



Municipal Planning & Design Review Commission
Regular Meeting Agenda
Thursday, May 11, 2023, 5:30 PM
City Hall, Lakeland, Tennessee 38002

- I. CALL TO ORDER:
- II. ROLL CALL:
- III. APPROVAL OF MINUTES OF PREVIOUS MEETING:
 - 1. April 13, 2023
- IV. PUBLIC DISCUSSION:
- V. REPORTS OF OFFICERS AND COMMITTEES:
- VI. OLD BUSINESS:
- VII. NEW BUSINESS:
 - 1. Ashmont PD Land Disturbance Permit
 - 2. Chapel Lakes PD Sketch Plan
- VIII. ANNOUNCEMENTS:
- IX. ADJOURNMENT:

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES**

THURSDAY, APRIL 13, 2023, 5:30 PM

CITY HALL, LAKELAND, TN.

DRAFT

- I. CALL TO ORDER:** The meeting was called to order at 5:30 PM by Chairman Wyatt Bunker.

For the record: The invocation and the pledge to the flag was led by Chairman Bunker.

II. ROLL CALL BY ACTING RECORDER:

Commissioner Jim Atkinson	Present
Sal Feraci	Present
Carl Helton	Present
Adam Henry	Present
Amber Hitchcock	Present
Shawn Rowland	Present
(C) Wyatt Bunker	Present

Others present:

Michael Walker, City Manager
Paul Luker, Planning Director
Emily Harrell, City Engineer
Alex Barthol, City Planner

III. APPROVAL OF MEETING MINUTES:

Mr. Henry moved to approve the regular meeting of March 16, 2023, as written, seconded by Commissioner Atkinson.

Motion carried, voice vote 7 in favor 0 against (7-0).

IV. PUBLIC DISCUSSION:

No comments were heard.

V. REPORTS OF OFFICERS AND COMMITTEES:

VI. OLD BUSINESS:

VII. NEW BUSINESS:

1. Action on approval of Arcadia Planned Residential Development – Time Extension.

Commissioner Atkinson moved to bring this item to the floor, seconded by Mr. Henry.

Discussion ensued.

Comments were heard from the following:

John Dudas – Belz Investco GP

Cindy Reaves – SR Consulting, LLC (*Present in audience*)

**LAKELAND MUNICIPAL PLANNING COMMISSION
MEETING MINUTES
THURSDAY, APRIL 13, 2023, 5:30 PM
CITY HALL, LAKELAND, TN.**

DRAFT

When the question was called the recommendation to the Board of Commissioners to approve the time extension for Arcadia Planned Residential Development passed, voice vote, 7 in favor 0 against.

2. Discussion and Possible Action on Mobil Station Lighting Plan (March 2018).

Chairman Bunker stated no motion was needed to bring this item to the floor for discussion.

Comments were heard from the following:

Bill Morgan – 9000 block of Sequoia Point Cv.

Robert Lilani – Mobile Station Owner

For the record: This item was discussed, and no action taken.

3. PULSE and Land Development Regulations Update Progress Report.

A report was given by Planning Director Paul Luker.

VIII. ANNOUNCEMENTS:

IX. ADJOURNMENT:

With no other business to conduct the meeting was adjourned at 6:28 p.m. without objections.

Amber Hitchcock, *Secretary*

ATTEST:

Debra Murrell, *City Recorder*

These minutes were approved on May 11, 2023.

Meeting Date: Thursday, May 11, 2023

Project: Ashmont PD – Land Disturbance Permit

Staff Contact: Alex Barthol, Staff Planner

PROJECT INFORMATION

Location: 9640 Davies Plantation Rd

Parcel ID: L0159 00395

Zoning District: C-2 (Regional Commercial District)

Site Area: 99.17 acres

Applicant: John McCarty

Representative: John McCarty, McCarty Granberry Engineering

STAFF RECOMMENDATION

Staff Recommends approval of the application as submitted.

REQUEST

The applicant is seeking approval of a Land Disturbance Permit for the Ashmont Planned Development Located at the Northwest Corner of Canada Road and Davis Plantation Road.

BACKGROUND

On April 21, 2022 the Municipal Planning Commission recommended approval of the Ashmont PD. The Outline Plan was then approved by the Board of Commissioners on June 9, 2022.

DISCUSSION

The applicant, John McCarty requests approval of a Land Disturbance Permit application for a 67.4 acre portion of the total land area of 99.17 acres to allow for the trees to be cleared and grading where sediment basins are necessary.

Title 18, Section 603 of the Lakeland Municipal Code requires that all land development activities disturbing one acre or more obtain a Land Disturbance Permit from the City. In accordance with the City's regulations, the applicant has provided the following documents as part of the permit application:

- Site survey
- Soils report
- TDEC notice of coverage
- Erosion Prevention and Sediment Control Plan
- Wetland Survey

Any approval of the Land Disturbance Permit by the Planning Commission should be made conditional upon the applicant satisfying all City regulations.

EXAMPLE MOTIONS

1. Motion to approve the Ashmont PD Land Disturbance Permit subject to the following conditions:
 - a. Conditions as determined by the Planning Commission
2. Motion to approve the Ashmont PD Land Disturbance Permit without conditions.
3. Motion to deny the Ashmont PD Land Disturbance Permit application:
 - a. Reason for denial

April 18, 2023

Emily Harrel L
City of Lakeland
10001 Highway 70
Lakeland, TN 38002

RE: ASHMONT LAND DISTURBANCE

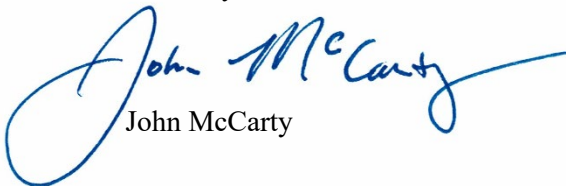
Emily,

On behalf of Vince Smith, we are submitting the attached land disturbance form with the approved NOC and SWPPP document for the Ashmont project per our discussions last week. We are requesting the land disturbance permit to allow for the trees to be cleared in the areas shown on the attached plans. The only grading that will be performed onsite is where sediment basins are necessary. Currently, the site has tree coverage in most areas with the small improvements from the paintball park. The streams onsite will not be disturbed and buffers are maintained accordingly.

The attached erosion control plans show the measures that will be taken to prevent issues related to erosion and sediment. The soil types onsite are primarily silty clay and lean clay. Erosion control inspections will be performed twice weekly per the TDEC regulations and kept onsite.

If any additional information is needed, please do not hesitate to contact me.

Sincerely,


John McCarty



City of Lakeland, Tennessee

INFORMATION ON OBTAINING A LAND-DISTURBING PERMIT

A Land Disturbing Permit is required prior to any excavating, filling or clearing of land. Clearing is defined as the removal of vegetation and disturbance of soil prior to grading or excavating in anticipation of construction activities at some time in the future.

The City Engineer may issue Land Disturbing Permits for sites one acre or less in area. The Municipal Planning Commission may approve the Land Disturbing Permit for sites over one acre in area. Building permit site plans with approved erosion control provisions are exempted.

Also exempted per TCA § 6-54-126 – Zoning Limitations on Agricultural Land “For any land that is presently used for agricultural purposes a municipality may not use its zoning power to interfere in any way with the use of such land for agricultural purposes as long as the land is used for agricultural purposes.”

Contact the City Engineer at Lakeland City Hall, 10001 US Highway 70, Lakeland, TN 38002, (901) 867-2717.

- A. Refer to the Tennessee Erosion and Sediment Control Handbook, Second Edition, March 2002, distributed by the Tennessee Department of Environment and Conservation. This handbook can be found on the web at www.state.tn.us/environment/wpc/sed-ero-control/handbook/index.html. Complete the Land Disturbing Permit application, including the submission of a site-specific erosion control plan using TDEC guidelines.
- B. Pay the appropriate fee depending on the site size.
- C. Your plan will be reviewed by City staff and the Municipal Planning Commission. A revised plan may be required.
- D. You may be required to post a surety bond or letter of credit.
- E. Upon satisfactory completion of the permit application and approval by the Municipal Planning Commission you will be issued a Land Disturbing Permit.
- F. This permit will be valid for a period of 6 months from the date of approval. If the project is incomplete, the applicant will have to resubmit the application to the Municipal Planning Commission prior to expiration of the permit.

CITY OF LAKELAND, TENNESSEE

CHECKLIST

For Erosion and Sediment Control Plans

NARRATIVE

- ☒ Project Description – Briefly describes the nature and purpose of the land disturbing activity, and the amount of grading involved.
- ☒ Existing site conditions – A description of the existing topography, vegetation and drainage.
- ☒ Adjacent areas – A description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be effected by the land disturbance.
- ☒ Soils – A brief description of the soils on the site giving such information as soil name, mapping unit, erodibility, permeability, depth, texture and soil structure.
- ☒ Critical Areas – A description of areas on the site which have potentially serious erosion problems.
- ☒ Erosion and sediment control measures – A description of the methods which will be used to control erosion and sedimentation on the site. (Must satisfy the "General Criteria").
- ☒ Permanent stabilization – A brief description, including specifications, of how the site will be stabilized after construction is completed.
- ☒ Stormwater management considerations – Will the development of the site result in increased peak rates of runoff? Will this result in flooding or channel degradation downstream? If so, considerations should be given to stormwater control structures on the site. (See "General Criteria").
- ☒ Maintenance – A schedule of regular inspections and repair of erosion and sediment control structures should be set forth.
- ☒ Calculations – Any calculations made for the design of such items as sediment basins, diversions, waterways, and calculations for runoff and stormwater detention basin design (if necessary or required).
- ☒ Permits – All required permits from other agencies shall be obtained including approval from TDEC of a Storm Water Pollution Prevention Plan. Copies of correspondence indicating approval shall be provided to the City of Lakeland prior to issuance of the permit.

SITE PLAN

- ☒ Vicinity map – A small map locating the site in relation to the surrounding area.
- ☒ Existing contours – The existing contours of the site should be shown on a map.
- ☒ Existing vegetation – The existing tree lines, grassy areas, or unique vegetation should be shown on a map.
- ☒ Soils – The boundaries of the different soil types should be shown on a map.
- ☒ Indicate north – The direction of north in relation to the site should be shown with plan scale.
- ☒ Critical erosion areas – Area with potentially serious erosion problems should be shown on a map.
- ☒ Existing drainage patterns – The dividing lines and the direction of flow for the different drainage areas should be shown on a map.
- ☒ Final contours – Changes to the existing contours should be shown on a map.
- ☒ Limits of clearing and grading – Areas which are to be cleared and graded should be outlined on a map.
- ☒ Location and practices – The locations of the erosion and sediment control and stormwater management practices used on the site should be shown on a map.
- ☒ Detail drawings – Any structural practices used that are not referenced to the Tennessee Erosion and Sediment Control Handbook, should be explained and illustrated with detail drawings.
- ☐ Tree Removal Plan, - The locations, sizes and species of trees located on site should be shown on a map as detailed in the Lakeland Tree Ordinance.
- ☒ Tree Management Plan, - The locations and protection of trees located on site that are designated as remaining should be shown on a map as detailed in the Lakeland Tree Ordinance.
- ☐ Tree Replacement Plan, - The locations, sizes and species of trees to be planted on site should be shown on a map as detailed in the Lakeland Tree Ordinance.

CITY OF LAKELAND, TENNESSEE

APPLICATION FOR LAND DISTURBING PERMIT

Project File # _____

Date of Application _____

Permit Effective Date _____

Permit Expires _____

Applicant Vince Smith Phone 901-489-5896

Address 355 Tara Lane

Landowner Vince D Smith Jr Phone _____

Address PO Box 772808, Memphis TN 38117

Plan prepared by McCarty Granberry Engineering

Project Ashmont

Location 9540 E Davies Plantation Rd (Name and Description)

Tax Map L0159 00395 Parcel _____ Land Area = 99.29 Ac sq. ft.

I, John McCarty, hereby certify that I fully understand the provisions of
(Print name)
the City of Lakeland Erosion and Sediment Control Program, and that I accept responsibility
for carrying out the Erosion and Sediment Control Plan for the above-referenced project as
approved by the Lakeland Municipal Planning Commission.

I further grant the right-of-entry onto this property, as described above, to the designated
personnel of the City of Lakeland for the purpose of inspecting and monitoring for compliance
with the aforesaid Regulation.

[Signature]
(Land Owner/Applicant)

April 18, 2023
Date

Approved:

(City Engineer)

Date

STORM WATER POLLUTION PREVENTION PLAN

Ashmont Site Clearing

Lakeland, Tennessee

Prepared for:

Ashmont Developer LLC
5851 Ridge Bend Road, Memphis, TN 38120

Prepared by:



April 2023

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I. INTRODUCTION

This document is the Storm Water Pollution Prevention Plan (SWPPP) for the construction activities of Ashmont Site Clearing in Lakeland, Tennessee, hereinafter referred to as the Project. A Vicinity Map showing the limits of proposed construction is provided in Appendix A to this Plan.

This SWPPP has been prepared to meet the requirements of the State of Tennessee NPDES Permit No. TNR 100000, which regulates Storm Water Discharges from Construction Sites that disturb 1 acre or greater. The TNR 100000 authorizes the discharge of storm water from sites that are under construction provided that the permit provisions are adhered to and the State of Tennessee receives formal application from the parties responsible for the construction. Under this general permit both the owner/developer of the property and the contractors performing the construction activities are responsible to comply with the permit.

As indicated on the NOI, the “Operators” for this Project are as follows:

- Ashmont Developer LLC has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications.
- The Contractor has not been selected yet.

II. PURPOSE AND SCOPE

The United States Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) have developed programs to regulate the discharge of storm water runoff from certain types of construction activity. As a result, the construction activities at the Project require an NPDES General Permit for Storm Water Discharges from Construction Activity. One of the requirements of the General Permit is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce the pollution of surface waters resulting from the construction activity.

The purpose of this SWPPP is to identify potential sources of pollution reasonably expected to affect the quality of storm water discharges from the construction site. This SWPPP also provides the control measures and describes the implementation practices, which will be used to reduce the pollutants in storm water discharges associated with this construction to enable compliance with the requirements of TNR 100000.

This SWPPP has been prepared in accordance with the requirements of Part II of TNR 100000 and in accordance with good engineering practices to address only storm water discharges from the construction and support activities. There will be no discharges of storm water that are mixed with sources of non-storm water. There will be no storm water discharges associated with these construction activities that have been issued an individual permit.

Storm water discharges from construction activities for this Project should not cause violations of water quality standards or contribute to the impairment of a Section 303(d)-Listed Water. Furthermore, it is believed that storm water discharges from construction of the Project will not impact legally protected listed or proposed threatened or endangered aquatic fauna in the receiving stream, and will not negatively affect a property that is listed or is eligible for listing in the National Historic Register maintained by the Secretary of Interior.

This SWPPP does not address storm water discharges that originate from the construction site after construction activities have been completed, the site has undergone final stabilization, and a Notice of Termination has been received.

III. PROJECT DESCRIPTION

A. General Description of Project Construction

This project will disturb 67.4 acres of a 99.2-acre parcel of land northwest of the intersection of Davies Plantation Road and Canada Road in Lakeland, TN (see **App. A** for exact location). This SWPPP is intended to cover the clearing and prepping of the site. This project will include the logging of the mature timber on the site, removal of the “root balls,” and the construction of a sediment basin. Construction will be done in such a way that no more than 50 acres is disturbed at one time.

The project will be conducted in a total of three (3) phases of construction, consisting of (3) phases of erosion prevention and sediment control. Phase 1 involves clearing, grubbing and the instillation of any silt fencing, wattles, check dams, bypass structures, etc. that may be necessary. Phase 2 includes the removal of the tree roots and the minimal grading of the site. During this phase the erosion prevention and sediment control measures installed in Phase 1 shall be maintained as much as possible and any additional measures shown on the plans shall be installed. Phase 3 involves the permanent stabilization of any disturbed areas and the removal of any temporary control measures not needed.

B. Description of Project Site

1. Existing Predeveloped Conditions – The predeveloped property is mostly forest with some open fields. Runoff leaves the property through 20 different outfalls.

- a. *Pre-Developed Outfall #1*

This outfall drains 2.35 acres of the property. Runoff flows north, through forest before crossing the north property line.

- b. *Pre-Developed Outfall #2*

This outfall drains 1.17 acres of the property. Runoff flows northeast, through forest before crossing the north property line.

- c. *Pre-Developed Outfall #3*

This outfall drains 0.38 acres of the property. Runoff flows north, through forest before crossing the north property line.

- d. *Pre-Developed Outfall #4*

This outfall drains 1.04 acres of the property. Runoff flows west, through forest before crossing the northwest property line.

- e. *Pre-Developed Outfall #5*

This outfall drains 4.95 acres of the property. Runoff flows to the center of the basin, through forest before diverting west towards the property line.

- f. *Pre-Developed Outfall #6*

This outfall drains 0.67 acres of the property. Runoff flows southwest, through forest before crossing the west property line.

- g. *Pre-Developed Outfall #7*

This outfall drains 6.53 acres of the property. Runoff flows southwest, through forest before crossing the west property line.

- h. *Pre-Developed Outfall #8*

This outfall drains 0.91 acres of the property. Runoff flows south, through forest before crossing the south property line.

i. *Pre-Developed Outfall #9*

This outfall drains 3.93 acres of the property. Runoff flows southeast, through forest before crossing the south property line.

j. *Pre-Developed Outfall #10*

This outfall drains 9.06 acres in total, with 3.2 of those acres coming from off the property. This basin is mostly forest along with some grass and asphalt. Runoff from this basin flows off of Canada Road, over grass, into the forest, and off of the site.

k. *Pre-Developed Outfall #11*

This outfall drains 4.95 acres of the property. Runoff flows to the center of the basin, through forest before diverting west towards the property line.

l. *Pre-Developed Outfall #12*

This outfall drains 3.02 acres of the property. Runoff flows east, through forest before entering the “tree protection zone.”

m. *Pre-Developed Outfall #13*

This outfall drains 2.63 acres of the property. Runoff flows east, through forest before entering the “tree protection zone.”

n. *Pre-Developed Outfall #14*

- o. This outfall drains 0.69 acres of the property. Runoff flows east, through forest before entering the “tree protection zone.”

p. *Pre-Developed Outfall #15*

This outfall drains 4.68 acres of the property. Runoff flows south, over grass and through forest before entering the “tree protection zone.”

q. *Pre-Developed Outfall #16*

This outfall drains 3.07 acres of the property. Runoff flows north, through forest before entering the “tree protection zone.”

r. *Pre-Developed Outfall #17*

This outfall drains 1.87 acres of the property. Runoff flows north, through forest before entering the “tree protection zone.”

s. Pre-Developed Outfall #18

This outfall drains 0.73 acres of the property. Runoff flows north, through forest before entering the “tree protection zone.”

t. Pre-Developed Outfall #19

This outfall drains 2.51 acres of the property. Runoff flows north, through forest before entering the “tree protection zone.”

u. Pre-Developed Outfall #20

This outfall drains 23.72 acres of the property. This basin contains short grass meadow, forest, and an existing paintball park. Runoff flows north and west, through forest and grass before entering the “tree protection zone.”

Proposed Post-Developed Conditions – The post-developed site will consist of stabilized, compacted soil. Grass will be planted and begin to grow as soon as construction activities cease. The drainage basins will not change, as no amount of grading will be done to change them. There will be 4 new sediment basins constructed before any other earth disturbing activities take place.

a. Post-Developed Outfall #1

This outfall drains 2.35 acres of the property. Runoff flows north, over disturbed earth before crossing the north property line.

b. Post-Developed Outfall #2

This outfall drains 1.17 acres of the property. Runoff flows northeast, over disturbed earth before crossing the north property line.

c. Post-Developed Outfall #3

This outfall drains 0.38 acres of the property. Runoff flows north, over disturbed earth before crossing the north property line.

d. Post-Developed Outfall #4

This outfall drains 1.04 acres of the property. Runoff flows west, over disturbed earth before crossing the northwest property line.

e. *Post-Developed Outfall #5*

This outfall drains 4.95 acres of the property. Runoff flows to the center of the basin, over disturbed earth before diverting west towards the property line.

f. *Post-Developed Outfall #6*

This outfall drains 0.67 acres of the property. Runoff flows southwest, over disturbed earth before crossing the west property line.

g. *Post-Developed Outfall #7*

This outfall drains 6.53 acres of the property. Runoff flows southwest, over disturbed earth before crossing the west property line.

h. *Post-Developed Outfall #8*

This outfall drains 0.91 acres of the property. Runoff flows south, over disturbed earth before crossing the south property line.

A sediment basin will be constructed in this basin. See Appendix C.

i. *Post-Developed Outfall #9*

This outfall drains 3.93 acres of the property. Runoff flows southeast, over disturbed earth before crossing the south property line.

j. *Post-Developed Outfall #10*

This outfall drains 9.06 acres in total, with 3.2 of those acres coming from off the property. This basin will be mostly disturbed earth along with some grass and asphalt. Runoff from this basin flows off of Canada Road, over grass, over disturbed earth, and off of the site.

A sediment basin will be constructed in this basin. See Appendix C.

k. *Post-Developed Outfall #11*

This outfall drains 4.95 acres of the property. Runoff flows to the center of the basin, over disturbed earth before diverting west towards the property line.

l. *Post-Developed Outfall #12*

This outfall drains 3.02 acres of the property. Runoff flows east, over disturbed earth before entering the “tree protection zone.”

m. Post-Developed Outfall #13

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u. Post-Developed Outfall #20

This outfall drains 23.72 acres of the property. This basin contains short grass meadow, forest, and an existing paintball park. Runoff flows north and west, over disturbed earth and grass before entering the “tree protection zone.”

Two sediment basins will be constructed in this basin. See Appendix C.

- 3. Disturbed Area – The total area of the construction site that is to be disturbed by clearing, grubbing, excavation, grading and other activities associated with this Project is approximately 67.4 acres and consists of

wooded areas, newly planted grass, concrete sidewalks, asphalt driveways, and private residences.

4. Curve Number – The pre-construction weighted curve number ('CN' value) for the basin was estimated to be 67. The post-construction runoff coefficient for the site was estimated to be 80. This is based on the complete buildout of the residential properties. The remainder site will be returned to its original state after installation of the streets.
5. Site Map – A USGS quad map indicating the location of the Project in relation to major roadways, drainage ways, surface waters, receiving stream, and other significant structures within the area is provided in Appendix B of this Plan.
6. Erosion & Sediment Control Plan – The Erosion Control Plan for this Project which indicates the location of major structural and nonstructural erosion and sediment controls, the location of areas where stabilization will occur and locations where storm water is discharged to a surface water is also provided in Appendix C to this Plan.
7. Storm Water Outfalls – The outfall points for all storm water discharges exiting this construction site intended for coverage under the General Permit are indicated on the Erosion Control Plan, which is provided in Appendix C to this Plan.
8. Non-Storm Water Discharges – Potential sources of non-storm water that may be combined with storm water discharges associated with this Project include watering of seeded areas.
9. Receiving Waters – The receiving waters for all discharging of storm water from this construction site is Oliver Creek (Source ID: TN08010209002_0400). This creek is impaired due to sedimentation and siltation.
10. Threatened or Endangered Aquatic Fauna – No legally protected state or federally listed threatened or endangered aquatic fauna and/or critical habitat has been identified at this construction site.

C. Construction Sequencing

The following construction sequence will be followed in order to reduce erosion and prevent sediment from leaving the construction site:

Phase 1

1. Construct temporary construction exit/entrance as shown. Construction entrance location may be modified according to ingress/egress of the contractor as approved by engineer.
2. Install rain gauge near construction exit/entrance or location that is easily accessible by a vehicle
3. Install silt fence in all locations shown before construction begins per detail. Remove sediment from silt fence once sediment has reached 1/3 to 1/2 of the height of the silt fence and as needed to clear and grub site.
4. Construct sediment basins and immediately stabilize.
5. Do not disturb more than 50 acres at one time.
6. Dust shall be controlled during construction by adequate use of water.
7. Transition to phase 2.

Phase 2

1. Maintain all erosion control measures as necessary.
2. Clear and grub site and perform removal of tree roots as desired. Cut and dispose of any debris produced during this process.
3. Do not disturb more than 50 acres at one time.
4. Remove any temporary control measures not needed.
5. Dust shall be controlled during construction by adequate use of water.

Phase 3

1. Maintain all erosion control measures as necessary.
2. All disturbed areas shall be permanently stabilized with seeding/sod. Designed erosion control measures must remain intact and functioning until stabilization is mature.
3. Storm water inspection and reporting will be required of all sediment and erosion control measures in accordance with TDEC.
4. Remove any temporary control measures not needed.
5. Dust shall be controlled during construction by adequate use of water.

A critical component of the successful control of erosion from a construction site is the sequencing of the construction activities. Therefore, the Contractor will be instructed within this Plan to sequence the installation/construction of erosion and sediment controls, performance of land disturbance activities, stabilization of disturbed areas, and removal of temporary controls so as to minimize the exposure time of graded areas.

IV. STORM WATER CONTROL PLAN

This section provides a site-specific plan to minimize the erosion of soil and the discharge of silt and other pollutants into waters of the State of Tennessee resulting from construction activities at the Project. This Plan was developed through a systematic process consisting of the following components:

- Control Selection and Plan Design – Based on the evaluation and assessment of site conditions for this Project, various types of erosion and sediment controls were evaluated and selected to minimize and control the pollution of storm water runoff from the construction site. The types of erosion and sediment controls considered for implementation during construction to minimize the loss of soil into receiving waters included stabilization (e.g., sodding of disturbed areas) and structural controls (e.g., silt fence, sediment traps, etc.). In addition to erosion and sediment controls, methods of controlling other sources of pollution resulting from construction were defined and evaluated. Other sources evaluated included construction debris, sanitary wastes, fuels and oils, offsite tracking of sediments, generation of dust, and contamination of non-storm water discharges. The location and type of erosion and sediment controls and storm water management control are indicated on the Erosion Control Plan provided in Appendix C to this Plan.
- Construction/Implementation – The Owner, contractors, and subcontractors (i.e., the Operators) performing the construction of the Project are responsible for implementation of this SWPPP. Implementation of this SWPPP includes certification of this Plan; filing of the required notices with appropriate regulatory agencies; construction/installation of erosion and sediment controls as specified in the Construction Documents and in this Plan; inspecting and maintaining the controls; keeping records of control inspections and maintenance; amending the Plan to keep it current; and making the Plan and records accessible as described in TNR 100000.
- Final Stabilization and Termination – Upon completion of the construction of the Project including final stabilization (as defined in 3.1 of the TNR 100000) of all disturbed areas in accordance with the Construction Documents, the Operator of the construction site can be relieved of the requirements of the General Permit for Storm Water Discharges from Construction Activities and this SWPPP by completing and submitting a Notice of Termination (NOT):

The following subsections describe the storm water runoff controls that will be the Contractor's responsibility to implement during the construction of this Project. The technical basis for selection of the controls and practices used to minimize the pollution of storm water runoff from the Project include the Tennessee Erosion & Sediment Control Handbook and good engineering practices proven in past experience to be effective when properly maintained.

A. Erosion and Sediment Controls

1. General Criteria and Requirements

The construction-phase erosion and sediment controls for this Project have been designed to retain sediment on site. Erosion and sediment controls have been designed according to the size and slope of disturbed or drainage areas to detain runoff and trap sediment. The controls have been designed to handle a 5-year 24-hour rainfall event. All control measures have been properly selected, and will be installed and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the control will be replaced or modified based on the site-specific conditions

Pre-construction vegetative ground cover will not be destroyed, removed or disturbed more than 10 days prior to grading unless the area is seeded and/or mulched or other temporary cover is installed. Clearing and grubbing has been held to the minimum necessary for grading and equipment operation. There are no offsite material storage areas (also including overburden and stockpiles of dirt, etc.) used solely for this Project.

Erosion and sediment control measures will be in place and functional before clearing and grubbing operations begin, and will be constructed and maintained throughout the construction period.

Prior to construction commencing, a professional licensed as a PE or LA, or CPESC or TDEC Level II shall perform a Quality Assurance Site Assessment at each outfall involving drainage totaling 10 or more acres or 5 or more acres if draining to an impaired or exceptional quality waters, within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. As a minimum, site assessment should be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. The site assessment should be performed with the inspector, and should include a review and update (if applicable) of the SWPPP. Modifications of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 (see part 10 below) and the rules of the Tennessee Board of Architectural and Engineering Examiners. The site assessment findings shall be documented and the documentation kept with the SWPPP at the site. At a minimum, the

documentation shall include information included in the inspection form provided in Appendix C of this permit. The documentation must contain the printed name and signature of the individual performing the site assessment and the following certification:

“I certify under penalty of law that this report and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Litter, construction debris, and construction fuels, oils, and chemicals exposed to storm water will be relocated prior to anticipated storm events, or otherwise prevented from becoming a pollutant source for storm water discharges. After use, silt fences will be removed or otherwise prevented from becoming a pollutant source for storm water discharges.

2. Stabilization Practices

This subsection includes a description of the temporary and permanent stabilization practices for areas of land disturbance for this Project. Existing vegetation has been preserved to the extent possible and disturbed areas will be stabilized as soon as practicable after completion of the land disturbance activity in a given area.

The primary stabilization methods used for this Project include the following:

- Seeding, mulching of any disturbed areas that will not be covered by the new slag/aggregate surface and sod stabilization of the proposed ditches;
- Protection and preservation of trees and mature vegetation to the extent practicable; and
- Stabilization of lay down/storage area with slag/aggregate base.

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within 15 days, then stabilization measures do not have to be initiated on that portion of the site by the 14th day after construction activity temporarily ceased.

Permanent stabilization with perennial vegetation or other permanently stable, non-eroding surface will replace any temporary measures as soon as practicable.

3. Structural Practices

This subsection describes the measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. This Plan does not address the ultimate operation and maintenance of the storm water management controls after the construction activities have been completed and the site has undergone final stabilization.

The primary storm water management controls for this Project are as follows:

- Installing silt fence along disturbed areas and behind curbs
- Inlet Protection
- Construction Exit
- Seeding of disturbed areas.

This subsection includes a description of structural controls and practices used for the Project to divert flows from exposed soils, store flows, or otherwise limits runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. The Erosion Control Plan provided in Appendix C addresses the initial encapsulation of the site and controls after final grades are established. Interim structural controls may be required to be installed by the Operator due to changing conditions during construction of the site work. The structural controls used for this Project may include one or more of the following as indicated on the Erosion Control Plan:

1. Silt fences: A temporary sediment control measure, composed of woven geotextile fabric supported by steel or wood posts, used to intercept sediment transported from areas where runoff occurs as sheet flow. Its purpose is to prevent sediment carried by sheet flow from leaving the site and entering natural drainage ways or storm drainage systems by slowing storm water runoff, causing ponding and the deposition of sediment at the structure. Silt fence does not filter sediment.
2. Construction Entrance/Exit: A stone pad on geotextile fabric or a rumble strip located at any point where traffic will be moving from a construction site onto a public roadway or other paved area. Its purpose is to reduce or eliminate the transport of material from the construction

area onto a public roadway by providing an area where mud and soil can be removed from the tires of construction vehicles.

3. Inlet Protection: A temporary protective device formed around a storm drain drop inlet to trap sediment. Its purpose is to prevent sediment from entering the storm drainage system, prior to temporary or permanent stabilization of the disturbed area.
4. Sediment Basin: A temporary basin created by an embankment constructed across a drainage way, or by an excavation that creates a basin, or by a combination of both, suitably located to capture sediment. A sediment basin consists of an embankment (dam), a sediment storage area, a sediment forebay, a dewatering mechanism, a principal (or primary) spillway and emergency spillway system, a permanent pool, and scour protection at the outlet of the principal spillway pipe.

Any muddy waters that are pumped from excavations and work areas will be allowed to settle or will be filtered prior to its discharge into surface waters. This water will be discharged through a pipe, well grassed, or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation.

B. Sediment Basin Requirements/Design

FOUR sediment basins must be installed per EPSC Plans (Appendix C) before any other land disturbing activities are carried out. The basin must have a control structure as shown on the EPSC plans. The basins should be cleaned of excess sediment when sediment composes of 50% of a basin's capacity. The proposed basin size, grading, and volume shall be maintained until the site is stabilized per TDEC regulations.

Outfall 7 Sediment Basin

Based on the drainage area to the sediment basin (5.1 acres), a storage volume of 18,441 cubic feet is required, and a storage volume of 39,690 cubic feet has been provided. This basin is capable of discharging the 25-year 24-hour event via its culvert and emergency spillway while maintaining 1 ft of freeboard. See the *Outfall 7 Sediment Basin Details* in Appendix C.

