING CONSTRUCTION REFER TO 01.1.06
- UPLAND HABITAT ESA

MITIGATION SUMMARY

MITIGATION TREES REQUIRED
 (289) - Specimen Mitigation Trees
 (348) - Protected Mitigation Trees
 (637) - Total Mitigation Trees Required

MITIGATION TREES PROVIDED
 (289) - Specimen Mitigation Trees
 (348) - Protected Mitigation Trees
 (637) - Total Mitigation Trees Provided

REMAINING TREE REPLACEMENT FEE

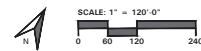
(404) - Mitigation Trees Remaining @ \$75 each
 Tree Replacement Fee - \$151,500.00

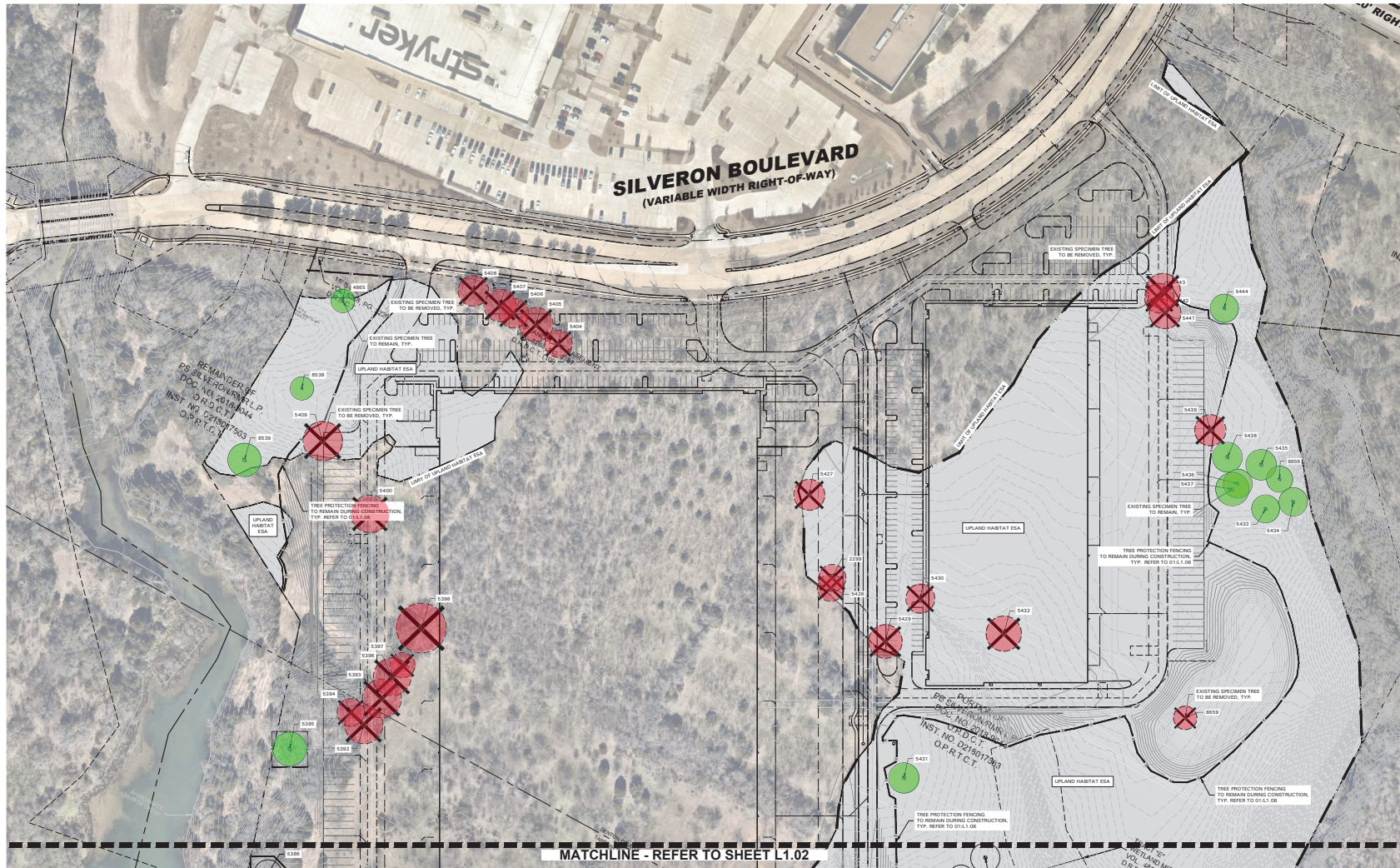
Upland Habitat ESA Mitigation

Refer to Tree Survey Field Data - Specimen Trees within ESA L1.00
 Total Monetary Value of ESA - \$395,550.00

TOTAL MITIGATION FEES - \$547,050.00

- 4245 North Central Expressway
- Suite 901
- Dallas, Texas 75245
- 214.898.7182





EXISTING TREE LEGEND

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED

TREE PROTECTION FENCING TO REMAIN DURING CONSTRUCTION
REFER TO 01/L1.06

UPLAND HABITAT ESA



SCALE: 1" = 80'-0"



4245 North Central Expressway
Suite 201
Dallas, Texas 75205
214.898.7182



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (F) • 972.361.6800 (T)



06/30/21
Professional Seal

SILVERON FLOWER MOUND, TEXAS TREE PRESERVATION PLAN

ISSUANCES

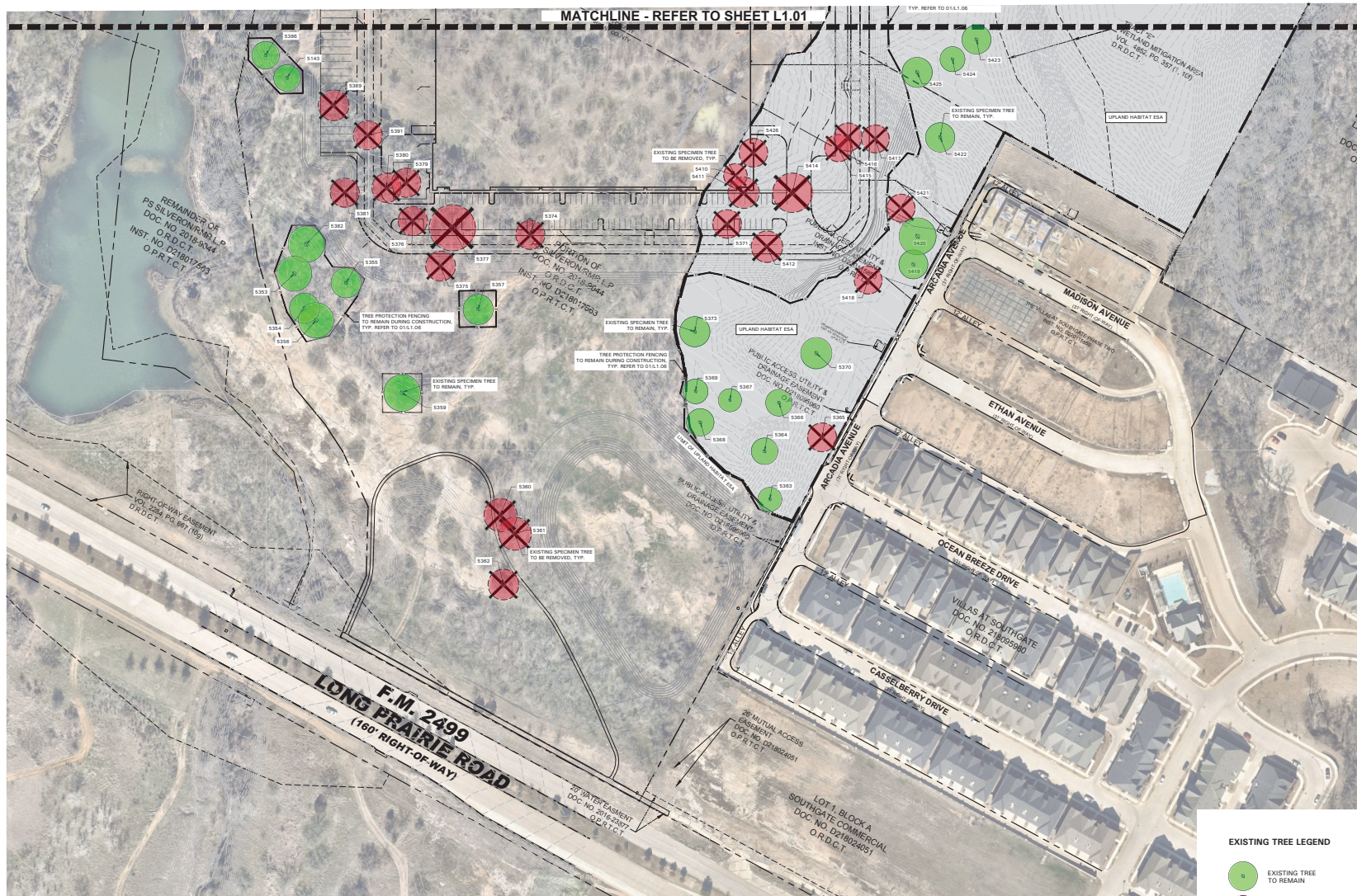
DRAWING INFORMATION

Scale: 1"=80'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
AVE Job #:

DRAWING / SHEET TITLE TREE PRESERVATION PLAN

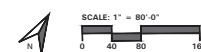
SHEET NUMBER

L1.01



EXISTING TREE LEGEND

- EXISTING TREE TO REMAIN
- ⊗ EXISTING TREE TO BE REMOVED
- TREE PROTECTION FENCING TO REMAIN DURING CONSTRUCTION REFER TO 01/L1.06
- UPLAND HABITAT ESA



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (P) • 972.361.6800 (F)



06/30/21
Professional Seal

SILVERON
FLOWER MOUND, TEXAS

TREE PRESERVATION PLAN

ISSUANCES

DRAWING INFORMATION

Scale: 1"=80'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
AVE Job #:

DRAWING / SHEET TITLE

TREE PRESERVATION
PLAN

SHEET NUMBER

L1.02



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (p) • 972.361.6800 (f)



Professional Seal

SILVERON
FLOWER MOUND, TEXAS
OVERALL LANDSCAPE PLAN

ISSUANCES	

DRAWING INFORMATION	
Scale:	1"=150'-0"
Date:	03/22/21
Checked By:	KAH
Drawn By:	RMT
Duke Realty Job #:	
A/E Job #:	

DRAWING / SHEET TITLE	
OVERALL LANDSCAPE PLAN	
SHEET NUMBER	
L2.00	

THE TOWN OF FLOWER MOUND - LAKESIDE BUSINESS DISTRICT (Campus Industrial)			
STREET YARD LANDSCAPING			
STANDARD	TOTAL STREET YARD	REQUIRED	PROVIDED
Min. 20% of street yard	288,152 s.f. of Street Yard	53,630 s.f. of Street Yard	58,651 s.f. of Street Yard
STREET YARD TREES			
STANDARD	TOTAL STREET YARD (SQUARE FEET)	REQUIRED	PROVIDED
Above 110,000 s.f. = 50 Trees + 1 Tree for every 5,000 s.f. over 110,000 s.f.	288,152 s.f. of Street Yard	82 Trees (3" cal.)	88 Trees (3" cal.)
STREET BUFFER LANDSCAPING			
STANDARD		REQUIRED BUFFER WIDTH	PROVIDED
Silveron Blvd.		25 ft.	25 ft.
FM 2499		25 ft.	25 ft.
STREET BUFFER TREES			
STANDARD	STREET FRONTAGE (LINEAR FEET)	REQUIRED	PROVIDED
1 per 40 l.f.	Silveron Blvd. = 1,516 l.f.	38 Trees (3" cal.)	46 Trees (3" cal.)
	FM 2499 = 563 l.f.	14 Trees (3" cal.)	17 Trees (3" cal.)
PARKING AREA LANDSCAPING			
STANDARD	# OF PARK SPACES	REQUIRED	PROVIDED
90 s.f. per 12 spaces	555 Parking Spaces	4,163 s.f.	?? s.f.
PARKING AREA TREES			
STANDARD	# OF PARK SPACES	REQUIRED	PROVIDED
1 per 10 parking spaes	555 parking spaces	56 trees (3" cal.)	?? trees (3" cal.)
** All parking spaces to be located within 50 ft. of Parking lot tree.			
*** 30% of the required parking lot trees can be small trees.			
PARKING AREA SCREENING			
STANDARD		Landscape berm or screening shrubs	PROVIDED
All head parking to be screened from street view		3' ht. Screen	Screening shrubs (3' ht.)
OPEN SPACE REQUIREMENTS			
STANDARD	TOTAL SITE AREA (SQUARE FEET)	REQUIRED	PROVIDED
5% of the site to be open space	1,322,330 s.f	66,117 s.f.	75,108 s.f.

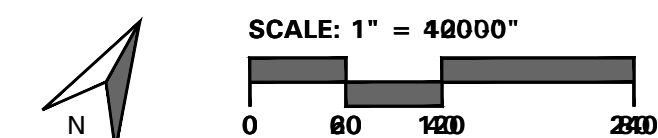
MITIGATION TREE LEGEND

M. MITIGATION TREE
(233) TOTAL

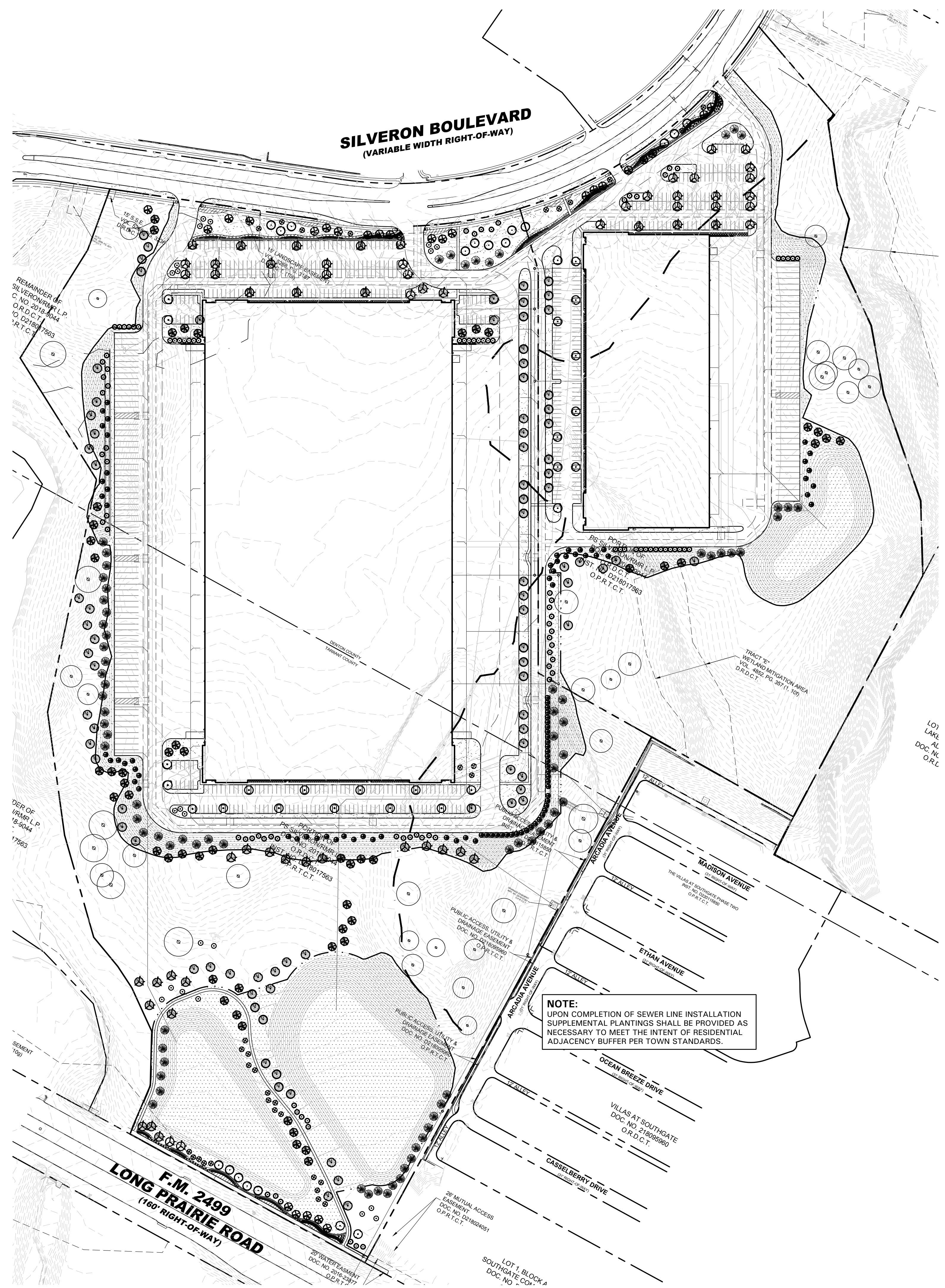
PLANT LIST

SYMBOL	BOTANICAL NAME TREES	COMMON NAME	QTY.	SIZE	REMARKS
AP	<i>Pinus edlarica</i>	Afgan Pine	102	6' ht.	B&B or container grown, full to base, 3' spread
CO	<i>Quercus muehlenbergii</i>	Chinkapin Oak	41	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
CM	<i>Lagerstroemia indica</i> 'Natchez'	Crepe Myrtle 'Natchez'	22	30 gal.	container grown, 3-5 trunk, no cross canes, 8' ht., 4' spread, matching
CP	<i>Pistacia chinensis</i>	Chinese Pistache	43	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
DC	<i>Cedrus deodara</i>	Deodar Cedar	85	4" cal.	container grown, 15' ht., 5' spread, 5' branching ht., matching
ERC	<i>Juniperus virginiana</i>	Eastern Redcedar	95	6' ht.	B&B or container grown, full to base, 3' spread
LE	<i>Ulmus parvifolia</i> 'Sempervirens'	Lacebark Elm	61	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
LO	<i>Quercus virginiana</i>	Live Oak	82	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
RB	<i>Cercis canadensis</i> 'Oklahoma'	Oklahoma Redbud	33	30 gal.	container grown, 8' ht., 4' spread min.
SO	<i>Quercus shumardii</i>	Shumard Red Oak	49	3" cal.	container grown, 12' ht., 4' spread, 4' branching ht., matching
SHRUBS/GROUND COVER					
DHG	<i>Pennisetum alopecuroides</i> 'Hameln'	Dwarf Hameln Grass	657	3 gal.	container full, 24" o.c.
DWM	<i>Myrica pusilla</i>	Dwarf Wax Myrtle	428	36" ht.	container full, 24" spread, 36" o.c.
LOR	<i>Loropetalum chinensis</i> 'Plum Delight'	Loropetalum 'Plum Delight'	851	3 gal.	container full, 18" spread, 24" o.c.
MIS	<i>Miscanthus sinensis</i> 'Adagio'	Miscanthus 'Adagio'	141	5 gal.	container full, 36" o.c.
NRS	<i>Ilex spp.</i> 'Nellie R. Stevens'	Nellie R. Stevens Holly	16	7 gal.	container full to base, 36" ht., 36" o.c.
SY	<i>Yucca recurvifolia</i>	Softleaf Yucca	92	5 gal.	container full, 36" o.c.
BS	<i>Carex divulsa</i>	Berkeley Sedge	514	1 gal.	container full, 30" o.c.
MFG	<i>Nassella tenuissima</i>	Mexican Feathergrass	1,434	1 gal.	container full, 24" o.c.
	<i>Cynodon dactylon</i>	Common Bermudagrass			solid sod, refer to Solid Sod Notes
	<i>Cynodon dactylon</i>	Common Bermudagrass			hydromulch, refer to Hydromulch Notes