Outfall 10 Sediment Basin

Based on the drainage area to the sediment basin (8.6 acres), a storage volume of 31,104 cubic feet is required, and a storage volume of 50,895 cubic feet has been provided. This basin is capable of discharging the 25-year 24-hour event via its culvert and emergency spillway while maintaining 1 ft of freeboard. See the *Outfall 10 Sediment Basin Details* in Appendix C.

Outfall 20 Upper Sediment Basin

Based on the drainage area to the sediment basin (9.3 acres), a storage volume of 33,642 cubic feet is required, and a storage volume of 47,682 cubic feet has been provided. This basin is capable of discharging the 25-year 24-hour event via its culvert and emergency spillway while maintaining 1 ft of freeboard. See the *Outfall 20 Upper Sediment Basin Details* in Appendix C.

Outfall 20 Lower Sediment Basin

Based on the drainage area to the sediment basin (12.9 acres), a storage volume of 47,034 cubic feet is required, and a storage volume of 72,819 cubic feet has been provided. This basin is capable of discharging the 25-year 24-hour event via its culvert and emergency spillway while maintaining 1 ft of freeboard. See the *Outfall 20 Upper Sediment Basin Details* in Appendix C. The total drainage area to this basin is about 21 acres. However, 9.3 of those acres are detained by the “*Outfall 20 Upper Sediment Basin*.”

C. Other Items Needing Control

This subsection describes the management practices and controls utilized to minimize the exposure and reduce the risk of exposure of other materials to storm water runoff.

1. Off-site Vehicle and Dust Minimization – The off-site vehicle tracking of sediments and the generation of dust will be minimized due to access of pavement along projects. The paved streets adjacent to the site entrance will be swept or cleaned as necessary to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.
2. Solid Wastes and Construction Debris – All waste materials will be accumulated in storage containers such as securely lidded metal dumpster or roll-off box rented from a licensed solid waste management company. All trash and construction debris from the site will be deposited in the containers. The containers will be emptied as often as necessary to prevent accidental spillage or release and exposure to storm water. No construction waste material will be buried onsite. All construction personnel will be instructed regarding the correct procedures for waste disposal. Notices stating these practices will be posted in the construction office trailer.
3. Sanitary Wastes – Sanitary waste will be collected from the portable units a minimum of three times per week by a licensed sanitary waste management contractor, as required by local regulation.

4. Discharge to Surface Waters – No solid materials, including building materials, will be discharged to waters of the United States, except as authorized by a Section 404 Permit.

D. Storm Water Discharges from Support Activities

This Plan recognizes that storm water discharges from construction support activities (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) may be necessary. To minimize the risk of the contamination or adverse impact on storm water discharges from this site, the support activity will meet the following requirements:

1. The support activity will be primarily related to this construction site that is covered under the General Permit and the owner/operator of this construction site will be the owner/operator of the support activity.
2. The support activity will not be a commercial operation serving multiple unrelated construction projects by different operators, and will not operate beyond the completion of the construction activity at the last phase of construction it supports.
3. Appropriate erosion and sediment controls and measures are identified in this SWPPP and will be implemented, inspected, and maintained to cover discharges from the support activity areas.
4. Process wastewater discharges from these support activities will not be allowed. If process wastewaters must be discharged from this construction site, an individual permit or other appropriate general permit will be obtained.

E. Spill Prevention

This subsection describes the management practices and controls utilized to minimize the exposure and reduce the risk of spills or other accidental release of hazardous materials and wastes to storm water runoff.

1. Inventory of Hazardous Materials – The materials and substances listed below are expected to be present at the construction site:
 - a. Petroleum Fuels and Oils
 - b. Fertilizers
2. Good Housekeeping – The following good housekeeping practices will be followed onsite during construction of the Project:

- a. An effort will be made to store only enough product required to do the job.
 - b. All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
 - c. Products will be kept in their original containers with the original manufacturer's label.
 - d. Substances will not be mixed with one another unless recommended by the manufacturer.
 - e. Whenever possible, all of a product will be used up before disposing of the container.
 - f. Manufacturer's recommendations for proper use and disposal will be followed.
 - g. The site construction superintendent will inspect daily to ensure proper use and disposal of materials onsite.
3. Hazardous Products - The following practices will be used to reduce the risk of spills associated with hazardous materials:
- a. Products will be kept in original containers unless they are not resealable.
 - b. Original labels and material safety data will be retained to allow access to important product information.
 - c. If surplus product must be disposed of, manufacturer's or local and State recommended methods for proper disposal will be followed.
4. Product Specific Practices – The following product specific practices will be followed at the construction site:
- a. Petroleum Products – All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.

- b. Fertilizers - Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.
5. Spill Control Practices – In addition to the good housekeeping and material management practices described above, the following practices will be followed for spill prevention and cleanup:
- a. The manufacturer's recommended methods for spill cleanup will be clearly posted, and site construction personnel will be made aware of the procedures and the location of the information and cleanup supplies.
 - b. The location of materials and equipment necessary for spill cleanup will be clearly posted, and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
 - c. Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include, but not be limited to, brooms, dust pans, mops, rags, gloves, goggles, absorbent, sand and plastic and metal trash containers specifically designed for this purpose.
 - d. All spills will be cleaned up immediately upon discovery.
 - e. The spill area will be kept well ventilated, and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

These practices should be effective in reducing the release of hazardous material and minimizing exposure of the material to storm water. Additionally, these practices should minimize the discharge of hazardous substances or oil into the stormwater runoff of the site.

V. INSPECTIONS AND MAINTENANCE

This subsection describes the procedures to ensure that vegetation, erosion and sediment control measures and other protective measures identified in this SWPPP are inspected and maintained in good and effective operating condition. All erosion and sediment controls, storm water management controls, and related appurtenances which are installed or used to achieve compliance with the conditions of the General Permit and with the requirements of this SWPPP will be properly operated and maintained until final

stabilization of the construction site is achieved and the Notice of Termination has been accepted by TDEC.

A. Inspection Procedures and Schedules

1. Inspection procedures for specific types of erosion and sediment controls and storm water management controls are as follows:
 - a. Structural Controls:
 - (1) Silt fence will be inspected for depth of sediment, tears, security of fabric attachment to the posts, security of fence posts in the ground, and to determine if the fabric is properly trenched into the soil.
 - (2) Drainage swales will be inspected to ensure that they are not silted in and are properly diverting storm water runoff water excessive erosion occurring.
 - (3) Earth dikes will be inspected to ensure that they are not silted in and are properly impounding storm water runoff.
 - (4) Check dams will be inspected for depth of sediment.
 - (5) Subsurface drains will be inspected to ensure that they are not obstructed and that storm water runoff is being properly intercepted by the system.
 - (6) Diversion dikes will be inspected for any breaches.
 - b. Stabilization Practices:
 - (1) Sod will be inspected for healthy growth and areas of washout.
 - (2) Protected and preserved trees and mature vegetation will be inspected to ensure that any protective barrier is in place and that the vegetation is not being encroached upon.
 - (3) Seeding & mulched areas will be inspected to insure healthy growth and for areas of washout.
2. The inspections described herein will be performed at least twice every calendar week and at least 72 hours apart. Inspections shall be performed within 24 hours of the end of a storm event of 0.5 inches or greater.

3. Qualified personnel will inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site. Personnel selected for inspection and maintenance responsibilities will be trained in the appropriate inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.
4. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures will be observed to ensure that they are operating correctly.
5. Outfall points (where discharges from the site enter streams or wet weather conveyances) will be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations will be inspected if possible. Locations where vehicles enter or exit the site will be inspected for evidence of offsite sediment tracking.
6. If the results of an inspection reveal that the storm water pollution prevention measures provided in this Plan are deficient, the Plan shall be revised as appropriate, but in no case later than 7 calendar days following the inspection. Such modifications shall provide for timely implementation of any changes to this Plan within 7 calendar days following the inspection.
7. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and actions taken in shall be made and retained as part of the SWPPP for at least three (3) years from the date the site is finally stabilized. This report shall be signed in accordance with Section 5 of TNR 100000.
8. Depth of rainfall, approximate volume of discharge, interval between rain events, total drainage area, and estimated disturbed area shall be logged in a Discharge Monitoring Report.

B. Maintenance Procedures and Schedules

1. Maintenance needs identified by inspections or other means will be accomplished before the next storm event if possible, but in no case more than seven (7) days after the need is identified. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

2. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the control will be replaced or modified based on the site-specific conditions.
3. If sediment escapes the construction sites, off-site accumulations of sediment that have not reached a stream will be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in the street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets).
4. Sediment will be removed from silt fences, rock silt screens, and other sediment controls as necessary, but at least when the design capacity of the control has been reduced by 40%.

VI. TOTAL MAXIMUM DAILY LOADS (TMDL)

The construction area that is the subject of this application drains into Oliver Creek. The disturbed area of the site is approximately 67.4 acres in size.

VII. NON-STORM WATER DISCHARGES

Potential sources of non-storm water that may be combined with storm water discharges associated with construction activities for this Project include the following:

- Discharge of non-storm water from the dewatering of work areas of collected storm water and ground water;
- Waters used to wash vehicles of dust and soil (not process materials such as concrete) to minimize off-site vehicle tracking of sediments where detergents are not used and detention and/or filtering is provided before the water leaves site;
- Water used to control dust generated by vehicular traffic; potable water sources including waterline flushings;
- Routine external building washdown which does not use detergents; uncontaminated ground water or spring water; and
- Foundation or footing drains where flows are not contaminated with process materials such as solvents.

This SWPPP includes appropriate erosion/sediment control and pollution prevention measures for the non-storm water component(s) of the discharge from this Project. All non-storm water discharges will be made through stable discharge structures.

VIII. RECORDKEEPING

This section provides a description of the records that will be produced and maintained with regards to complying with the requirements of this SWPPP and the General Permit.

- This Plan will be made available upon request to the TDEC or to the local agency approving sediment and erosion plans, grading plans, or storm water management plans.
- A copy of this SWPPP (including a copy of the permit language) will be maintained at the construction site (or other local location accessible to the Director and the public) from the date construction commences to the date of final stabilization. A copy of this Plan will be available at a central location onsite for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site.
- If the site is inactive or does not have an onsite location adequate to store this Plan, the location of the SWPPP, along with a contact number, will be posted onsite. If the Plan is located offsite, reasonable local access to the Plan, during normal working hours, will be provided.
- A notice will be posted near the main entrance of the construction site with the following information:
 - 1) The Storm Water Construction General Permit Certificate, a copy of the NOI confirmation letter;
 - 2) The name and telephone number of a local contact person;
 - 3) A brief description of the Project (shall include permit number); and
 - 4) The location of the SWPPP if the site is inactive or does not have an onsite location to store the Plan.

If posting this information near a main entrance is infeasible due to safety concerns, the notice will be posted in a local public building. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary.

- The following records will be maintained on site:
 - 1) The dates when major grading activities occur;

- 2) The dates when construction activities temporarily or permanently cease on a portion of the site; and
 - 3) The dates when stabilization measures initiated.
- A rain gauge is maintained at the site to measure and record rainfall moments.
 - Any information, which is requested to determine compliance with the General Permit or other information, will be furnished to the Director or an authorized representative of the Director upon request.
 - When an Operator on this Project becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the TDEC, such facts or information will be promptly submitted to the TDEC.
 - Upon the presentation of credentials and other documents as required by law, authorized representatives of the EPA or TDEC will be allowed:
 - 1) To enter the construction site or location where records are maintained for this Project in accordance with the requirements of this SWPPP or the General Permit;
 - 2) To have access to and copy, at reasonable times, any records maintained for this Project in accordance with the requirements of this SWPPP or the General Permit; and
 - 3) To inspect any controls or equipment implemented and maintained for this Project in accordance with the requirements of this SWPPP or the General Permit.
 - Records of inspections, maintenance, and repairs of erosion and sediment controls will be maintained on site or at a nearby office.
 - Copies of this Storm Water Pollution Prevention Plan and all reports and records required by the SWPPP and the General Permit and records of all data used to complete the Notice of Intent to be covered by the General Permit, will be maintained for a period of at least three (3) years from the date the Notice of Termination is filed.

IX. AMENDMENT OF PLAN

This section provides the conditions upon which this SWPPP shall be amended to keep it current and to reflect changes in site conditions or control practices.

- Change in Scope – Whenever there is a change in the scope of the Project, which is expected to have a significant effect on the discharge of pollutants to the waters of the State and which has not otherwise been addressed in this Plan.
- Deficiencies – Whenever inspections or investigations by site operators, local, State and Federal officials indicate this SWPPP is proving ineffective in eliminating, significantly minimizing, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharge associated with the construction activity for this Project.
- New or Additional Operator – To identify any new construction and/or subcontractor that will implement a measure of the storm water pollution prevention plan.
- Aquatic Fauna – To include measures necessary to prevent a negative impact to legally protected state of federal listed or proposed threatened or endangered aquatic fauna. The State of Tennessee and EPA may review amendments to the plan.
- Request of TDEC – If notified by the Director of the TDEC or an authorized representative that this SWPPP does not meet one or more of the minimum requirements of the conditions of the General Permit, then within forty-eight (48) hours, unless additional time is provided by the Director, after such notifications sediment and erosion control will be modified to prevent the discharges of sediment from the site and this SWPPP will be amended to reflect these modifications within seven (7) days.

In addition, when one or more of the operators changes during the course of a construction project, new operators will submit a new NOI for their roles at the site.

X. TERMINATION OF COVERAGE

A Notice of Termination (NOT) shall be submitted on the TDEC's NOT form provided in Appendix C of this plan within thirty (30) days after one of the following events:

- The Project site has been finally stabilized and all storm water discharges from construction activities that are authorized by the General Permit have been eliminated; or
- The operator of all storm water discharges at a facility changes and another operator has taken over all of their responsibilities at the site.

Elimination of storm water discharges associated with construction activity means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time to ensure final stabilization is maintained, or that all storm water discharges associated with construction activities from the identified site that are authorized by the General Permit have otherwise been eliminated from the portion of the construction site where the operator had control.

XI. CERTIFICATION

This section provides the certification(s) from all Operators for this Project site in accordance with the requirements of Part VII.G of the General Permit.

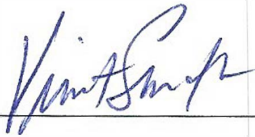
A. **Certification of Parties with operational control cover construction plans and specifications** – In providing the following certification, the party with operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (i.e., normally the Owner or Developer), is attesting that it is responsible for the following:

1. Ensuring the project specifications developed meet the minimum requirements of Part IV (Storm Water Pollution Prevention Plans (SWPPP)) and all other applicable conditions of the General Permit.
2. Ensuring that the SWPPP indicates the areas of the Project where they have operational control over project specifications (including the ability to make modifications in specifications), and ensuring all other parties implementing portions of the SWPPP impacted by any changes they make to the plan are notified of such modifications in a timely manner.
3. If parties with day-to-day operational control of the construction site (i.e., normally the General Contractor) is not identified below, the party with operational control over project specifications is the responsible party until

such time as the authority is transferred to another party and this Plan updated.

OWNER CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

	<u>March 6. 2023</u>
Signature	Date
<u>Vincent Smith, Jr.</u>	<u>Member</u>
Printed Name	Title
<u>Ashmont Developer LLC</u>	<u>901-489-5896</u>
Company	Phone Number
<u>5851 Ridge Bend Road, Memphis, TN 38120</u>	
Address	

B. **Certification of Parties with Day-to-Day Operational Control** – In providing the following certification, the party or parties with day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other conditions of the General Permit (i.e., normally the General Contractor), is attesting that they are responsible for the following:

1. Ensuring that the SWPPP, for portions of the Project where they are Operators, meets the minimum requirements of Part IV (Storm Water Pollution Plan) of the General Permit and identifying the parties responsible for implementation of control measures identified in the Plan.
2. Ensuring that the SWPPP indicates the areas of the Project where they have operational control day-to-day activities.

CONTRACTOR CERTIFICATION

I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with the permit requirements.

Ryan Browning
Signature

3.7.2023
Date

Ryan Browning
Printed Name

Vice President
Title

Browning Contractors Inc.
Company Name

901-494-2827
Phone Number

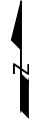
50 Lakes Edge Piperton TN 38017
Company Address

APPENDIX A

Vicinity Map

VICINITY MAP

1" = 2000'

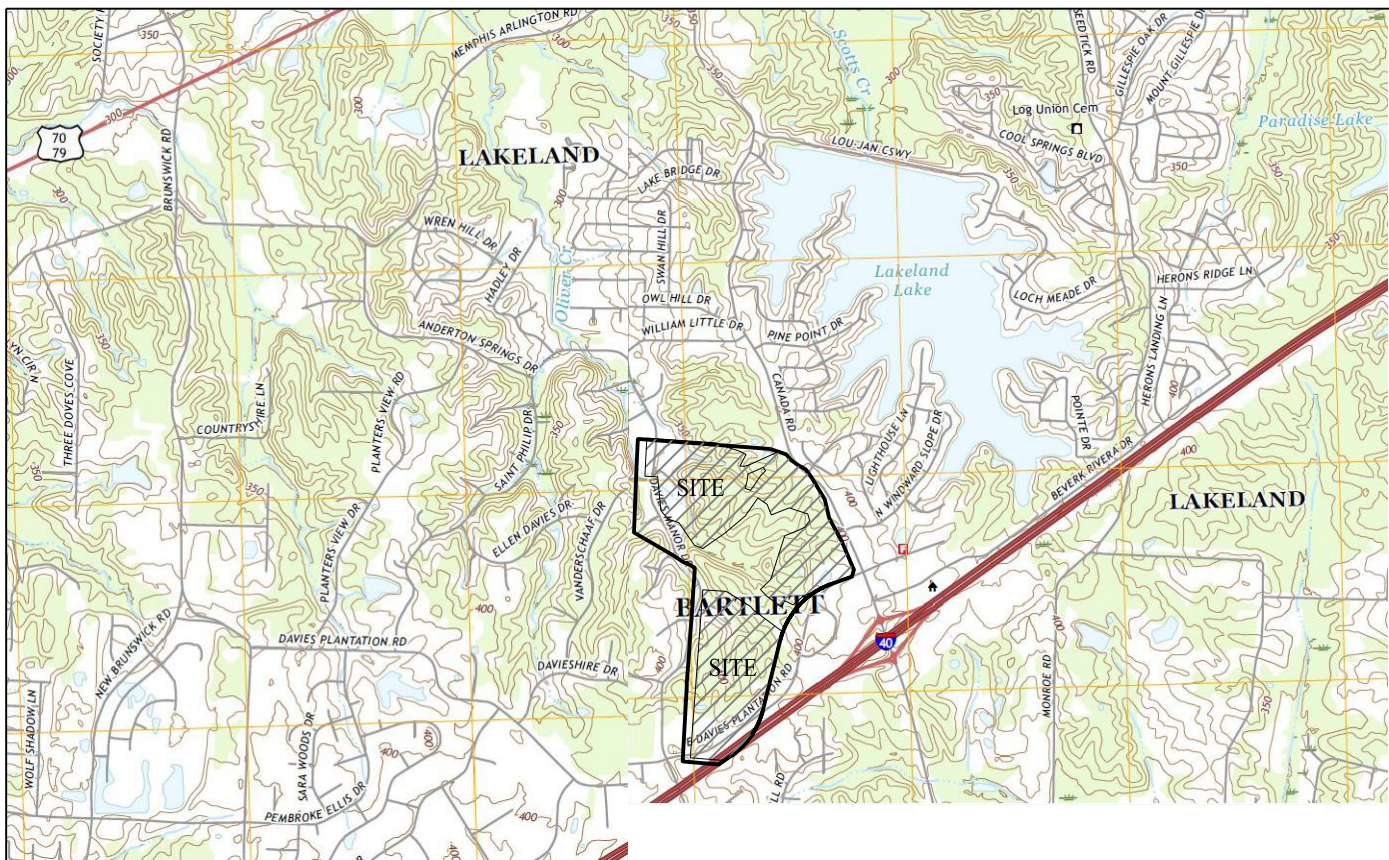


APPENDIX B

Site Map (USGS Quad)

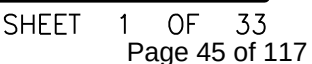
QUAD MAP

1" = 2000'



APPENDIX C

**Erosion Protection & Sediment
Control Plan**

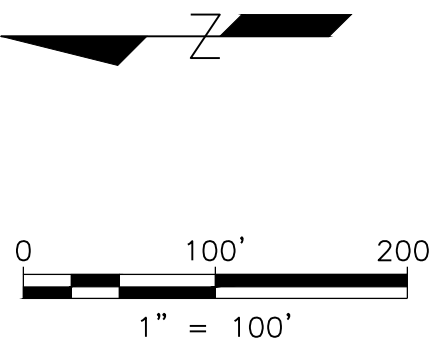


EROSION CONTROL NOTES:

CONSTRUCTION SEQUENCE - PHASE 2

1. MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY.
2. CLEAR AND GRUB SITE AND PERFORM REMOVAL OF TREE ROOTS AS DESIRED. CUT AND DISPOSE OF ANY DEBRIS PRODUCED DURING THIS PROCESS.
3. DO NOT DISTURB MORE THAN 50 ACRES AT ONE TIME.
4. REMOVE ANY TEMPORARY CONTROL MEASURES NOT NEEDED.
5. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF WATER.
6. TRANSITION TO PHASE 3.

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL DURING CONSTRUCTION BY THE PLACEMENT OF SILT FENCES OR WATTLES WHERE NECESSARY TO PREVENT DOWNSTREAM SILTATION OF ANY DITCHES, PIPES, DRAINAGE STRUCTURES, OR ADJACENT PROPERTIES. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL AS NEEDED OR AS DIRECTED BY THE ENGINEER.
2. ALL NEW CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED MULCHED, SEEDED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. TOTAL DISTURBED AREA IS APPROXIMATELY 67.4 ACRES.
4. DURING EXCAVATION PHASES OF STEEP SLOPES, WATTLES WITH SILT FENCE BACKING SHALL BE REQUIRED TO ELIMINATE SILTATION TRANSFER ONTO ADJACENT LANDOWNERS PROPERTY AND PUBLIC STREETS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL WATTLES WITH SILT FENCE BACKING AS NEEDED ALONG EXPOSED SLOPES.
5. SEDIMENT WILL BE REMOVED FROM SILT FENCES, ROCK SILT SCREENS, AND OTHER SEDIMENT CONTROLS AS NECESSARY, BUT AT LEAST WHEN THE SEDIMENT HAS REACHED $\frac{3}{4}$ TO $\frac{1}{2}$ OF THE HEIGHT OF THE CONTROL DEVICE.
6. MAINTENANCE NEEDS IDENTIFIED BY INSPECTIONS OR OTHER MEANS WILL BE ACCOMPLISHED BEFORE THE NEXT STORM EVENT IF POSSIBLE, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE NEED IS IDENTIFIED.
7. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
8. DRAINAGE BASINS AND CORRESPONDING AREAS ARE SHOWN IN BOXES.
9. THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASHOUT AREA WITHIN THE LIMITS OF DISTURBANCE. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PER MDEQ SPECIFICATIONS. ALL CONCRETE IN THE WASHOUT AREA SHALL BE COMPLETELY REMOVED AT THE END OF CONSTRUCTION.
12. NEAREST RECEIVING WATER: TRIBUTARY OF HURRICANE CREEK. THE CREEK IS NOT LISTED ON THE MISSISSIPPI 303(D) LIST AS IMPAIRED WATER BODIES.
13. NOTIFY STORMWATER INSPECTOR-RUSSELL ALLEN 901-860-8265 rallen@civil-link.com



LEGEND

These standard symbols may be found in the drawing.

- | | | | |
|-------|------------------------------|---|---|
| — | PROPERTY LINES | ⊙ | SEDIMENT TRAP |
| - - - | ADJOINING PROP. LINES | ⊙ | SEDIMENT BASIN |
| - - - | DRAINAGE BASIN | ⊙ | OUTLET PROTECTION |
| - - - | LIMITS OF DISTURBANCE | ⊙ | CONSTRUCTION EXIT |
| - - - | EASEMENT | ⊙ | PERMANENT SEEDING |
| ⊙ | TREES TO REMAIN | ⊙ | EROSION CONTROL MAT |
| ⊙ | TREES TO BE REMOVED | ⊙ | |
| — | SILT FENCE | ⊙ | SEWER MANHOLE |
| — | SILT FENCE WITH WIRE BACKING | ⊙ | DRAINAGE MANHOLE |
| ⊙ | INLET PROTECTION | ⊙ | HYDRAULIC FLOW ARROWS (DIRECTION OF WATER FLOW) |
| ⊙ | CHECK DAM | ⊙ | |
| ⊙ | WATTLES | ⊙ | |

SITE BENCHMARK (T.B.M.):

SET CHISEL MARK AT THE SOUTHWEST CORNER OF LOT 1 OF THE VILLAGES AT PORTER FARMS PHASE 8.

ELEVATION: 349.90'

F.E.M.A. NOTE:

ACCORDING TO THE FEDERAL EMERGENCY MANagements AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



DIVISION OF ENGINEERING

EPSC 2

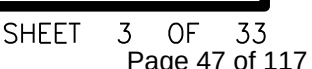
LAKELAND, TN

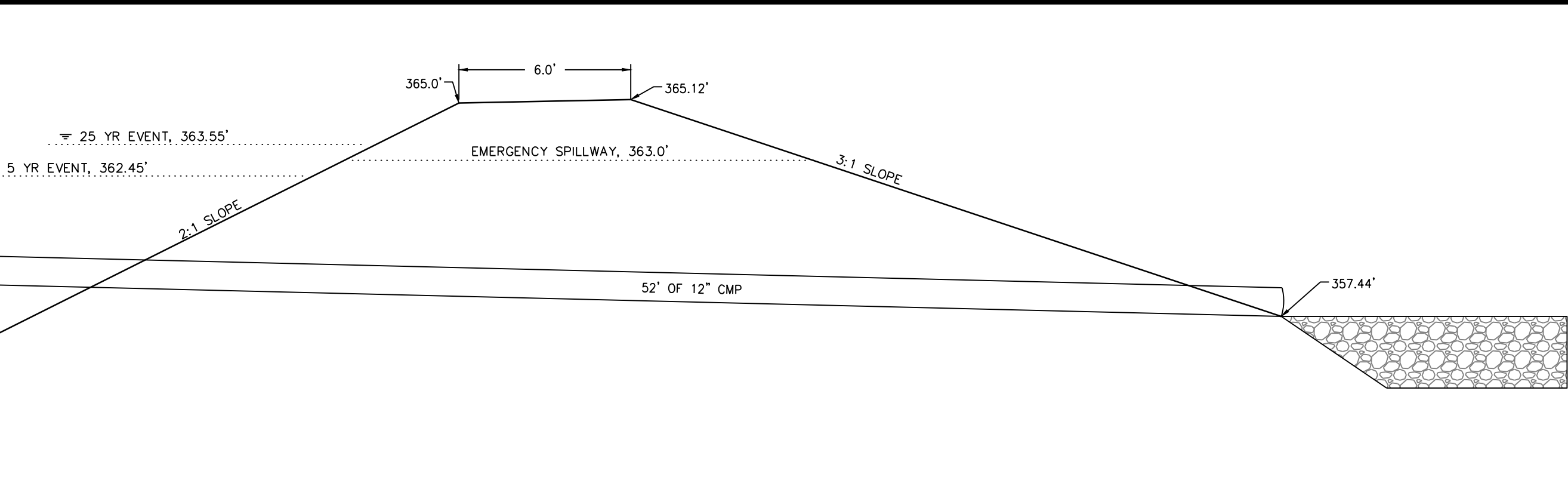
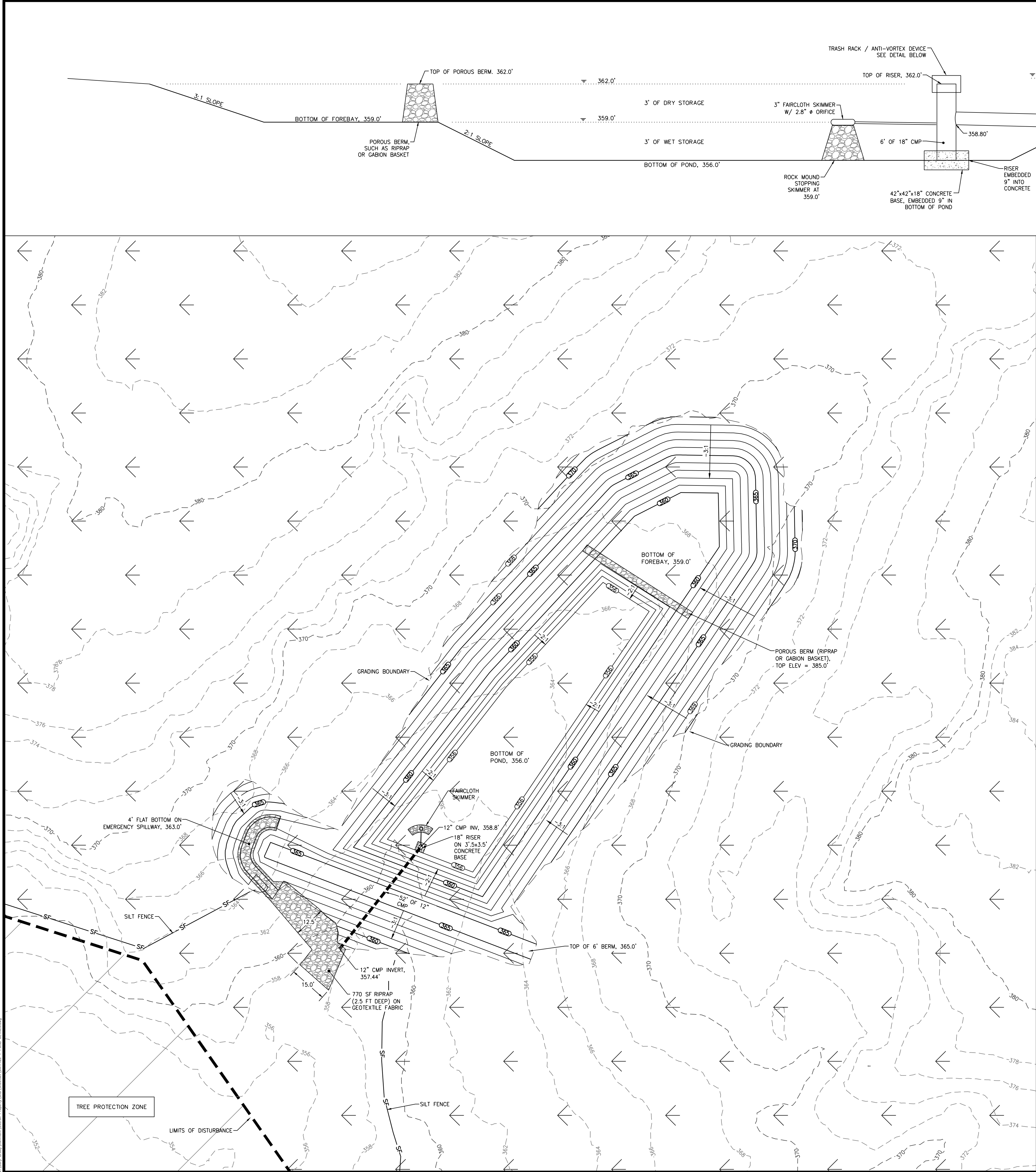
SURVEY: HARRIS & ASSOC.
DESIGN BY: J. MCCARTY, P.E.
DRAWN BY: P. DUNGAN, E.I.

DATE: 01-02-2023 PROJECT NO.: ---
DATE: 03-10-2023 BOOK:
DATE: 03-10-2023 SCALE: 1" = 100'

ASHMONT SWPPP

OWNER: ASHMONT DEVELOPER, LLC
ENGINEER: MCCARTY GRANBERRY ENGINEERING FIRM





OUTFALL 7 SEDIMENT BASIN INFO SHEET		
DRAINAGE AREA (ON & OFF SITE)	4.9	AC
DESIGN STORM DEPTH (5 yr 24 hr):	4.85	IN
DESIGN STORM UNDETAINED PEAK FLOW (5 yr 24 hr):	24.20	CFS
VOLUME - WET STORAGE	13,986	CF
VOLUME - DRY STORAGE	11,424	CF
VOLUME - FOREBAY	4,590	CF
SURFACE AREA - POND AT RISER ELEVATION	10,510	SF
ELEVATION - 5 yr 24 hr (DESIGN STORM)	362.45	FT
ELEVATION - 25 yr 24 hr	363.55	FT
ELEVATION - TOP OF EMBANKMENT	365.00	FT
ELEVATION - RISER/DRY STORAGE	362.00	FT
ELEVATION - PERMANENT POOL/WET STORAGE	359.00	FT
ELEVATION - BOTTOM OF BASIN	356.00	FT
ELEVATION - FOREBAY CREST	362.00	FT
ELEVATION - FOREBAY BOTTOM	359.00	FT
ELEVATION - OUTFALL PIPE DISCHARGE	357.44	FT
ELEVATION - RECEIVING MEDIUM AT OUTFALL	357.44	FT
EMERGENCY SPILLWAY - ELEVATION	363.00	FT
EMERGENCY SPILLWAY - SIDESLOPE	3:1	H:V
EMERGENCY SPILLWAY - SMALLEST STORM THAT WILL DISCHARGE	25	YR
LENGTH TO WIDTH RATIO	4:1	L:W

020'40'

1" = 20'

LEGEND

These standard symbols may be found in the drawing.