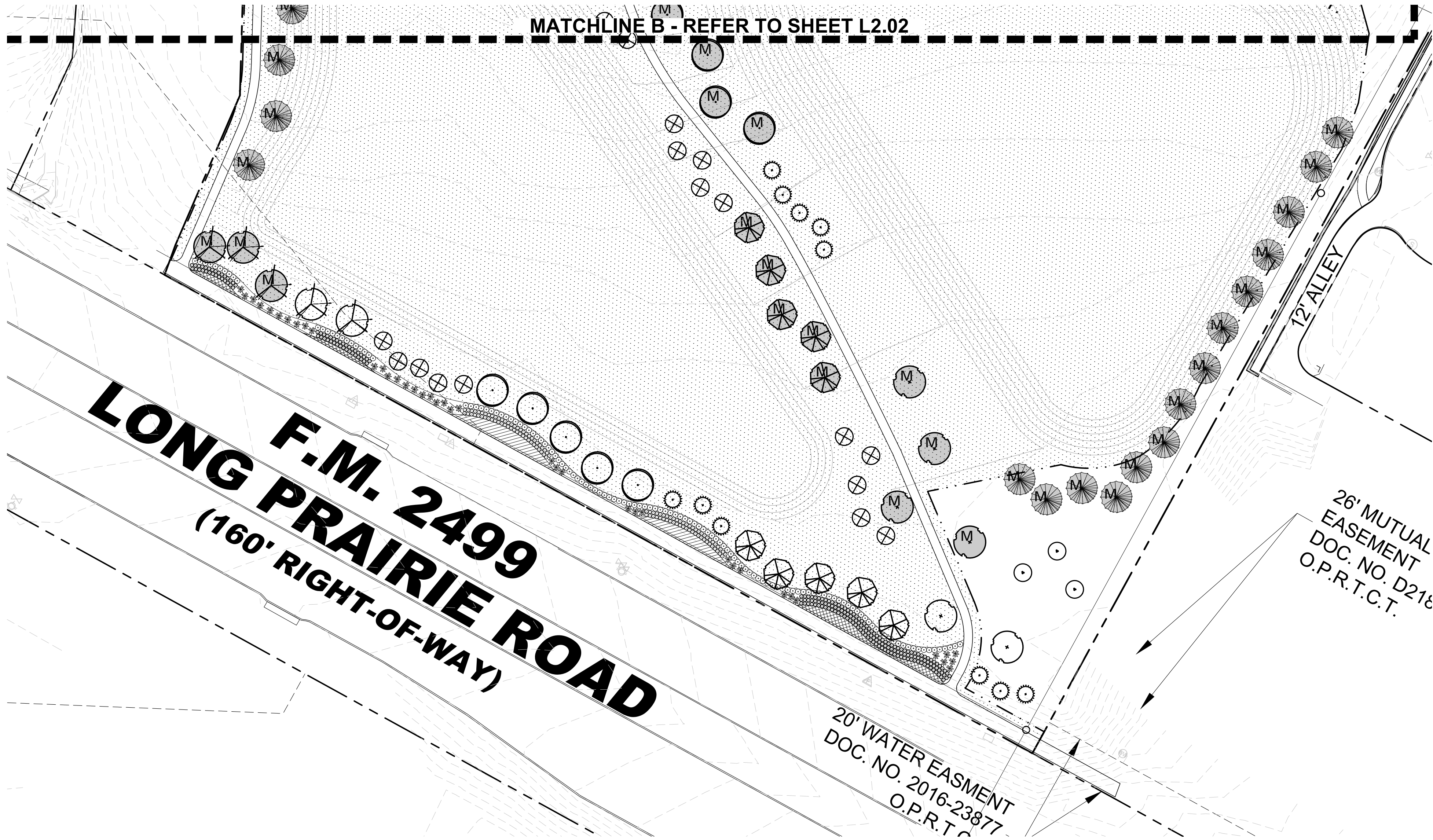
NOTE: ALL TREES SHALL HAVE STRAIGHT TRUNKS AND BE MATCHING WITHIN VARIETIES.
PLANT LIST IS AN AID TO BIDDERS ONLY. CONTRACTOR SHALL VERIFY ALL QUANTITIES ON PLAN.
ALL HEIGHTS AND SPREADS ARE MINIMUMS. ALL PLANT MATERIAL SHALL MEET OR EXCEED REMARKS AS INDICATED.



• 4245 North Central Expy
• Suite 501
• Dallas, Texas 75205
• 214.865.7192 office



NOTE:
UPON COMPLETION OF SEWER LINE INSTALLATION
SUPPLEMENTAL PLANTINGS SHALL BE PROVIDED AS
NECESSARY TO MEET THE INTENT OF RESIDENTIAL
ADJACENCY BUFFER PER TOWN STANDARDS.



NOTE:

REMOVE EXISTING BARBED WIRE FENCE AND CLEAN FENCE LINE AT RESIDENTIAL ADJACENCY.

UPON COMPLETION OF SEWER LINE INSTALLATION SUPPLEMENTAL PLANTINGS SHALL BE PROVIDED AS NECESSARY TO MEET THE INTENT OF RESIDENTIAL ADJACENCY BUFFER PER TOWN STANDARDS.

PLANT LEGEND	
SYMBOL	COMMON NAME
AP	Afgan Pine
CO	Chinkapin Oak
CM	Crepe Myrtle 'Natchez'
CP	Chinese Pistache
DC	Deodar Cedar
ERC	Eastern Redcedar
LE	Lacebark Elm
LO	Live Oak
RB	Oklahoma Redbud
SO	Shumard Red Oak
DHG	Dwarf Hameln Grass
DWM	Dwarf Wax Myrtle
LOR	Loropetalum 'Plum Delight'
MIS	Miscanthus 'Adagio'
NRS	Nellie R. Stevens Holly
SY	Softleaf Yucca
BS	Berkeley Sedge
MFG	Mexican Feathergrass
	Common Bermudagrass Solid Sod
	Common Bermudagrass Hydromulch

- LANDSCAPE NOTES**
- CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED SITE ELEMENTS AND NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES. SURVEY DATA OF EXISTING CONDITIONS WAS SUPPLIED BY OTHERS.
 - CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICTS. CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING IN THE VICINITY OF UNDERGROUND UTILITIES.
 - CONTRACTOR SHALL PROVIDE A MINIMUM 2% SLOPE AWAY FROM ALL STRUCTURES.
 - CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED. LEAVE AREAS TO RECEIVE TOPSOIL 3" BELOW FINAL FINISHED GRADE IN PLANTING AREAS AND 1" BELOW FINAL FINISHED GRADE IN LAWN AREAS.
 - ALL PLANTING BEDS AND LAWN AREAS SHALL BE SEPARATED BY STEEL EDGING. NO STEEL EDGING SHALL BE INSTALLED ADJACENT TO BUILDINGS, WALKS, OR CURBS. CUT STEEL EDGING AT 45 DEGREE ANGLE WHERE IT INTERSECTS WALKS AND CURBS.
 - TOP OF MULCH SHALL BE 1/2" MINIMUM BELOW THE TOP OF WALKS AND CURBS.
 - ALL LAWN AREAS SHALL BE SOLID SOD BERMUDAGRASS, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - ALL REQUIRED LANDSCAPE AREAS SHALL BE PROVIDED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM WITH RAIN AND FREEZE SENSORS AND EVAPOTRANSPIRATION (ET) WEATHER-BASED CONTROLLERS AND SAID IRRIGATION SYSTEM SHALL BE DESIGNED BY A QUALIFIED PROFESSIONAL AND INSTALLED BY A LICENSED IRRIGATOR.
 - CONTRACTOR SHALL PROVIDE BID PROPOSAL LISTING UNIT PRICES FOR ALL MATERIAL PROVIDED.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED LANDSCAPE AND IRRIGATION PERMITS.

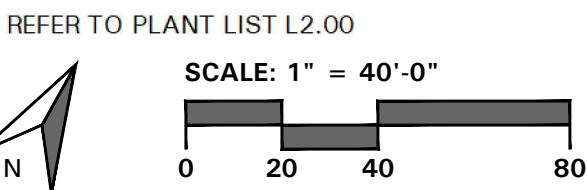
- MAINTENANCE NOTES**
- THE OWNER, TENANT AND THEIR AGENT, IF ANY, SHALL BE JOINTLY AND SEVERALLY RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE.
 - ALL LANDSCAPE SHALL BE MAINTAINED IN A NEAT AND ORDERLY MANNER AT ALL TIMES. THIS SHALL INCLUDE MOWING, EDGING, PRUNING, FERTILIZING, WATERING, WEEDING AND OTHER SUCH ACTIVITIES COMMON TO LANDSCAPE MAINTENANCE.
 - ALL LANDSCAPE AREAS SHALL BE KEPT FREE OF TRASH, LITTER, WEEDS AND OTHER SUCH MATERIAL OR PLANTS NOT PART OF THIS PLAN.
 - ALL PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY AND GROWING CONDITION AS IS APPROPRIATE FOR THE SEASON OF THE YEAR.
 - ALL PLANT MATERIAL WHICH DIES SHALL BE REPLACED WITH PLANT MATERIAL OF EQUAL OR BETTER VALUE.
 - CONTRACTOR SHALL PROVIDE SEPARATE BID PROPOSAL FOR ONE YEAR'S MAINTENANCE TO BEGIN AFTER FINAL ACCEPTANCE.

- GENERAL LAWN NOTES**
- CONTRACTOR SHALL COORDINATE OPERATIONS AND AVAILABILITY OF EXISTING TOPSOIL WITH ON-SITE CONSTRUCTION MANAGER.
 - CONTRACTOR SHALL LEAVE LAWN AREAS 1" BELOW FINAL FINISHED GRADE PRIOR TO TOPSOIL INSTALLATION.
 - CONTRACTOR SHALL FINE GRADE AREAS TO ACHIEVE FINAL CONTOURS AS INDICATED ON CIVIL PLANS. ADJUST CONTOURS TO ACHIEVE POSITIVE DRAINAGE AWAY FROM BUILDINGS. PROVIDE UNIFORM ROUNDING AT TOP AND BOTTOM OF SLOPES AND OTHER BREAKS IN GRADE. CORRECT IRREGULARITIES AND AREAS WHERE WATER MAY STAND.
 - ALL LAWN AREAS SHALL BE FINE GRADED, IRRIGATION TRENCHES COMPLETELY SETTLED AND FINISH GRADE APPROVED BY THE OWNER'S CONSTRUCTION MANAGER OR LANDSCAPE ARCHITECT PRIOR TO LAWN INSTALLATION.
 - CONTRACTOR SHALL REMOVE ALL ROCKS 3/4" DIAMETER AND LARGER, DIRT CLODS, STICKS, CONCRETE SPOILS, ETC. PRIOR TO PLACING TOPSOIL AND LAWN INSTALLATION.
 - CONTRACTOR SHALL MAINTAIN ALL LAWN AREAS UNTIL FINAL ACCEPTANCE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: MOWING, WATERING, WEEDING, CULTIVATING, CLEANING AND REPLACING DEAD OR BARE AREAS TO KEEP PLANTS IN A VIGOROUS, HEALTHY CONDITION.
 - CONTRACTOR SHALL GUARANTEE ESTABLISHMENT OF ACCEPTABLE TURF AREA AND SHALL PROVIDE REPLACEMENT FROM LOCAL SUPPLY IF NECESSARY.

- SOLID SOD NOTES**
- PLANT SOD BY HAND TO COVER INDICATED AREAS COMPLETELY. ENSURE EDGES OF SOD ARE TOUCHING. TOP DRESS JOINTS BY HAND WITH TOPSOIL TO FILL VOIDS.
 - ROLL GRASS AREAS TO ACHIEVE A SMOOTH, EVEN SURFACE, FREE FROM UNNATURAL UNDULATIONS.
 - WATER SOD THOROUGHLY AS SOD OPERATION PROGRESSES.
 - IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1 AND MARCH 1, OVER-SEED BERMUDAGRASS SOD WITH WINTER RYEGRASS, AT A RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1000) SQUARE FEET.

- HYDROMULCH NOTES**
- CONTRACTOR SHALL SCARIFY, RIP AND LOOSEN ALL AREAS TO BE HYDROMULCHED TO A MINIMUM DEPTH OF 4" PRIOR TO TOPSOIL AND HYDROMULCH INSTALLATION.
 - BERMUDAGRASS SEED SHALL BE EXTRA HULLED AND TREATED LAWN TYPE, SHALL BE DELIVERED TO THE SITE IN ITS ORIGINAL UNOPENED CONTAINER AND SHALL MEET STATE LAW REQUIREMENTS.
 - FIBER SHALL BE ONE HUNDRED PERCENT (100%) WOOD CELLULOSE FIBER, DELIVERED TO THE SITE IN ITS ORIGINAL UNOPENED CONTAINER AS MANUFACTURED BY 'CONWEB' OR EQUAL.
 - FIBER TACK SHALL BE DELIVERED TO THE SITE IN ITS ORIGINAL UNOPENED CONTAINER AND SHALL BE 'TERRO-TACK ONE', AS MANUFACTURED BY GROWERS, INC. OR EQUAL.
 - HYDROMULCH WITH BERMUDAGRASS SEED AT A RATE OF TWO (2) POUNDS PER ONE THOUSAND (1000) SQUARE FEET.
 - USE A 4'X8' BATTER BOARD AGAINST ALL BED AREAS.
 - IF INSTALLATION OCCURS BETWEEN SEPTEMBER 1 AND MAY 1, ALL HYDROMULCH AREAS TO BE WINTER RYEGRASS, AT A RATE OF FOUR (4) POUNDS PER ONE THOUSAND (1000) SQUARE FEET. CONTRACTOR SHALL BE REQUIRED TO RE-HYDROMULCH WITH BERMUDAGRASS THE FOLLOWING GROWING SEASON AS PART OF THIS CONTRACT.
 - ALL LAWN AREAS TO BE HYDROMULCHED SHALL HAVE ONE HUNDRED PERCENT (100%) COVERAGE PRIOR TO FINAL ACCEPTANCE.