PROPERTY LINES

ADJOINING PROP.

BACK OF CURB

FACE OF CURB

SIDEWALK

EDGE OF PAVEMENT

ROADWAY CENTERLINE

EX. OH ELECTRIC LINES

EX. UG ELECTRIC LINES

EX. WATER LINES

EX. SEWER LINES

EX. STORM DRAIN

EX. GAS LINE

EX. UG CABLE

EX. FIBER OPTIC

EX. FENCE LINES

EX. SIDEWALK

EX. EASEMENT

PR. WATER LINE

PR. SEWER LINE

PR. STORM DRAIN

DRAINAGE BASIN EASEMENT

EX. UTILITY POLE

EX. FIRE HYDRANT

EX. LIGHT POLE

EX. TELEPHONE PEDESTAL

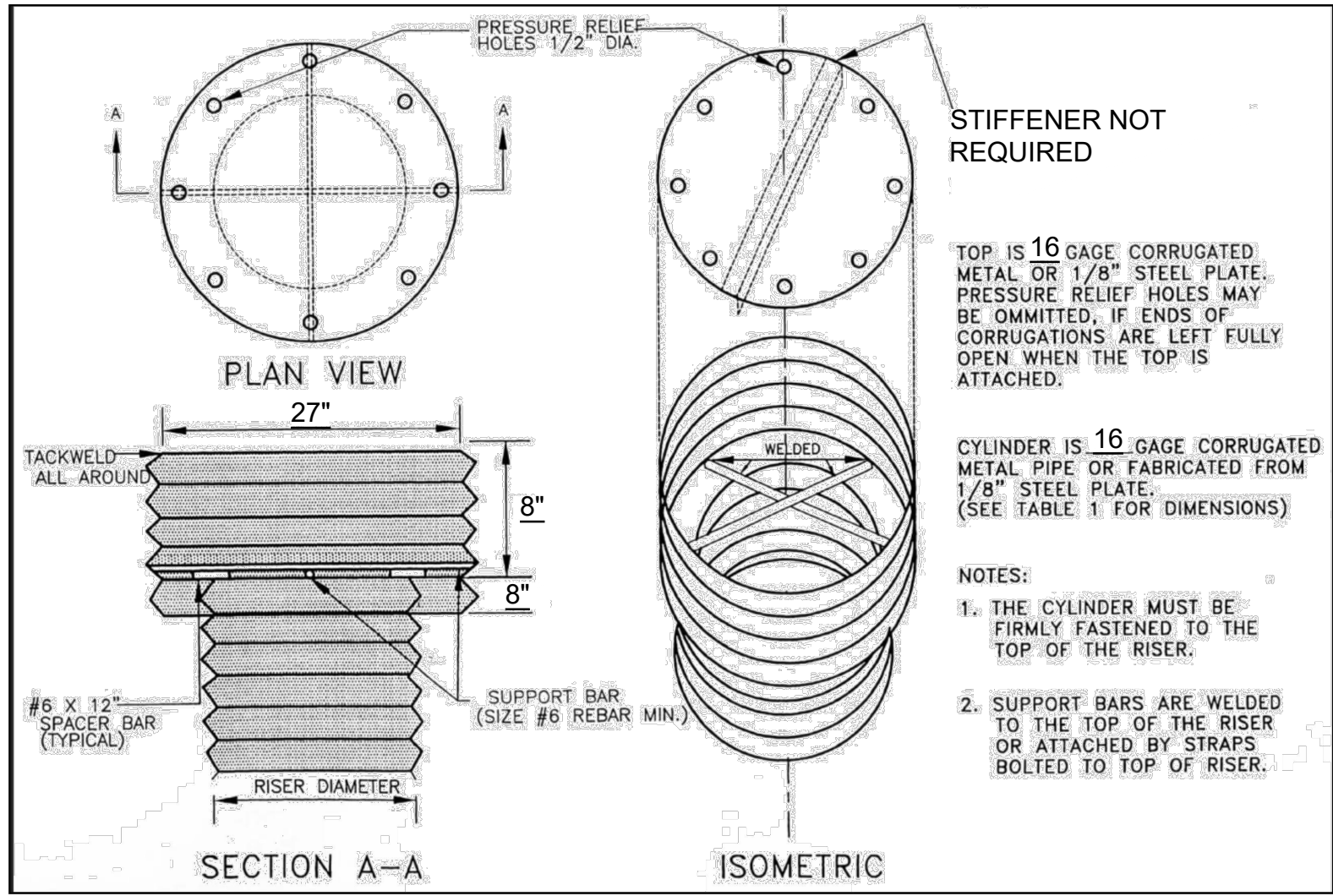
EX. WATER VALVE

EX. WATER METER

EX. SEWER MANHOLE

EX. DRAINAGE MANHOLE

EX. ELECTRICAL BOX



SITE BENCHMARK (T.B.M.):
SET CHISEL MARK AT THE SOUTHWEST CORNER OF LOT 1 OF THE VILLAGES AT PORTER FARMS PHASE 8.
ELEVATION: 349.90'
F.E.M.A. NOTE:
ACCORDING TO THE FEDERAL EMERGENCY MANAGMENTS AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

REVISION

ITEM NO.

DESCRIPTION OF CHANGE

APPROVAL DATE

1

2

3

4

5

6

7

8

9

10

ASHMONT SITE CLEARING

OWNER: AMHERST DEVELOPER, LLC

ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM

DIVISION OF ENGINEERING

OUTFALL #7 SEDIMENT BASIN DETAILS

LAKELAND, TN

SURVEY: HARRIS & ASSOC.

DESIGN BY: J. McCARTY, P.E.

DRAWN BY: P. DUNGAN, E.I.

DATE: 01/02/2023

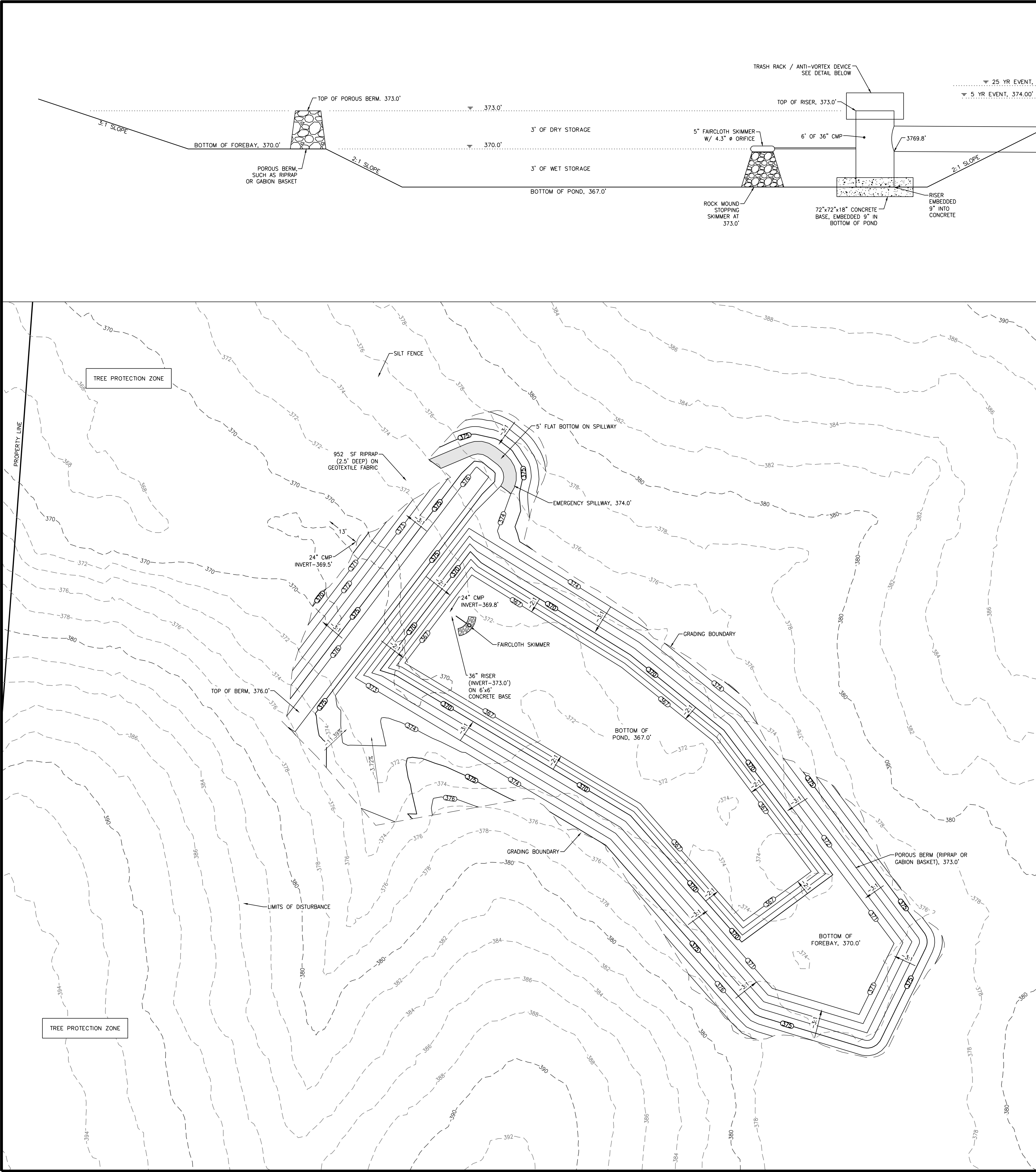
DATE: 03/06/2023

DATE: 03/06/2023

PROJECT NO.:

BOOK:

SCALE:



TRASH RACK / ANTI-VORTEX DEVICE
SEE DETAIL BELOW

TOP OF RISER, 373.0'

5' FAIRCLOTH SKIMMER
W/ 4.3" Ø ORIFICE

6' OF 36" CMP

3769.8'

72"x72"x18" CONCRETE
BASE, EMBEDDED 9" IN
BOTTOM OF POND

RISER
EMBEDDED
9" INTO
CONCRETE

2.1 SLOPE

ANTI-SEEP COLLAR (TYP)

46' OF 24" CMP

369.54

13' RIPRAP APRON

EMERGENCY SPILLWAY, 374.0'

6.0'

376.0'

376.12'

3-1 SLOPE

5. YR EVENT, 374.00'

25. YR EVENT, 374.96'

3' OF DRY STORAGE

373.0'

3' OF WET STORAGE

370.0'

370.0'

BOTTOM OF FOREBAY, 370.0'

TOP OF POROUS BERM, 373.0'

2-1 SLOPE

POROUS BERM,
SUCH AS RIPRAP
OR CABION BASKET

3-1 SLOPE

0 20' 40'

1" = 20'

LEGEND

These standard symbols may be found in the drawing.

PROPERTY LINES
ADJOINING PROP. LINES
BACK OF CURB
FACE OF CURB
SIDEWALK
EDGE OF PAVEMENT
ROADWAY CENTERLINE
EX. OH ELECTRIC LINES
EX. UG ELECTRIC LINES
EX. WATER LINES
EX. SEWER LINES
EX. STORM DRAIN
EX. GAS LINE
EX. UG CABLE
EX. FIBER OPTIC
EX. FENCE LINES
EX. SIDEWALK
EX. EASEMENT
PR. WATER LINE
PR. SEWER LINE
PR. STORM DRAIN
DRAINAGE BASIN
EASEMENT

EX. UTILITY POLE
FIRE HYDRANT
LIGHT POLE
TELEPHONE PEDESTAL
WATER VALVE
WATER METER
SEWER MANHOLE
DRAINAGE MANHOLE
ELECTRICAL BOX

PLAN VIEW

54"

17"

8"

TACKWELD ALL AROUND

#6 X 12" SPACER BAR (TYPICAL)

RISER DIAMETER

SUPPORT BAR (SIZE #8 REBAR MIN.)

SECTION A-A

ISOMETRIC

STIFFENER NOT REQUIRED

TOP IS 14 GAGE CORRUGATED METAL OR 1/8" STEEL PLATE. PRESSURE RELIEF HOLES MAY BE OMITTED, IF ENDS OF CORRUGATIONS ARE LEFT FULLY OPEN WHEN THE TOP IS ATTACHED.

CYLINDER IS 14 GAGE CORRUGATED METAL PIPE OR FABRICATED FROM 1/8" STEEL PLATE. (SEE TABLE 1 FOR DIMENSIONS)

NOTES:

1. THE CYLINDER MUST BE FIRMLY FASTENED TO THE TOP OF THE RISER.

2. SUPPORT BARS ARE WELDED TO THE TOP OF THE RISER OR ATTACHED BY STRAPS BOLTED TO TOP OF RISER.

SITE BENCHMARK (T.B.M.):

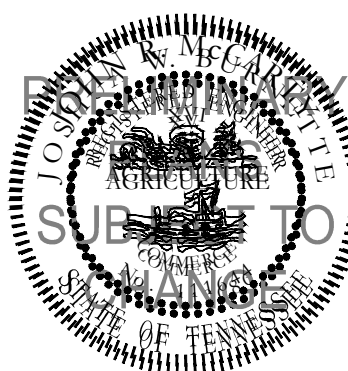
SET CHISEL MARK AT THE SOUTHWEST CORNER OF LOT 1 OF THE VILLAGES AT PORTER FARMS PHASE 8.

ELEVATION: 349.90'

F.E.M.A. NOTE:

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENTS AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE
ASHMONT SITE CLEARING		
OWNER: AMHERST DEVELOPER, LLC		
ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM		



DIVISION OF ENGINEERING

OUTFALL 20 LOWER SED. BASIN DETAILS

LAKELAND, TN

SURVEY: HARRIS & ASSOC.

DESIGN BY: J. McCARTY, P.E.

DRAWN BY: P. DUNGAN, E.I.

DATE: 01/02/2023

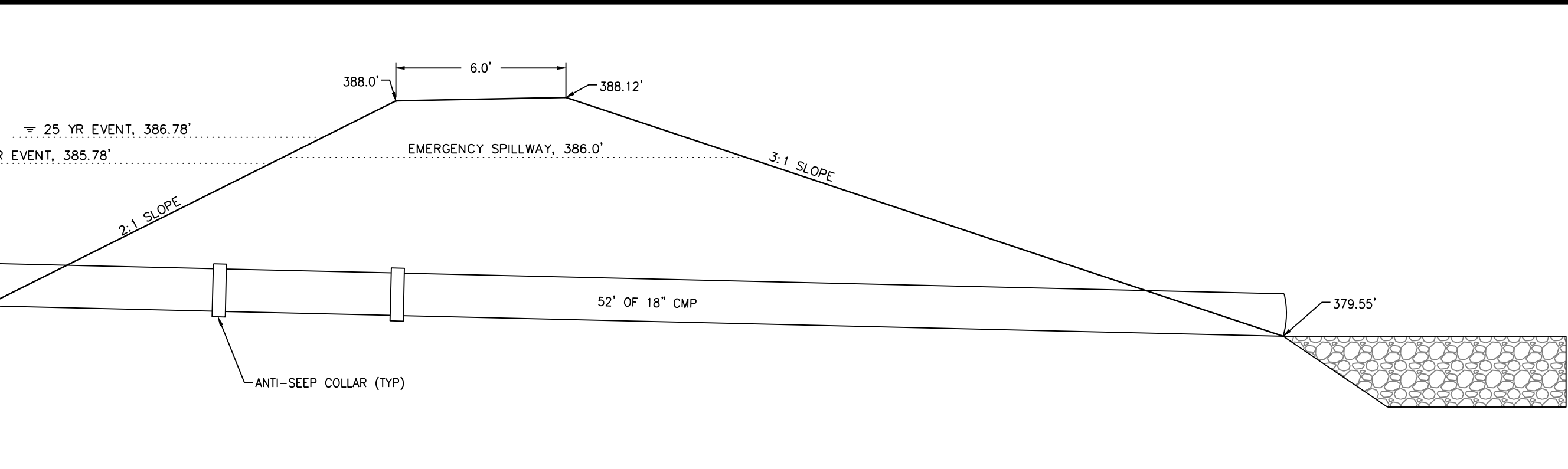
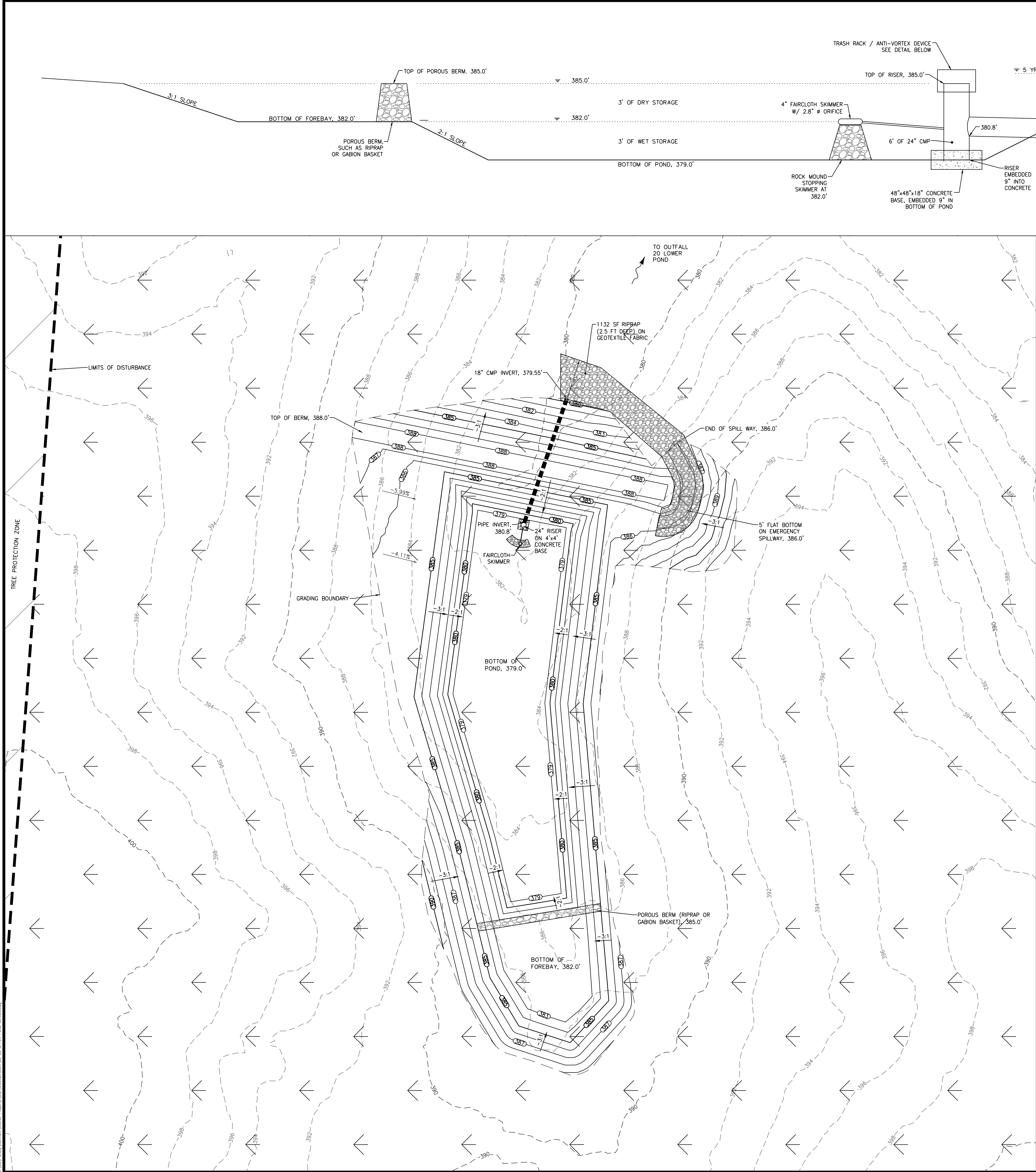
DATE: 03/06/2023

DATE: 03/06/2023

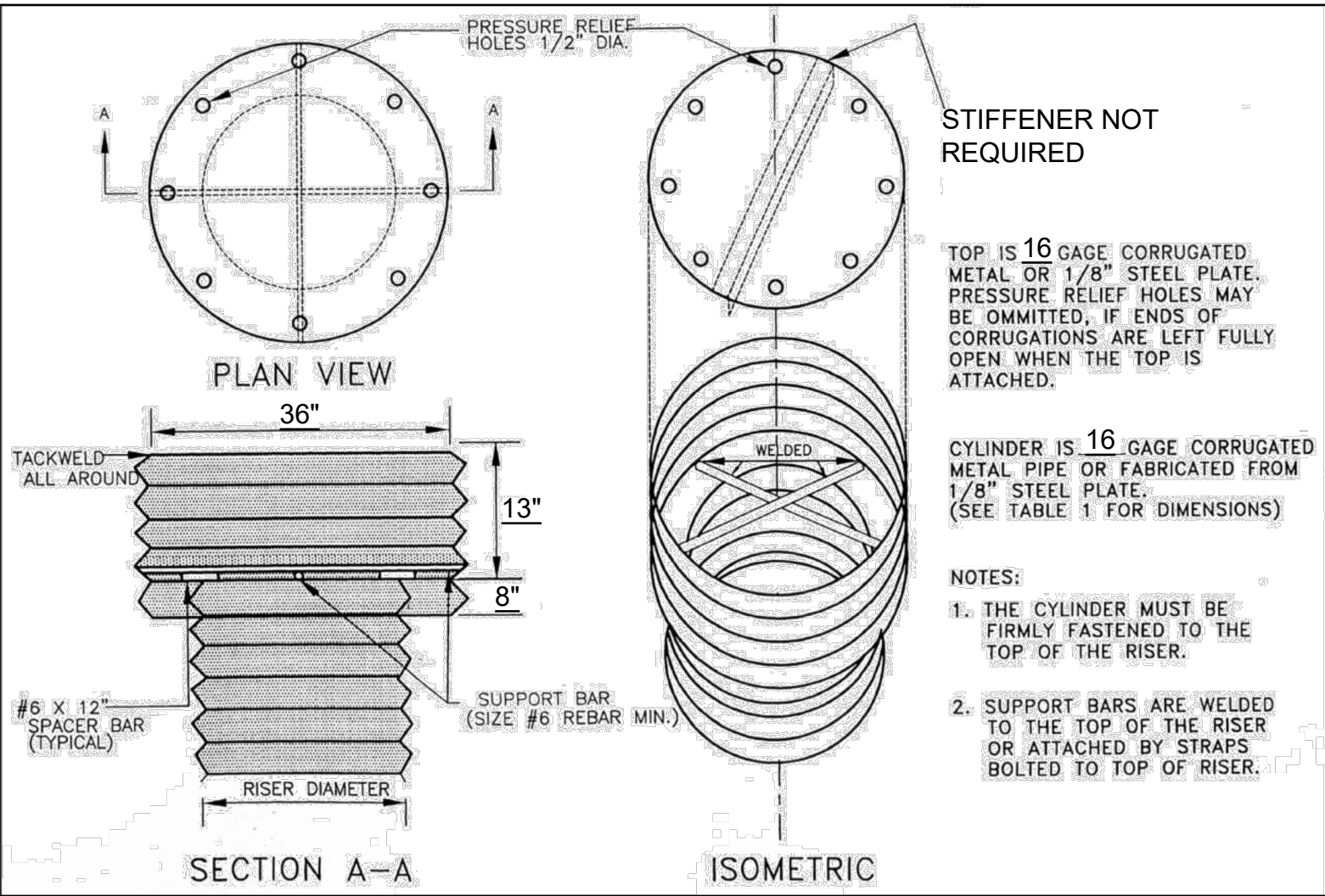
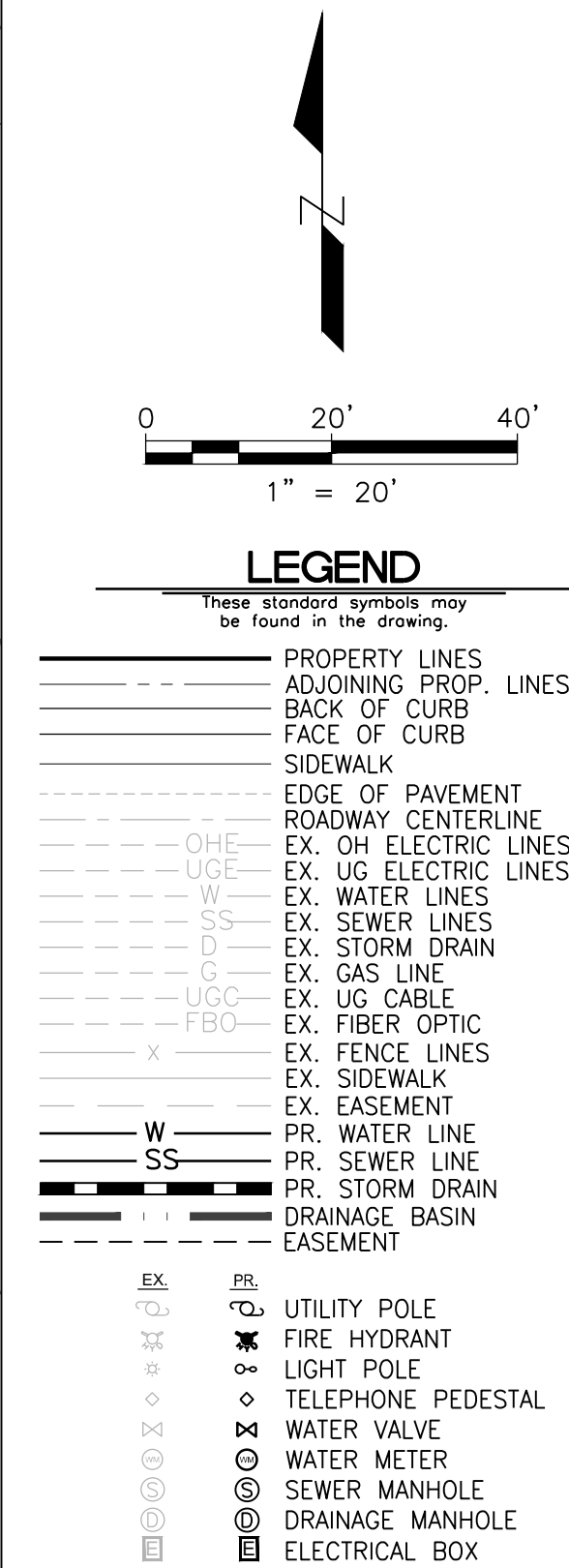
PROJECT NO.:

BOOK:

SCALE:

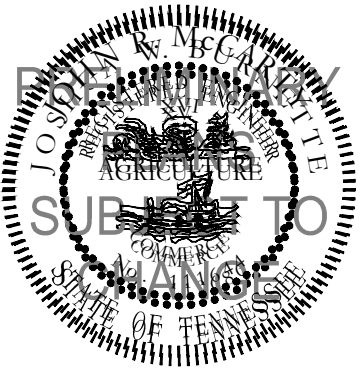


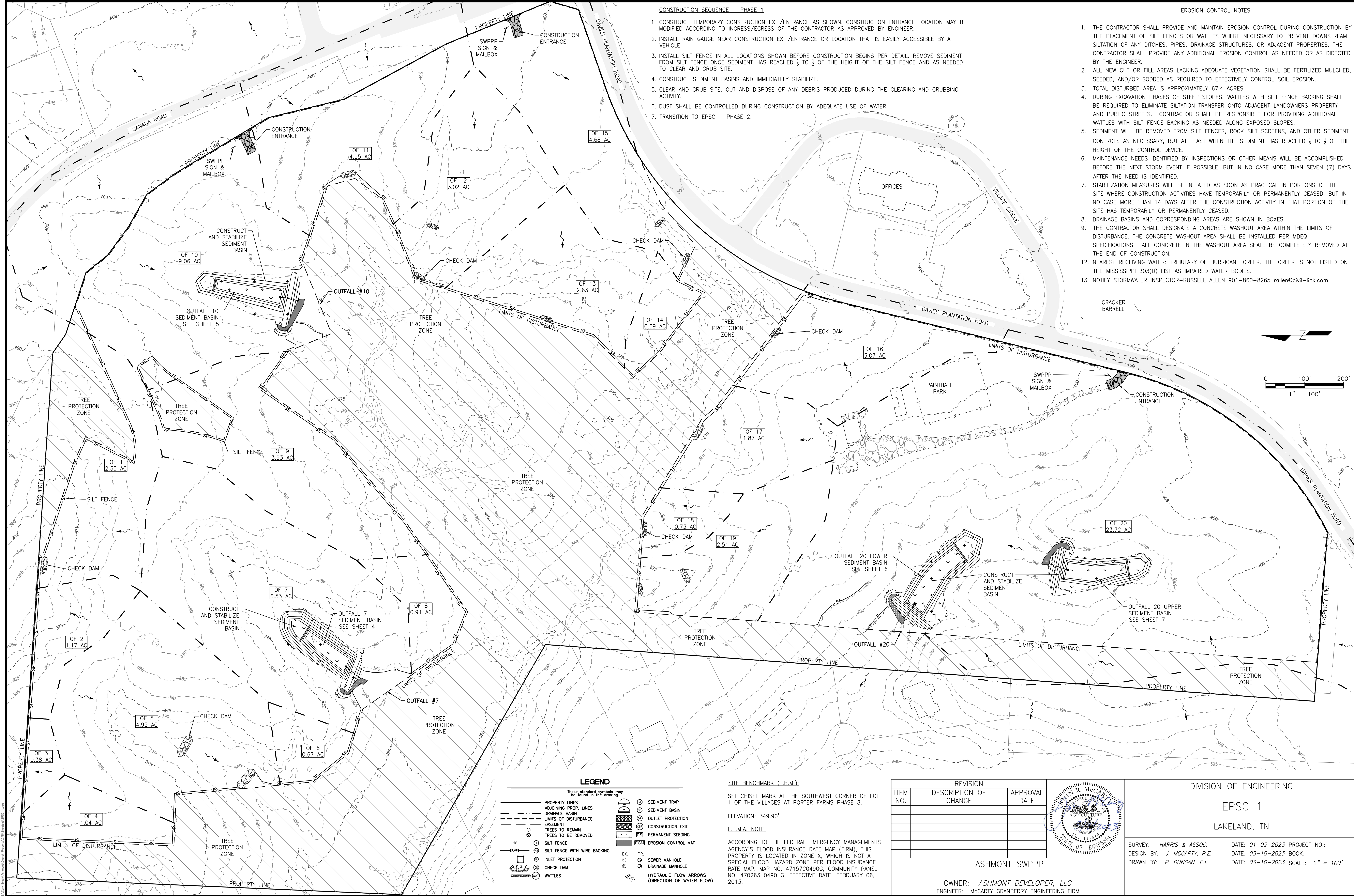
OUTFALL #20 UPPER SEDIMENT BASIN INFO SHEET		
DRAINAGE AREA (ON & OFF SITE)	9.3	AC
DESIGN STORM DEPTH (5 yr 24 hr):	4.85	IN
DESIGN STORM UNDETAINED PEAK FLOW (5 yr 24 hr):	26.50	CFS
VOLUME - WET STORAGE	17,388	CF
VOLUME - DRY STORAGE	30,294	CF
VOLUME - FOREBAY	4,293	CF
SURFACE AREA - POND AT RISER ELEVATION	12,349	SF
ELEVATION - 5 yr 24 hr (DESIGN STORM)	385.77	FT
ELEVATION - 25 yr 24 hr	386.66	FT
ELEVATION - TOP OF EMBANKMENT	388.00	FT
ELEVATION - RISER/DRY STORAGE	385.00	FT
ELEVATION - PERMANENT POOL/WET STORAGE	382.00	FT
ELEVATION - BOTTOM OF BASIN	379.00	FT
ELEVATION - FOREBAY CREST	385.00	FT
ELEVATION - FOREBAY BOTTOM	382.00	FT
ELEVATION - OUTFALL PIPE DISCHARGE	379.55	FT
ELEVATION - RECEIVING MEDIUM AT OUTFALL	379.55	FT
EMERGENCY SPILLWAY - ELEVATION	386.00	FT
EMERGENCY SPILLWAY - SIDESLOPE	3:1	H:V
EMERGENCY SPILLWAY - SMALLEST STORM THAT WILL DISCHARGE	10	YR
LENGTH TO WIDTH RATIO	4:1	L:W



SITE BENCHMARK (T.B.M.):
SET CHISEL MARK AT THE SOUTHWEST CORNER OF LOT 1 OF THE VILLAGES AT PORTER FARMS PHASE 8.
ELEVATION: 349.90'
F.E.M.A. NOTE:
ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENTS AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

REVISION			DIVISION OF ENGINEERING	
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE	OUTFALL 20 UPPER SED. BASIN DETAILS	
			LAKELAND, TN	
			SURVEY: HARRIS & ASSOC. DATE: 01/02/2023 PROJECT NO.: DESIGN BY: J. McCARTY, P.E. DATE: 03/06/2023 BOOK: DRAWN BY: P. DUNGAN, E.I. DATE: 03/06/2023 SCALE:	
			ASHMONT SITE CLEARING OWNER: AMHERST DEVELOPER, LLC ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM	



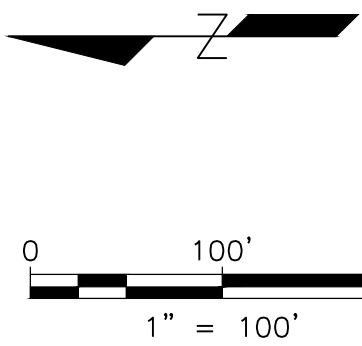


CONSTRUCTION SEQUENCE – PHASE 1

1. CONSTRUCT TEMPORARY CONSTRUCTION EXIT/ENTRANCE AS SHOWN. CONSTRUCTION ENTRANCE LOCATION MAY BE MODIFIED ACCORDING TO INGRESS/EGRESS OF THE CONTRACTOR AS APPROVED BY ENGINEER.
2. INSTALL RAIN GAUGE NEAR CONSTRUCTION EXIT/ENTRANCE OR LOCATION THAT IS EASILY ACCESSIBLE BY A VEHICLE
3. INSTALL SILT FENCE IN ALL LOCATIONS SHOWN BEFORE CONSTRUCTION BEGINS PER DETAIL. REMOVE SEDIMENT FROM SILT FENCE ONCE SEDIMENT HAS REACHED $\frac{3}{4}$ TO $\frac{1}{2}$ OF THE HEIGHT OF THE SILT FENCE AND AS NEEDED TO CLEAR AND GRUB SITE.
4. CONSTRUCT SEDIMENT BASINS AND IMMEDIATELY STABILIZE.
5. CLEAR AND GRUB SITE. CUT AND DISPOSE OF ANY DEBRIS PRODUCED DURING THE CLEARING AND GRUBBING ACTIVITY.
6. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF WATER.
7. TRANSITION TO EPSC – PHASE 2.