- MITIGATION TREE LEGEND**
- M. MITIGATION TREE
(233) TOTAL

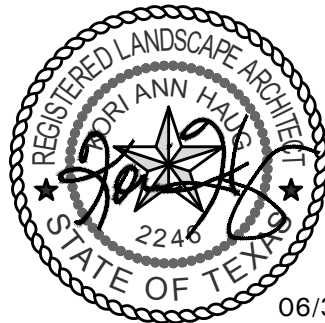


BELLE FIRMA

4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (p) • 972.361.6800 (f)



Professional Seal

SILVERON
FLOWER MOUND, TEXAS

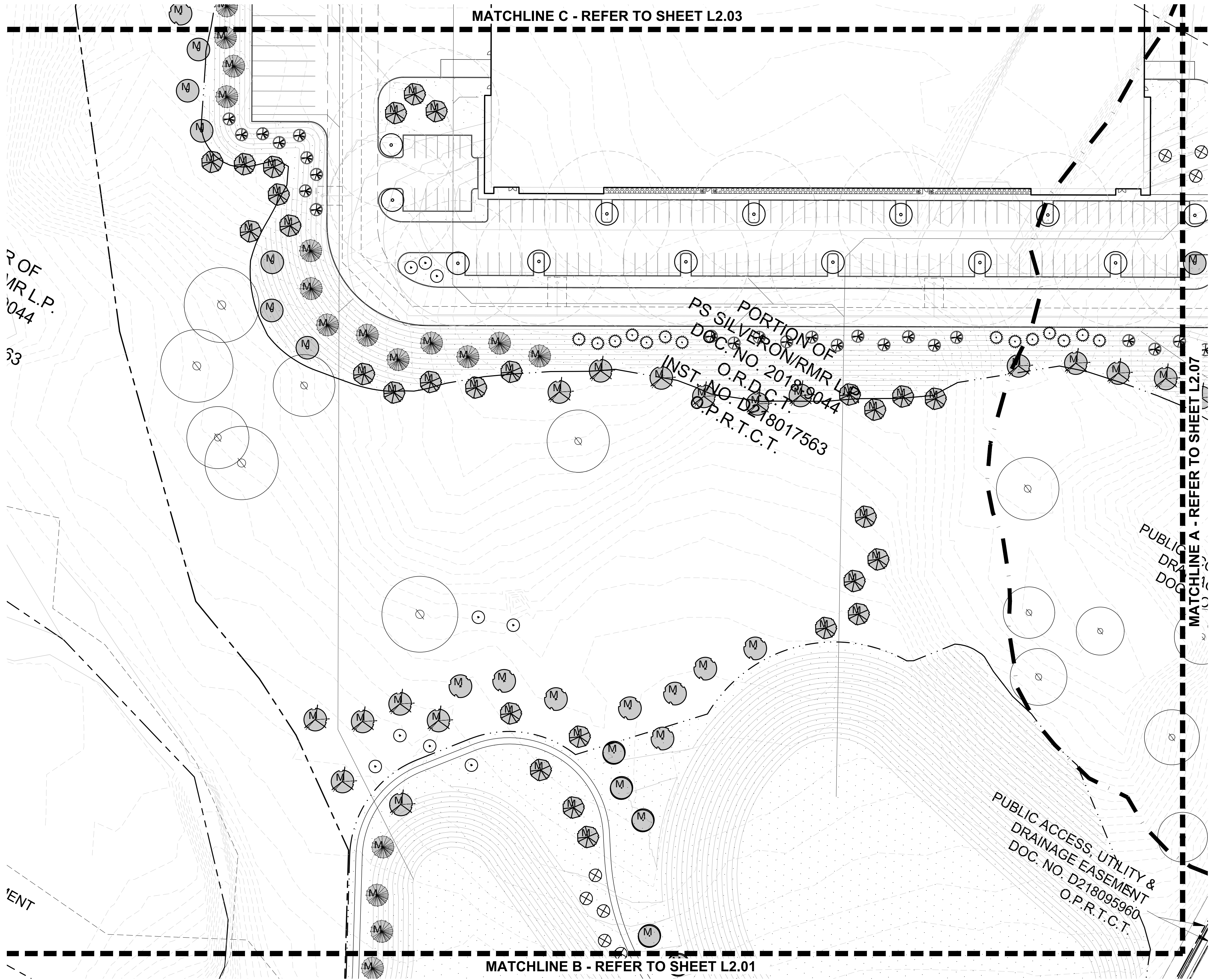
LANDSCAPE PLAN

ISSUANCES	

DRAWING INFORMATION	
Scale:	1"= 40'-0"
Date:	03/22/21
Checked By:	KAH
Drawn By:	RMT
Duke Realty Job #:	
A/E Job #:	

DRAWING / SHEET TITLE	
LANDSCAPE PLAN	

SHEET NUMBER	
L2.01	



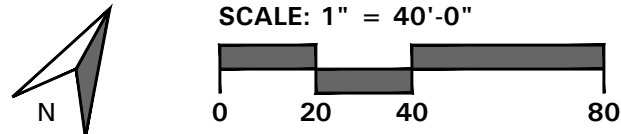
MITIGATION TREE LEGEND

M. MITIGATION TREE (233) TOTAL

PLANT LEGEND

SYMBOL	COMMON NAME
AP	Afghan Pine
CO	Chinkapin Oak
CM	Crepe Myrtle 'Natchez'
CP	Chinese Pistache
DC	Deodar Cedar
ERC	Eastern Redcedar
LE	Lacebark Elm
LO	Live Oak
RB	Oklahoma Redbud
SO	Shumard Red Oak
DHG	Dwarf Hameln Grass
DWM	Dwarf Wax Myrtle
LOR	Loropetalum 'Plum Delight'
MIS	Miscanthus 'Adagio'
NRS	Nellie R. Stevens Holly
SY	Softleaf Yucca
BS	Berkeley Sedge
MFG	Mexican Feathergrass
	Common Bermudagrass Solid Sod
	Common Bermudagrass Hydromulch

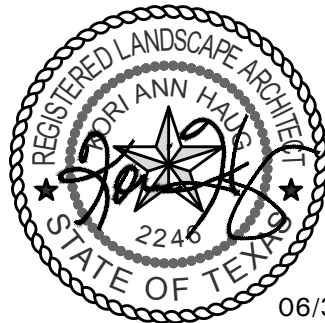
REFER TO PLANT LIST L2.00



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (p) • 972.361.6800 (f)



Professional Seal

SILVERON
FLOWER MOUND, TEXAS

LANDSCAPE PLAN

ISSUANCES

DRAWING INFORMATION

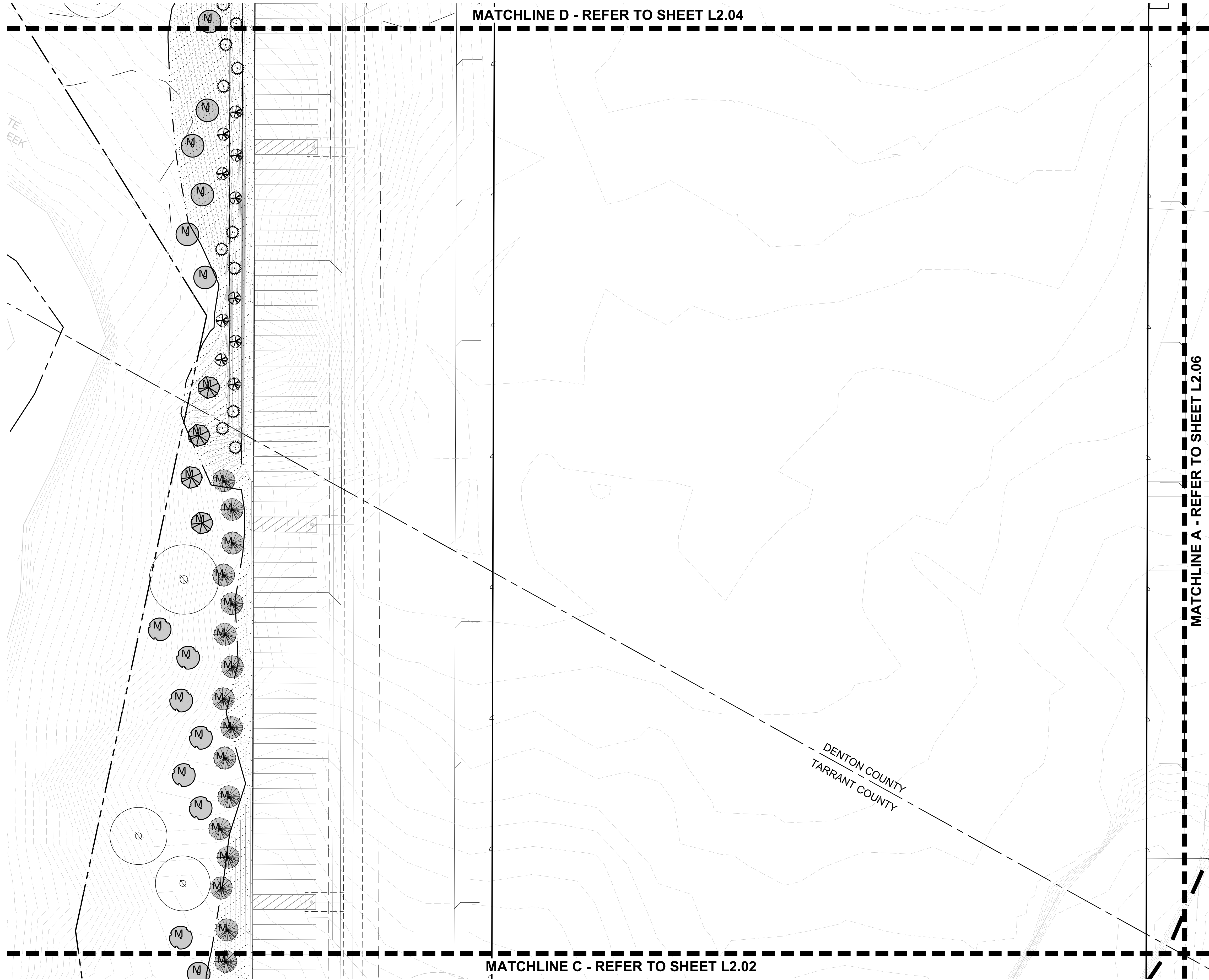
Scale: 1"= 40'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
A/E Job #:

DRAWING / SHEET TITLE

LANDSCAPE
PLAN

SHEET NUMBER

L2.02



MITIGATION TREE LEGEND

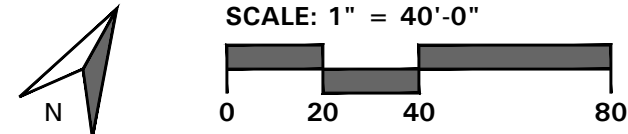
M.

MITIGATION TREE
(233) TOTAL

PLANT LEGEND

SYMBOL	COMMON NAME
AP	Afgan Pine
CO	Chinkapin Oak
CM	Crepe Myrtle 'Natchez'
CP	Chinese Pistache
DC	Deodar Cedar
ERC	Eastern Redcedar
LE	Lacebark Elm
LO	Live Oak
RB	Oklahoma Redbud
SO	Shumard Red Oak
DHG	Dwarf Hameln Grass
DWM	Dwarf Wax Myrtle
LOR	Loropetalum 'Plum Delight'
MIS	Miscanthus 'Adagio'
NRS	Nellie R. Stevens Holly
SY	Softleaf Yucca
BS	Berkeley Sedge
MFG	Mexican Feathergrass
	Common Bermudagrass Solid Sod
	Common Bermudagrass Hydromulch

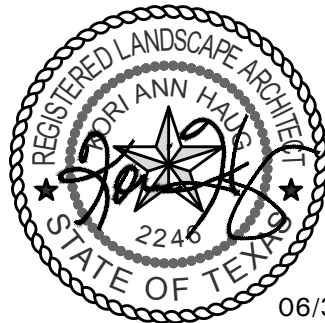
REFER TO PLANT LIST L2.00



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (p) • 972.361.6800 (f)



Professional Seal

SILVERON
FLOWER MOUND, TEXAS

LANDSCAPE PLAN

ISSUANCES

DRAWING INFORMATION

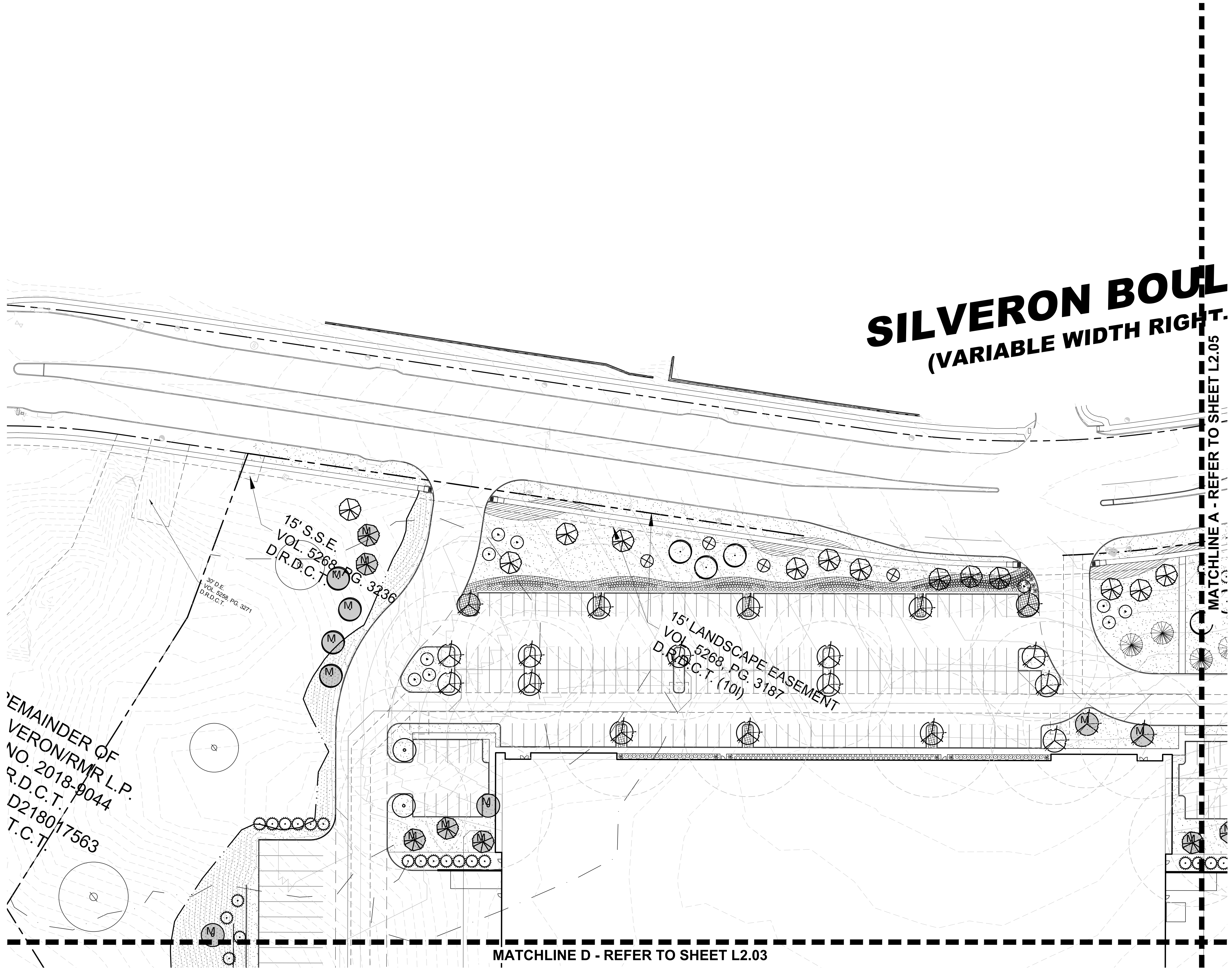
Scale: 1"= 40'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
A/E Job #:

DRAWING / SHEET TITLE

LANDSCAPE
PLAN

SHEET NUMBER

L2.03



SILVERON BOUL

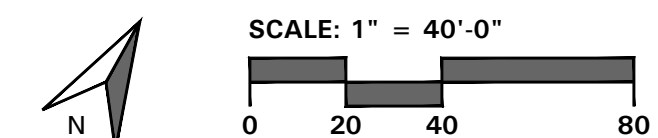
(VARIABLE WIDTH RIGHT-OF-WAY)

MATCHLINE A - REFER TO SHEET L2.05

MATCHLINE D - REFER TO SHEET L2.03

REMAINDER OF
VERON/RMR L.P.
NO. 2018-0044
R.D.C.T.
D218017563
T.C.T.