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL DURING CONSTRUCTION BY THE PLACEMENT OF SILT FENCES OR WATTLES WHERE NECESSARY TO PREVENT DOWNSTREAM SILTATION OF ANY DITCHES, PIPES, DRAINAGE STRUCTURES, OR ADJACENT PROPERTIES. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL AS NEEDED OR AS DIRECTED BY THE ENGINEER.
2. ALL NEW CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED MULCHED, SEEDED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. TOTAL DISTURBED AREA IS APPROXIMATELY 67.4 ACRES.
4. DURING EXCAVATION PHASES OF STEEP SLOPES, WATTLES WITH SILT FENCE BACKING SHALL BE REQUIRED TO ELIMINATE SILTATION TRANSFER ONTO ADJACENT LANDOWNERS PROPERTY AND PUBLIC STREETS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL WATTLES WITH SILT FENCE BACKING AS NEEDED ALONG EXPOSED SLOPES.
5. SEDIMENT WILL BE REMOVED FROM SILT FENCES, ROCK SILT SCREENS, AND OTHER SEDIMENT CONTROLS AS NECESSARY, BUT AT LEAST WHEN THE SEDIMENT HAS REACHED $\frac{3}{4}$ TO $\frac{1}{2}$ OF THE HEIGHT OF THE CONTROL DEVICE.
6. MAINTENANCE NEEDS IDENTIFIED BY INSPECTIONS OR OTHER MEANS WILL BE COMPLETED BEFORE THE NEXT STORM EVENT IF POSSIBLE, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE NEED IS IDENTIFIED.
7. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
8. DRAINAGE BASINS AND CORRESPONDING AREAS ARE SHOWN IN BOXES.
9. THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASHOUT AREA WITHIN THE LIMITS OF DISTURBANCE. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PER MDEQ SPECIFICATIONS. ALL CONCRETE IN THE WASHOUT AREA SHALL BE COMPLETELY REMOVED AT THE END OF CONSTRUCTION.
12. NEAREST RECEIVING WATER: TRIBUTARY OF HURRICANE CREEK. THE CREEK IS NOT LISTED ON THE MISSISSIPPI 303(D) LIST AS IMPAIRED WATER BODIES.
13. NOTIFY STORMWATER INSPECTOR–RUSSELL ALLEN 901–860–8265 rallen@civil-link.com



LEGEND

These standard symbols may be found in the drawing.

- | | | | |
|----------|------------------------------|---|---|
| — P — | PROPERTY LINES | ⊙ | SEDIMENT TRAP |
| - - - | ADJOINING PROP. LINES | ⊙ | SEDIMENT BASIN |
| - - - | DRAINAGE BASIN | ⊙ | OUTLET PROTECTION |
| - - - | LIMITS OF DISTURBANCE | ⊙ | CONSTRUCTION EXIT |
| - - - | EASEMENT | ⊙ | PERMANENT SEEDING |
| ⊙ | TREES TO REMAIN | ⊙ | EROSION CONTROL MAT |
| ⊙ | TREES TO BE REMOVED | ⊙ | |
| — SF — | SILT FENCE | ⊙ | SEWER MANHOLE |
| — SF/W — | SILT FENCE WITH WIRE BACKING | ⊙ | DRAINAGE MANHOLE |
| ⊙ | INLET PROTECTION | ⊙ | HYDRAULIC FLOW ARROWS (DIRECTION OF WATER FLOW) |
| ⊙ | CHECK DAM | ⊙ | |
| ⊙ | WATTLES | ⊙ | |

SITE BENCHMARK (T.B.M.):

SET CHISEL MARK AT THE SOUTHWEST CORNER OF LOT 1 OF THE VILLAGES AT PORTER FARMS PHASE 8.

ELEVATION: 349.90'

F.E.M.A. NOTE:

ACCORDING TO THE FEDERAL EMERGENCY MANagements AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



DIVISION OF ENGINEERING

EPSC 1

LAKELAND, TN

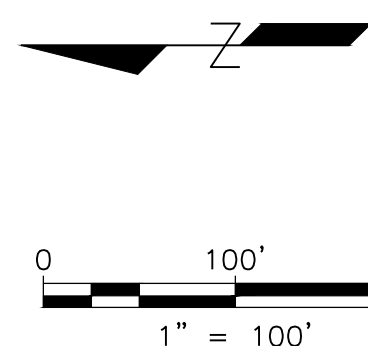
SURVEY: HARRIS & ASSOC.
DESIGN BY: J. MCCARTY, P.E.
DRAWN BY: P. DUNGAN, E.I.

DATE: 01-02-2023 PROJECT NO.: ---
DATE: 03-10-2023 BOOK:
DATE: 03-10-2023 SCALE: 1" = 100'

ASHMONT SWPPP

OWNER: ASHMONT DEVELOPER, LLC
ENGINEER: MCCARTY GRANBERRY ENGINEERING FIRM

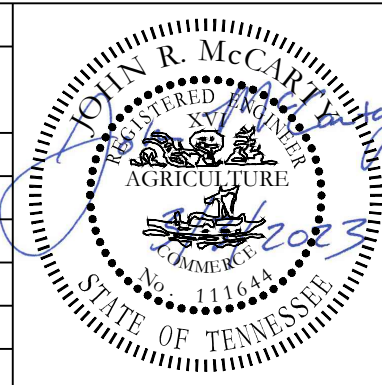
1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL DURING CONSTRUCTION ON THE PLACEMENT OF SILT FENCES OR WATTLES WHERE NECESSARY TO PREVENT DOWNSTREAM SILTATION OF ANY DITCHES, PIPES, DRAINAGE STRUCTURES, OR ADJACENT PROPERTIES. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL AS NEEDED OR AS DIRECTED BY THE ENGINEER.
2. ALL NEW CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED MULCHED SEED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. TOTAL DISTURBED AREA IS APPROXIMATELY 67.4 ACRES.
4. DURING EXCAVATION PHASES OF STEEP SLOPES, WATTLES WITH SILT FENCE BACKING SHALL BE REQUIRED TO ELIMINATE SILTATION TRANSFER ONTO ADJACENT LANDOWNERS PROPERTY AND PUBLIC STREETS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL WATTLES WITH SILT FENCE BACKING AS NEEDED ALONG EXPOSED SLOPES.
5. SEDIMENT WILL BE REMOVED FROM SILT FENCES, ROCK SILT SCREENS, AND OTHER SEDIMENT CONTROLS AS NECESSARY, BUT AT LEAST WHEN THE SEDIMENT HAS REACHED $\frac{1}{3}$ TO $\frac{1}{2}$ OF THE HEIGHT OF THE CONTROL DEVICE.
6. MAINTENANCE NEEDS IDENTIFIED BY INSPECTIONS OR OTHER MEANS WILL BE ACCOMPLISHED BEFORE THE NEXT STORM EVENT IF POSSIBLE, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE NEED IS IDENTIFIED.
7. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
8. DRAINAGE BASINS AND CORRESPONDING AREAS ARE SHOWN IN BOXES.
9. THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASHOUT AREA WITHIN THE LIMITS OF DISTURBANCE. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PER MDEQ SPECIFICATIONS. ALL CONCRETE IN THE WASHOUT AREA SHALL BE COMPLETELY REMOVED AT THE END OF CONSTRUCTION.
12. NEAREST RECEIVING WATER: TRIBUTARY OF HURRICANE CREEK. THE CREEK IS NOT LISTED ON THE MISSISSIPPI 303(D) LIST AS IMPAIRED WATER BODIES.
13. NOTIFY STORMWATER INSPECTOR--RUSSELL ALLEN 901-860-8265 rollen@civil-link.com



REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE

ASHMONT SWPPP

OWNER: ASHMONT DEVELOPER, LLC
ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM



DIVISION OF ENGINEERING

EPSC 2

LAKELAND, TN

SURVEY: HARRIS & ASSOC.
DESIGN BY: J. MCCARTY, P.E.
DRAWN BY: P. DUNGAN, E.I.

DATE: 01-02-2023 PROJECT NO.: ----
DATE: 03-10-2023 BOOK:
DATE: 03-10-2023 SCALE: 1" = 100'



MAINTAIN ALL EROSION CONTROL MEASURES AS NECESSARY.

ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED WITH SEEDING/SOD.

DESIGNED EROSION CONTROL MEASURES MUST REMAIN INTACT AND FUNCTIONING UNTIL STABILIZATION IS MATURE.

STORM WATER INSPECTION AND REPORTING WILL BE REQUIRED OF ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH MDEQ.

REMOVE ANY TEMPORARY CONTROL MEASURES NOT NEEDED.

DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY ADEQUATE USE OF WATER.

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL DURING CONSTRUCTION BY THE PLACEMENT OF SILT FENCES OR WATTLES WHERE NECESSARY TO PREVENT DOWNSTREAM SILTATION OF ANY DITCHES, PIPES, DRAINAGE STRUCTURES, OR ADJACENT PROPERTIES. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL EROSION CONTROL AS NEEDED OR AS DIRECTED BY THE ENGINEER.
2. ALL NEW CUT OR FILL AREAS LACKING ADEQUATE VEGETATION SHALL BE FERTILIZED MULCHED, SEED,ED, AND/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.
3. TOTAL DISTURBED AREA IS APPROXIMATELY 67.4 ACRES.
4. DURING EXCAVATION PHASES OF STEEP SLOPES, WATTLES WITH SILT FENCE BACKING SHALL BE REQUIRED TO ELIMINATE SILTATION TRANSFER ONTO ADJACENT LANDOWNERS PROPERTY AND PUBLIC STREETS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL WATTLES WITH SILT FENCE BACKING AS NEEDED ALONG EXPOSED SLOPES.
5. SEDIMENT MUST BE REMOVED FROM SILT FENCES, ROCK SILT SCREENS, AND OTHER SEDIMENT CONTROLS AS NECESSARY, BUT AT LEAST WHEN THE SEDIMENT HAS REACHED $\frac{1}{3}$ TO $\frac{1}{2}$ OF THE HEIGHT OF THE CONTROL DEVICE.
6. MAINTENANCE NEEDS IDENTIFIED BY INSPECTIONS OR OTHER MEANS WILL BE ACCOMPLISHED BEFORE THE NEXT STORM EVENT IF POSSIBLE, BUT IN NO CASE MORE THAN SEVEN (7) DAYS AFTER THE NEED IS IDENTIFIED.
7. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
8. DRAINAGE BASINS AND CORRESPONDING AREAS ARE SHOWN IN BOXES.
9. THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASHOUT AREA WITHIN THE LIMITS OF DISTURBANCE. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PER MDEQ SPECIFICATIONS. ALL CONCRETE IN THE WASHOUT AREA SHALL BE COMPLETELY REMOVED AT THE END OF CONSTRUCTION.
12. NEAREST RECEIVING WATER: TRIBUTARY OF HURRICANE CREEK. THE CREEK IS NOT LISTED ON THE MISSISSIPPI 303(D) LIST AS IMPAIRED WATER BODY.
13. NOTIFY STORMWATER INSPECTOR--RUSSELL ALLEN 901-860-8265 ralten@civil-link.com

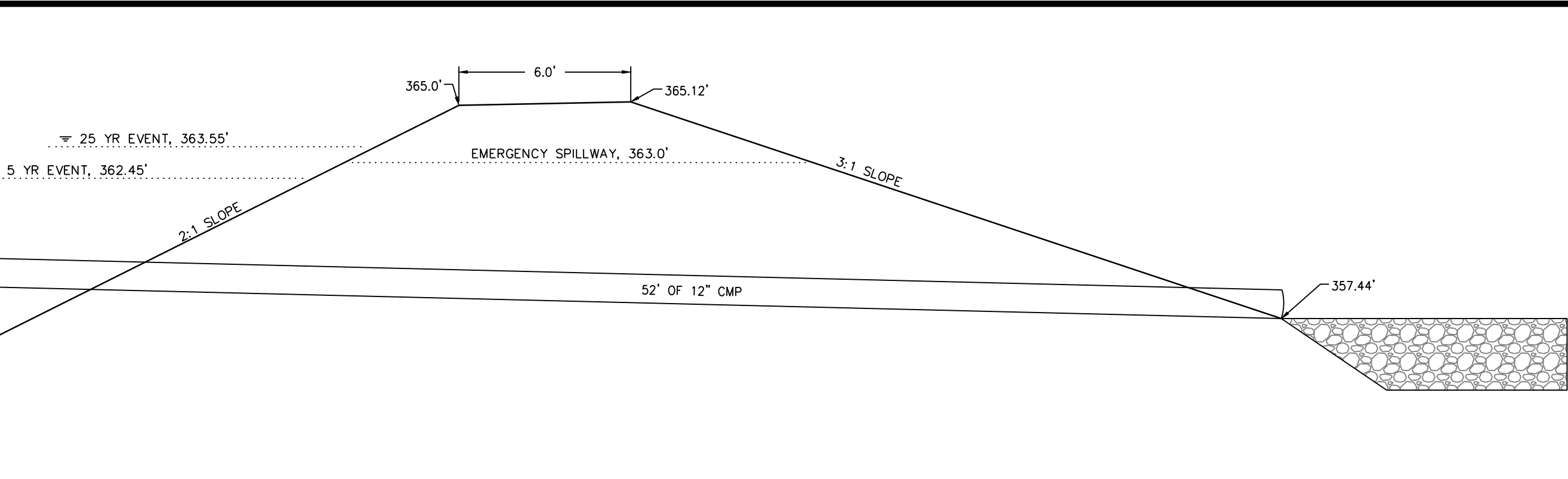
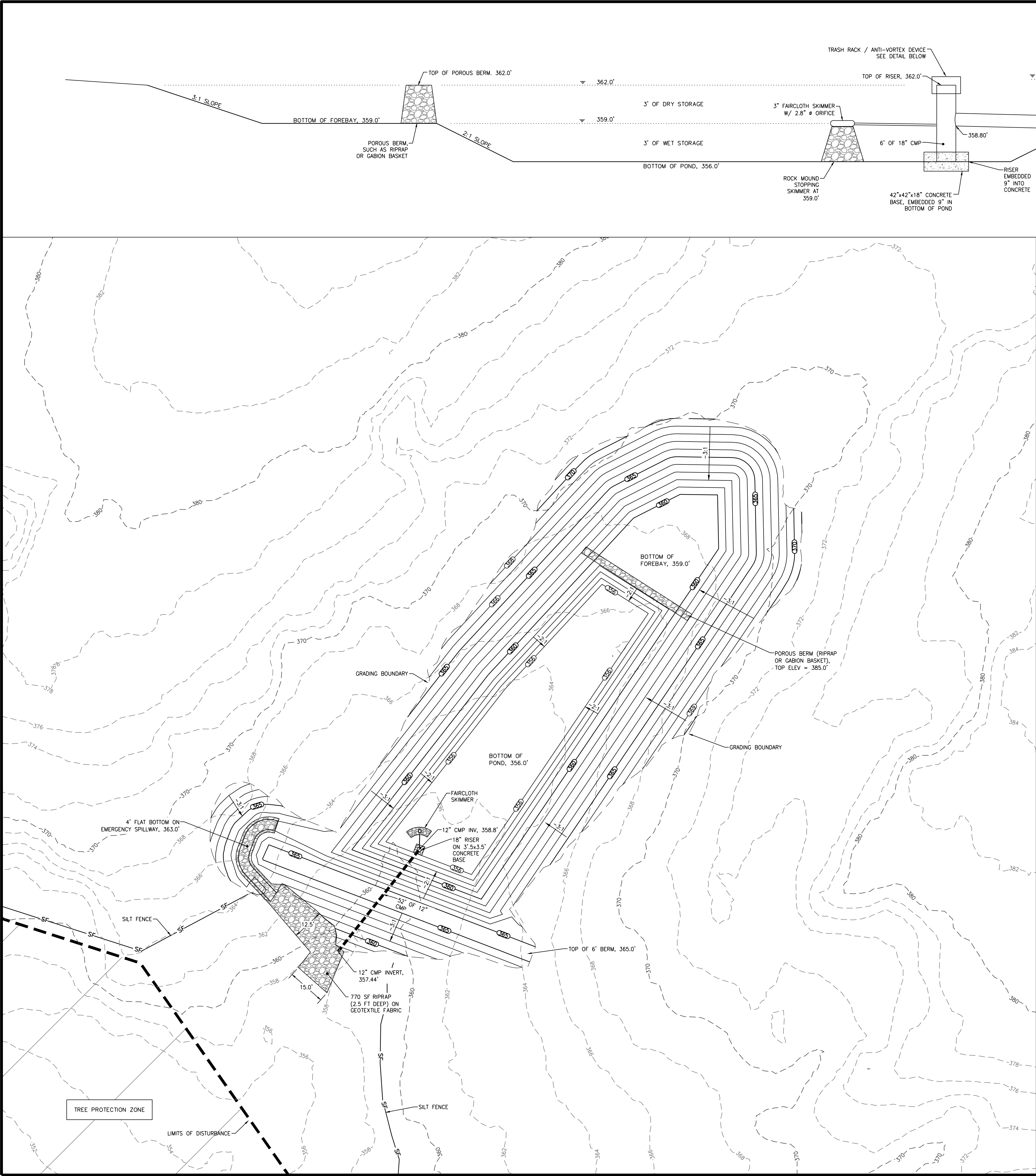
These standard symbols may be found in the drawing.

- | | | | | | |
|--|------------------------------|---|-----------------------|---|---------------------|
|  | PROPERTY LINES |  | ADJOINING PROP. LINES |  | SEDIMENT TRAP |
|  | DRAINAGE BASIN | | LIMITS OF DISTURBANCE |  | SEDIMENT BASIN |
|  | EASEMENT |  | TREES TO REMAIN |  | OUTLET PROTECTION |
|  | TREES TO BE REMOVED |  | SILT FENCE |  | CONSTRUCTION EXIT |
| 5'  | SILT FENCE WITH WIRE BACKING |  | INLET PROTECTION |  | PERMANENT SEEDING |
|  | CHECK DAM |  | WATTLES |  | EROSION CONTROL MAT |
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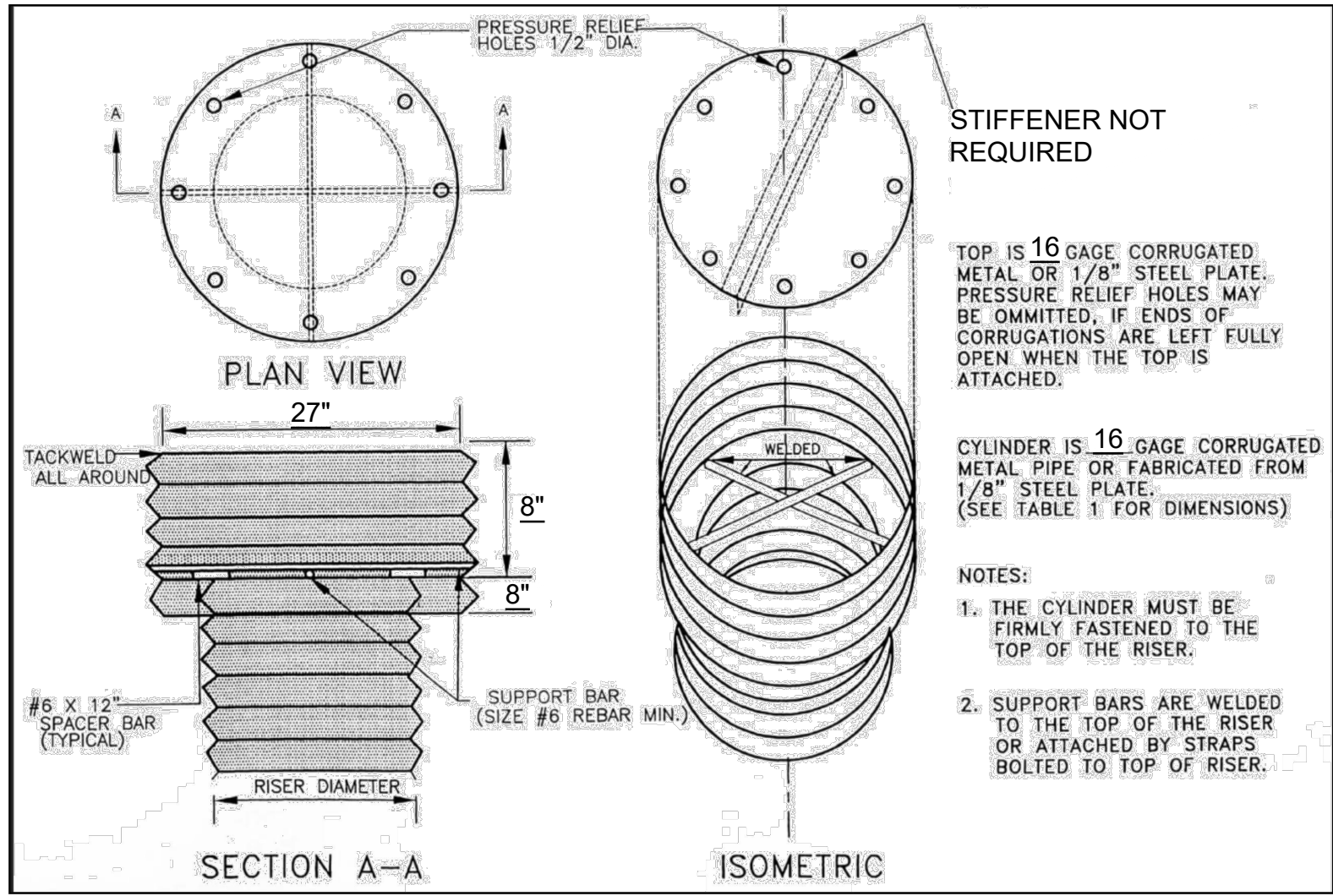
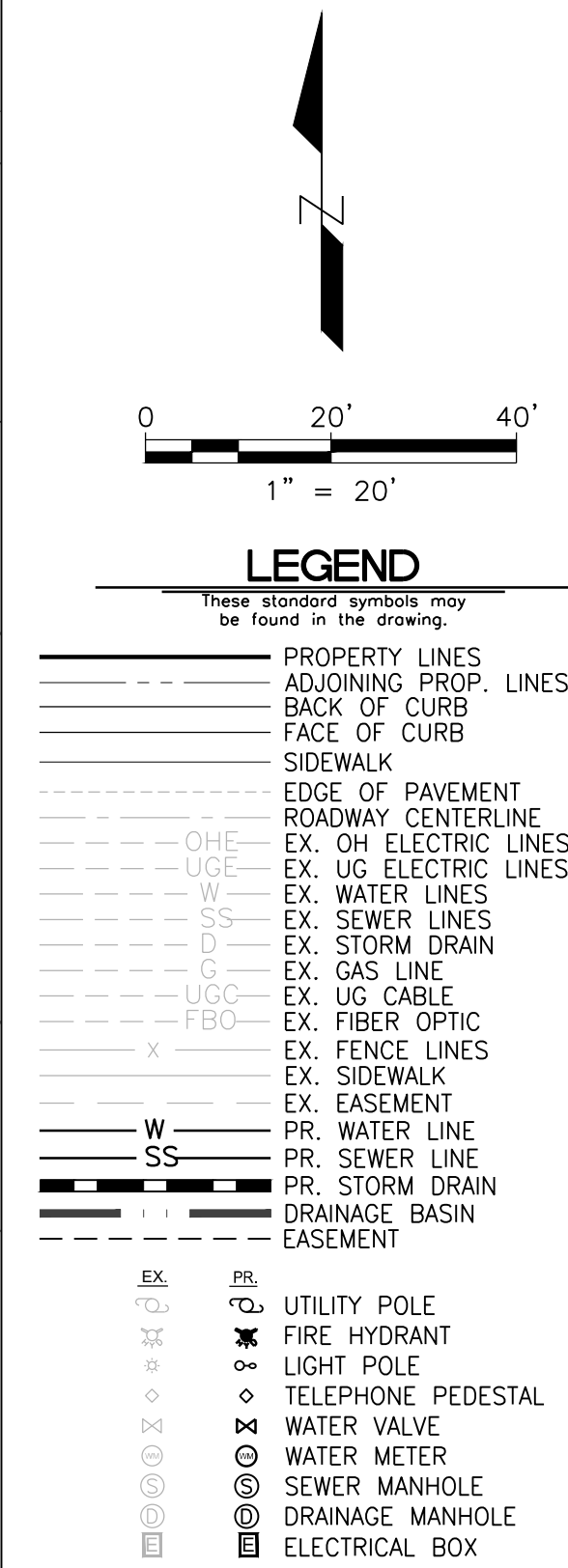
F.F.M.A. NOTE:

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

SURVEY: *HARRIS & ASSOC.* DATE: *01-02-2023* PROJECT NO.:
DESIGN BY: *J. MCCARTY, P.E.* DATE: *03-10-2023* BOOK:
DRAWN BY: *P. DUNGAN, E.I.* DATE: *03-10-2023* SCALE: *1" = 100'*



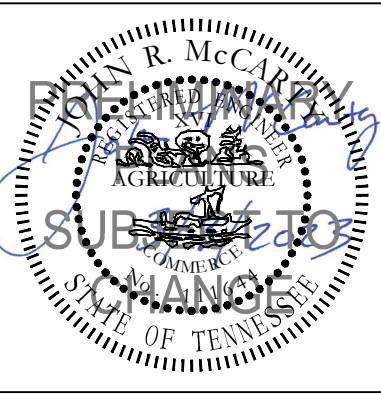
OUTFALL 7 SEDIMENT BASIN INFO SHEET		
DRAINAGE AREA (ON & OFF SITE)	4.9	AC
DESIGN STORM DEPTH (5 yr 24 hr):	4.85	IN
DESIGN STORM UNDETAINED PEAK FLOW (5 yr 24 hr):	24.20	CFS
VOLUME - WET STORAGE	13,986	CF
VOLUME - DRY STORAGE	11,424	CF
VOLUME - FOREBAY	4,590	CF
SURFACE AREA - POND AT RISER ELEVATION	10,510	SF
ELEVATION - 5 yr 24 hr (DESIGN STORM)	362.45	FT
ELEVATION - 25 yr 24 hr	363.55	FT
ELEVATION - TOP OF EMBANKMENT	365.00	FT
ELEVATION - RISER/DRY STORAGE	362.00	FT
ELEVATION - PERMANENT POOL/WET STORAGE	359.00	FT
ELEVATION - BOTTOM OF BASIN	356.00	FT
ELEVATION - FOREBAY CREST	362.00	FT
ELEVATION - FOREBAY BOTTOM	359.00	FT
ELEVATION - OUTFALL PIPE DISCHARGE	357.44	FT
ELEVATION - RECEIVING MEDIUM AT OUTFALL	357.44	FT
EMERGENCY SPILLWAY - ELEVATION	363.00	FT
EMERGENCY SPILLWAY - SIDESLOPE	3:1	H:V
EMERGENCY SPILLWAY - SMALLEST STORM THAT WILL DISCHARGE	25	YR
LENGTH TO WIDTH RATIO	4:1	L:W



SITE BENCHMARK (T.B.M.):
SET CHISEL MARK AT THE SOUTHWEST CORNER OF LOT 1 OF THE VILLAGES AT PORTER FARMS PHASE 8.
ELEVATION: 349.90'