- MITIGATION TREE LEGEND**
- M. MITIGATION TREE (233) TOTAL
- PLANT LEGEND**
- | SYMBOL | COMMON NAME |
|--------|--------------------------------|
| AP | Afghan Pine |
| CO | Chinkapin Oak |
| CM | Crepe Myrtle 'Natchez' |
| CP | Chinese Pistache |
| DC | Deodar Cedar |
| ERC | Eastern Redcedar |
| LE | Lacebark Elm |
| LO | Live Oak |
| RB | Oklahoma Redbud |
| SO | Shumard Red Oak |
| DHG | Dwarf Hameln Grass |
| DWM | Dwarf Wax Myrtle |
| LOR | Loropetalum 'Plum Delight' |
| MIS | Miscanthus 'Adagio' |
| NRS | Nellie R. Stevens Holly |
| SY | Softleaf Yucca |
| BS | Berkeley Sedge |
| MFG | Mexican Feathergrass |
| | Common Bermudagrass Solid Sod |
| | Common Bermudagrass Hydromulch |
- REFER TO PLANT LIST L2.00



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (p) • 972.361.6800 (f)



Professional Seal

SILVERON
FLOWER MOUND, TEXAS

LANDSCAPE PLAN

ISSUANCES

DRAWING INFORMATION

Scale: 1"= 40'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
A/E Job #:

DRAWING / SHEET TITLE

LANDSCAPE
PLAN

SHEET NUMBER

L2.04

ULEVARD
(RIGHT-OF-WAY)

MATCHLINE A - REFER TO SHEET L2.04

MATCHLINE D - REFER TO SHEET L2.06

4874 PG. 1472
J.R.D.C.T.

DRAINAGE EASEMENT
VOL. 5208 PG. 3261
D.R.C.T. (10)

MITIGATION TREE LEGEND

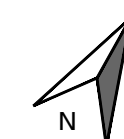
M. MITIGATION TREE
(233) TOTAL

PLANT LEGEND

SYMBOL	COMMON NAME
AP	Afghan Pine
CO	Chinkapin Oak
CM	Crepe Myrtle 'Natchez'
CP	Chinese Pistache
DC	Deodar Cedar
ERC	Eastern Redcedar
LE	Lacebark Elm
LO	Live Oak
RB	Oklahoma Redbud
SO	Shumard Red Oak
DHG	Dwarf Hameln Grass
DWM	Dwarf Wax Myrtle
LOR	Loropetalum 'Plum Delight'
MIS	Miscanthus 'Adagio'
NRS	Nellie R. Stevens Holly
SY	Softleaf Yucca

BS	Berkeley Sedge
MFG	Mexican Feathergrass
	Common Bermudagrass Solid Sod
	Common Bermudagrass Hydromulch

REFER TO PLANT LIST L2.00



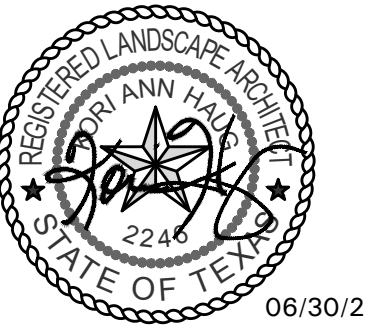
SCALE: 1" = 40'-0"
0 20 40 80



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (p) • 972.361.6800 (f)



06/30/21
Professional Seal

SILVERON
FLOWER MOUND, TEXAS

LANDSCAPE PLAN

ISSUANCES

DRAWING INFORMATION

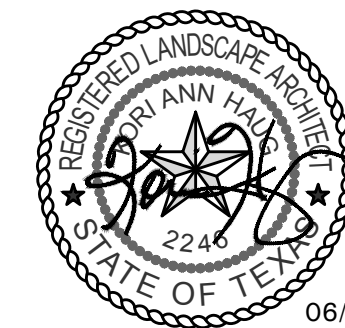
Scale: 1" = 40'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
A/E Job #:

DRAWING / SHEET TITLE

LANDSCAPE
PLAN

SHEET NUMBER

L2.05



Professional Seal

SILVERON
FLOWER MOUND, TEXAS

LANDSCAPE PLAN

ISSUANCES

DRAWING INFORMATION

Scale: 1" = 40'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
A/E Job #:

DRAWING / SHEET TITLE

LANDSCAPE
PLAN

SHEET NUMBER

L2.06

MITIGATION TREE LEGEND

M. MITIGATION TREE
(233) TOTAL

PLANT LEGEND

SYMBOL COMMON NAME

- | | |
|-----|-----------------------------------|
| AP | Afghan Pine |
| CO | Chinkapin Oak |
| CM | Crepe Myrtle 'Natchez' |
| CP | Chinese Pistache |
| DC | Deodar Cedar |
| ERC | Eastern Redcedar |
| LE | Lacebark Elm |
| LO | Live Oak |
| RB | Oklahoma Redbud |
| SO | Shumard Red Oak |
| DHG | Dwarf Hameln Grass |
| DWM | Dwarf Wax Myrtle |
| LOR | Loropetalum 'Plum Delight' |
| MIS | Miscanthus 'Adagio' |
| NRS | Nellie R. Stevens Holly |
| SY | Softleaf Yucca |
| BS | Berkeley Sedge |
| MFG | Mexican Feathergrass |
| | Common Bermudagrass
Solid Sod |
| | Common Bermudagrass
Hydromulch |

REFER TO PLANT LIST L2.00

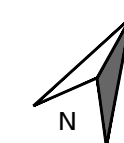
MATCHLINE D - REFER TO SHEET L2.05

MATCHLINE A - REFER TO SHEET L2.03

PORTION OF
PS SILVERON/RMR L.P.
DOC. NO. 2012-09044
ST. NO. Q.R.D.C.T.
O.P.R.T.C.T.
O.P.R.T.C.T. D218017563

TRACT "E"
WETLAND MITIGATION AREA
VOL. 4852, PG. 357 (1, 10f)
D.R.D.C.T.

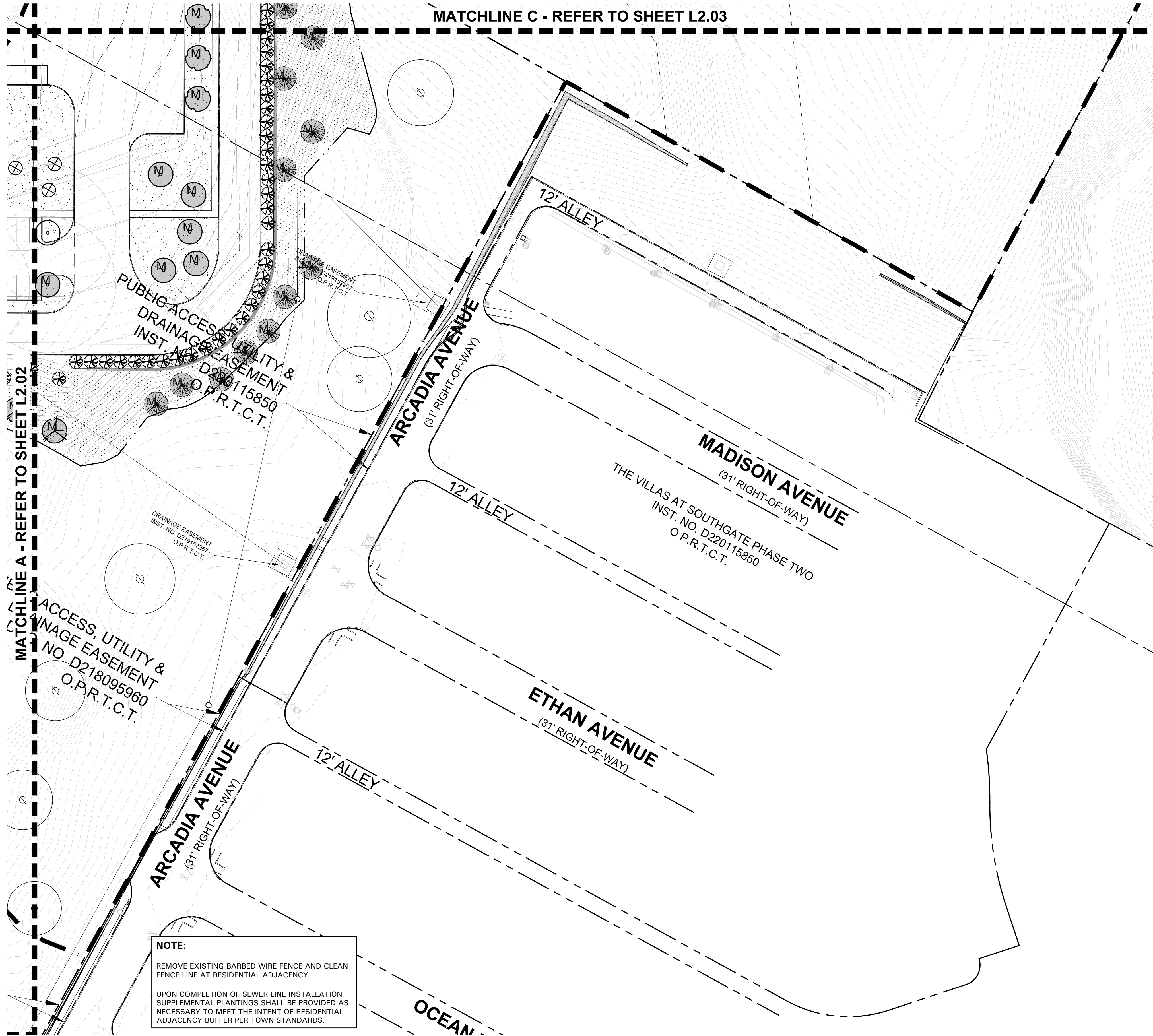
MATCHLINE C - REFER TO SHEET L2.07



SCALE: 1" = 40'-0"
0 20 40 80



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office



NOTE:
REMOVE EXISTING BARBED WIRE FENCE AND CLEAN FENCE LINE AT RESIDENTIAL ADJACENCY.
UPON COMPLETION OF SEWER LINE INSTALLATION SUPPLEMENTAL PLANTINGS SHALL BE PROVIDED AS NECESSARY TO MEET THE INTENT OF RESIDENTIAL ADJACENCY BUFFER PER TOWN STANDARDS.

MITIGATION TREE LEGEND

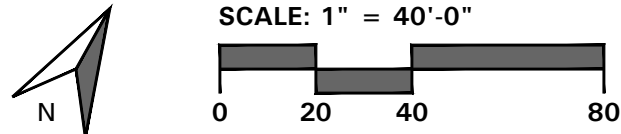
M. MITIGATION TREE
(233) TOTAL

PLANT LEGEND

SYMBOL	COMMON NAME
AP	Afgan Pine
CO	Chinkapin Oak
CM	Crepe Myrtle 'Natchez'
CP	Chinese Pistache
DC	Deodar Cedar
ERC	Eastern Redcedar
LE	Lacebark Elm
LO	Live Oak
RB	Oklahoma Redbud
SO	Shumard Red Oak
DHG	Dwarf Hameln Grass
DWM	Dwarf Wax Myrtle
LOR	Loropetalum 'Plum Delight'
MIS	Miscanthus 'Adagio'
NRS	Nellie R. Stevens Holly
SY	Softleaf Yucca

BS	Berkeley Sedge
MFG	Mexican Feathergrass
	Common Bermudagrass Solid Sod
	Common Bermudagrass Hydromulch

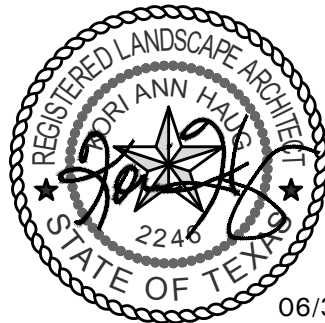
REFER TO PLANT LIST L2.00



4245 North Central Expy
Suite 501
Dallas, Texas 75205
214.865.7192 office



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (p) • 972.361.6800 (f)



Professional Seal

SILVERON
FLOWER MOUND, TEXAS

LANDSCAPE PLAN

ISSUANCES

DRAWING INFORMATION

Scale: 1"= 40'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
A/E Job #:

DRAWING / SHEET TITLE

**LANDSCAPE
PLAN**

SHEET NUMBER

L2.07

SECTION 32 9300 - LANDSCAPE

PART 1 - GENERAL

1.1 REFERENCED DOCUMENTS

- A. Refer to Landscape Plans, notes, details, bidding requirements, special provisions, and schedules for additional requirements.

1.2 DESCRIPTION OF WORK

- A. Work included: Furnish all supervision, labor, materials, services, equipment and appliances required to complete the work covered in conjunction with the landscaping covered in these specifications and landscaping plans, including:

- Planting (trees, shrubs and grasses)
- Bed preparation and fertilization
- Notification of sources
- Water and maintenance until final acceptance
- Guarantee

1.3 REFERENCE STANDARDS

- A. American Standard for Nursery Stock published by American Association of Nurserymen: April 14, 2014 Edition; by American National Standards Institute, Inc. (Z60.1) – plant material
- B. American Joint Committee on Horticultural Nomenclature: 1942 Edition of Standardized Plant Names.
- C. Texas Association of Nurserymen, Grades and Standards
- D. Hortis Third, 1976 - Cornell University

1.4 NOTIFICATION OF SOURCES AND SUBMITTALS

- A. Samples: Provide representative quantities of sandy loam soil, mulch, bed mix material, gravel, crushed stone, steel edging and tree stakes. Samples shall be approved by Owner's Authorized Representative before use on the project.

1.5 JOB CONDITIONS

- A. General Contractor to complete the following punch list: Prior to Landscape Contractor initiating any portion of landscape installation, General Contractor shall leave planting bed areas three (3") inches below final finish grade of sidewalks, drives and curbs as shown on the drawings. All lawn areas to receive solid sod shall be left one (1") inch below the final finish grade of sidewalks, drives and curbs. All construction debris shall be removed prior to Landscape Contractor beginning any work.
- B. Storage of materials and equipment at the job site will be at the risk of the Landscape Contractor. The Owner cannot be held responsible for theft or damage.

1.6 MAINTENANCE AND GUARANTEE

- A. Maintenance:
- The Landscape Contractor shall be held responsible for the maintenance of all work from the time of planting until final acceptance by the Owner. No trees, shrubs, groundcover or grass will be accepted unless they show healthy growth and satisfactory foliage conditions.
 - Maintenance shall include watering of trees and plants, cultivation, weeding spraying, edging, pruning of trees, moving of grass, cleaning up and all other work necessary of maintenance.
 - A written notice requesting final inspection and acceptance should be submitted to the Owner at least seven (7) days prior to completion. An on-site inspection by the Owner's Authorized Representative will be completed prior to written acceptance.
- B. Guarantee:

- Trees, shrubs and groundcover shall be guaranteed for a twelve (12) month period after final acceptance. The Contractor shall replace all dead materials as soon as weather permits and upon notification of the Owner. Plants, including trees, which have partially died so that shape, size, or symmetry have been damaged, shall be considered subject to replacement. In such cases, the opinion of the Owner shall be final.

- a. Plants used for replacement shall be of the same size and kind as those originally planted and shall be planted as originally specified. All work, including materials, labor and equipment used in replacements, shall carry a twelve (12) month guarantee. Any damage, including ruts in lawn or bed areas, incurred as a result of making replacements shall be immediately repaired.
- b. At the direction of the Owner, plants may be replaced at the start of the next year's planting season. In such cases, dead plants shall be removed from the premises immediately.
- c. When plant replacements are made, plants, soil mix, fertilizer and mulch are to be utilized as originally specified and re-inspected for full compliance with the contract requirements. All replacements are to be included under "Work" of this section.

- The Owner agrees that for the guarantee to be effective, he will water plants at least twice a week during dry periods and cultivate beds once a month after final acceptance.
- The above guarantee shall not apply where plants die after acceptance because of injury from storms, hail, freeze, insects, diseases, injury by humans, machines or theft.
- Acceptance for all landscape work shall be given after final inspection by the Owner provided the job is in a complete, undamaged condition and there is a stand of grass in all lawn areas. At that time, the Owner will assume maintenance on the accepted work.

- C. Repairs: Any necessary repairs under the Guarantee must be made within ten (10) days after receiving notice, weather permitting. In the event the Landscape Contractor does not make repairs accordingly, the Owner, without further notice to Contractor, may provide materials and men to make such repairs at the expense to the Landscape Contractor.

1.7 QUALITY ASSURANCE

- A. General: Comply with applicable federal, state, county and local regulations governing landscape materials and work.
- B. Personnel: Employ only experienced personnel who are familiar with the required work. Provide full time supervision by a qualified foreman acceptable to Landscape Architect.
- C. Selection of Plant Material:
- Make contact with suppliers immediately upon obtaining notice of contract acceptance to select and book materials. Develop a program of maintenance (pruning and fertilization) which will ensure the purchased materials will meet and / or exceed project specifications.
 - Substitutions: Do not make plant material substitutions. If the specified landscape material is not obtainable, submit proof of non-availability to Landscape Architect, together with proposal for use of equivalent material. At the time bids are submitted, the Contractor is assumed to have located the materials necessary to complete the job as specified.
 - Landscape Architect will provide a key identifying each tree location on site. Written verification will be required to document material selection, source and delivery schedules to site.
 - Measurements: Measure trees with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements six inches above ground for trees up to and including 4" caliper size, and twelve inches above ground for larger sizes. Measure main body of all plant material of height and spread dimensions.

do not measure from branch or root tip-to-tip.

- Owner's Authorized Representative shall inspect all plant material with requirements for genus, species, cultivar / variety size and quality.
- Owner's Authorized Representative retains the right to further inspect all plant material upon arrival to the site and during installation for size and condition of root balls and root systems, limbs, branching habit, insects, injuries and latent defects.
- Owner's Authorized Representative may reject unsatisfactory or defective material at any time during the process work. Remove rejected materials immediately from the site and replace with acceptable material at no additional cost to the Owner. Plants damaged in transit or at job site shall be rejected.

1.8 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Preparation:

- Balled and Burlapped (B&B) Plants: Dig and prepare shipment in a manner that will not damage roots, branches, shape and future development.

- Container Grown Plants: Deliver plants in rigid container to hold ball shape and protect root mass.

B. Delivery:

- Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored on site.
- Deliver only plant materials that can be planted in one day unless adequate storage and watering facilities are available on job site.
- Protect root balls by heeling in with sawdust or other approved moisture retaining material if not planted within 24 hours of delivery.
- Protect plants during delivery to prevent damage to root balls or desiccation of leaves. Keep plants moist at all times. Cover all materials during transport.
- Notify Owner's Authorized Representative of delivery schedule 72 hours in advance job site.
- Remove rejected plant material immediately from job site.
- To avoid damage or stress, do not lift, move, adjust to plumb, or otherwise manipulate plants by trunk or stems.

PART 2 - PRODUCTS

2.1 PLANTS

- A. General: Well-formed No. 1 grade or better nursery grown stock. Listed plant heights are from tops of root balls to nominal tops of plants. Plant spread refers to nominal outer width of the plant, not to the outer leaf tips. Plants will be individually approved by the Owner's Authorized Representative and his decision as to their acceptability shall be final.
- B. Quantities: The drawings and specifications are complementary. Anything called for on one and not the other is as binding as if shown and called for on both. The plant schedule is an aid to bidders only. Confirm all quantities on plan.
- C. Quality and size: Plant materials shall conform to the size given on the plan, and shall be healthy, symmetrical, well-shaped, full branched and well rooted. The plants shall be free from injurious insects, diseases, injuries to the bark or roots, broken branches, objectionable disfigurements, insect eggs and larvae, and are to be of specimen quality.
- D. Approval: All plants which are found unsuitable in growth, or are in any unhealthy, badly shaped or undersized condition will be rejected by the Owner's Authorized Representative either before or after planting and shall be removed at the expense of the Landscape Contractor and replaced with acceptable plant as specified at no additional cost to the Owner.

specified at no additional cost to the Owner.

- Trees shall be healthy, full-branched, well-shaped, and shall meet the minimum trunk and diameter requirements of the plant schedule. Balls shall be firm, neat, slightly tapered and well wrapped in burlap. Any tree loose in the ball or with a broken root ball at time of planting will be rejected. Balls shall be ten (10") inches in diameter for each one (1") inch of trunk diameter, measured six (6") inches above ball. (Nomenclature confirms to the customary nursery usage. For clarification, the term "multi-trunk" defines a plant having three (3) or more trunks of nearly equal diameter.)

- Pruning: All pruning of trees and shrubs, as directed by the Landscape Architect prior to final acceptance, shall be executed by the Landscape Contractor at no additional cost to the Owner.

2.2 SOIL PREPARATION MATERIALS

A. Sandy Loam:

- Friable, fertile, dark, loamy soil, free of clay lumps, subsoil, stones and other extraneous material and reasonably free of weeds and foreign grasses. Loam containing Dallasgrass or Nutgrass shall be rejected.
- Physical properties as follows:
 - Clay – between 7-27 percent
 - Silt – between 15-25 percent
 - Sand – less than 52 percent
- Organic matter shall be 3%-10% of total dry weight.

- If requested, Landscape Contractor shall provide a certified soil analysis conducted by an approved soil testing laboratory verifying that sandy loam meets the above requirements.

- B. Organic Material: Compost with a mixture of 80% vegetative matter and 20% animal waste. Ingredients should be a mix of coarse and fine textured material.

- C. Premixed Bedding Soil as supplied by Vital Earth Resources, Gladewater, Texas; Professional Bedding Soil as supplied by Living Earth Technology, Dallas, Texas or Acid Gro Municipal Mix as supplied by Soil Building Systems, Dallas, Texas or approved equal.

- D. Sharp Sand: Sharp sand must be free of seeds, soil particles and weeds.

- E. Mulch: Double Shredded Hardwood Mulch, partially decomposed, dark brown. Living Earth Technologies or approved equal.

- F. Organic Fertilizer: Fertilaid, Sustane, or Green Sense or equal as recommended for required applications. Fertilizer shall be delivered to the site in original unopened containers, each bearing the manufacturer's guaranteed statement of analysis.

- G. Commercial Fertilizer: 10-20-10 or similar analysis. Nitrogen source to be a minimum 50% slow release organic Nitrogen (SCU or UF) with a minimum 8% sulfur and 4% iron, plus micronutrients.

- H. Peat: Commercial sphagnum peat moss or partially decomposed shredded pine bark or other approved organic material.

2.3 MISCELLANEOUS MATERIALS

- A. Steel Edging: All steel edging shall be 3/16" thick x 4" deep x 16' long with 6 stakes per section, painted black at the factory as manufactured by The J.D. Russell Company and under its trade name DURAEEDGE Heavy Duty Steel.

- B. Staking Material for Shade Trees: refer to details.

- C. Gravel: Washed native pea gravel, graded 1 inch to 1-1/2 inch.

- D. Filter Fabric: 'Mirafi Mirascape' by Mirafi Construction Products available at Lone Star Products, Inc., (469) 523-0444 or approved equal.

- E. River Rock: 'Colorado' or native river rock, 2" - 4" dia.

TREE PLANTING DETAIL LEGEND AND NOTES

- A. TREE: TREES SHALL CONFORM WITH LATEST AMERICAN STANDARD FOR NURSERY STOCK. www.anla.org
- B. TREE PIT: WIDTH TO BE AT LEAST TWO (2) TIMES THE DIAMETER OF THE ROOT BALL CENTER TREE IN HOLE & REST ROOT BALL ON UNDISTURBED NATIVE SOIL.
- C. ROOT BALL: REMOVE TOP 1/2 BURLAP AND ANY OTHER FOREIGN OBJECT; CONTAINER GROWN STOCK TO BE INSPECTED FOR GIRDLING ROOTS.
- D. ROOT FLARE: ENSURE THAT ROOT FLARE IS EXPOSED, FREE FROM MULCH, AND AT LEAST TWO INCHES ABOVE GRADE. TREES SHALL BE REJECTED WHEN GIRDLING ROOTS ARE PRESENT & ROOT FLARE IS NOT APPARENT.
- E. ROOTBALL ANCHOR RING: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. PLACE ROOTBALL ANCHOR RING ON BASE OF ROOTBALL. TRUNK SHOULD BE IN THE CENTER OF THE RING.
- F. ROOT ANCHOR BY TREE STAKE SOLUTIONS.
- G. NAIL STAKE: REFER TO MANUFACTURER'S GUIDELINES FOR SIZING. INSTALL NAIL STAKES WITH HAMMER OR MALLET FIRMLY INTO UNDISTURBED GROUND. DRIVE NAIL STAKES FLUSH WITH "U" BRACKET ADJACENT TO ROOTBALL (DO NOT DISTURB ROOTBALL).

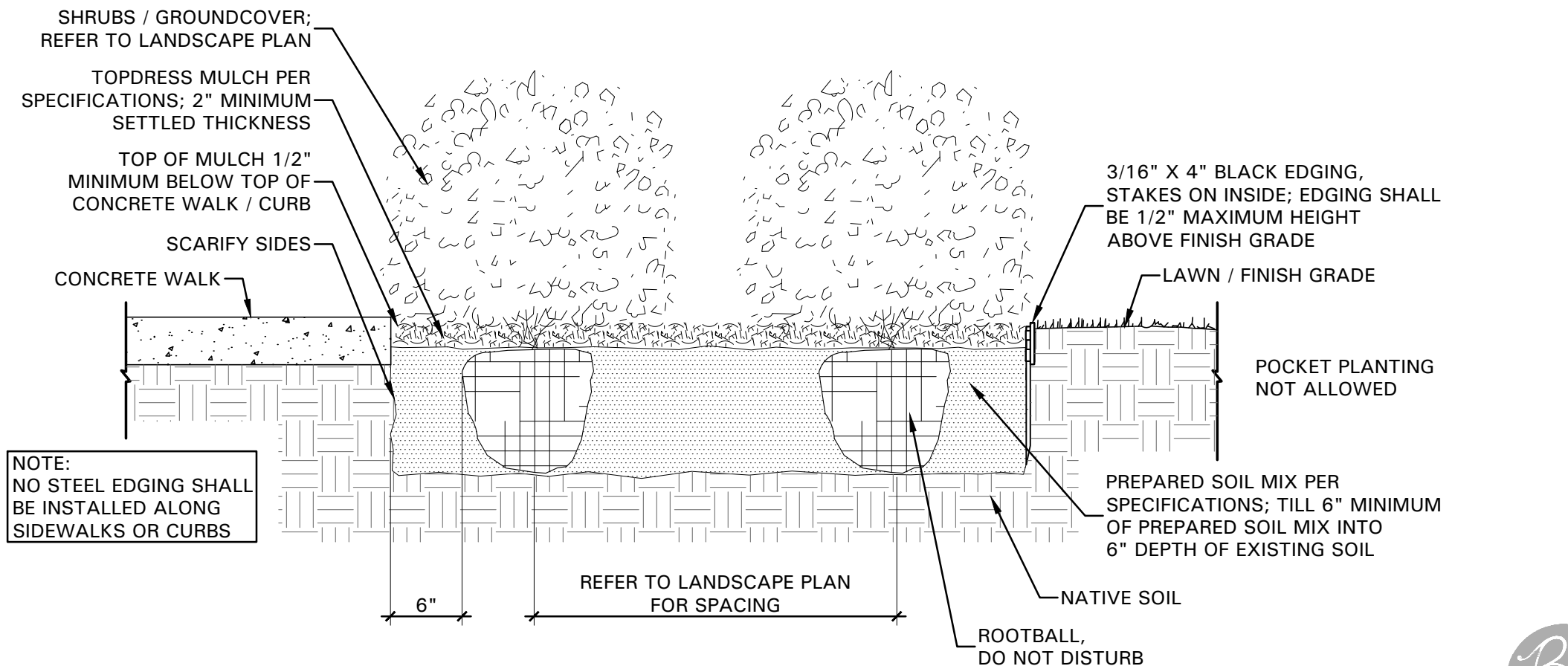
- H. BACKFILL: USE EXISTING NATIVE SOIL (no amendments) WATER THOROUGHLY TO ELIMINATE AIR POCKETS.

- I. MULCH: DOUBLE SHREDDED HARDWOOD MULCH 2 INCH SETTLED THICKNESS. WITH 2" HT. WATERING RING; ENSURE THAT ROOT FLARE IS EXPOSED. BELOW GROUND STAKE SHOULD NOT BE VISIBLE.

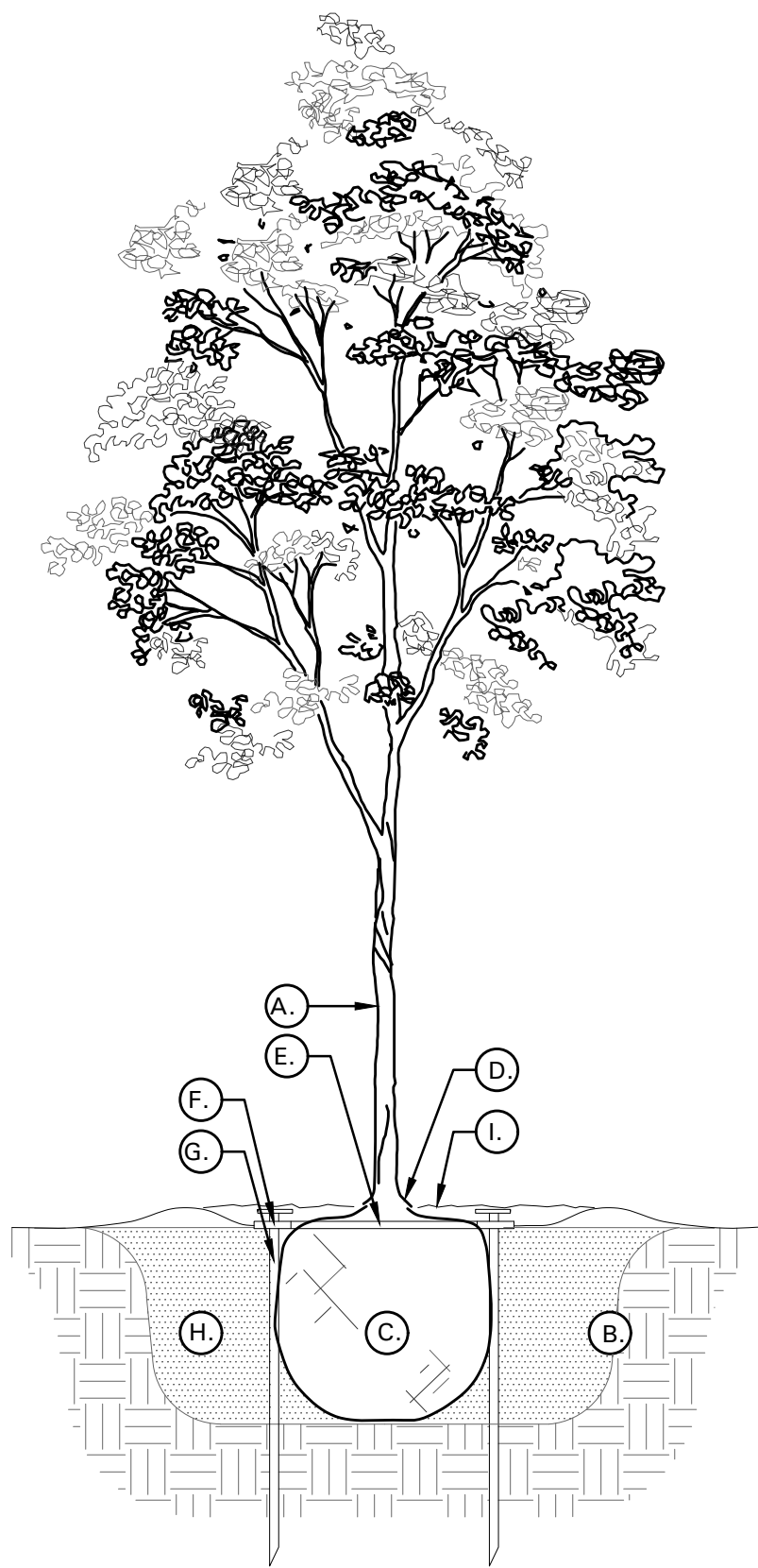
- J. TREE STAKES: TREE STAKE SOLUTIONS 'SAFETY STAKE' BELOW GROUND MODEL AVAILABLE FROM: Tree Stake Solutions ATTN: Jeff Tuley (903) 676-6143 jeff@treestakesolutions.com www.treestakesolutions.com

- OR APPROVED EQUAL. TREES SHALL BE STAKED BELOW GROUND WHERE NECESSARY; ABOVE GROUND STAKING IS EXPRESSLY PROHIBITED.

- K. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN A COPY OF THE MANUFACTURER'S SPECIFICATIONS PRIOR TO INSTALLATION OF TREE STAKES. CONTRACTOR SHALL ADHERE TO MANUFACTURER'S INSTALLATION GUIDELINES, SPECIFICATIONS, AND OTHER REQUIREMENTS FOR TREE STAKE INSTALLATION.



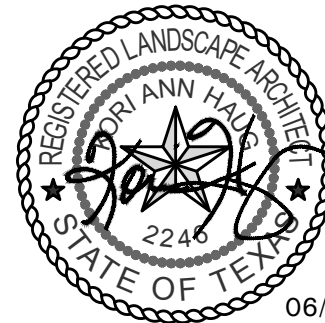
02 SHRUB / GROUNDCOVER DETAIL
NOT TO SCALE



01 TREE PLANTING DETAIL
NOT TO SCALE



14241 Dallas Parkway, Suite 1000
Dallas, TX 75254
972.361.6700 (p) • 972.361.6800 (f)



06/30/21
Professional Seal

SILVERON
FLOWER MOUND, TEXAS
LANDSCAPE SPECIFICATIONS

ISSUANCES

DRAWING INFORMATION

Scale: 1"= 40'-0"
Date: 03/22/21
Checked By: KAH
Drawn By: RMT
Duke Realty Job #:
A/E Job #:

DRAWING / SHEET TITLE

LANDSCAPE
SPECIFICATIONS AND DETAILS

SHEET NUMBER

L2.08



• 4245 North Central Expy
• Suite 501
• Dallas, Texas 75205
• 214.865.7192 office



ENVIRONMENTAL CONSERVATION COMMISSION AGENDA ITEM NO. 3

REGULAR ITEM

DATE: July 6, 2021
FROM: James Hoefert, Environmental Review Analyst
PRESENTER: James Hoefert, Environmental Review Analyst
ITEM: **Consider a recommendation to Town Council to increase the per-caliper-inch tree mitigation fee.**

BACKGROUND INFORMATION:

The Town's Tree Ordinance establishes a per-caliper-inch cash value to address the mitigation for trees which are removed with Town approval. The current value is set at \$125 per-caliper-inch for the removal and subsequent mitigation for trees which are removed during development projects. The Tree Ordinance requires replacement trees to be a minimum of two and one-half to three inches in caliper width. The Town may allow a developer to pay fees in lieu of planting replacement trees. The value for a three inch replacement tree is set at \$375 based on the \$125 per-caliper-inch value.

The applicable section of the Tree Ordinance is included below.

Sec. 94-38. - Per-caliper-inch cash value; replacement trees; mitigation fee credit.

(a) A per-caliper-inch cash value for replacement trees shall be set, and updated as necessary by the town council after review and recommendation by the environmental conservation commission. The per-caliper-inch cash value shall be used to calculate mitigation costs for authorized and unauthorized removals of protected, specimen, and historic trees. The tree preservation and enforcement officer or his authorized designee shall maintain a record of the current per-caliper-inch cash value of replacement trees.

Staff will present the ECC with the estimated costs for replacement trees received from regional providers. The \$125 per-caliper-inch fee has not been increased in recent years and was last evaluated in 2011-2012. The proposed fee increase will place the per-caliper-inch fee more in line with the current costs for replacement trees. The ECC recommendation will be submitted to Town Council for their consideration.

CITIZEN FEEDBACK: As of July 2, 2021, staff has not received feedback related to this item.

ALTERNATIVES/OPTIONS: The ECC may recommend keeping the per-caliper-inch value at \$125 per-caliper-inch.

FISCAL IMPACT: N/A

LEGAL REVIEW: N/A

ATTACHMENTS:

1. Chapter 94 "Trees"

RECOMMENDATION: Move to recommend an increase to the per-caliper-inch tree mitigation fee.

Chapter 94 - TREES^[1]

Footnotes:

--- (1) ---

Editor's note— Ord. No. 63-08, § 3, adopted Oct. 6, 2008, repealed the former Ch. 94, Art. I, Art. II, Div. 1, Subdiv. I, Subdiv. II, §§ 94-71—94-73, Subdiv. III, §§ 94-91—94-94, Div. 3, §§ 94-121—94-128, Div. 4, Subdiv. I, §§ 94-151—94-156, Subdiv. II, §§ 94-181—94-183, Subdiv. III, §§ 94-201, 94-202, Subdiv. IV, §§ 94-221, 94-222, Subdiv. V, §§ 94-241, 94-242 and enacted a new Ch. 94 as set out herein. The former Ch. 94 pertained to vegetation and derived from Code 1989, ch. 12, § 5.03(e)(1)—(e)(8), ch. 12, §§ 5.08(a)—(d), ch. 12, §§ 5.08(e)(1)—(e)(3), ch. 12, § 5.08(f)(1), (f)(2), ch. 12, §§ 5.08(g)(1), (g)(2), ch. 12, §§ 5.08(h)—(k), ch. 12, § 6.15(a)(1), (2), ch. 12, §§ 6.15(b)(1)—(b)(3), ch. 12, § 6.15(c); Ord. No. 12-00, §§ 2, 6, 2-17-2000; Ord. No. 101-02, § 1, 12-16-2002.