F.E.M.A. NOTE:
ACCORDING TO THE FEDERAL EMERGENCY MANAGMENTS AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

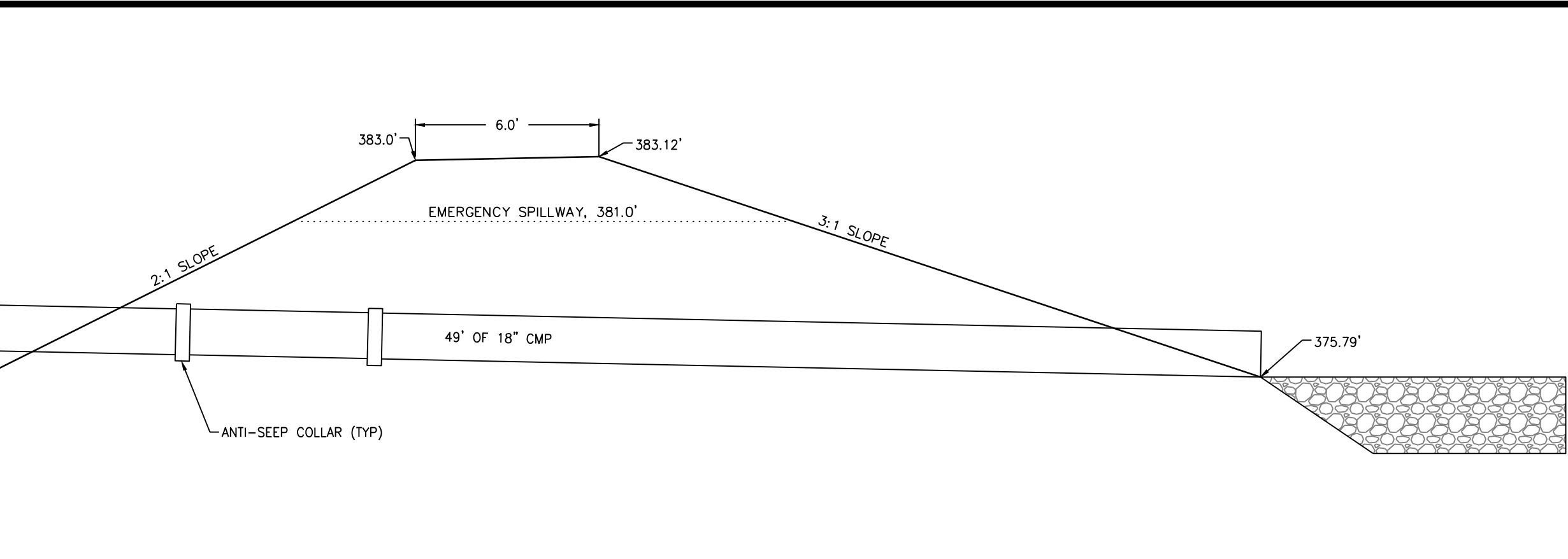
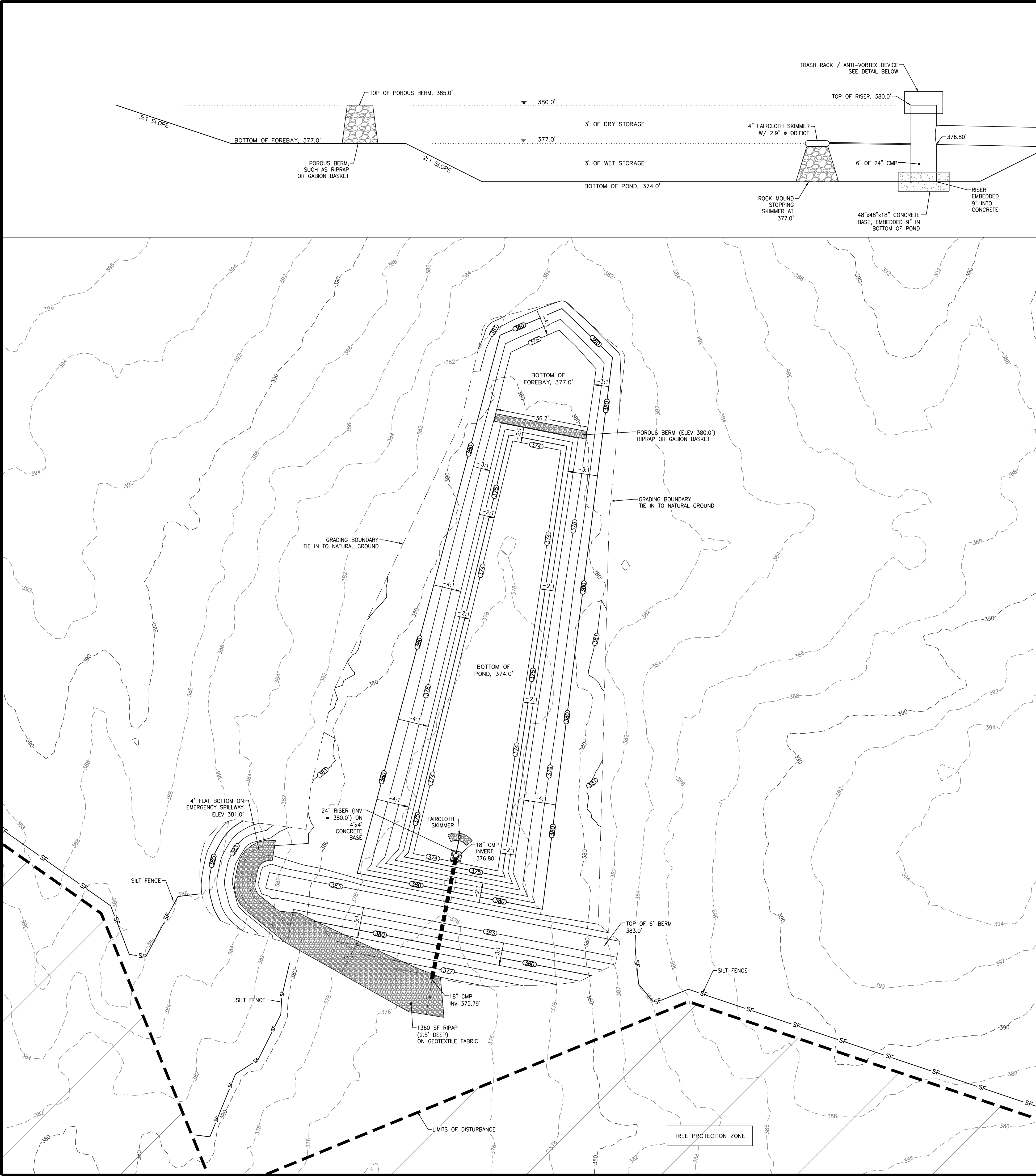
REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



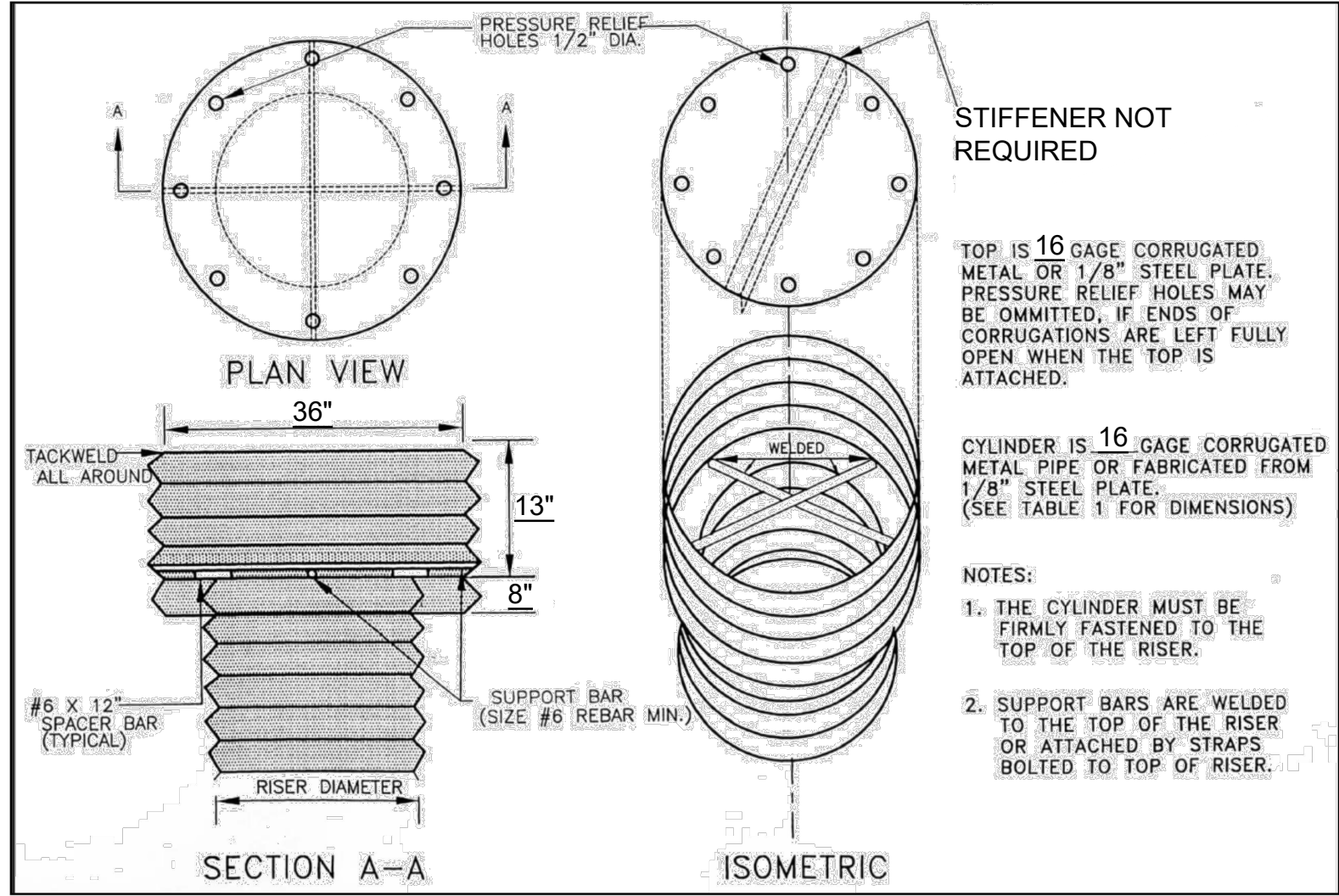
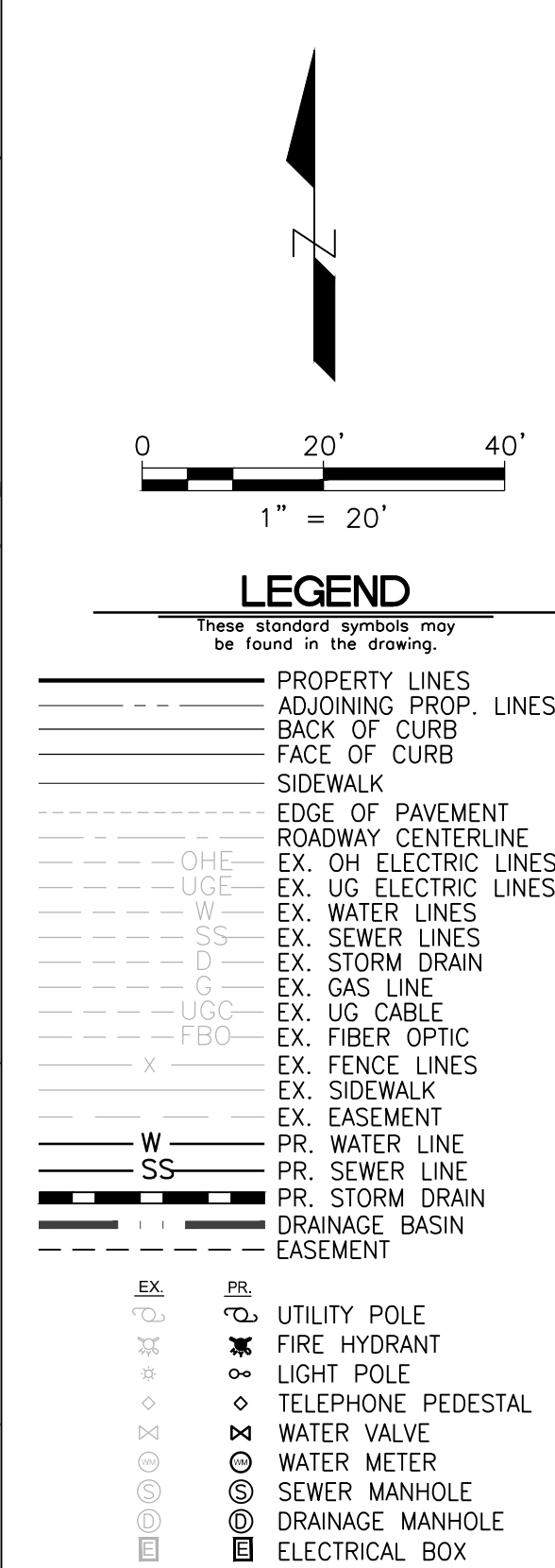
DIVISION OF ENGINEERING
OUTFALL #7 SEDIMENT BASIN DETAILS
LAKELAND, TN

SURVEY: HARRIS & ASSOC. DATE: 01/02/2023 PROJECT NO.:
DESIGN BY: J. McCARTY, P.E. DATE: 03/06/2023 BOOK:
DRAWN BY: P. DUNGAN, E.I. DATE: 03/06/2023 SCALE:

ASHMONT SITE CLEARING
OWNER: AMHERST DEVELOPER, LLC
ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM

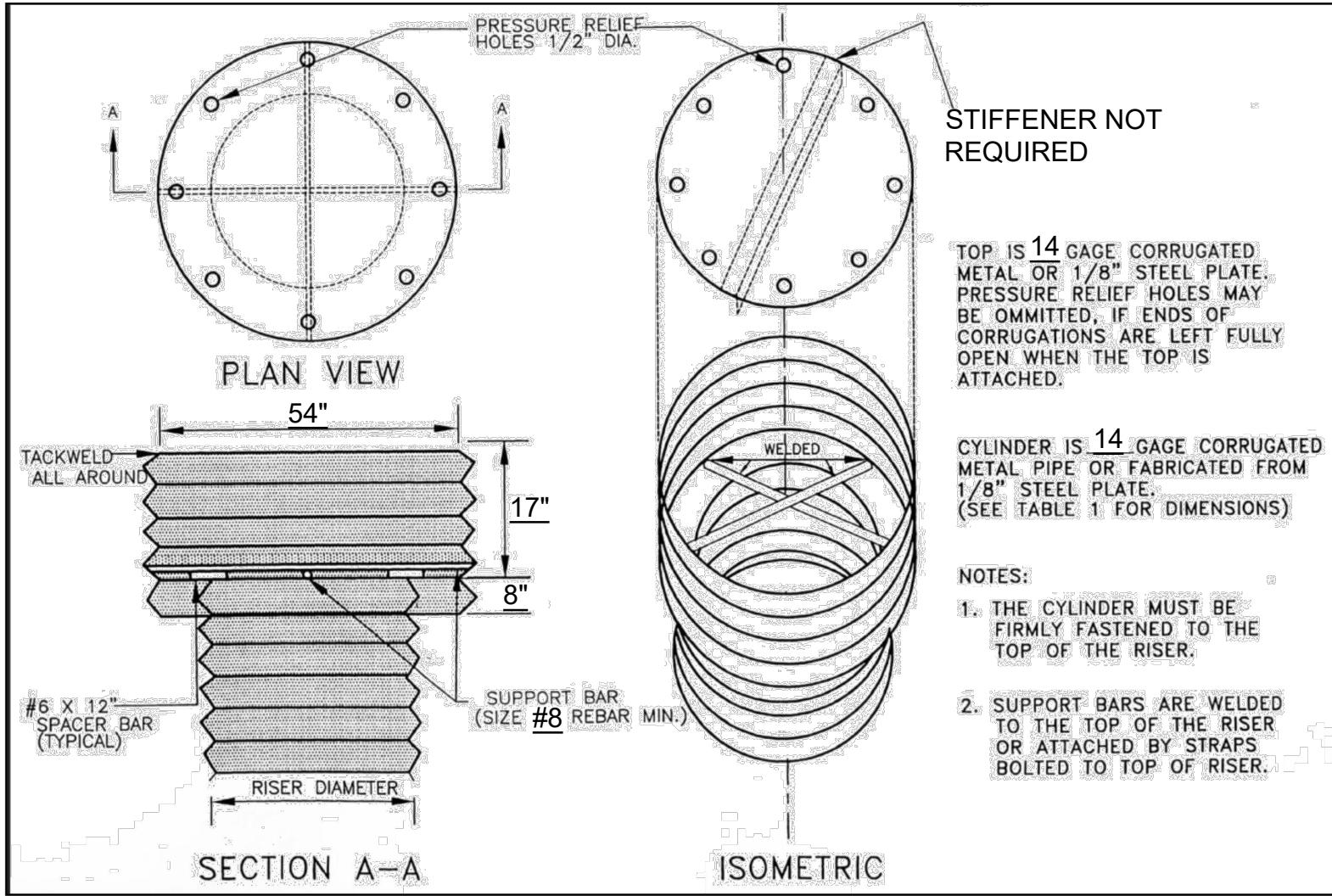
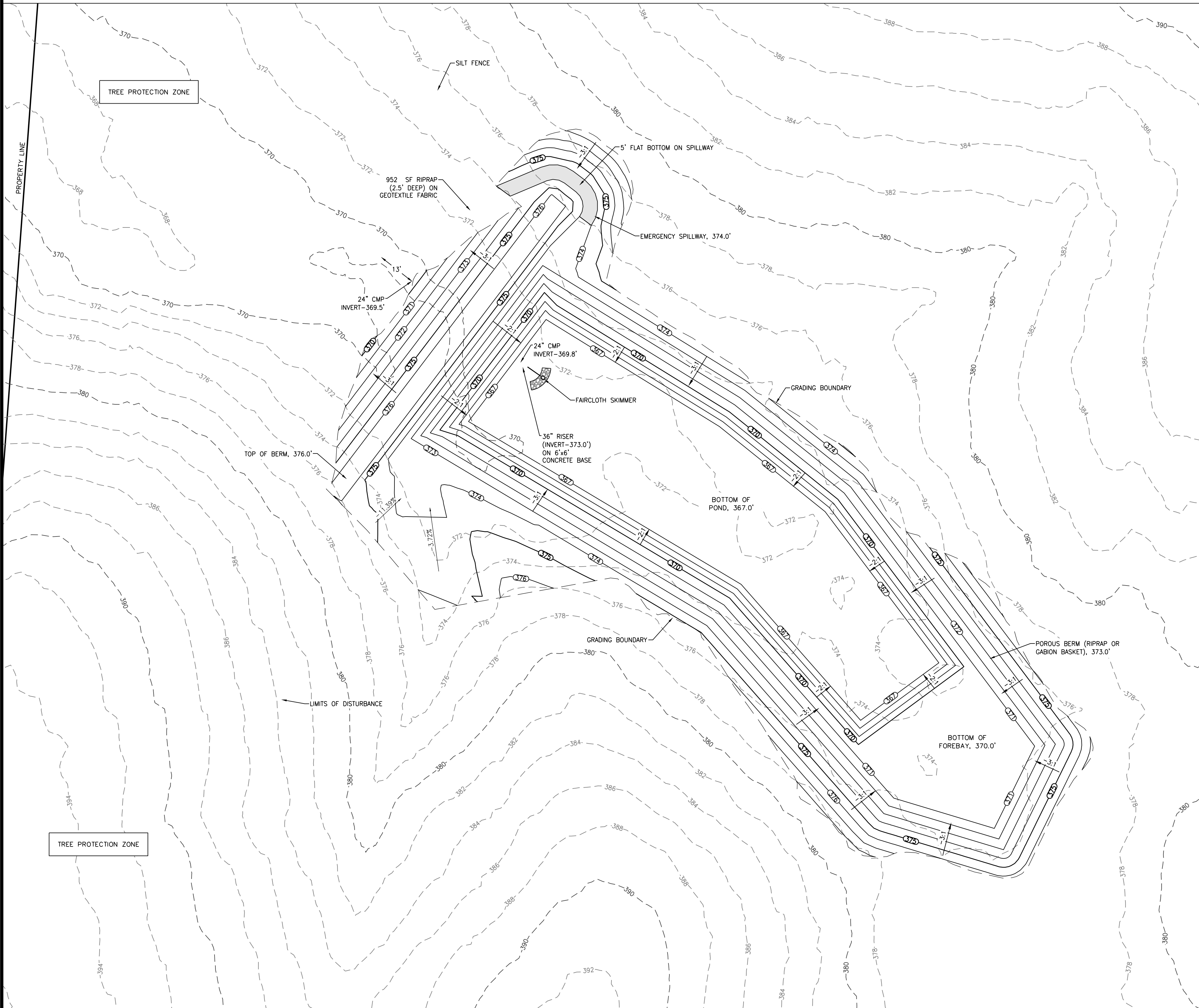


OUTFALL #10 SEDIMENT BASIN INFO SHEET		
DRAINAGE AREA (ON & OFF SITE)	8.6	AC
DESIGN STORM DEPTH (5 yr 24 hr):	4.85	IN
DESIGN STORM UNDETAINED PEAK FLOW (5 yr 24 hr):	30.20	CFS
VOLUME - WET STORAGE	18,900	CF
VOLUME - DRY STORAGE	32,000	CF
VOLUME - FOREBAY	4,100	CF
SURFACE AREA - POND AT RISER ELEVATION	13,041	SF
ELEVATION - 5 yr 24 hr (DESIGN STORM)	380.73	FT
ELEVATION - 25 yr 24 hr	381.63	FT
ELEVATION - TOP OF EMBANKMENT	383.00	FT
ELEVATION - RISER/DRY STORAGE	380.00	FT
ELEVATION - PERMANENT POOL/WET STORAGE	377.00	FT
ELEVATION - BOTTOM OF BASIN	374.00	FT
ELEVATION - FOREBAY CREST	380.00	FT
ELEVATION - FOREBAY BOTTOM	377.00	FT
ELEVATION - OUTFALL PIPE DISCHARGE	375.79	FT
ELEVATION - RECEIVING MEDIUM AT OUTFALL	375.79	FT
EMERGENCY SPILLWAY - ELEVATION	381.00	FT
EMERGENCY SPILLWAY - SIDESLOPE	3:1	H:V
EMERGENCY SPILLWAY - SMALLEST STORM THAT WILL DISCHARGE	10	YR
LENGTH TO WIDTH RATIO	4:1	L:W

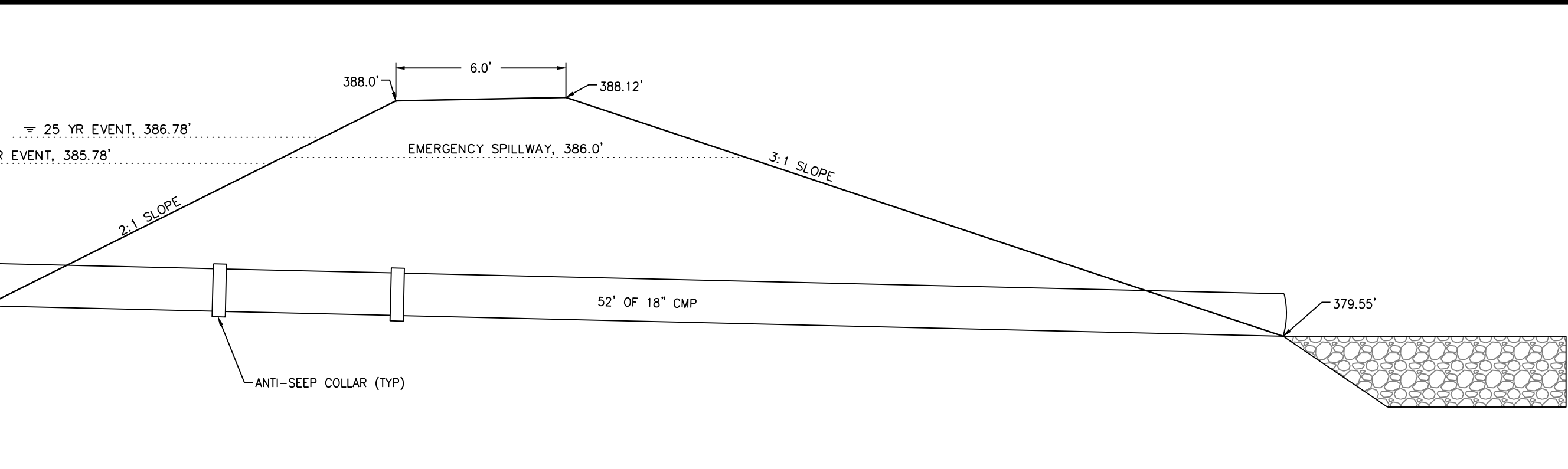
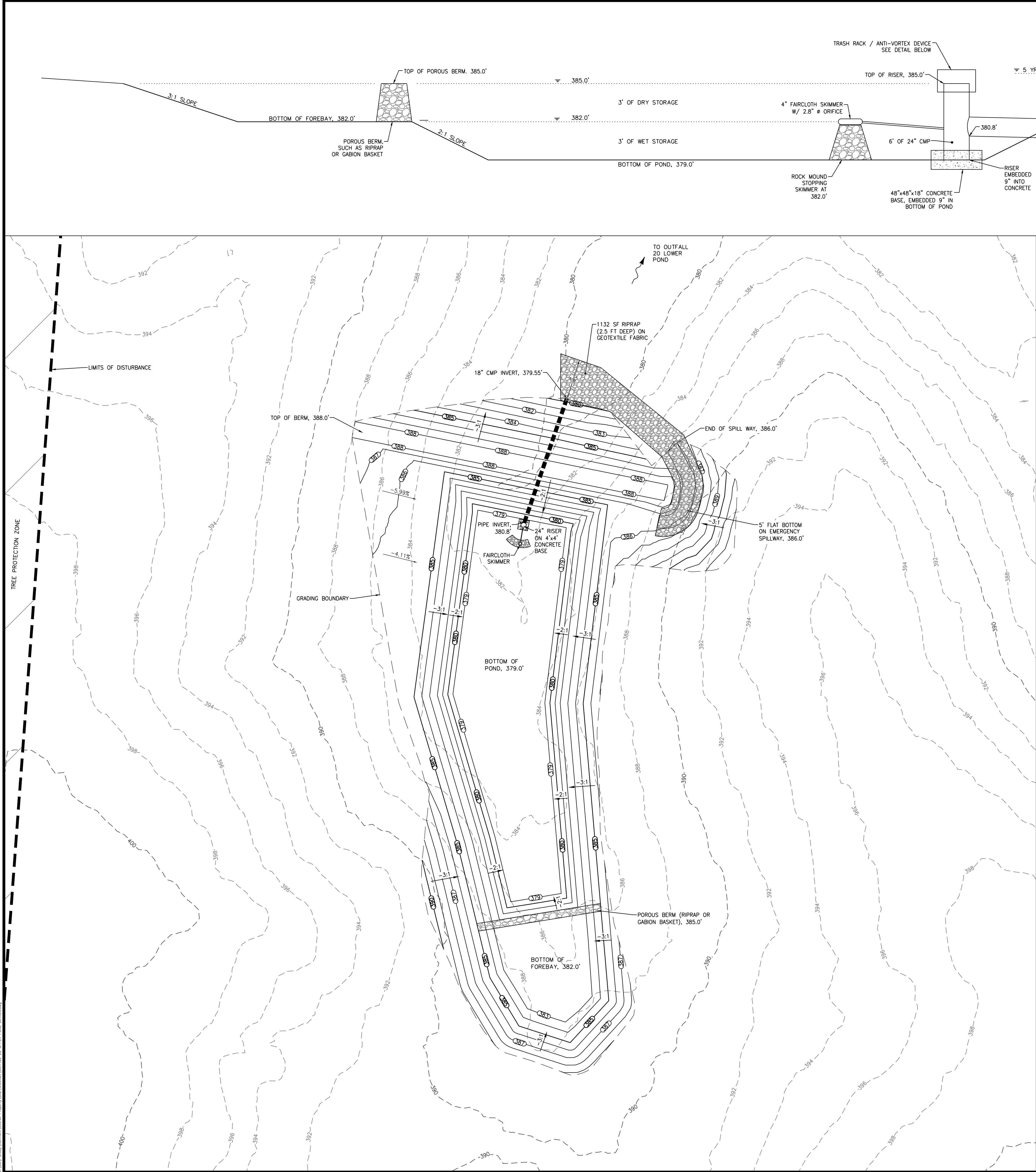


SITE BENCHMARK (T.B.M.):
SET CHISEL MARK AT THE SOUTHWEST CORNER OF LOT 1 OF THE VILLAGES AT PORTER FARMS PHASE 8.
ELEVATION: 349.90'
F.E.M.A. NOTE:
ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENTS AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

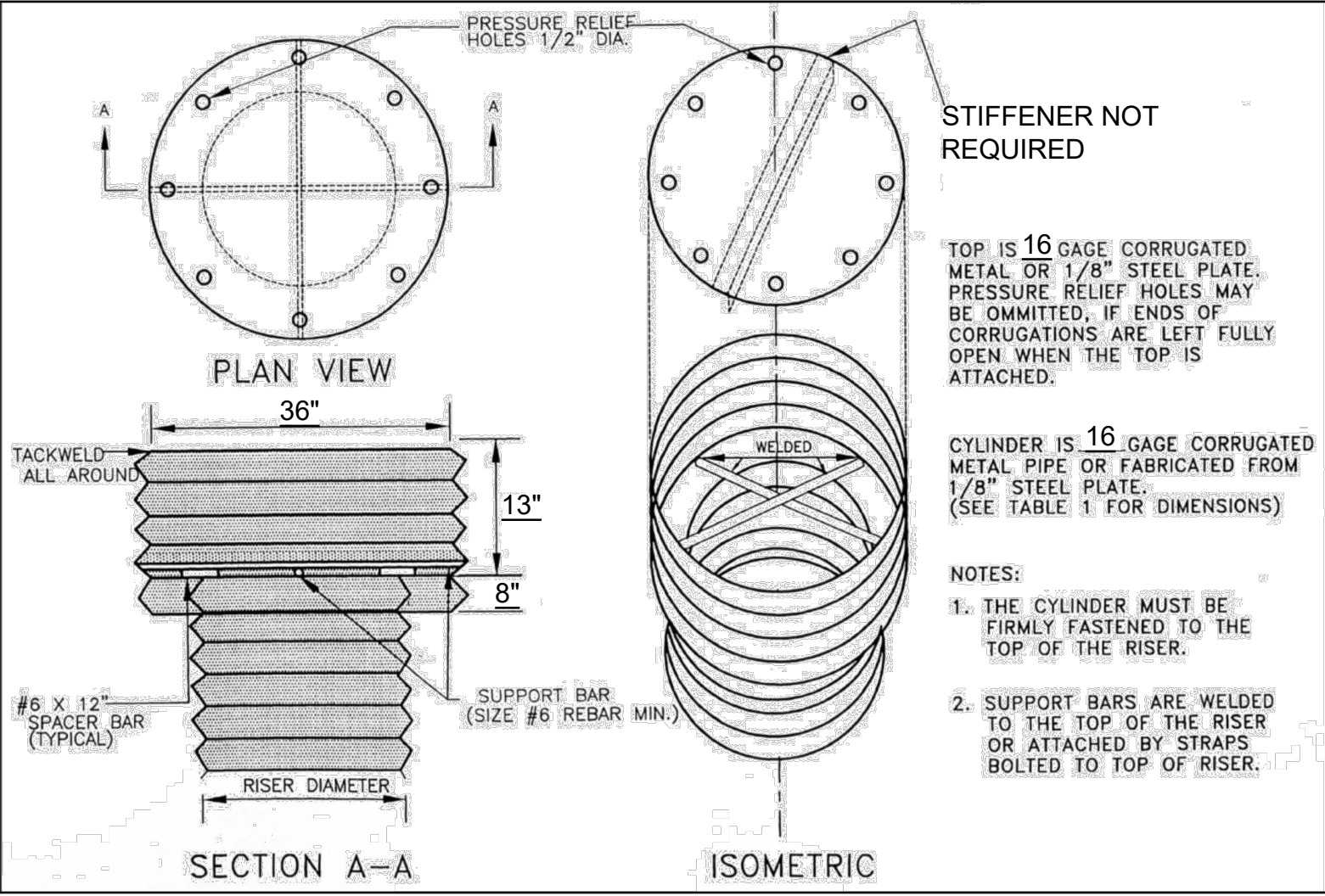
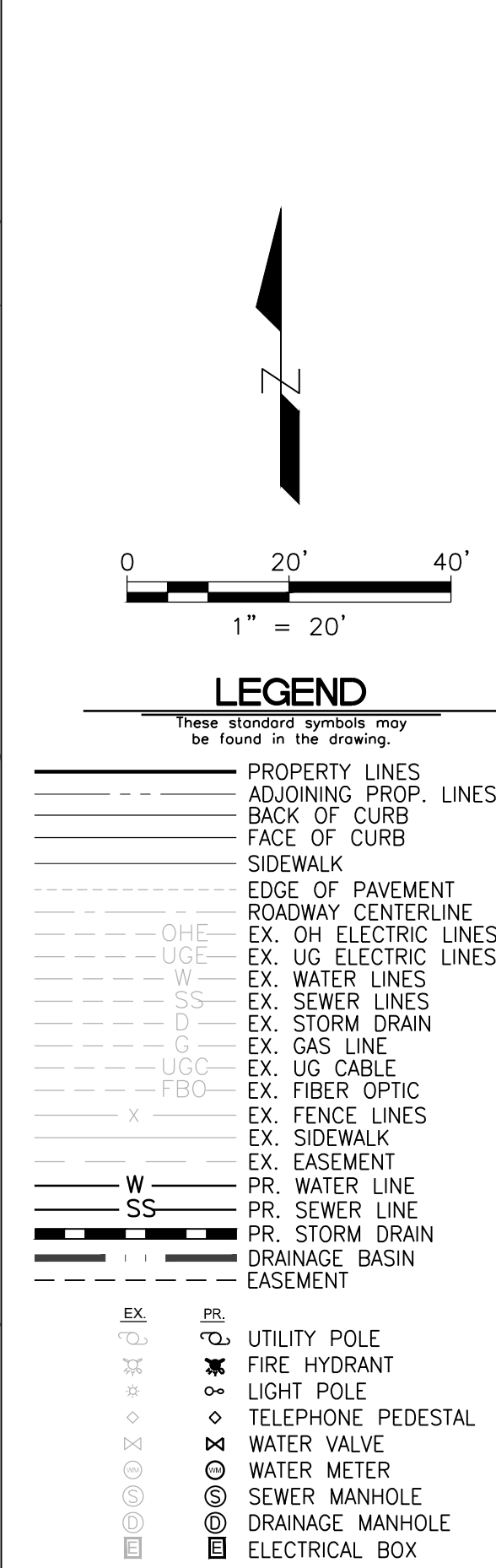
REVISION			DIVISION OF ENGINEERING	
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE	OUTFALL 10 SEDIMENT BASIN DETAILS	
			LAKELAND, TN	
			SURVEY: HARRIS & ASSOC. DATE: 01/02/2023 PROJECT NO.:	
			DESIGN BY: J. McCARTY, P.E. DATE: 03/06/2023 BOOK:	
			DRAWN BY: P. DUNGAN, E.I. DATE: 03/06/2023 SCALE:	
ASHMONT SITE CLEARING				
OWNER: AMHERST DEVELOPER, LLC				
ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM				