ARTICLE I. - GENERALLY

Sec. 94-1. - Purpose.

The terms and provisions of this chapter are intended to accomplish the following public purposes:

- (1) Establish rules and regulations for the protection and preservation of native and/or established trees within the town.
- (2) Encourage the preservation and replacement of the town's tree canopy by establishing a 35 percent canopy goal for the town as outlined in guidelines established by "American Forests," the nation's oldest nonprofit citizens' conservation organization.
- (3) Encourage the protection of healthy trees and provide for the replacement and/or replanting of trees that are necessarily removed during construction, development or redevelopment.
- (4) Provide for the preservation and protection of larger native and/or established trees, which provide a valuable amenity to the urban environment and which, once destroyed, can only be replaced after generations, if at all.
- (5) Provide for shade, windbreaks and the cooling of air; thereby, reducing the requirements for air conditioning and heating and the utilization of scarce energy sources.
- (6) Provide for open space and more efficient drainage of land; thereby, reducing the effects of soil erosion and the need for additional drainage facilities.
- (7) Reduce the clear-cutting of land.
- (8) Preserve the country atmosphere and natural environment that define the community character of the town and make it a unique and desirable community.
- (9) Mitigate the ill effects of rapid and intense urbanization.

(Ord. No. 63-08, § 3(94-1), 10-6-2008)

Sec. 94-2. - Applicability of chapter provisions.

The terms and provisions of this chapter shall apply to real property within the town's corporate limits and extraterritorial jurisdiction as follows:

- (1) All real property upon which any protected, specimen, or historic tree is located, excluding property that has already been developed for single-family and two-family residential uses.
- (2) All vacant and undeveloped real property.

- (3) All real property to be subdivided or re-subdivided, including record plats and replats.
- (4) The yard areas of all developed property, excluding property already developed for single-family and two-family residential uses.

(Ord. No. 63-08, § 3(94-2), 10-6-2008)

Secs. 94-3—94-12. - Reserved.

ARTICLE II. - MEASUREMENT

Sec. 94-13. - Landscape, nursery, or replacement trees.

Unless specified otherwise, tree caliper (diameter) or circumference shall be measured at a height of 12 inches above ground level. The caliper of multi-trunk trees shall be measured by determining the diameter or circumference of the largest trunk at full caliper added to one-half of the diameter or circumference of each remaining trunk, measured at a height of 12 inches above ground level.

(Ord. No. 63-08, § 3(94-3), 10-6-2008)

Sec. 94-14. - Existing, established, and/or native trees.

The caliper or circumference of existing, established, and/or native trees shall be measured in accordance with the measuring rules and procedures as developed and updated by the Texas Forest Service. A copy of these procedures shall be made available for review in the office of the tree preservation and enforcement officer. The current procedure is outlined below.

(1) *Caliper width or circumference.*

General rule: Measure the smallest trunk caliper width or circumference between the diameter at breast height ("DBH") point (4.5 feet) and the ground, but below the lowest fork. Also record the height above the ground, in inches, where the measurement was taken.

(2) *Determining DBH point.*

Tree on slope: Measure up 4.5 feet along the axis of the trunk on both the high and low sides of the trunk; DBH point is midway between these two planes.

Leaning tree: Measure 4.5 feet along both the top and under sides of the trunk; DBH point is midway between these two planes.

Low branches: When determining where on the trunk to measure circumference, ignore portions of the tree that do not form part of the tree's crown, such as dead branches or forks, and epicormic sprouts.

Obstruction at DBH: If there is a bump, burl, branch, or other obstruction at the DBH point, measure the circumference of the trunk above and below the obstruction and record the smaller value. A buttress that forms between the trunk and root system as a natural feature of the species (e.g.—bald cypress, water tupelo) should not be considered an obstruction.

(3) *Multiple trees.* In practice, it must be determined whether a tree has a single trunk, or whether it represents two or more stems growing very close to one another. Trunks that have clear separation or included bark at or near the ground line should be considered separate trees; trunks of different species should also be considered separate stems, no matter how closely aligned. When following the measurement rules above, if the point below the lowest fork places

the measurement at the ground line, the stems should be considered and measured as separate.

(Ord. No. 63-08, § 3(94-4), 10-6-2008)

Secs. 94-15—94-20. - Reserved.

ARTICLE III. - PRESERVATION

Sec. 94-21. - Tree designations.

Protected, specimen, and historic trees, except as specified in this section, shall possess the following respective characteristics or criteria:

- (1) *Protected trees.* Any tree listed on the small, medium, or large protected tree lists in section 94-22 that measures six inches in caliper width or greater and which is at least ten feet in height and located outside of existing public streets, alleys, rights-of-way, utility easements, drainage easements, fence easements, pedestrian access easements, or other existing public rights-of-way or easements.
- (2) *Specimen tree.* Except as specified in this section, any tree listed on the town's small, medium, or large protected tree lists can be considered a specimen tree if it reaches the designated size for that list. For the small tree list, a specimen tree shall be any tree that measures 13 inches or more in caliper width. For the medium tree list, a specimen tree shall be any tree that measures 19 inches or more in caliper width. For the large tree list, a specimen tree shall be any tree that measures 25 inches or more in caliper width. All measurements shall be taken in accordance with the measuring rules and procedures as outlined and maintained by the Texas Forest Service. These procedures are outlined in section 94-14 of this chapter. In addition to the provisions of this subsection, a specimen tree shall be any other tree that has been designated by the town council, upon recommendation by the environmental conservation commission, after public hearing and due notice to the owner of the tree, to be of high value because of its type, size, age or other relevant criteria. Specimen trees shall not be regulated as protected trees. Specific requirements are set forth in this chapter regarding specimen trees.

Post oak trees shall receive a separate designation and specimen size classification of 22 inches or more in caliper width as listed within section 94-22.

- (3) *Historic tree.* Upon recommendation by the environmental conservation commission, a historic tree shall be any tree that has been designated by the town council, after public hearing and due notice to the owner of the tree, as a tree of notable historical interest and value to the town because of its location or historical association with the community. A listing and map of all designated historic trees shall be maintained and updated by the tree preservation and enforcement officer or authorized designee and made available to the public upon request. Historic trees are not dependant on or determined by diameter or caliper width as are protected and specimen trees. Specific requirements are set forth in this chapter regarding historic trees.

Subject to the review and approval of the tree preservation and enforcement officer or authorized designee, a protected or specimen tree shall not include any living tree that a registered arborist or landscape architect certifies in writing is injured, dying, diseased or infested with harmful insects; that is in danger of falling, interferes with utility service or creates unsafe vision clearance; in any manner creates a hazardous or dangerous condition so as to endanger the public health, welfare or safety. Further, a protected tree shall not include any living tree that is identified on approved subdivision construction plans as necessary to be removed to comply with EPA storm water permitting requirements or FHA lot grading plans.

Subject to review and approval of the tree preservation and enforcement officer or authorized designee, a protected, specimen, or historic tree shall not include any tree that a registered arborist or landscape architect certifies in writing is dead.

(Ord. No. 63-08, § 3(94-5), 10-6-2008; [Ord. No. 62-16](#), § 2, 11-21-2016)

Sec. 94-22. - Protected tree lists.

- (a) *Generally.* The tree species lists contained in this section have been developed and will be periodically updated by the town's environmental conservation commission and shall be maintained and distributed to the public by the tree preservation and enforcement officer or authorized designee as guides for the identification and selection of tree species that meet the various standards and requirements of this chapter. Trees included on this tree species list were selected on the basis of one or more of the following criteria or factors: hardiness, resistance to disease, suitability relative to local climate and soil conditions, adaptability for transplantation, longevity, adaptability to various landscape conditions, resistance to drought, aesthetic qualities, shade provision, windbreak provision, and screening qualities.
- (b) *Lists of trees that are protected.* Unless otherwise specified in this chapter, only those tree species found on the following lists shall be subject to the preservation, protection and replanting requirements of this section.

Small Tree List

Common Name	Scientific Name
Carolina buckthorn	(Rhamnus caroliniana)
Yaupon holly	(Ilex vomitoria)
Possum haw	(Ilex deciduas)
Redbud	(Cercis species)
Texas buckeye	(Aesculus glabra variety arguta)
Chickasaw plum	(Prunus agustifolia)
Mexican plum	(Prunus mexicana)

Medium Tree List

Common Name	Scientific Name
Slippery elm	(Ulmus rubra)
Cedar elm	(Ulmus crassifolia)

Winged elm	(Ulmus alata)
Blackjack oak	(Quercus marilandica)
Persimmon species	(Diospyros species)
Chittamwood	(Bumelia languinosa)
Western soapberry	(Sapindus drummondii)
Sweetgum	(Luquidambar styraciflua)

Large Tree List

Common Name	Scientific Name
Shumard red oak	(Quercus shumardi)
Texas red oak	(Quercus texana)
Southern live oak	(Quercus virginiana)
Water oak	(Quercus nigra)
Bur oak	(Quercus macrocarpa)
Chinquapin oak	(Quercus muehlenbergii)
American elm	(Ulmus americana)
Pecans and hickories	(Cayra species)
Magnolia	(Magnolia grandiflora)
Bald cypress	(Taxodium distichum)
Pine species	(Pinus species)
Ash species	(Fraxinus species)
Sycamore	(Plantanus occidentalis)

Black walnut	(Juglans nigra)
--------------	-----------------

Post Oak — 22" Specimen Size

Common Name	Scientific Name
Post oak	(Quercus stellata)

(Ord. No. 63-08, § 3(94-6), 10-6-2008; [Ord. No. 62-16](#), § 3, 11-21-2016)

Sec. 94-23. - Tree survey; development projects.

Tree surveys are required to accompany an application for a development plan, site plan, record plat, replat, oil and gas well drilling permit, oil and gas pipeline permit, tree removal permit, or tree transplanting permit. A tree survey may be required to accompany a zoning application or a master plan amendment if it is deemed necessary by the town's tree preservation and enforcement officer. Each tree survey shall contain, but not be limited to, the following information/parts:

- (1) The location of all specimen trees and historic trees on the subject site.
- (2) The location of the trunk and the extent of the canopy spread of each specimen tree and historic tree on the subject site.
- (3) A table containing the following information for each specimen tree and historic tree:
 - a. Tree number;
 - b. Common and scientific name of each tree;
 - c. Diameter (DBH) of each tree measured in accordance with section 94-14 of this chapter;
 - d. General health/condition of each tree;
 - e. Average canopy spread;
 - f. Status (specimen or historic) of each tree;
 - g. Whether each identified tree will remain or be removed; and
 - h. Location coordinates (northings and eastings, State Plane - NAD 1983) for each tree.
- (4) Each specimen tree and historic tree shall be affixed with a permanent tag bearing the corresponding number on the tree survey. This tag shall be placed on the trunk of the tree, between five and six feet in height on the south face of the tree's trunk.
- (5) Each tree survey shall contain a count of all protected trees located on the property.
- (6) Each tree survey shall contain a count of all protected trees that will be removed from the buildable area on the property. The phrase "buildable area" is defined in section 94-32 of this chapter.
- (7) Protected trees designated for preservation shall be flagged in a distinguishing manner approved by the town for such purpose. In addition, those trees designated for removal shall be flagged in a different distinguishing manner as approved by the town.

- (8) The tree survey must be signed, and stamped or sealed, by a certified arborist, certified forester, or a registered landscape architect. Each tree survey submitted shall contain one sheet of the tree survey as described above, one sheet with the tree survey data overlain with the site information, and one sheet with the site information overlain on an aerial photo for the site. The tree survey shall be on drawings measuring 24 inches by 36 inches and shall be drawn to a scale of no less than 100 feet to one inch, unless otherwise approved by the tree preservation and enforcement officer. When necessary the tree survey shall be on several sheets accompanied by an index sheet, showing the entire area of the survey. Necessary site information includes:
- a. The location and dimensions of all existing or proposed public streets, alleys, rights-of-way, utility easements, drainage easements, fence easements, pedestrian access easements or other public rights-of-way or easements;
 - b. The location and dimensions of the designated parking area and designated stockpile area required in this subdivision and of any site proposed or anticipated to be proposed for a temporary batching plant permit; and,
 - c. The location of all existing or proposed property lines, lot lines, building lines, setback and yard requirements, any proposed building footprint or floor plan, and other special relationships or significant features of the proposed development plan, record plat or site plan of the development.
 - d. The location of designated upland, riparian habitat, and FEMA floodplain, if identified through an environmentally sensitive area survey and subsequent environmental protection plan, as defined in the town's SMARTGrowth Program and Analysis Manual.

(Ord. No. 63-08, § 3(94-7), 10-6-2008; [Ord. No. 62-16](#), § 4, 11-21-2016)

Sec. 94-24. - Tree survey; residential lots.

Tree surveys are required to accompany an application for a building permit for the construction of homes on undeveloped residential lots. For lots that are one acre in size or larger, the tree survey shall be completed as described in section 94-23 of this chapter. For lots that are less than one acre in size, the tree survey shall contain, but not be limited to, the following information/parts:

- (1) A site plan showing: The location and configuration of the proposed house/structure, all required setbacks, sidewalks, driveway locations, porches, etc.
- (2) Further, the site plan shall show the location of all specimen or historic trees located on the site.
- (3) The survey shall depict the location of the trunk and the extent of the canopy spread of each specimen or historic tree.
- (4) A table (spreadsheet) shall be supplied containing the common name, caliper width (DBH), and tree number of each specimen tree and historic tree shown on the site plan/tree survey. All measurements shall be in accordance with section 94-14 of this chapter.
- (5) A count of all protected trees on the site and all protected trees proposed for removal shall be included on the tree survey.

(Ord. No. 63-08, § 3(94-8), 10-6-2008)

Secs. 94-25—94-30. - Reserved.

ARTICLE IV. - PERMITS, MITIGATION, PENALTIES, AND INCENTIVES

Sec. 94-31. - Generally.

No person, directly or indirectly, shall cut down, destroy, remove or effectively destroy through damaging any protected, specimen, or historic tree on any real property within the town without first obtaining a tree removal permit as required in the terms and provisions of this article. Further, the replanting of any protected, specimen, or historic tree requires a tree replanting permit in accordance with the terms and provisions of this article.

(Ord. No. 63-08, § 3(94-9), 10-6-2008)

Sec. 94-32. - Trees located in a buildable area.

The phrase "buildable area" shall mean and include all of a commercial or residential building lot, oil and gas pad site, development site or other site, excluding the fully developed FEMA floodplain as defined in section 90-403 and required street/landscaping buffer areas. Trees located within TXDOT rights-of-way are exempt from the terms and provisions of this chapter.

(Ord. No. 63-08, § 3(94-10), 10-6-2008; [Ord. No. 62-16](#), § 5, 11-21-2016)

Sec. 94-33. - Tree transplanting permit.

An application for a tree transplanting permit for protected trees located on undeveloped property or developed nonresidential property within the town may be submitted at any time and need not be submitted in conjunction with a development plan or record plat or a building permit. Tree transplanting permits shall be obtained by making application to the town's tree preservation and enforcement officer or authorized designee on forms prescribed by the town when a protected tree is proposed to be transplanted within the town. No fee shall be charged to make application for a tree transplanting permit. The application shall also be accompanied by a written document indicating the reasons for transplanting the protected tree and two copies of a legible tree survey. The tree survey should be prepared in accordance with section 94-24 of this chapter.

Upon receipt of a proper application for a tree transplanting permit, the town's tree preservation and enforcement officer or authorized designee shall review the application and may conduct field inspections of the site or development and/or refer the permit application to other departments for review and recommendations as deemed necessary and appropriate by the town manager or authorized designee. The application for a tree transplanting permit shall be approved unless the town's tree preservation and enforcement officer or authorized designee determines that the proposed transplanting will unnecessarily damage or jeopardize the health of the trees proposed to be transplanted. A denial of an application for a tree transplanting permit by the tree preservation and enforcement officer or authorized designee may be appealed to the environmental conservation commission. The decision of the environmental conservation commission regarding the appeal from the denial of such tree transplanting permit application shall be final.

(Ord. No. 63-08, § 3(94-11), 10-6-2008)

Sec. 94-34. - Tree removal permit.

Tree removal permits are required for the removal of protected trees located outside the buildable area of a lot or site, and for any specimen trees and historic trees that are intended for removal from a lot or site in conjunction with the development, redevelopment, subdivision and/or re-subdivision of real property within the town.

An application for a tree removal permit, when required, shall be submitted at the earliest point in the application process where entitlements and/or buildable area are established. The following outlines the process associated with tree removal permit applications.

- (1) Tree removal permit applications, when required, shall be submitted in conjunction with a zoning planned development (ZPD) or a development plan and shall be considered by the environmental conservation commission prior to the project proceeding to the planning and zoning commission. The application shall be placed on the same town council agenda for action as the ZPD or development plan; or
- (2) Tree removal permit applications, when required, shall be submitted in conjunction with site plans or record plats for the development of subdivisions of four lots or less where the construction of necessary infrastructure necessitates a tree removal permit, and shall be considered by the environmental conservation commission and acted upon by the town council prior to the site plan or record plat proceeding to the planning and zoning commission for approval; or
- (3) Tree removal permit applications, when required, shall be submitted in conjunction with the development of individual residential or nonresidential platted lots and shall be considered by the environmental conservation commission and acted upon by the town council prior to the issuance of a building permit.