REVISION			DIVISION OF ENGINEERING	
ITEM NO.	DESCRIPTION OF CHANGE		APPROVAL DATE	OUTFALL 20 <u>LOWER</u> SED. BASIN DETAILS
ASHMONT SITE CLEARING OWNER: <i>AMHERST DEVELOPER, LLC</i> ENGINEER: <i>McCARTY GRANBERRY ENGINEERING FIRM</i>			LAKELAND, TN SURVEY: <i>HARRIS & ASSOC.</i> DATE: <i>01/02/2023</i> PROJECT NO.: DESIGN BY: <i>J. McCARTY, P.E.</i> DATE: <i>03/06/2023</i> BOOK: DRAWN BY: <i>P. DUNGAN, E.I.</i> DATE: <i>03/06/2023</i> SCALE:	



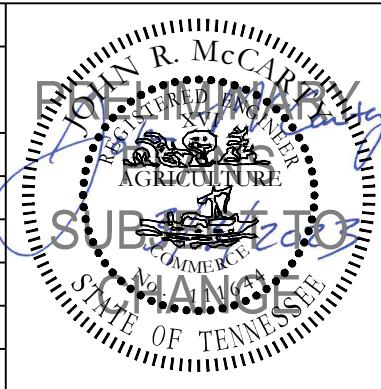
OUTFALL #20 UPPER SEDIMENT BASIN INFO SHEET		
DRAINAGE AREA (ON & OFF SITE)	9.3	AC
DESIGN STORM DEPTH (5 yr 24 hr):	4.85	IN
DESIGN STORM UNDETAINED PEAK FLOW (5 yr 24 hr):	26.50	CFS
VOLUME - WET STORAGE	17,388	CF
VOLUME - DRY STORAGE	30,294	CF
VOLUME - FOREBAY	4,293	CF
SURFACE AREA - POND AT RISER ELEVATION	12,349	SF
ELEVATION - 5 yr 24 hr (DESIGN STORM)	385.77	FT
ELEVATION - 25 yr 24 hr	386.66	FT
ELEVATION - TOP OF EMBANKMENT	388.00	FT
ELEVATION - RISER/DRY STORAGE	385.00	FT
ELEVATION - PERMANENT POOL/WET STORAGE	382.00	FT
ELEVATION - BOTTOM OF BASIN	379.00	FT
ELEVATION - FOREBAY CREST	385.00	FT
ELEVATION - FOREBAY BOTTOM	382.00	FT
ELEVATION - OUTFALL PIPE DISCHARGE	379.55	FT
ELEVATION - RECEIVING MEDIUM AT OUTFALL	379.55	FT
EMERGENCY SPILLWAY - ELEVATION	386.00	FT
EMERGENCY SPILLWAY - SIDESLOPE	3:1	H:V
EMERGENCY SPILLWAY - SMALLEST STORM THAT WILL DISCHARGE	10	YR
LENGTH TO WIDTH RATIO	4:1	L:W

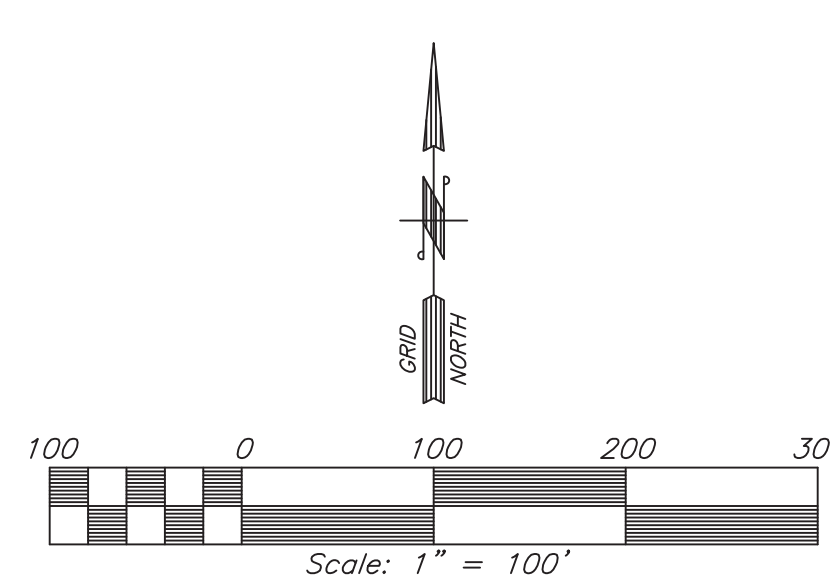
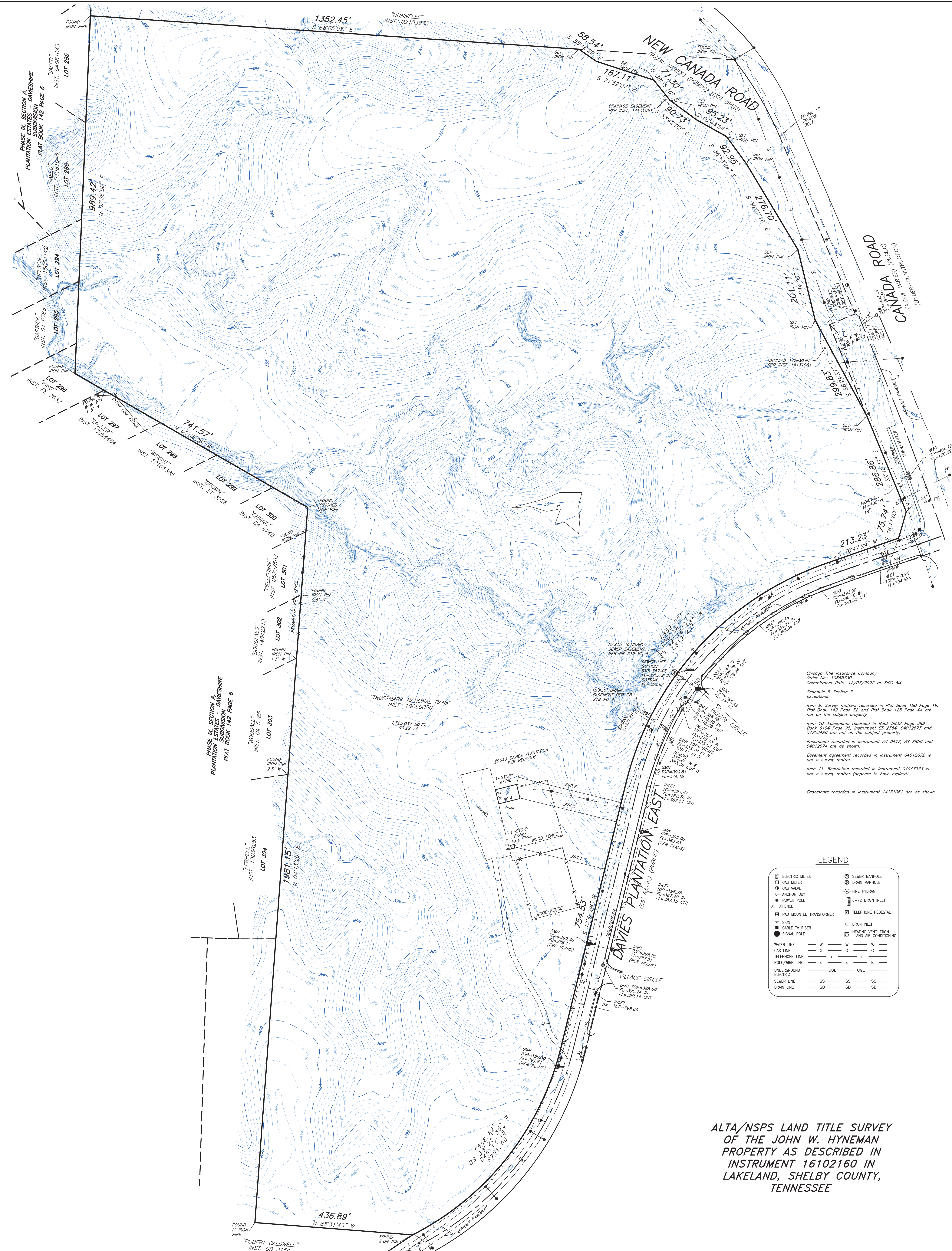


SITE BENCHMARK (T.B.M.):
SET CHISEL MARK AT THE SOUTHWEST CORNER OF LOT 1 OF THE VILLAGES AT PORTER FARMS PHASE 8.
ELEVATION: 349.90'

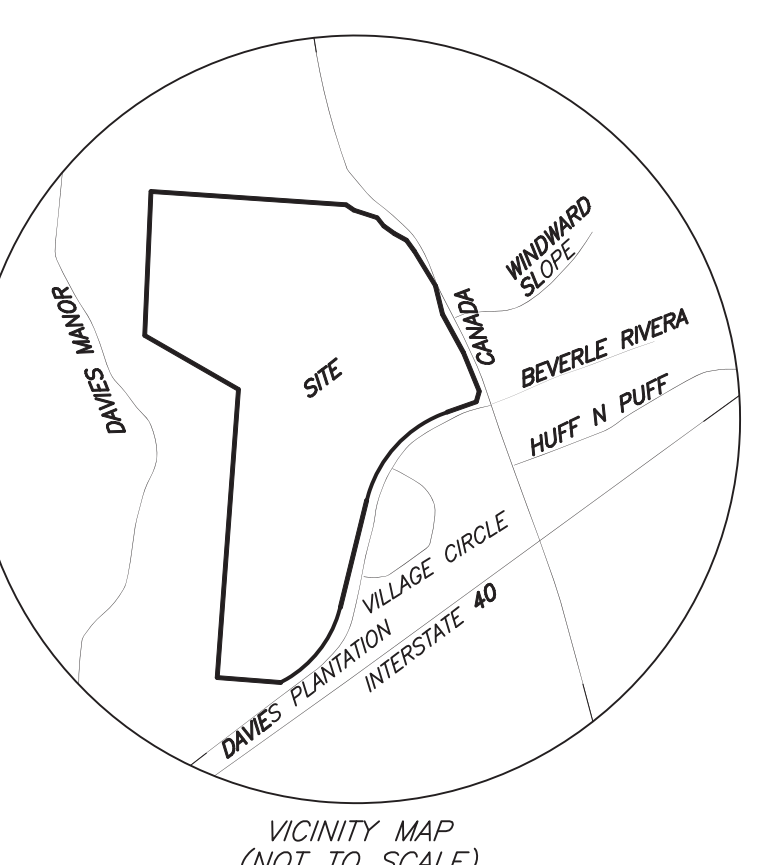
F.E.M.A. NOTE:
ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENTS AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY IS LOCATED IN ZONE X, WHICH IS NOT A SPECIAL FLOOD HAZARD ZONE PER FLOOD INSURANCE RATE MAP, MAP NO. 47157C0490G, COMMUNITY PANEL NO. 470263 0490 G, EFFECTIVE DATE: FEBRUARY 06, 2013.

REVISION			DIVISION OF ENGINEERING	
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE	OUTFALL 20 UPPER SED. BASIN DETAILS	
			LAKELAND, TN	
			SURVEY: HARRIS & ASSOC. DATE: 01/02/2023 PROJECT NO.:	
			DESIGN BY: J. McCARTY, P.E. DATE: 03/06/2023 BOOK:	
			DRAWN BY: P. DUNGAN, E.I. DATE: 03/06/2023 SCALE:	
			ASHMONT SITE CLEARING	
			OWNER: AMHERST DEVELOPER, LLC	
			ENGINEER: McCARTY GRANBERRY ENGINEERING FIRM	





- NOTES
1. BEARINGS SHOWN ARE RELATIVE TO EACH OTHER ONLY.
 2. ONLY VISIBLE AND APPARENT UTILITIES SHOWN.
 3. UNDERGROUND UTILITIES NOT SHOWN, BEFORE COMMENCEMENT OF ANY CONSTRUCTION CALL TENNESSEE 1 CALL 811 AND THE UTILITY COMPANIES MAINTAINING UTILITY SERVICES ACROSS SUBJECT PROPERTY.
 4. EVERY DOCUMENT OF RECORD REVIEWED AND CONSIDERED AS A PART OF THIS SURVEY IS NOTED HEREIN, ONLY THE DOCUMENTS NOTED HEREIN WERE SUPPLIED TO THE SURVEYOR. THERE MAY EXIST OTHER DOCUMENTS OF RECORD THAT WOULD AFFECT THIS PARCEL.
 5. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART TO THIS SURVEY, NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT.
 6. ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM), THIS PROPERTY LIES IN ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS IDENTIFIED IN COMMUNITY PANEL NUMBER 470402 0330 G MAP DATED FEBRUARY 6, 2013.
 7. IF YOU HAVE RECEIVED THIS DRAWING IN DIGITAL FORMAT PLEASE BE AWARE THAT A HARD COPY OF THE DRAWING BEARING AN ORIGINAL SEAL AND SIGNATURE RENDERED IN RED WILL RULE IN THE EVENT OF A CONFLICT BETWEEN THE PRESENTED DATA.
 8. THE UNAUTHORIZED DISTRIBUTION OF THIS PLAT OF SURVEY MAY CONSTITUTE A COPYRIGHT INFRINGEMENT.
 9. THERE WERE NO OBSERVED EVIDENCE OF ANY CEMETERIES, GRAVESTONES OR BURIAL GROUNDS ON SUBJECT PROPERTY.
 10. THERE ARE NO STRIPPED PARKING SPACES ON THE SURVEYED PROPERTY.
 11. THERE IS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
 12. WE ARE UNAWARE OF ANY PROPOSED CHANGES IN STREET RIGHT OF WAY LINES.
 13. THIS PROPERTY HAS ACCESS TO DAVES PLANTATION EAST WHICH IS PUBLIC RIGHT OF WAY.



Chicago Title Insurance Company
Order No.: 10865730
Commitment Date: 12/07/2022 at 8:00 AM
Schedule B Section 1
Exceptions

Item 9. Survey matters recorded in Plat Book 180 Page 19, Plat Book 142 Page 32 and Plat Book 125 Page 44 are not on the subject property.
Item 10. Easements recorded in Book 5932 Page 389, Book 6104 Page 98, Instrument ES 2354, 04012673 and 04020486 are not on the subject property.
Easements recorded in Instrument AC 9412, AS 8850 and 04012674 are as shown.
Easement agreement recorded in Instrument 04012672 is not a survey matter.
Item 11. Restriction recorded in Instrument 04043933 is not a survey matter (appears to have expired).

Easements recorded in Instrument 14131061 are as shown.

LEGEND

	ELECTRIC METER		SEWER MANHOLE
	GAS METER		DRAIN MANHOLE
	GAS VALVE		FIRE HYDRANT
	ANCHOR GUY		6-72 DRAIN INLET
	POWER POLE		TELEPHONE PEDESTAL
	WIRE		DRAIN INLET
	PAV MOUNTED TRANSFORMER		HEATING VENTILATION AND AIR CONDITIONING
	SIGN		
	CABLE TV RISER		
	SIGNAL POLE		

WATER LINE	W	W	W
GAS LINE	G	G	G
TELEPHONE LINE	T	T	T
POLE/WIRE LINE	P	P	P
UNDERGROUND	U	U	U
ELECTRIC	SS	SS	SS
SEWER LINE	SD	SD	SD
DRAIN LINE	SD	SD	SD

TO: LAKELAND COMMONS, LLC;
CHICAGO TITLE INSURANCE COMPANY AND
BASS, BERRY & SIMS PLLC
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED
WERE MADE IN ACCORDANCE WITH 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR
ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS,
AND INCLUDES ITEMS 1-4, 7A, 8, 9, 13, 14, 16-18 OF TABLE A THEREOF. THE
FIELDWORK WAS COMPLETED ON DECEMBER 21, 2022.

Harris & Associates Land Surveyors, LLC
By:
JOE S. WISEMAN
SURVEYOR
TENNESSEE LICENSE #1932
jwiseman@harrisassociateslandsurveyors.com
project # 23014

revised March 29, 2023 to add topography

ALTA/NSPS LAND TITLE SURVEY
OF THE JOHN W. HYNEMAN
PROPERTY AS DESCRIBED IN
INSTRUMENT 16102160 IN
LAKELAND, SHELBY COUNTY,
TENNESSEE

HARRIS & ASSOCIATES LAND SURVEYORS, LLC
554 Green Tree Cove, Suite 102B • Collierville, Tennessee 38017 • (901)362-2345

DATE: Dec. 21, 2022
SCALE: 1" = 100'
DRAWN BY: jw
F:\23014\SUR\combine
topo.dwg
ORDERED BY: Cynthia Bailey
Bass Berry Sims



October 7, 2022

Mr. Barry Allmon (ballmon@Rgroup.biz)
Renaissance Group
9700 Village Circle, Suite 100
Lakeland, Tennessee 38002

**Re: Canada Road Property
West of Canada Road and north of Interstate-40
Lakeland, Shelby County, Tennessee**

Dear Mr. Allmon:

On September 27, 2022, an environmental investigation was conducted on the property located west of Canada Road and north of Interstate-40 in Lakeland, Shelby County, Tennessee. A Topographic Site Location Map based upon the 1:24,000 Eads, Tennessee and Ellendale, Tennessee USGS topographic quadrangles is enclosed.

The purpose of the investigation was to assess the property for wetlands and other "waters" subject to §404/§401 regulations by the U.S. Army Corps of Engineers (Corps) and/or the Tennessee Department of Environment and Conservation (TDEC). This investigation was conducted in accordance with the methodology of the *2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region*, the Corps' Regulatory Guidance Letter No 05-05 regarding ordinary high-water mark identification, and Version 1.5 of the Tennessee Department of Environment and Conservation's *Guidance for Making Hydrologic Determinations* (April 2020).

Representative photos of the site are provided in the enclosed Photographic Documentation. The majority of the site consists of forested habitat. According to the Natural Resource Conservation Service (NRCS), soils on the property consist of Falaya silt loam (Fm) and a mixture of non-hydric soil types. Falaya soils are considered partially hydric (9% hydric inclusion rating), due to the possibility of Waverly silt loam inclusions. Grenada silt loam (GaB and GaD2), Gullied land (Gs), and Memphis silt loam (MeB, MeB2, MeC2, MeE, MeF3, and MeG) soils are also found on the site. For reference, a copy of the soils map is included in this report.

Drainage from the site is received by Oliver Creek, which is located in the Loosahatchie River watershed (HUC: 08010209). Although no channels appear as blue lines on the topographic map, there are multiple drainage valleys on the site. There are two drainage channels located in the central portion of the site that meet the criteria of a stream based upon primary indicators (flowing water and fish). The location of each of the streams are shown on the Features Map. For the purposes of this report, these channels are herein described as Stream 1 and Stream 2. According to the StreamStats web application, Stream 1 and Stream 2 have a drainage area of 32 acres and 44.8 acres at the point they exit the site, respectively. These are relatively small drainage areas; however, the channels both appear to have incised to a depth at which they are intercepting groundwater. Photos 1-4 of the Photographic Documentation are representative of Streams 1 and 2. Based on various geomorphologic and hydrologic indicators, it appears that there are also two other small sections of stream are located on or adjacent to the property (see Features Map). The channels within the other drainage valleys will likely be considered non-jurisdictional by TDEC and the Corps. To determine the jurisdictional status of the channels, formal hydrologic determinations will be necessary. The results of the hydrologic determinations can then be provided to TDEC for their concurrence. Additional information about the channels will also need to be collected to provide to the Corps for inclusion in a jurisdictional determination (JD) request.

One area that has potential for meeting the soils, vegetation, and hydrology criteria of a jurisdictional wetland was identified in the western portion of the site. A representative view of the potential wetland area can be seen in Photo 5 of the Photographic Documentation. The approximate portion of the site that contains a potential wetland is shown on the enclosed Features Map; however, the entire area marked is not necessarily wetlands. In order to know the acreage and exact location of a wetland on the site, a formal wetland delineation will need to be performed.

Representatives from TDEC and the Corps need to make the final determination on the status of potentially jurisdictional features on the site. We recommend performing formal hydrologic determinations for the on-site channels, as well as a wetland delineation. We also recommend obtaining concurrence from the Corps of Engineers in the form of a Jurisdictional Determination (JD). Please let us know if you would like to proceed with obtaining a formal hydrologic determination from TDEC and/or obtaining a JD from the Corps.

Please contact me at (901) 373-3289, or via email at asharp3@bellsouth.net, should you have any questions. Thank you.

Sincerely,

A handwritten signature in black ink that reads "Alex Sharp". The signature is written in a cursive, flowing style.

Alex Sharp
Wetland Scientist
Brophy-Heineke & Associates, Inc.

Enclosures: 1) Topographic Site Location Map
2) Features Map
3) Photographic Documentation
4) NRCS Soil Map

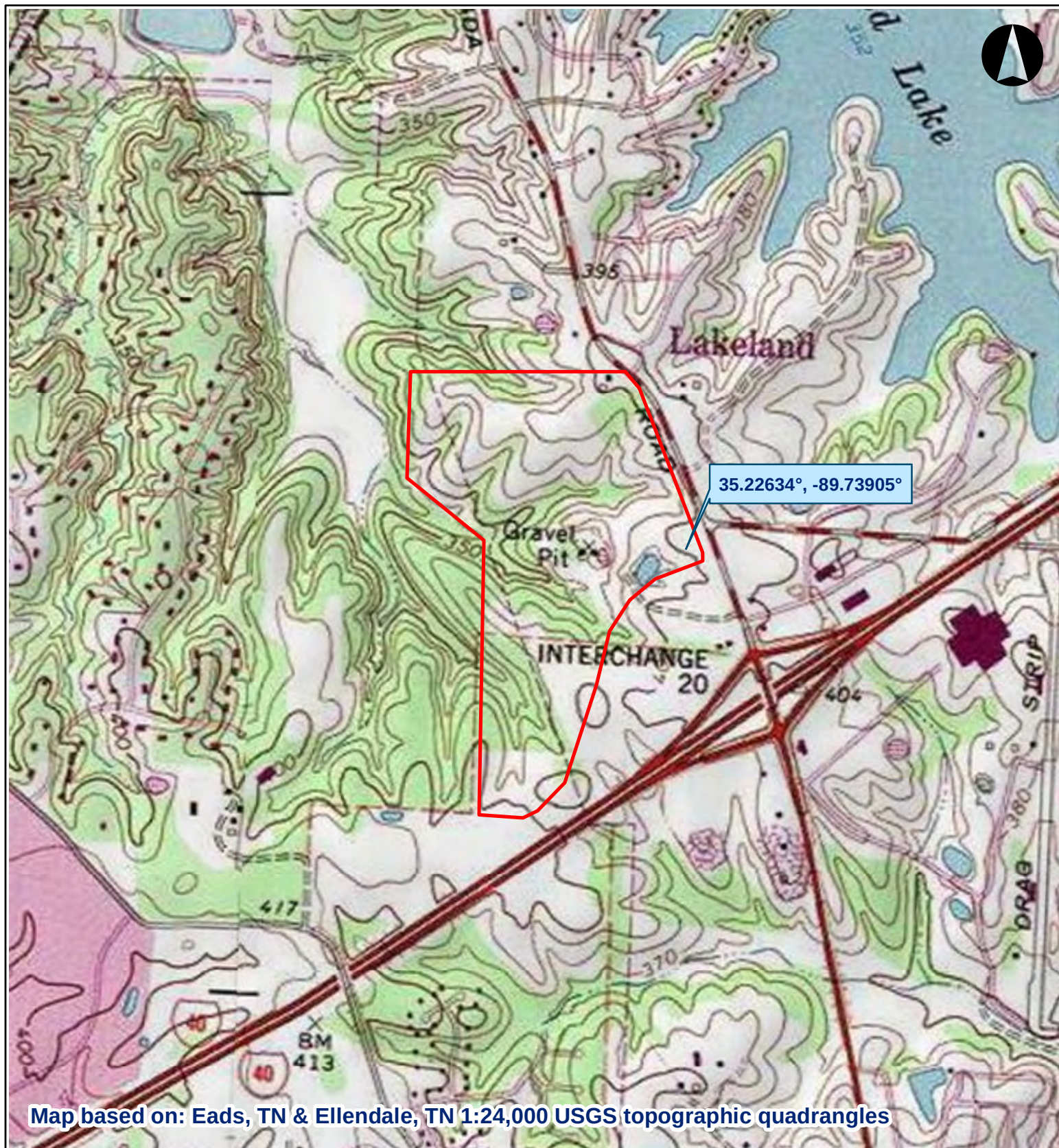
ENCLOSURE 1

MAPS:

Topographic Site Location Map

Features Map

Canada Road Topographic Site Location Map

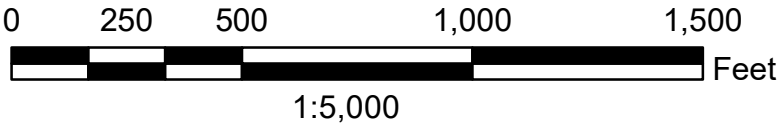
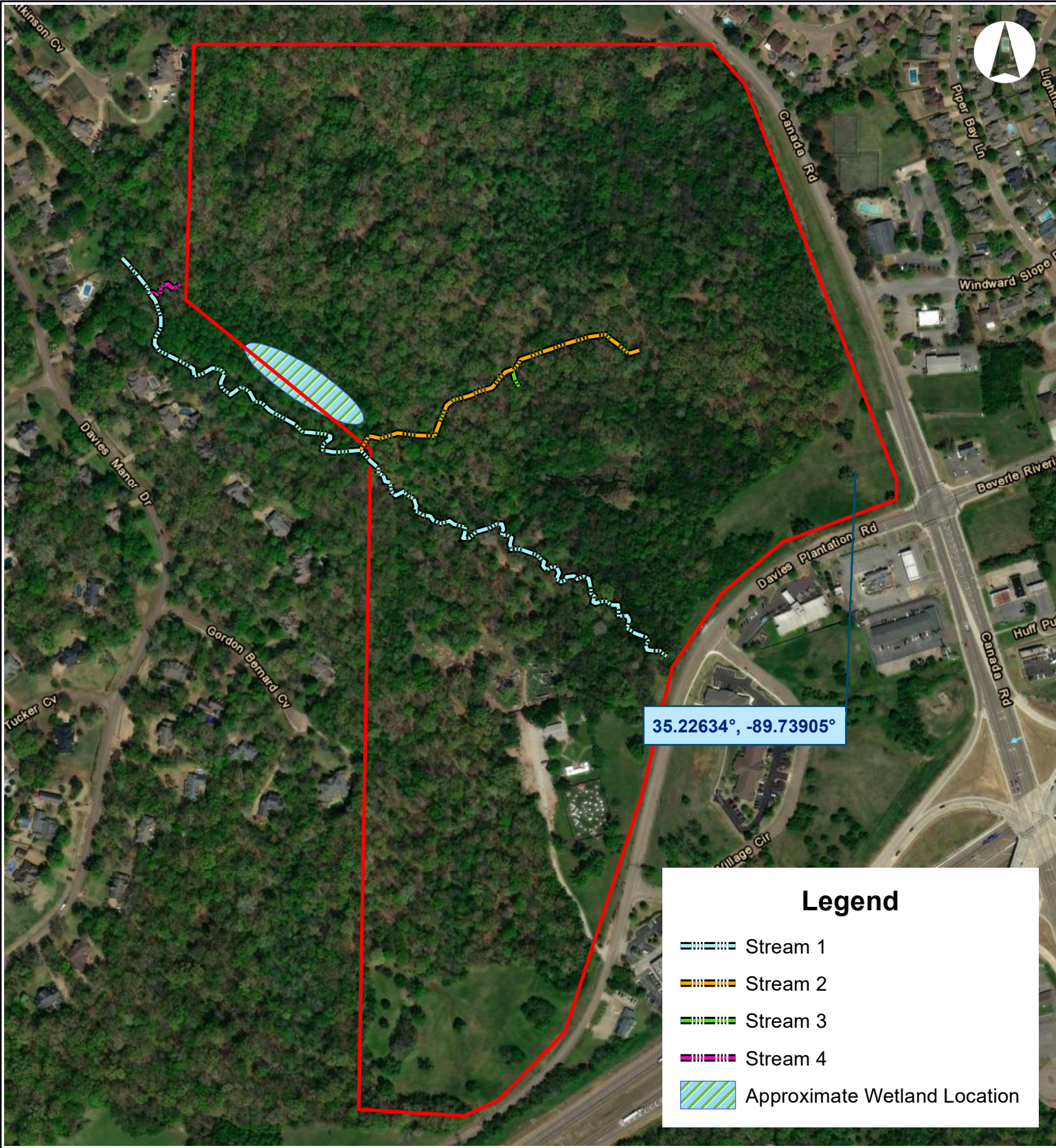


0 500 1,000 2,000 3,000
Feet
1:12,000



BROPHY — HEINEKE & ASSOCIATES, INC.
WETLAND AND ENVIRONMENTAL CONSULTANTS
2978 SHELBY STREET, BARTLETT TN 38134

Canada Road Features Map



BROPHY – HEINEKE & ASSOCIATES, INC.
WETLAND AND ENVIRONMENTAL CONSULTANTS
2978 SHELBY STREET, BARTLETT TN 38134

ENCLOSURE 2

PHOTOGRAPHIC DOCUMENTATION

PHOTOGRAPHIC DOCUMENTATION

Canada Road

September 27, 2022



Photo 1. A view of Stream 1 with standing water visible. Fish were present in the stream at this location.



Photo 2. This photo shows water flowing through riffle habitat in Stream 1.



Photo 3. A view of Stream 2 meandering near its confluence with Stream 1. Pools of water and sediment sorting were present in the channel at this location.



Photo 4. The confluence of Stream 1 and Stream 2 located at the western edge of the site. Pools of water were present within both channels, and fish were observed at this location.



Photo 5. A potential wetland area observed in the western portion of the site adjacent to the stream.



Photo 6. A view of Stream 4 located at the northwestern edge of the site. The channel appears to be a stream at its confluence with Stream 1.



Photo 7. This photo provides a representative view of the wet weather conveyances located on the property.



Photo 8. A representative view of the upland forested habitat located on the project site.

ENCLOSURE 3

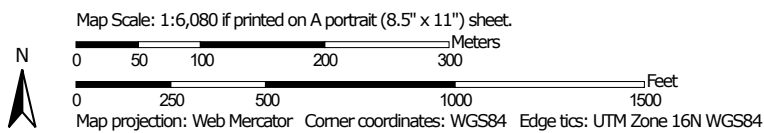
OTHER SITE INFORMATION:

NRCS Soils Map

Hydric Rating by Map Unit—Shelby County, Tennessee (Canada Road)



Soil Map may not be valid at this scale.



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

Hydric Rating by Map Unit—Shelby County, Tennessee (Canada Road)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Shelby County, Tennessee
Survey Area Data: Version 17, Sep 14, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 30, 2020—May 10, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Fm	Falaya silt loam	9	7.0	6.8%
GaB	Grenada silt loam, 2 to 5 percent slopes	0	18.3	18.0%
GaD2	Grenada silt loam, 8 to 12 percent slopes, eroded	0	1.6	1.5%
Gs	Gullied land, silty(udorthent, silty)	0	9.1	8.9%
MeB	Memphis silt loam, 2 to 5 percent slopes, northern phase	0	0.3	0.3%
MeB2	Memphis silt loam, 2 to 5 percent slopes, moderately eroded, northern phase	0	14.2	14.0%
MeC2	Memphis silt loam, 5 to 8 percent slopes, moderately eroded, northern phase	0	1.7	1.6%
MeE	Memphis silt loam, 12 to 20 percent slopes, northern phase	0	13.2	13.0%
MeF3	Memphis silt loam, 12 to 30 percent slopes, severely eroded, northern phase	0	31.9	31.3%
MeG	Memphis silt loam, 30 to 65 percent slopes	0	3.9	3.9%
W	Water	0	0.7	0.7%
Totals for Area of Interest			102.0	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower



Municipal Planning and Design Review Commission

Meeting Date: Thursday, May 11, 2023

Project: Chapel Lakes PD - Sketch Plan

Staff Contact: Paul Luker, Planning Director

PROJECT INFORMATION

Location: 4532 Maple Walk Drive

Parcel ID: L0151 00483 & L151 00049

Zoning District: R-1 (Suburban Estate), R-2 (Suburban Manor), OS-2 (Neighborhood Open Space), and OS-5 (Conservation)

Neighborhood: Type II and Type III

Site Area: 126.48 acres

Applicant: Valleybrook Development, LLC

Representative: The Bray Firm

STAFF RECOMMENDATION

The Sketch Plan phase of the Planned Development process gives Planning Commissioners an early opportunity to provide feedback and recommendations to the applicant. Staff will rely on the Commission's directions and the City's guiding and regulatory documents when reviewing the Outline Plan and subsequent plans for this project. Staff recommendations will be provided during future stages of the Planned Development process.

BACKGROUND

Chapel Lakes PD is a proposed planned residential development having a combined area of 126.5-acres. The subject property is bound generally on the west by Maple Walk Drive, the east by Chambers Chapel Road, the north by Oakwood Grove Subdivision, and the south by the future site of the Estates at Chambers Chapel PD.

LAND USE PLAN

Lakeland's Comprehensive Land Use Plan Update, adopted March of 2006, recommends "Suburban Neighborhood" and "Conservation Overlay" for the property.

"Suburban Neighborhood" is defined as "Primarily single-family residential lots with a maximum density of 2.5 dwelling units per acre, but may contain religious facilities, schools, and public buildings. Development requires public water and sanitary sewer service. Streets shall be designed with an urban cross section".

"Conservation Overlay" is defined as "Primarily Planned Developments containing single family residential lots that require conservation development practices in the design and preservation of natural resources. Areas shall contain substantial passive open space and possibly some limited active open space. Development requires public water and sanitary sewer services. Streets may be designed with a rural or urban cross-section as approved by the Municipal Planning Commission and Board of Commissioners.

LAND DEVELOPMENT REGULATIONS

The subject properties are currently zoned R1 (Suburban Estate), R2 (Suburban Manor), OS2 (Neighborhood Open Space), and OS5 (Conservation) as defined and regulated by the Lakeland Land Development Regulations. This is different than most PDs before the MPC and BOC as there are currently zoning entitlements in place for the property and the property could develop through the traditional subdivision process.

However, in the Spring of 2014 the City adopted a planned development ordinance to allow for flexibility in all zoning districts with a PD. The planned development ordinance allows greater flexibility of design and relief from various provisions of the Lakeland Development Regulations (Zoning Ordinance) when the standards and criteria of the planned development ordinance are met. When a planned development is approved, the underlying zoning of the property remains unchanged, but the conditions of the planned development regulate the uses and bulk regulations of the property as opposed to the zoning provisions.

CLEAR CREEK INTERCEPTOR PROJECT STATUS

The Clear Creek Sewer Interceptor construction contract has been awarded. Construction is anticipated to start in May and be completed by February 2025. The interceptor project will increase sewer capacity for this area of Lakeland and will be sufficient to accommodate the needs of the Chapel Lakes development.

2021 PLAN

A previous version of the proposed development was presented to the Municipal Planning Commission (MPC) in 2021 and is included in the list of attachments. The application was recommended for denial due to the amount of open space being less than what is expected for a Conservation Overlay Area as designated by the Comprehensive Plan in addition to the density of lots that was proposed.

PLAN COMPARSION

The following changes have been made to this sketch plan from the 2021 Chapel Lakes submittal:

- This plan proposes 200 lots, the 2021 plan proposed 261 lots.
- This plan provides 38.6 acres of open space, the 2021 plan provided 28.6 acres of open space.

Lot Sizes	# of Lots 2023 Sketch Plan	# of Lots 2021 Plan
R-1 (min. 17,500 sq.ft.)	95	30
R-2 (min. 10,000 sq.ft.)	65	113
R-3 (min. 5,500 sq. ft.)	40	118

ANALYSIS

Staff has the following concerns with proposed plan:

- Green space connection details
- Cluster mailbox locations
- Details concerning abandoned portion of Chambers Chapel Road
- Complete trail connection to Oakwood Grove along Northwest boundary
- Traffic calming on Lakeland Trace and Gillespie Oak Drive
- Lot access and configuration for R-3 size lots in the Northeast section of the development

The Bray Firm

Telephone 901-383-8668
2950 Stage Plaza North
Bartlett, Tennessee 38134

April 11, 2023

Paul Luker
Planning Director
City of Lakeland

Re: Chapel Lakes Planned Development – Sketch Plan for May PC meeting

Mr. Luker,

Please find attached the copy of the public notice to be mailed today along with 15 copies of the sketch plan for review by the PC.

The following are the building setbacks we would like to apply for this development. As we move forward in this process we will provide more detailing on house design elements and requirements.

R-1 lots (17500 s.f.)

Front setback: 30 feet (garages may not face the street except on corner lots where they may face the street that does not contain the front elevation of the house)

Rear setback: 25 feet

Side setback: minimum of 5 feet with a total of 25 required

R-2 lots (10000 s.f.)

Front setback: 20 feet for garage structure if hook garage is utilized, 25 feet for house
If forward facing garage is utilized, house may be 25 feet but garage setback shall be 30 feet.

Rear setback: 25 feet

Side setback: 5 feet minimum

R-3 lots (5000 s.f.)

Front setback: 15 feet

Rear setback: 10 feet for garage, 20 feet for house

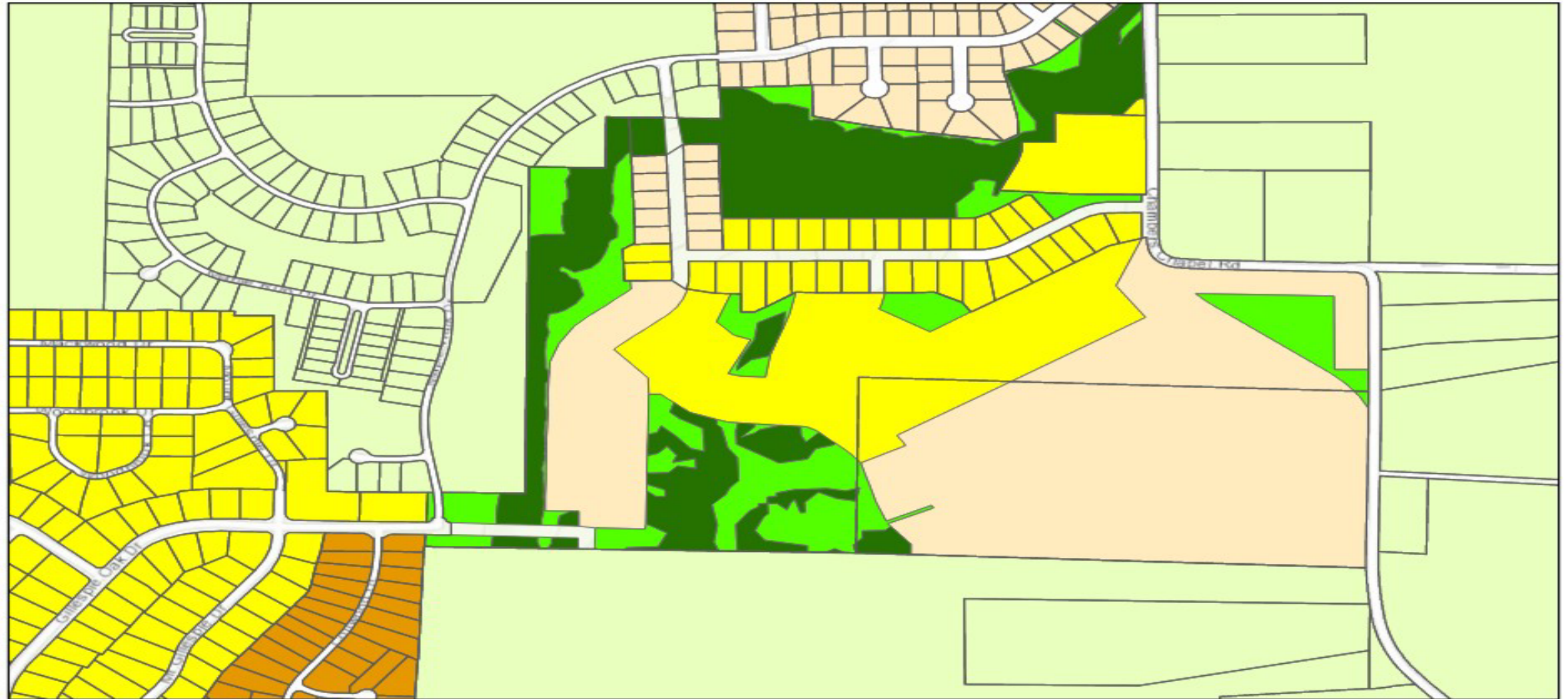
Side setback: 5 feet minimum.

Thank you for considering this request. Please let me know if you have any additional questions.

Sincerely,

David Gean Bray, P.E.

Chapel Lakes Zoning Map



4/24/2023, 9:42:47 AM

Parcel

Zoning District

AG: Agriculture

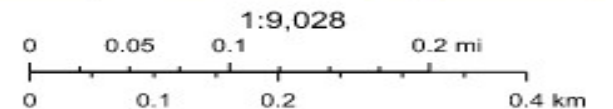
R-1: Low Density Residential

R-1 (PRD): Planned Low Density Residential

R-2: Medium Density Residential

OS-2: General Open Space

OS-5: Conservation Area



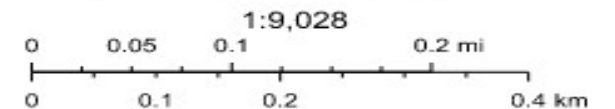
County of Shelby, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

Chapel Lakes Zoning Map

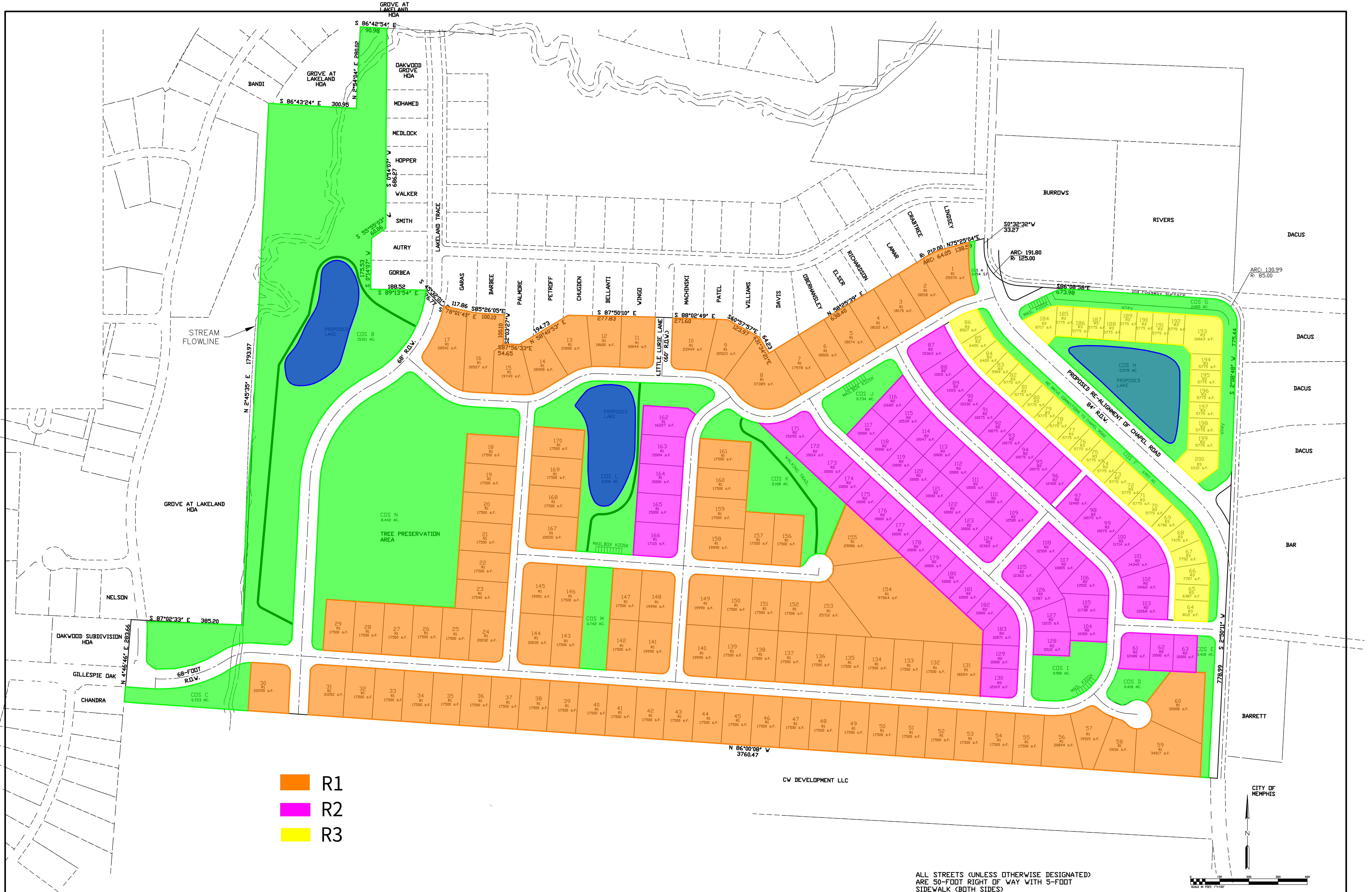


4/24/2023, 9:42:47 AM

- Parcel
- Zoning District
- AG: Agriculture
- R-1: Low Density Residential
- R-1 (PRD): Planned Low Density Residential
- R-2: Medium Density Residential
- OS-2: General Open Space
- OS-5: Conservation Area



County of Shelby, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA



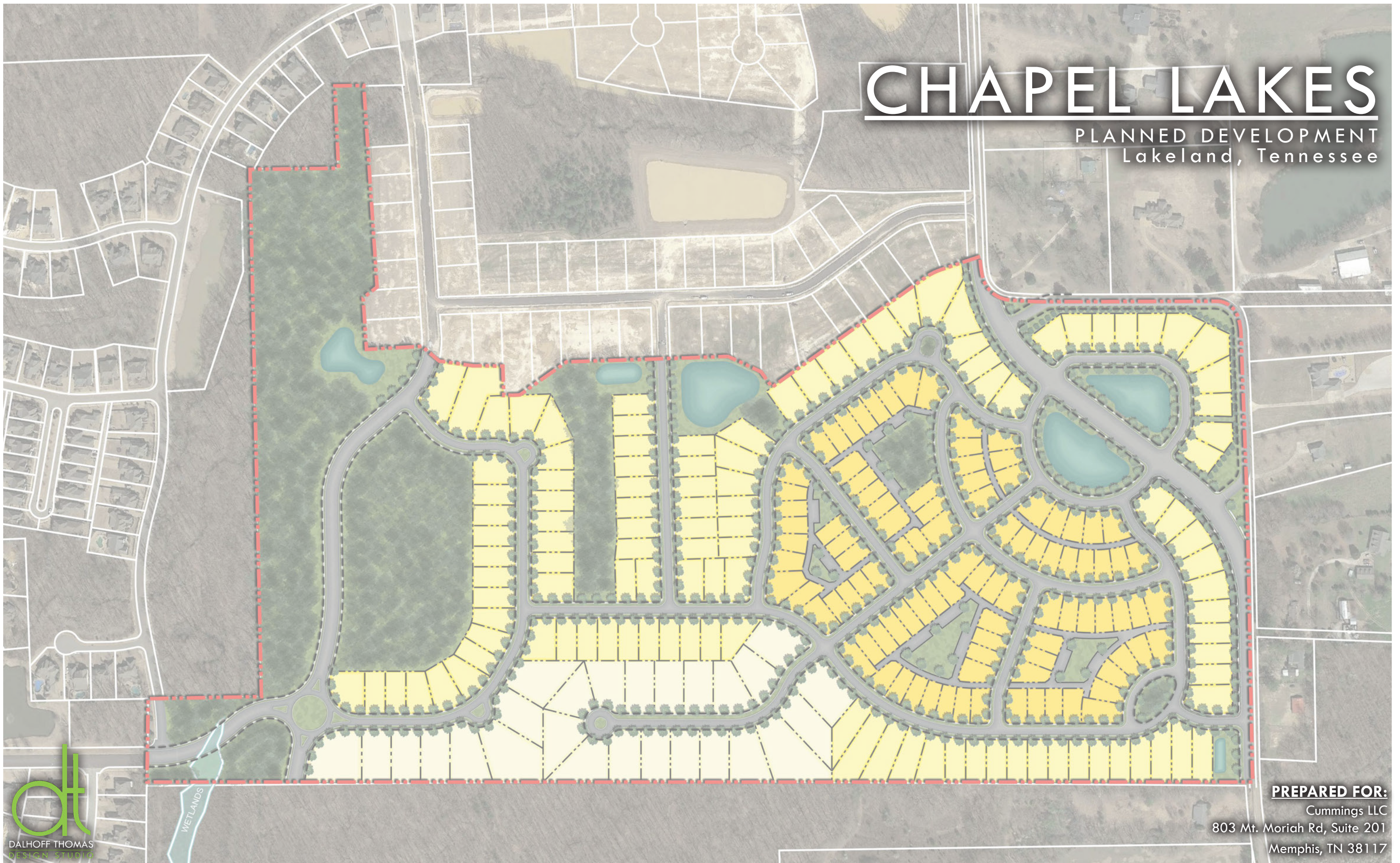
ALL STREETS (UNLESS OTHERWISE DESIGNATED)
ARE 50-FOOT RIGHT OF WAY WITH 5-FOOT
SIDEWALK (BOTH SIDES)

PLAN DATA	
ACREAGE	126.4 ACRES
LOTS	200 LOTS
R-1 (17500 S.F.)	100 LOTS (50%)
R-2 (10000 S.F.)	60 LOTS (30%)
R-3 (5000 S.F.)	40 LOTS (20%)
DENSITY	1.58 D.U./ACRE
PROPOSED USE	SFR
CDS AREA	38.586 ACRES (30.5%)

CONCEPTUAL PLAN		
CHAPEL LAKES PLANNED DEVELOPMENT		
LAKELAND, TENNESSEE		
LOTS: 200	AREA: 126.488 ACRES	
PREPARED FOR: VALLEYBROOK DEVELOPMENT, LLC 8620 TRINITY ROAD, SUITE 202 CORDOVA, TN 38018 901-870-0900		ENGINEER: THE BRAY FIRM 2950 STAGE PLAZA NORTH BARTLETT, TN 38134 (901) 383-8668
DATE: APRIL 11, 2023	SCALE: 1"=100'	SHEET 1 OF 1

CHAPEL LAKES

PLANNED DEVELOPMENT
Lakeland, Tennessee

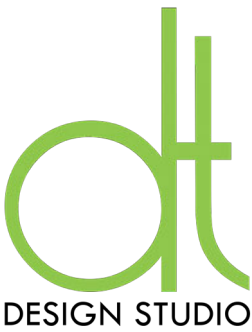


DEVELOPER:

Cummings LLC
803 Mt. Moriah Rd, Suite 201
Memphis, TN 38117
901.233.1591

contact: Mr. Trent Crowley - trent@astorfinebuilders.com

PLANNER / LANDSCAPE ARCHITECT:



DT design | studio
6465 North Quail Hollow | Suite 401
Memphis, Tennessee 38120
901.646.5070
www.dt-designstudio.com
contacts: Bob Dalhoff - bob@dt-designstudio.com
Michelle Ye - michelle@dt-designstudio.com

CIVIL ENGINEER:



The Reaves Firm
6800 Poplar Avenue | Suite 101
Memphis, TN 38138
901.761.2016
www.reavesfirm.com
contact: Dave Watkins - sdw@reavesfirm.com

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DISCLAIMER:
Graphics, images, and photographs included in this booklet are solely to convey form and character within Chapel Lakes Planned Development and are not intended to be a final product design. All site design, engineering, graphics, and images are subject to final design and approvals. Some images used in this booklet are not property of DALHOFF THOMAS design studio. A full list of photo credits can be provided if needed.

July 9, 2021

Ms. Emily Harrell
City Engineer
City of Lakeland
10001 Highway 70
Lakeland, TN 38002

**RE: Chapel Lakes Planned Development
Outline Plan Submittal**

Dear Ms. Harrell,

We are pleased on behalf of Cummings LLC, the Owner & Developer, to submit this Outline Plan application for the property located on the west side of Chambers Chapel Road, just north of I-40, and currently referred to as Chapel Lakes Planned Development (PD). The team received positive feedback on the preliminary plan submitted for Sketch Plan review in March 2020, and we have worked diligently on plan adjustments in response to the Municipal Planning Commission’s priorities and tree survey data. This Outline Plan resubmittal represents an improved version of the April 2020 Outline Plan submittal, including the following major changes:

- Increase of common open space from 23.4% to 30.8% ±
- Decrease in gross density from 2.06 to 1.89 DU/AC ±
- Preservation of the areas with higher conservation priority and unique topography near Lakeland Trace Road
- Increased width of the rear lot line of lots adjacent to Oakwood Grove to 100’

Chapel Lakes PD encompasses 126.4± acres and 261 proposed single-family lots located on the west side of Chambers Chapel Road, east of Grove and Oakwood Subdivisions, and South of the Oakwood Grove Subdivision. Roughly 4.4 acres will be comprised of the existing and proposed realignment of Chambers Chapel Road, resulting in a net acreage of 122.1± acres. Close attention was paid to the natural features of the site including topography and vegetation. Three lot types are proposed for the development to offer residents different lifestyle options while accommodating the various natural features of the site. The largest of these is the R-1 Suburban Estate lot which will be complemented with a rural street cross-section. R-2 Suburban Manor lot is the next smallest lot type. Although this product type is currently allowed to be 70’ minimum width in Lakeland’s Land Development Regulations, the Developer has made the lots that are directly adjacent to Oakwood Grove lots a minimum of 100’ wide at the rear, to match the minimum lot width of the neighboring Oakwood Grove lots. The smallest lot type is the R-3 Suburban Cottage lot. This product type is required by the Land Development Regulations to be 55’ minimum width with a 5,500 SF lot size. To achieve the proposed tree preservation targets, we are asking for an exception that allows these R-3 lots to be 50’ minimum width. It is currently anticipated that less than 10 lots will fall under the 55’ minimum width standard. The lots in Chapel Lakes PD represent a gross density of about 1.89 DU/AC ±, which is well under the 2.5 DU/AC recommended by the Suburban Neighborhood designation for this property in the Lakeland Future Land Use Plan.

The common open spaces of Chapel Lakes were prioritized in the conceptual development plan to preserve the features that make this neighborhood uniquely Lakeland. Since the Sketch Plan was originally presented to the MPC, the amount of common open space in the development has increased from 17.7% ± to 30.8% ±. These include a mixture of natural areas to be preserved, beautiful lakes as an entry feature, and smaller neighborhood pocket parks for residents’ daily recreation. The two primary north-south connections through the site, Chambers Chapel Road and Lakeland Trace Road, are both designed as “scenic corridors” with gently winding alignment and landscape buffers or greenspaces along both sides. No lots or driveways are directly fronting either of these roads.

Over 7,000 trees were identified by a certified arborist on site, including 533 specimen trees. After receiving the tree survey locations, the design team adjusted the conceptual development plan that was previously submitted for the Sketch Plan with the goal of saving as many specimen trees as possible. Through this exercise, it is estimated that at least 80 more specimen trees could now be preserved compared to the original plan, resulting in a total of about 140 specimen trees projected to be preserved, or about 26.3% of all specimen trees on site. Over 2,000 total trees are projected to remain, or about 29.1%. The conceptual development plan provides an Existing Density Factor of about 7,300, well over the 2,442 Site Density Factor that is required, even without accounting for any new trees which will be planted as part of the streetscape or within common open spaces. The full arborist report and tree data has been provided as a separate document in the submittal for reference.

A traffic impact study was performed by M.E. Lipinski, PE, PhD, PTOE concluding that the traffic generated by the development would not require any modifications to the existing roadway network in terms of geometric design or control. Even if development increases beyond expectations along Chambers Chapel Road, the site’s driveways would continue to operate at high levels of service. The study was performed using an estimate of 270 lots, which represents a worst-case traffic scenario for the 239-lot conceptual development plan.

The design character of Chapel Lakes PD will be implemented by architectural regulations and guidelines, which will be utilized by the Developer’s Design Review Committee to ensure architectural and aesthetic continuity throughout the life of the development. To set the tone for the overall development, the main entrances from Chambers Chapel Road are flanking a moderately sized pond that appears to carry from one side of the road to the other. Streetscape along Chambers Chapel Road will include sidewalks, landscape, and hardscape materials that highlight the naturalistic feeling of the current site. Common open space is provided throughout rather than bulked together in one area of the site. By doing this, residents are never too far from a park-like setting, and overall walkability of the neighborhood is improved.

We feel that Chapel Lakes Planned Development will create an extraordinary neighborhood which the City of Lakeland and the Developer will be proud to have, and will provide the City a shining example of high-quality, site-sensitive development. The Developer’s commitment to this neighborhood is sincere in pledging to make Chapel Lakes an integral part of the growth and prominence of the City of Lakeland. If we can be of any help with regards to this application, please do not hesitate to contact us.

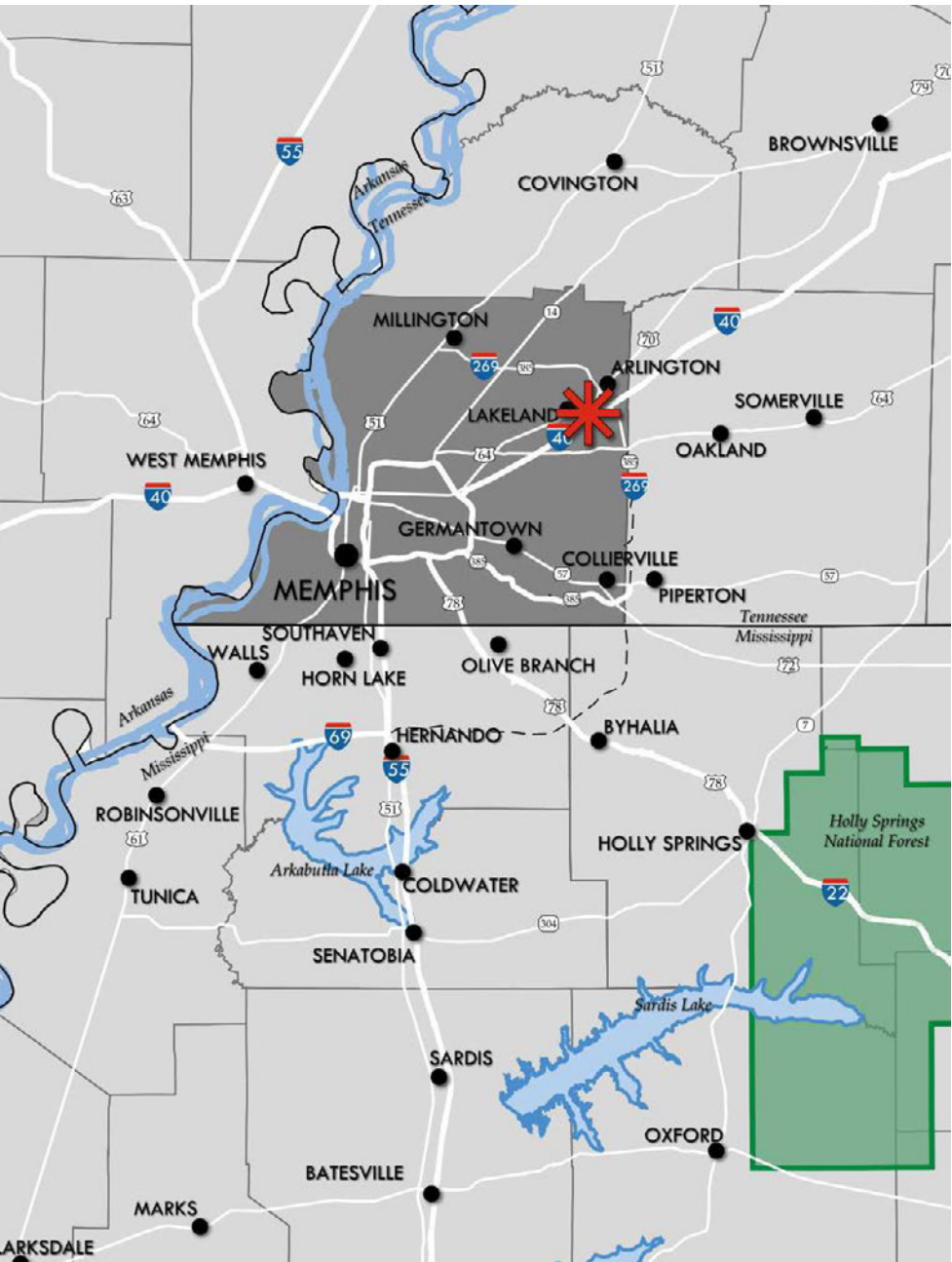
Sincerely,



Michelle Ye, PLA
Senior Associate
DT design studio

REGIONAL LOCATION

Chapel Lakes Planned Development is located in the northeastern portion of Shelby County, Tennessee and is in the limits of the City of Lakeland. The property is inside the realm of the Memphis Metropolitan Area boasting a population of over 1.29 million. Metropolitan Memphis is also known as the Mid-South. Chapel Lakes PD contains 126.40 acres ±.

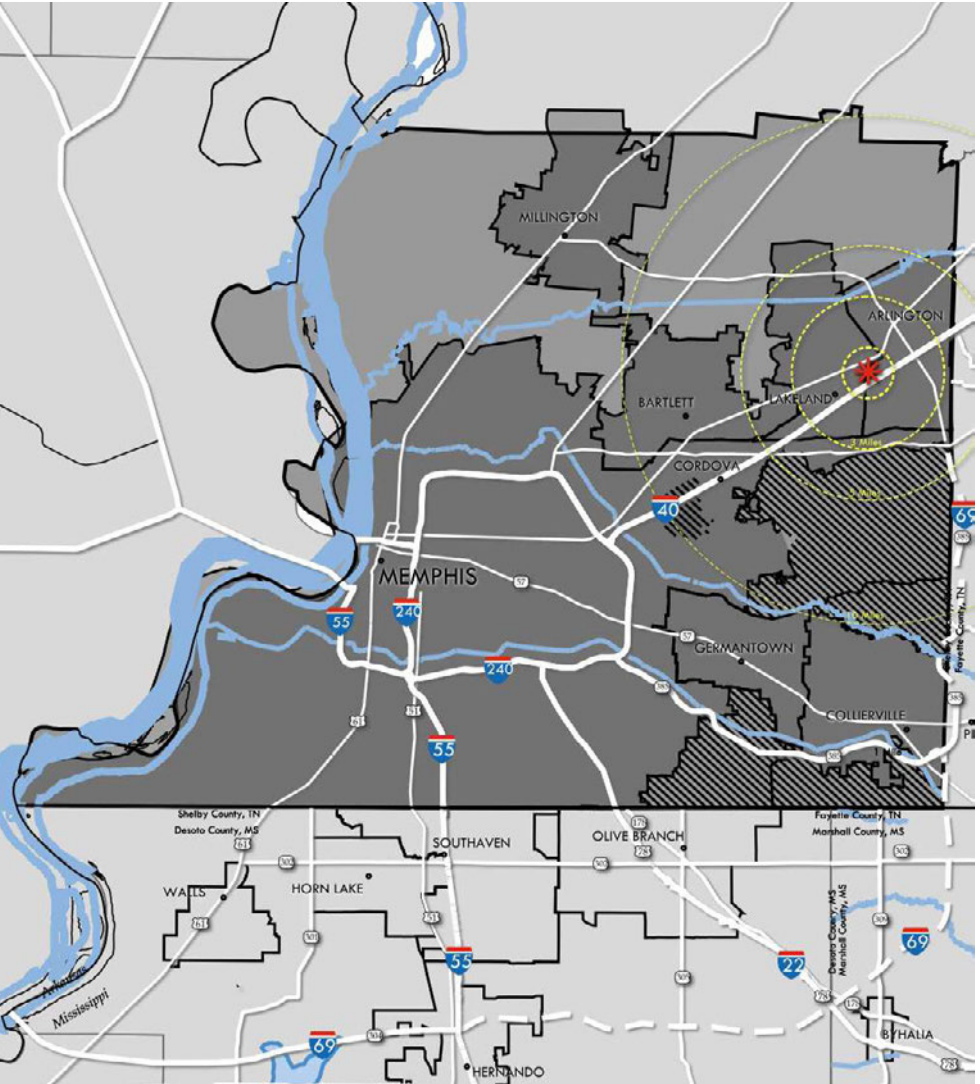


IMMEDIATE LOCATION

More specifically defined, the Chapel Lakes Planned Development is located in the eastern portion of the City of Lakeland. The subject property is bound by single family residential developments to the north and south, Chambers Chapel Road to the east, and Maple Walk Drive to the west. The site consists of approximately 122.1 acres ± after accounting for right-of-way dedications expected for improvements to Chambers Chapel Road.