No protected trees located outside the buildable area, specimen trees, or historic trees approved for removal in accordance with this chapter shall be removed from any building lot or site until:

- (1) Proper mitigation or replacement requirements have been determined and approved for the lot or site; and
 - (2) A preconstruction meeting has been held with proper town staff authorizing grading and construction activities to begin on the lot or site; and/or
 - (3) A building permit, where needed, has been issued for the lot or site.
- (a) *Tree removal permits for fewer than ten protected trees or four specimen trees.* A tree removal permit shall be obtained by making application to the town's tree preservation and enforcement officer or authorized designee on forms prescribed by the town. The application shall include the following:
- (1) A written document indicating the reasons for removal of the protected, specimen, or historic trees on the lot or site.
 - (2) Photographs of each tree requested for removal.
 - (3) Photographs of required signage on the site as described below.
 - (4) Two copies of a tree survey for the lot or site prepared as described in section 94-23 of this chapter.
- (b) *Tree removal permits for greater than ten protected trees or four specimen trees.* Applicants requesting to remove greater than ten protected trees or greater than four specimen trees, shall have the option of requesting a comprehensive tree removal permit. The fee for this permit will be \$1,000.00. All other requirements and incentives remain unchanged.
- (c) A sign shall be placed on each separate lot or tract for which a tree removal permit is requested to inform the general public that an application for a tree removal permit has been filed relative to a protected, specimen, or historic tree.
- (1) The size of the signs shall be three feet by four feet.
 - (2) The signs shall be made out of aluminum or corrugated plastic material.
 - (3) The signs shall be mounted on stakes/poles.
 - (4) The signs shall be visible from the street.

- (5) There shall be one sign for each street frontage.
- (6) The signs shall have a white background, with letters and borders being green in color. The signs shall state the following:

TOWN OF FLOWER MOUND, TX
A TREE REMOVAL REQUEST
IS BEING MADE ON THIS PROPERTY
FOR INFORMATION CALL

(Ord. No. 63-08, § 3(94-12), 10-6-2008)

Sec. 94-35. - Tree removal permit on property zoned agricultural district (A) uses.

No fee shall be charged to make application for a tree removal permit for the removal of protected trees located on real property having an agricultural zoning district classification. However, if within any 12-month period, tree removal permits for the removal of 20 or more protected trees are issued for the same agricultural property or tract, or any of its portions, the agricultural zoning district classification of such property cannot be changed, nor can an application for approval of a development plan, planned development or zoning amendment relative to such property be made, for a period of 60 months following the most recent 12-month period during which 20 or more protected trees were removed from such agricultural zoned property.

(Ord. No. 63-08, § 3(94-13), 10-6-2008)

Sec. 94-36. - Special provisions for agricultural district (A) uses.

Notwithstanding anything contained in this chapter to the contrary, for tracts zoned agricultural district (A) uses, the tree survey requirements contained in this article shall be limited in their application to proposed rights-of-way, easements and an area equal to 20 feet on any side of such rights-of-way and easements, provided that the applicant executes a development agreement with the town that all trees on the tract and outside of such areas, for the purposes of such agreement, are protected trees (regardless of their species or caliper width) and that the unauthorized removal of such trees shall result in the revocation of any previously approved development plan and record plat for a period of 60 months from the date of the most recent unauthorized removal of one or more trees from the subject property.

(Ord. No. 63-08, § 3(94-14), 10-6-2008)

Sec. 94-37. - Review of application.

- (a) An application for a tree removal permit for a protected tree located outside of the buildable area shall be accompanied by an administrative fee per tree proposed for removal in the amount listed in appendix A of this Code, not to exceed a total per permit application in an amount listed in appendix A of this Code. An application for a tree removal permit for a specimen tree, or historic tree shall be accompanied by an administrative fee per tree proposed for removal in the amount listed in appendix A of this Code. Upon receipt of a properly completed application accompanied by the appropriate fee, the tree preservation and enforcement officer or his authorized designee shall review the application and may conduct field inspections of the development and/or refer the permit application to other departments for review and recommendations as deemed necessary and appropriate by the tree preservation and enforcement officer or his authorized designee.
- (b) The application for a tree removal permit, if required, shall be considered an integral part of the application for development plan or site plan approval, or the application for an oil and gas well permit. No development plan or site plan for any development, or oil and gas well permit, subject to

the terms and provisions of this subdivision, shall be approved without approval of such tree removal permit. It is further provided that if a property owner or developer does not submit a tree removal permit application prior to town approval of a development plan covering a particular site, then if a tree removal permit application for the site is submitted later, approval of the development plan may be revoked. In this event, a revised development plan must be submitted for review by the town.

- (c) The tree preservation and enforcement officer may approve, approve with conditions, or deny a request for a tree removal permit for protected trees located outside the buildable area of a lot or site, provided that the requested tree removal permit is for the removal of trees in a development district other than the Cross Timbers Conservation Development District. An appeal of the decision of the tree preservation and enforcement officer may be made to the Environmental Conservation Commission.
- (d) An application for a tree removal permit for specimen, historic, or protected trees located outside the buildable area of a lot or site within the Cross Timbers Conservation Development District or an application for a tree removal permit for specimen, or historic trees within all other districts shall be submitted to the environmental conservation commission for review and recommendation to the town council that the permit application be approved, approved with conditions or denied. The environmental conservation commission shall not recommend an application for a tree removal permit be approved or approved with conditions, unless the commission finds that the subject development, redevelopment, subdivision or re-subdivision cannot reasonably be developed, based on economic and/or practical considerations, without removal of the trees included in the permit application.
- (e) The environmental conservation commission's recommendation concerning an application for tree removal permit shall be reviewed by the town council. The town council may then approve the application, approve it with conditions, or deny the application; however, the town council may overturn the denial of an application for tree removal permit by the environmental conservation commission only upon a finding that the subject development, redevelopment, subdivision or re-subdivision cannot reasonably be developed, based on economic and/or practical considerations, without removal of the trees included in the permit application.
- (f) Approval for removal of a historic tree shall require a three-fourths majority vote of the environmental conservation commission and the town council, respectively.

(Ord. No. 63-08, § 3(94-15), 10-6-2008)

Sec. 94-38. - Per-caliper-inch cash value; replacement trees; mitigation fee credit.

- (a) A per-caliper-inch cash value for replacement trees shall be set, and updated as necessary by the town council after review and recommendation by the environmental conservation commission. The per-caliper-inch cash value shall be used to calculate mitigation costs for authorized and unauthorized removals of protected, specimen, and historic trees. The tree preservation and enforcement officer or his authorized designee shall maintain a record of the current per-caliper-inch cash value of replacement trees.
- (b) Whenever a mitigation fee is imposed in accordance with this chapter, a mitigation fee credit will be given for replacement tree(s), that are at least two inches in diameter at the point on the trunk four and one-half feet above ground, planted on the property for which the tree mitigation fee was assessed or property mutually agreed upon by the town and the person. The calculation for the credit will be done in the same manner as the tree mitigation fee assessed against the person and be:
 - (1) Fifty percent of the amount of the tree mitigation fee assessed against the person if:
 - a. The property is a residential structure or pertains to the development, construction, or renovation of a residential structure; and

- b. The person is developing, constructing, or renovating the property not for use as the person's residence; or
- (2) Forty percent of the amount of the tree mitigation fee assessed against the person if:
 - a. The property is not a residential structure; or
 - b. The person is constructing or intends to construct a structure on the property that is not a residential structure.
- (c) An application for a mitigation fee credit under subsection (b) must be done in conjunction with an application for a tree removal permit as prescribed within this chapter.

(Ord. No. 63-08, § 3(94-16), 10-6-2008; Ord. No. [43-17](#), § 1, 11-20-2017)

Sec. 94-39. - Mitigation requirements for authorized tree removal.

- (a) *Replacement trees required for the removal of protected trees located within the buildable area on a lot or site.* It shall be the responsibility of any person removing a protected tree located within the buildable area of a lot or site to replace each protected tree removed with one, two and one-half to three-inch caliper tree measured in accordance with section 94-13 of this chapter. Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Replacement trees shall have a minimum height of at least six feet, and shall be planted in locations approved by the tree preservation and enforcement officer or authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed tree(s) may be paid to the town instead of providing the replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance with section 94-38 of this article.
- (b) *Mitigation of loss of habitat.* When any person seeks to develop property, rezone property, or amend the master plan regarding property, so that an application for a development plan, site plan, record plat, re-plat, oil and gas well drilling permit, oil and gas pipeline permit, tree removal permit, or tree transplanting permit is required by this chapter, and such person wishes to remove protected trees from an environmentally sensitive area (ESA), such as upland habitat and/or riparian habitat as defined in the town's SMARTGrowth Program and Analysis Manual, it shall be the responsibility of such person to mitigate the acreage of habitat lost or negatively impacted through either the payment to the town of mitigation fees or the planting of replacement trees included in the required environmental protection plan (EPP) for the development project, or a combination thereof that results in the required mitigation. This required habitat mitigation only applies to impacts to designated upland or riparian habitats. The mitigation for the removal of protected trees located outside of the designated habitats as established in an approved EPP is addressed in section 94-39(a). The monetary value of upland habitat and riparian habitat is set at \$15,000.00 per acre. Preservation incentives for upland and/or riparian habitat preserved within a project are established in section 94-40. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the value of the removed habitat may be paid to the town instead of providing the replacement trees. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations.
- (c) *Replacement trees required for the removal of protected trees located outside the buildable area on a lot or site.* It shall be the responsibility of any person obtaining a tree removal permit for a protected tree located outside of the buildable area on a lot or site to provide replacement with trees having a total caliper width equivalent to one and one-half times that of the tree(s) to be removed. Total

caliper width for replacement trees shall be calculated using measurements taken in accordance with section 94-14 of this chapter. For example, if a ten-inch protected tree is removed, then that tree must be replaced by trees having a total caliper width of 15 inches. This total caliper width could be satisfied by an approved combination of replacement trees to meet the required caliper width replacement. Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Such replacement trees shall be container-grown and each replacement tree shall have a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. Replacement trees shall have a minimum height of at least six feet, and shall be planted in locations approved by the tree preservation and enforcement officer or his authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed tree(s) may be paid to the town instead of providing the replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance to section 94-38 of this chapter.

- (d) *Replacement trees required for the authorized removal of specimen trees.* It shall be the responsibility of any person obtaining a tree removal permit for a specimen tree to provide replacement trees having a total caliper width equivalent to two times that of the tree(s) to be removed. Total caliper width for replacement trees shall be calculated using measurements taken in accordance with section 94-14 of this chapter. Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Such replacement trees shall be container-grown and have a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. Replacement trees shall have a minimum height of at least six feet, and shall be planted in a location approved by the tree preservation and enforcement officer or authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed tree(s) may be paid to the town instead of providing the replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance to section 94-38 of this chapter.
- (e) *Replacement trees required for the authorized removal of historic trees.* It shall be the responsibility of any person obtaining a tree removal permit for a historic tree to provide replacement trees having a total caliper width equivalent to two and one-half times that of the tree(s) to be removed. Total caliper width for replacement trees shall be calculated using measurements taken in accordance with section 94-14 of this chapter. Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Such replacement trees shall be container-grown and have a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. Replacement trees shall have a minimum height of at least six feet, and shall be planted in locations as approved by the tree preservation and enforcement officer or authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed tree(s) may be paid to the town instead of providing the replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance to section 94-38 of this chapter.

Any fees or payments made to the town to satisfy the mitigation or replacement requirements of this article shall be paid at the time of a preconstruction meeting authorizing grading or construction activities to occur on the lot or site. In cases where a preconstruction meeting is not required, all fees or payments shall be made prior to the issuance of a building permit for the lot or site.

(Ord. No. 63-08, § 3(94-17), 10-6-2008; [Ord. No. 62-16](#), § 6, 11-21-2016)

Sec. 94-40. - Incentives for preservation of protected, specimen, and historic trees.

If any protected, specimen, or historic tree is preserved within an area that would otherwise be considered a buildable area, credit for preservation shall be given that will be counted toward the mitigation requirements for the removal of protected trees within the buildable area on a site or project. Such mitigation credits shall be given only for those trees whose critical root zones are left predominately in their natural state. No cutting, filling, or other construction related activities are allowed within the critical root zones of trees eligible for mitigation credit unless otherwise approved in writing and in advance by the town. Existing trees that are preserved within required street yard landscaping areas shall be counted for credit toward the requirements of section 82-241 of this Code, street yard landscaping, provided that they are located within the street yard and/or parking area. Following is a list of credits available for the preservation of protected and specimen trees on a site or project, and a separate credit schedule for the preservation of protected and specimen post oak trees on a site or project.

- (1) One mitigation tree credit will be given for each protected tree preserved within a buildable area on a site or project.
- (2) The following schedule outlines tree credits that will be given for each specimen tree preserved within a buildable area on a site or project.

*Buildable Area Mitigation Specimen
Tree Credit Schedule*

Caliper Size (Diameter)	Tree Credits
13—18 inches	3
19—24 inches	4
25—30 inches	5
Greater than 30 inches	6

- (3) The following schedule outlines tree credits that will be given for each protected or specimen post oak tree preserved on a site or project and located outside of an ESA.

Post Oak Tree Credit Schedule

Post Oak Caliper Size (Diameter)	Tree Credits
6—12 inches	2
13—21 inches	4
22 inches and greater	6

- (4) Mitigation credits for preservation of protected trees within designated upland and/or riparian habitat will be given for each acre of habitat protected on a site or project.
- (5) For purposes of this section, one mitigation tree credit shall be the equivalent of the person developing the property providing one container-grown tree as provided in section 94-39 of a variety selected from the replacement tree list having a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. In the event the tree preservation and enforcement officer or authorized designee approves the payment of money in an amount equal to the per-caliper-inch cash value of the removed tree(s) instead of providing the replacement trees required by this article, one mitigation tree credit shall be the equivalent of the per-caliper-inch cash value for a replacement tree having a minimum caliper width of two and one-half inches to three inches. However, no tree credits shall be allowed or permitted for trees that are dead, dying, diseased or infested with harmful insects (as determined by the tree preservation and enforcement officer or authorized designee), or for trees which have not been adequately protected using required tree protection measures, as defined in article V of this chapter, or which are otherwise likely to die (as determined by the tree preservation and enforcement officer or authorized designee); or trees that are not included on the protected tree list.

(Ord. No. 63-08, § 3(94-18), 10-6-2008; [Ord. No. 62-16](#), § 7, 11-21-2016)

Sec. 94-41. - Penalties for unauthorized removal of protected, specimen, and historic trees.

If any protected, specimen, or historic trees are removed from any real property without a tree removal permit, or if a protected, specimen, or historic tree is injured because of failure to follow required tree protection measures such that the tree dies or may reasonably be expected to die, the town shall have the authority to impose one or more of the following administrative and civil penalties on the developer and/or owner of the property:

- (1) A monetary penalty of \$250.00 per-caliper-inch of width of the protected tree(s) removed or damaged, payable to the town. A monetary penalty of \$500.00 per-caliper-inch of width of the specimen tree(s) removed or damaged, payable to the town. A monetary penalty of \$750.00 per-caliper-inch of width of the historic tree(s) removed or damaged, payable to the town. Funds paid to the town as tree removal penalties shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town, and/or to support the administration and enforcement of the town's tree preservation regulations.
- (2) For each protected tree that is removed or damaged, replacement with new trees having a total tree caliper width equivalent to five times that of the removed or damaged tree(s). For each

specimen tree that is removed or damaged, replacement with new trees having a total tree caliper width equivalent to ten times that of the removed or damaged tree(s). For each historic tree that is removed or damaged, replacement with new trees having a total tree caliper width equivalent to 15 times that of the removed or damaged tree(s). Replacement trees shall be of a species listed on the town's approved mitigation and replacement tree planting list. Such replacement trees shall be container-grown and have a minimum caliper width of two and one-half inches to three inches, measured in accordance with section 94-13 of this chapter. Replacement trees shall have a minimum height of at least six feet, and shall be planted in locations as approved by the tree preservation and enforcement officer or authorized designee. Acceptable locations shall include reforestation sites designated by the town. At the discretion of the tree preservation and enforcement officer or authorized designee, money in an amount equal to the per-caliper-inch cash value of the removed or damaged tree(s) may be paid to the town instead of providing replacement trees required by this article. Any such payments shall be deposited in a special account or fund and used by the town to provide and/or support supplemental landscape plantings in public areas of the town and/or to support the administration and enforcement of the town's tree preservation regulations. A per-caliper-inch cash value for replacement trees shall be set by the town council in accordance with section 94-38 of this article.

(Ord. No. 63-08, § 3(94-19), 10-6-2008)

Secs. 94-42—94-50. - Reserved.

ARTICLE V. - TREE PROTECTION

Sec. 94-51. - Enumeration.

The following tree protection measures shall be required:

- (1) Prior to any and all construction or land development activity, the developer or property owner shall install four-foot-high plastic (or equivalent) safety fencing around the drip line of protected trees and six-foot-high chain-link fencing around the drip line of specimen and historic trees.
- (2) Prior to any and all construction or land development activity, the developer or property owner shall establish designated parking areas for the parking and maintenance of all vehicles, trailers, construction equipment and related items, designated stockpile areas for the storage of construction supplies and materials during construction of the subdivision and designated drive areas for vehicles and equipment. The location and dimensions of such designated areas shall be clearly identified on both subdivision construction and site plans and shall be approved by the tree preservation and enforcement officer or authorized designee prior to any construction or land development activity in, on or about the subdivision. Such designated areas shall be completely fenced with chain-link fencing and gates for safety purposes and to separate protected, specimen, or historic trees from the construction area and related construction activity. With the approval of the tree preservation and enforcement officer or authorized designee, the designated parking and stockpile areas may be combined into one fenced area, provided that the preservation of protected trees is not adversely affected or jeopardized. Supplies and pipe and other items that are customarily unloaded where installed shall not be required to be stored within the designated stockpile areas. Sites approved for temporary batching plant permits shall be fenced and gated in the same manner as designated parking and stockpile areas. Temporary batching plant permits shall also be required for the operation of all batching plants, pursuant to the regulations of this chapter.
- (3) During construction, the developer or property owner shall prohibit the cleaning of equipment or materials and/or the disposal of any waste material, including, but not limited to, paint, oil, solvents, asphalt, concrete, mortar, etc., under the canopy or drip line of any protected, specimen, or historic tree or group of such trees.

- (4) No attachments or wires of any kind, other than those of a protective nature, shall be attached to any protected tree(s).
- (5) With major grade changes of six inches or greater, a retaining wall or tree well of rock, brick, landscape timbers or other approved materials shall be constructed around the tree no closer than the drip line of the tree. The top of the retaining wall or tree well shall be constructed at the new grade.
- (6) Unless otherwise approved by the town, no construction or construction-related activity shall occur under the canopy or drip line of any protected, specimen, or historic tree or group of such trees.
- (7) Any tree(s) removed during land development, construction or construction-related activities shall be chipped or hauled off site. Burning of removed trees is prohibited unless prior approval is given by the town's fire marshal.
- (8) The tree preservation and enforcement officer or authorized designee may require additional protection measures or best management practices as needed on a case by case basis to adequately protect protected, specimen, historic trees, or trees required as part of an approved landscape plan.

(Ord. No. 63-08, § 3(94-20), 10-6-2008; [Ord. No. 62-16](#), § 8, 11-21-2016)

Secs. 94-52—94-60. - Reserved.

ARTICLE VI. - TREE PLANTING REQUIREMENTS AND PLANTING LISTS

Sec. 94-61. - Street yard trees.

Trees shall be planted or existing trees preserved within the street yard of a nonresidential lot or building tract according to the following provisions:

- (1) For street yards less than 10,000 square feet in area, one tree shall be provided for each 1,000 square feet, or fraction of such amount, of street yard.
- (2) For street yards between 10,000 and 110,000 square feet in area, ten trees shall be required for the first 10,000 square feet plus one additional tree shall be required for each 2,500 square feet, or fraction of such amount, of street yard area in excess of 10,000 square feet.
- (3) For street yards over 110,000 square feet in area, 50 trees shall be required for the first 110,000 square feet plus one additional tree shall be required for each 5,000 square feet, or fraction of such amount, of street yard area in excess of 110,000 square feet.
- (4) Street yard trees shall be a minimum of three-inch caliper.
- (5) Trees required to satisfy other provisions of this article and lying within the street yard may be used to satisfy the requirements of this section.

(Ord. No. 63-08, § 3(94-21), 10-6-2008)

Sec. 94-62. - Street buffer trees.

Trees shall be planted or existing trees preserved within the street buffer landscaping area required by section 82-242 of this Code, street buffer landscaping, according to the following provisions:

- (1) Street buffer trees shall be provided in a ratio of one tree for every 30 feet of lineal frontage, except that a ratio of one tree for every 25 feet of lineal frontage shall be provided along scenic roadways.

- (2) Street buffer trees shall be a minimum of three-inch caliper.

(Ord. No. 63-08, § 3(94-22), 10-6-2008)

Sec. 94-63. - Parking area trees.

Trees shall be planted or existing trees preserved within off-street parking areas according to the following provisions:

- (1) One tree shall be provided for each ten parking spaces provided on the site; provided, however, that churches and/or schools shall be required to provide one tree for each 20 parking spaces provided on the site.
- (2) Parking area trees shall be minimum of three-inch caliper, except as provided in subsection (4) of this section.
- (3) All parking spaces shall be located within 50 feet of a tree that is located within the same parking area, measured from the trunk of the tree; provided, however, that for churches and/or schools, all parking spaces shall be located within 100 feet of a tree that is located within the same parking area, measured from the trunk of the tree.
- (4) A maximum of 30 percent of the trees used to satisfy the requirements of this section may come from subsection 94-66(b), approved median and right-of-way planting list.

(Ord. No. 63-08, § 3(94-23), 10-6-2008)

Sec. 94-64. - Median and right-of-way trees.

Trees may be planted in medians and rights-of-way only with the approval of the town, provided that such trees are selected from subsection 94-66(b), approved median and right-of-way planting list.

(Ord. No. 63-08, § 3(94-24), 10-6-2008)

Sec. 94-65. - Residential lots.

The following tree planting requirements shall be satisfied prior to the issuance of a certificate of occupancy for a single-family, duplex or multi-family use:

- (1) A minimum of three trees, with a minimum caliper width of two and one-half inches to three inches, and at least six feet in height, shall be provided on each 10,000 square foot and greater single-family and duplex lot prior to the issuance of a certificate of occupancy. A minimum of two trees, with a minimum caliper width of two and one-half inches to three inches, and at least six feet in height, shall be provided on each single-family and duplex lot between 5,000 and 10,000 square feet prior to the issuance of a certificate of occupancy. At least one of the required trees shall be located within the front yard area of the lot.
- (2) A minimum of one tree, with a minimum caliper width of two and one-half inches to three inches, shall be provided for each 3,000 square feet of gross lot area on each multi-family lot prior to the issuance of a certificate of occupancy. At least 50 percent of the required trees shall be located within either the front or side yard area of the lot.
- (3) From July 1 until September 1 of each year, only container grown trees shall be used to satisfy the requirements of this section; and, the builder/developer shall certify that any such trees are container grown.
- (4) Homeowners desiring to plant trees of a caliper width in excess of two times the requirements of this article may, from July 1 until September 1 of each year, file a town-approved affidavit with

the town manager to this effect. Such trees shall be planted by March 1 of the following year in which the affidavit was filed. Failure to comply with the requirements of this article shall be considered a misdemeanor, punishable as such by a fine in accordance with section 1-13 of this Code.

- (5) There shall be no more than 50 percent of any tree species, and no more than 75 percent of any tree genus permitted to satisfy the planting requirements.

(Ord. No. 63-08, § 3(94-25), 10-6-2008; [Ord. No. 62-16](#), § 9, 11-21-2016)

Sec. 94-66. - Approved tree planting lists.

Unless otherwise specified in this chapter, only those tree species included in this section shall satisfy the tree planting requirements of this article.

Generally. The tree species lists contained in this section have been developed and will be periodically updated by the town's environmental conservation commission and shall be maintained and distributed to the public by the tree preservation and enforcement officer or authorized designee as guides for the identification and selection of tree species that meet the various standards and requirements of this article. Trees included on these tree species lists were selected on the basis of one or more of the following criteria or factors: hardiness, resistance to disease, suitability relative to local climate and soil conditions, adaptability for transplantation, longevity, adaptability to various landscape conditions, resistance to drought, aesthetic qualities, shade provision, windbreak provision, and screening qualities. To promote biodiversity, there shall be no more than 20 percent of a tree species, and no more than 50 percent of any tree genus permitted to satisfy the planting requirements on all new developments.

- (1) *Approved tree planting list.* Only those tree species found on the following approved tree planting list shall satisfy the tree planting standards and requirements of this article.

Approved Tree Planting List

Common Name	Scientific Name
Southern live oak	(Quercus virginiana)
Escarpment live oak	(Quercus fusiformis)
Shumard oak	(Quercus shumardi)
Chinkapin oak	(Quercus muehlenbergii)
Monterrey oak	(Quercus polymorpha)
Bur oak	(Quercus macrocarpa)
Texas red oak	(Quercus texana)
Water oak	(Quercus nigra)
American elm	(Ulmus americana)

Cedar elm	(Ulmus crassifolia)
Winged elm	(Ulmus alata)
Lacebark elm	(Ulmus parvifolia)
Bald cypress	(Taxodium distichum)
Pecans and hickories	(Carya species)
Juniper tree	(Juniperus species)
White ash	(Fraxinus americana)
Green ash	(Fraxinus pennsylvanica)
Texas ash	(Fraxinus texensis)
Western soapberry	(Sapindus drummondii)
Sweet gum	(Liquidambar styraciflua)
Eastern red cedar	(Juniperus virginiana)
Pines	(Pinus species)
Leyland cypress	(Cypressocyparis leylandi)
Black walnut	(Juglans nigra)
Magnolia	(Magnolia grandiflora)

- (2) *Approved median and right-of-way tree planting list.* The following tree species shall be allowed to be planted in medians and rights-of-way when approved by the town. Additional tree species with non-aggressive root systems/deep root systems maybe authorized for planting in such areas by the director of recreational services.

*Approved Median and ROW Tree
Planting List*

Common Name	Scientific Name
-------------	-----------------

Sweet gum	(Liquidambar styraciflua)
Crepe myrtle	(Lagerstroemia indica)
Wax myrtle	(Myrica cerifera)
Plum	(Prunus species)
Holly	(Ilex species)
Possum haw	(Ilex decidua)
Native pecan	(Carya species)
Redbuds/whitebuds	(Cercis species)
Fruitless crabapples	(Malus species)
Southern live oak	(Quercus virginiana)
Escarpment live oak	(Quercus fusiformis)
Texas red oak	(Quercus texana)
Shumard oak	(Quercus shumardi)
Chinkapin oak	(Quercus muehlenbergii)
Bur oak	(Quercus macrocarpa)
Water oak	(Quercus nigra)
Winged elm	(Ulmus alata)
Cedar elm	(Ulmus crassifolia)
Lacebark elm	(Ulmus parvifolia)
Slippery elm	(Ulmus rubra)
Bald cypress	(Taxodium distichum)
Hickories	(Carya species)
Pines	(Pinus species)

Chinese pistache	(Pistachia chinensis)
Juniper tree	(Juniperus species)
Texas buckeye	(Aesculus glabra variety arguta)
Common persimmon	(Diospyros virginiana)
Texas ash	(Fraxinus texensis)
White ash	(Fraxinus Americana)
Green ash	(Fraxinus pennsylvanica)
Western soapberry	(Sapindus drummondii)
Black walnut	(Juglans nigra)
Magnolia	(Magnolia grandiflora)
Yaupon holly	(Ilex vomitoria)
Carolina buckthorn	(Rhamnus caroliniana)
Thornless honey locust	(Gleditsia triacanthos variety inermis)

- (3) *Approved mitigation and replacement tree planting list.* The following list of tree species shall be allowed to be planted to satisfy mitigation and replacement standards for trees removed from the buildable area on sites, trees removed with approved tree removal permits, and/or trees removed without authorization.

*Approved Mitigation and Replacement
Tree Planting List*

Common Name	Scientific Name
Native pecan	(Carya species)
Texas red oak	(Quercus texana)
Shumard oak	(Quercus shumardi)

Bur oak	(Quercus macrocarpa)
Water oak	(Quercus nigra)
Winged elm	(Ulmus alata)
Slippery elm	(Ulmus rubra)
Post oak	(Quercus stellata)
Cedar elm	(Ulmus crassifolia)

- (4) *Approved overhead utility easement tree planting list.* The following list of tree species shall be allowed to be planted in overhead utility easements where required. These species were selected due to their relatively small mature size and growth characteristics. Trees planted in these areas shall be planted at a ratio of three trees for every one tree required.

Common Name	Scientific Name
Yaupon holly	(Ilex vomitoria)
Carolina buckthorn	(Rhamnus caroliniana)
Possum haw	(Ilex decidua)
Plum	(Prunus species)
Redbuds/whitebuds	(Cercis species)
Wax myrtle	(Myrica cerifera)
Crepe myrtle	(Lagerstroemia indica)

(Ord. No. 63-08, § 3(94-26), 10-6-2008; [Ord. No. 62-16](#), § 10, 11-21-2016)

Sec. 94-67. - Limits on credit for preservation of existing or established trees.

Existing protected trees, which are not being applied toward compliance with landscaping requirements, may be applied as a credit against required buildable area mitigation. Similarly, existing specimen trees, which are not being applied toward compliance with landscaping requirements, may be applied as credit toward required buildable area mitigation. In order for trees to qualify for credit, all standards described in article V of this chapter, shall be met completely. Further, all requirements set

forth in section 94-40 shall also be met for credit to apply toward required buildable area mitigation for such trees. If the trees are compromised in any way, credit will not be given. Eligibility for credit will be determined by the tree preservation and enforcement officer or authorized designee. In no event shall any tree be counted for credit against both the landscaping requirements and the buildable area mitigation requirements.

(Ord. No. 63-08, § 3(94-28), 10-6-2008; [Ord. No. 62-16](#), § 11, 11-21-2016)

Editor's note— [Ord. No. 62-16](#), § 11, adopted Nov. 21, 2016, repealed § 94-67, and renumbered former § 94-68 as new § 94-67 as set out herein. The former § 94-67 pertained to landscape credit for large trees and derived from Ord. No. 63-08, § 3(94-27), 10-6-2008.

Secs. 94-68—94-80. - Reserved.

ARTICLE VII. - MISCELLANEOUS

Sec. 94-81. - Exceptions.

The following exceptions from the terms and provisions of this chapter are hereby authorized and granted:

- (1) If any protected, specimen, or historic tree shall be determined to be in a hazardous or dangerous condition so as to endanger the public health, welfare or safety, and require immediate removal without delay, authorization for removal may be given by the town manager, upon recommendation of the tree preservation and enforcement officer or authorized designee, and such protected, specimen, or historic tree may then be removed without obtaining a written permit as required in this article.
- (2) During the period of an emergency, such as a tornado, storm, flood or other act of God, the requirements of this article may be waived as may be deemed necessary by the town council.
- (3) All licensed plant or tree nurseries shall be exempt from the terms and provisions of this article only in relation to those trees planted and growing on the premises of such licensee that are so planted and growing for the sale or intended sale to the general public in the ordinary course of such licensed business.
- (4) Utility companies, franchised or otherwise, that are authorized to provide utility service within the town may remove protected, specimen, or historic trees that endanger public safety and welfare by interfering with utility service, except that where such trees are on owner-occupied properties developed for single-family or duplex use, removal of such trees shall be at the option of the property owners and require the property owners' consent and approval.
- (5) For recreational property or uses, such as golf courses and baseball, soccer, football or similar athletic facilities, and public works projects such as water or wastewater treatment plants, pump stations, storage tanks, and public streets and drainage improvements, the buildable area of the property shall include that portion of the property necessary for the construction of such recreational and public works improvements, including sufficient adjacent area, to allow the normal operation of construction equipment.
- (6) The terms and provisions of this article shall not apply to any development, subdivision or re-subdivision for which a record plat has been approved by the town council and filed in the plat records of the county prior to October 6, 2008.
- (7) All easements and rights-of-way included on a record plat approved by the town and filed in the plat records of the county.

(Ord. No. 63-08, § 3(94-29), 10-6-2008; [Ord. No. 43-15](#), § 2, 7-20-2015; [Ord. No. 62-16](#), § 12, 11-21-2016)

Sec. 94-82. - Penalty upon failure to comply with chapter provisions.

- (a) Any person violating or failing to comply with any provision or requirement of this chapter shall be deemed guilty of a misdemeanor and, upon conviction, shall, without exception, be fined the maximum amount provided in section 1-13 of this Code. A separate offense shall be deemed committed upon each day or portion of a day during or on which each separate violation or failure to comply occurs or continues to occur and shall be punishable as such.
- (b) Notwithstanding the foregoing, any violation by any person of any provision of this chapter that constitutes an immediate danger or threat to any protected, specimen, or historic tree shall be subject to the administrative penalties set forth in this chapter.
- (c) Notwithstanding the foregoing, any violation by any person of any provision of this chapter that constitutes an immediate danger or threat to the health, safety and welfare of the public may be enjoined in a suit brought by the town for such purpose.
- (d) In addition to any other remedies or penalties contained in this section, the town may enforce the provisions of this chapter pursuant to the applicable provisions of V.T.C.A., Local Government Code ch. 54, which chapter provides for the enforcement of municipal ordinances.
- (e) Allegation and evidence of a culpable mental state is not required for the proof of an offense defined by this chapter.

(Ord. No. 63-08, § 3(94-30), 10-6-2008)

Sec. 94-83. - Informational assistance.

- (a) In furtherance of the purposes and provisions of this article, the town's tree preservation and enforcement officer or authorized designee shall develop and distribute to persons making application for either tree removal permits or tree replanting permits and make available to the general public an informational pamphlet identifying appropriate and useful facts, guidelines and how-to information relative to the preservation, protection and replanting of trees.
- (b) The tree preservation and enforcement officer or authorized designee shall also develop, maintain and make available to applicants for tree removal permits or tree replanting permits and to the general public a tree species reference book to provide more detailed information concerning tree care in general and the characteristics, soil and growth requirements and other traits of specific tree species identified on the town's protected tree list and approved tree planting and replacement list.
- (c) A current edition of the Texas Association of Nurserymen Grades and Standards, as applicable to the tree species on the town's protected tree list and approved tree planting and replacement list, shall be maintained by the tree preservation and enforcement officer or his authorized designee and made available to applicants for building permits, tree removal permits or tree replanting permits and to the general public, as only those trees meeting and planted or replanted in accordance with the applicable Texas Association of Nurserymen Grades and Standards shall satisfy the tree planting, replanting and/or replacement standards and requirements contained in this chapter.

(Ord. No. 63-08, § 3(94-31), 10-6-2008)