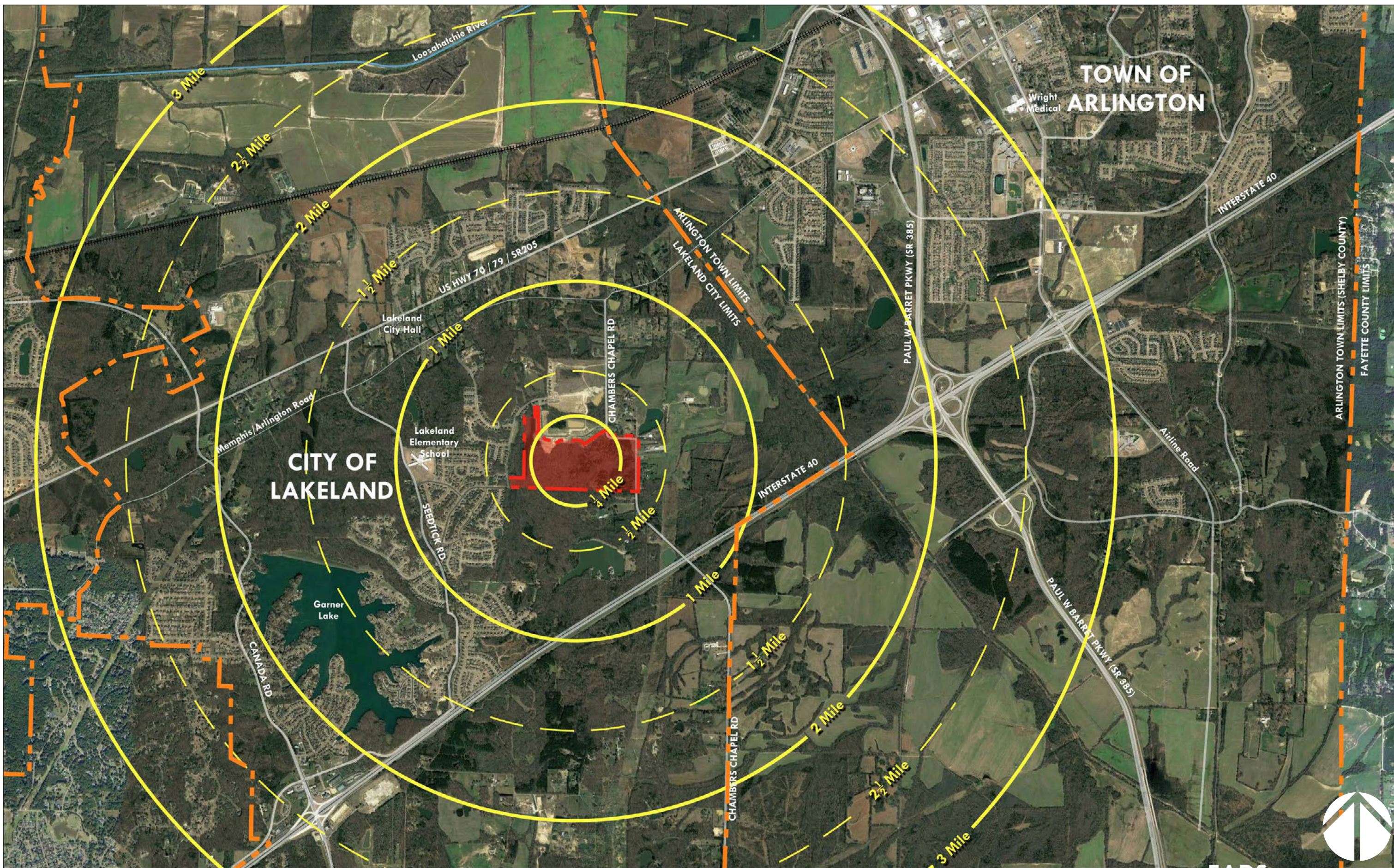
CURRENT MUNICIPALITIES

Chapel Lakes Planned Development falls entirely within the Lakeland municipal boundary. The US Census Bureau estimates the current population within the City of Lakeland to be approximately 12,617. The City is located in the northeastern portion of Shelby County. The County itself has a population of over 935,000.



MILEAGE TO SURROUNDING MUNICIPALITIES (±)

Lakeland.....	2.5
Bartlett	10.6
Germantown	17.8
Collierville	20.4
Memphis.....	27.6
Olive Branch	34.8
Southaven.....	37.1
Jackson, TN	63.5
Little Rock, AR	163.0
Nashville, TN.....	189.0
Measured to City/Town Hall	



BOUNDARY SURVEY & LEGAL DESCRIPTION

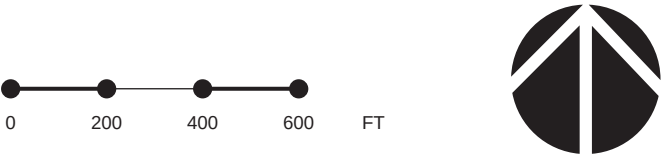
Boundary survey and legal description provided by Lawson Engineering on 11/8/17. Note: The survey has been modified from its original format and scale to fit this page. A full-size copy of the survey is available by request.

Beginning at a point having coordinates of N:355803.91, E:861405.68 said point being in the centerline of Chambers Chapel Road 3990 feet South of the intersection of Chambers Chapel Road and Memphis Arlington Road; thence along the centerline of Chambers Chapel Road with a bearing of S 86°08'58" E a distance of 673.98 feet to a point; thence in a southeasterly direction with a tangent curve turning to the right with a radius of 85.00 feet, having a chord bearing of S 42°00'05" E and a chord distance of 118.41, having a central angle of 88°17'54" and an arc length of 130.99 to a point; thence with a bearing of S 02°08'48" W a distance of 775.44 feet to a point; thence with a bearing of S 02°50'11" W a distance of 778.99 feet to a point in the North line of the Bank of Bartlett Property (Instrument No. 11000708); thence along said north property line with a bearing of N 86°00'08" W a distance of 3760.47 feet to a point in the East property line of the Steven and Mikki Gibson Property (Instrument No. 06085432); thence with a bearing of N 04°46'46" E a distance of 283.66 feet to a point in the South property line of the Bruce and Alison Nelson property (Instrument No. 09104215); thence with a bearing of S 87°02'33" E a distance of 385.20 feet to a point in the East property line of the Grove at Lakeland Homeowners Association LLC (Instrument No. 14083333); thence following said property line with a bearing of N 02°45'35" E a distance of 1793.97 feet to a point; thence with a bearing of S 86°43'24" E a distance of 300.95 feet to a point; thence with a bearing of N 02°54'04" E a distance of 280.02 feet to a point; thence with a bearing of S 86°42'54" E a distance of 90.98 feet to a point in the West property line of the TFB LLC property (Instrument No. 16035351); thence along said property line in a southeasterly direction with a tangent curve turning to the right with a radius of 0.50 feet, having a chord bearing of S 43°14'24" E and a chord distance of 0.69, having a central angle of 86°57'01" and an arc length of 0.76 to a point; thence with a bearing of S 00°14'07" W a distance of 686.27 feet to a point; thence with a bearing of S 55°55'03" W a distance of 60.06 feet to a point; thence with a bearing of S 00°14'07" W a distance of 175.53 feet to a point; thence with a bearing of S 89°13'54" E a distance of 188.52 feet to a point; thence with a bearing of S 45°32'01" E a distance of 76.77 feet to a point; thence with a bearing of S 78°01'41" E a distance of 117.86 feet to a point; thence with a bearing of S 85°26'05" E a distance of 100.10 feet to a point; thence with a bearing of S 02°03'27" W a distance of 100.10 feet to a point; thence with a bearing of S 87°56'33" E a distance of 54.65 feet to a point; thence with a bearing of N 58°40'53" E a distance of 194.73 feet to a point; thence with a bearing of S 87°50'10" E a distance of 277.83 feet to a point; thence with a bearing of S 88°02'49" E a distance of 271.60 feet to a point; thence with a bearing of S 60°57'57" E a distance of 123.97 feet to a point; thence with a bearing of S 31°34'21" E a distance of 64.23 feet to a point; thence with a bearing of N 58°25'39" E a distance of 638.40 feet to a point; thence in a northeasterly direction with a tangent curve turning to the right with a radius of 212.00 feet, having a chord bearing of N 67°05'00" E and a chord distance of 63.81, having a central angle of 17°18'41" and an arc length of 64.05 to a point; thence with a bearing of N 75°25'04" E a distance of 138.59 feet to a point; thence with a bearing of S 00°32'32" W a distance of 33.27 feet to a point; thence in a southeasterly direction with a non-tangent curve turning to the left with a radius of 125.00 feet, having a chord bearing of S 42°11'32" E and a chord distance of 173.53, having a central angle of 87°54'51" and an arc length of 191.80 to the point of beginning; containing 5505810.87 square feet or 126.396 acres.

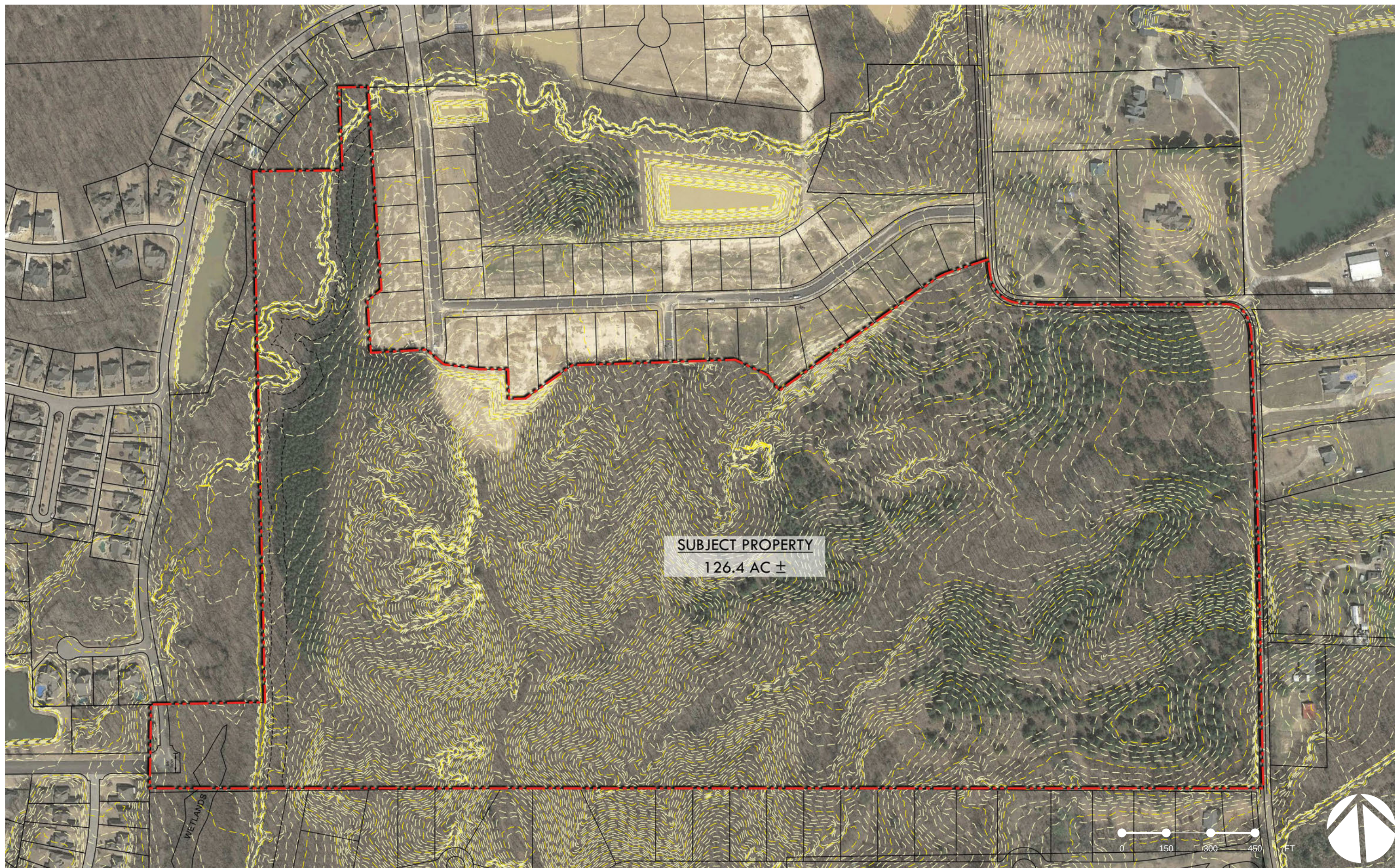
The Northing and Easting coordinates as referred to in this description are relative to the Tennessee State Plane Coordinate System (North American Datum 1983).

Parcel Line Table		
Line #	Length	Direction
L1	90.98	S86° 42' 54.14"E
L2	686.27	S0° 14' 07.00"W
L3	60.06	S55° 55' 03.00"W
L4	175.53	S0° 14' 07.00"W
L5	188.52	S89° 13' 54.07"E
L6	76.77	S45° 32' 01.00"E
L7	117.86	S78° 01' 40.95"E
L8	100.10	S85° 26' 04.72"E
L9	100.10	S2° 03' 27.09"W
L10	54.65	S87° 56' 32.91"E
L11	194.73	N58° 40' 53.00"E
L12	277.83	S87° 50' 10.00"E
L13	271.60	S88° 02' 49.00"E
L14	123.97	S60° 57' 57.00"E
L15	64.23	S31° 34' 21.00"E
L16	638.40	N58° 25' 39.00"E
L17	138.59	N75° 25' 04.40"E

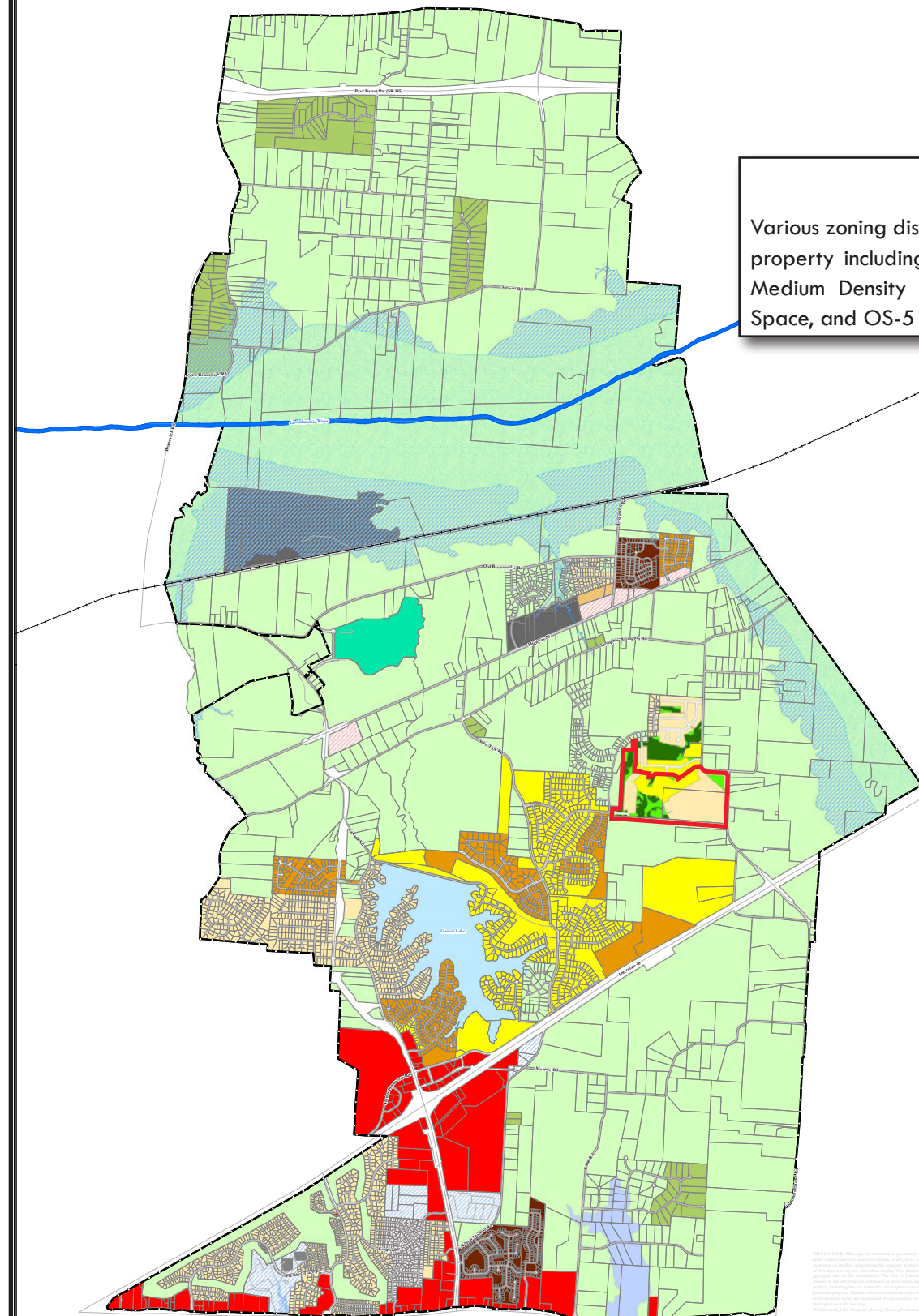
Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	64.05	212.00	17.31	N67° 05' 00"E	63.81
C2	191.80	125.00	87.91	S42° 11' 32"E	173.53
C3	130.99	85.00	88.30	S42° 00' 05"E	118.41



PROPERTY SURVEY		
CHAPEL WOODS SUBDIVISION LAKELAND, TENNESSEE		
TOTAL AREA: 126.40 Ac.	NUMBER OF LOTS: 214	
ZONING DISTRICT: R1, R2, OS2, OS5	WARD 64, BLOCK 51, PARCEL 483 AND 49	
DEVELOPER: EVOLVE BANK& TRUST 6070 POPLAR AVE. SUITE 200 MEMPHIS, TN 38119 PHONE: (901)334-0980	ENGINEER: LAWSON ENGINEERING AND CONSULTING, INC. 5909 POLK ST. ARLINGTON, TN 38002 PHONE: (901)383-3278 FAX: (901)867-5546	
100 YEAR FLOOD ELEVATION: N/A	FEMA MAP PANEL NUMBER: 47157C0215 G	FEMA MAP DATE: FEBRUARY 6, 2013
DATE: 11/8/17	SCALE: 1"=400'	SHEET 1



City of Lakeland Zoning Map

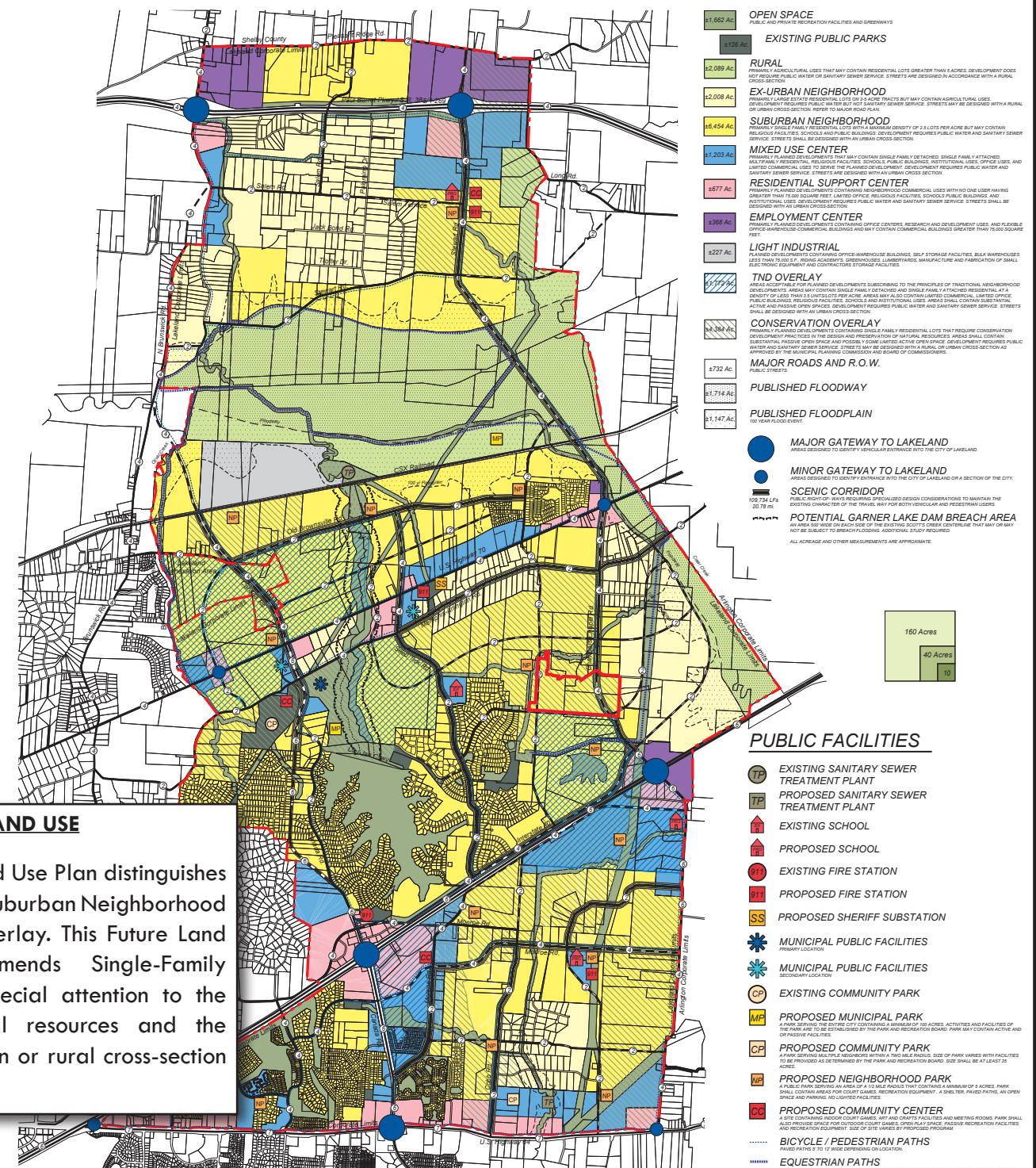


ZONING

Various zoning districts are included within the subject property including R-1 Low Density Residential, R-2 Medium Density Residential, OS-2 General Open Space, and OS-5 Conservation area.



CITY OF LAKE LAND, TENNESSEE COMPREHENSIVE LAND USE PLAN UPDATE



FUTURE LAND USE

The Lakeland Future Land Use Plan distinguishes the subject property as Suburban Neighborhood with a Conservation Overlay. This Future Land Use category recommends Single-Family Residential Lots with special attention to the preservation of natural resources and the utilization of either urban or rural cross-section streets.

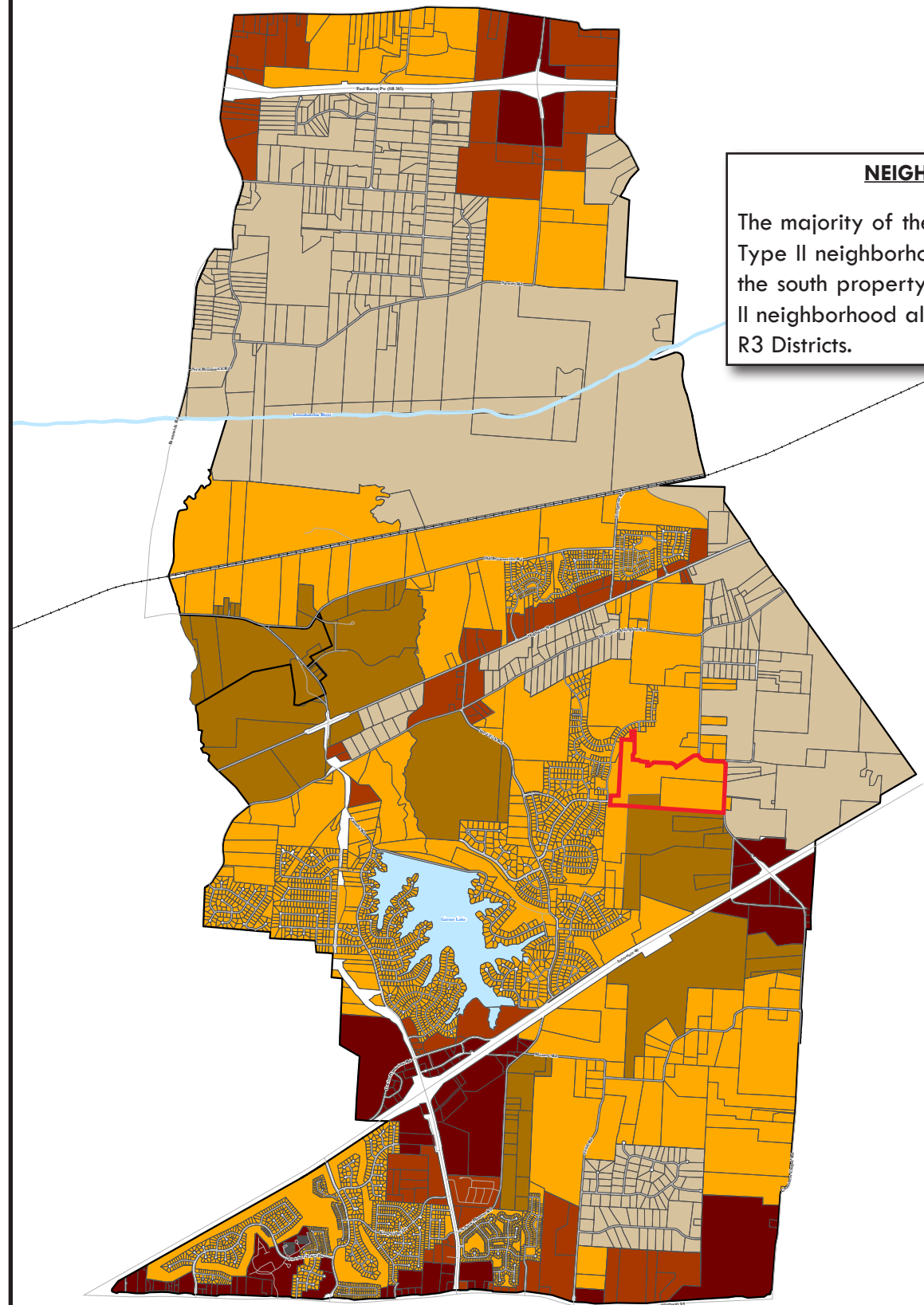


LAND USE PLAN

Brenda P. Solomito
Land Planner
10145 Mackwood Drive • Lakeland, TN 38002
brendasolomito@bellsouth.net

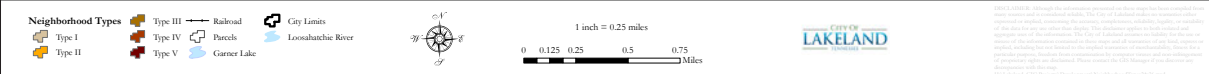
DUGAN DESIGN GROUP, LLC
planning, landscape architecture, design
5100 WHEELERS DRIVE, SUITE 110 MEMPHIS, TN 38117
TEL 901.680.3080 FAX 901.680.9097
WWW.DUGANDSIGNGROUP.COM
March 20, 2006 E0248FinalLandUsePlan.dwg

City of Lakeland Neighborhood Types

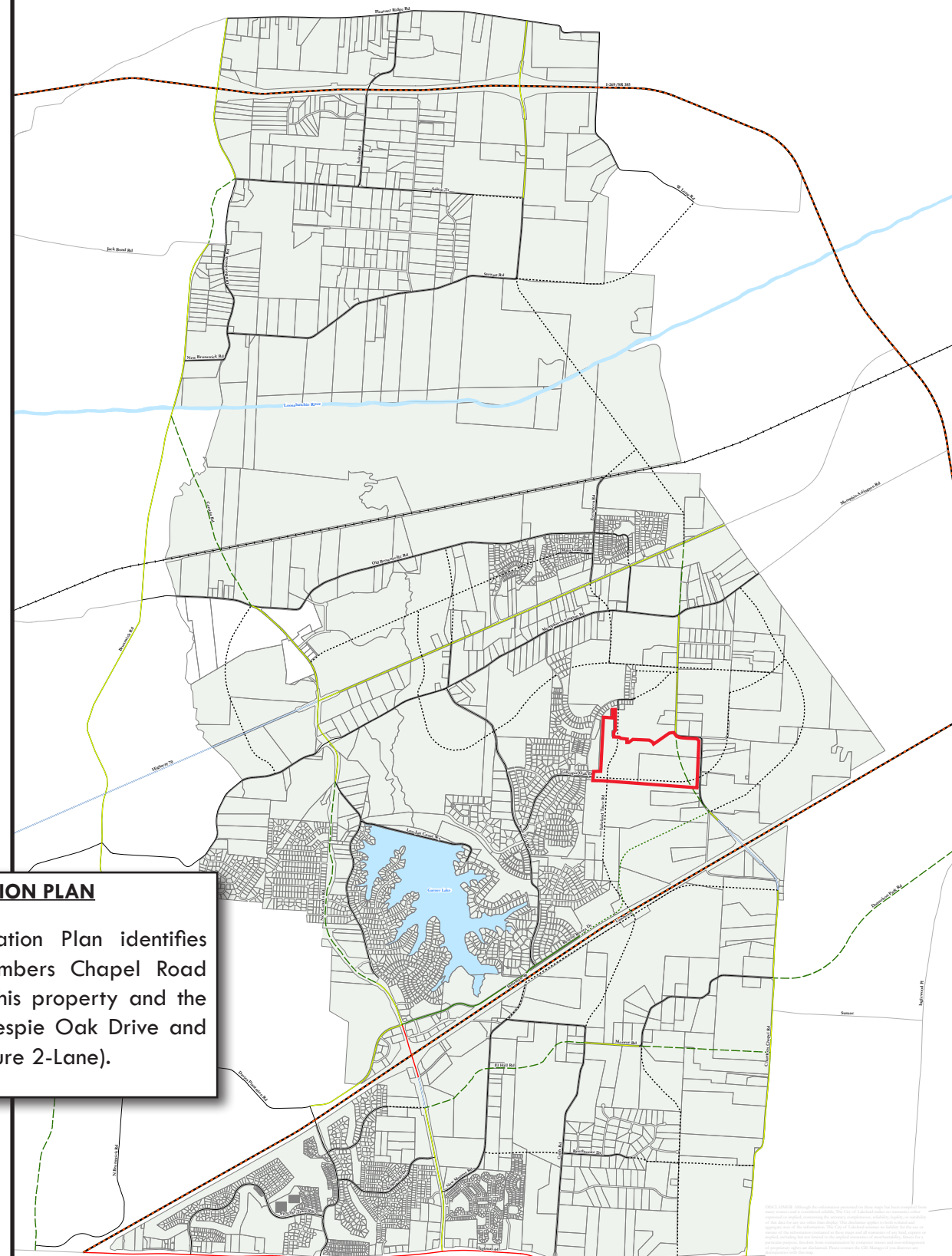


NEIGHBORHOOD TYPES

The majority of the property is designated as a Type II neighborhood, with a small portion near the south property line being Type III. The Type II neighborhood allows a mixture of R1, R2, and R3 Districts.

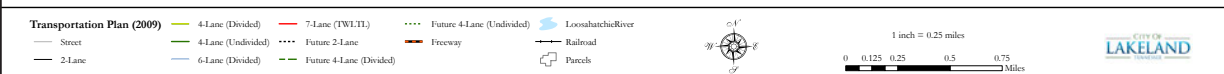


City of Lakeland Transportation Plan



TRANSPORTATION PLAN

The Lakeland Transportation Plan identifies the realignment of Chambers Chapel Road (Future 4-Lane) through this property and the connections made to Gillespie Oak Drive and Lakeland Trace Road (Future 2-Lane).



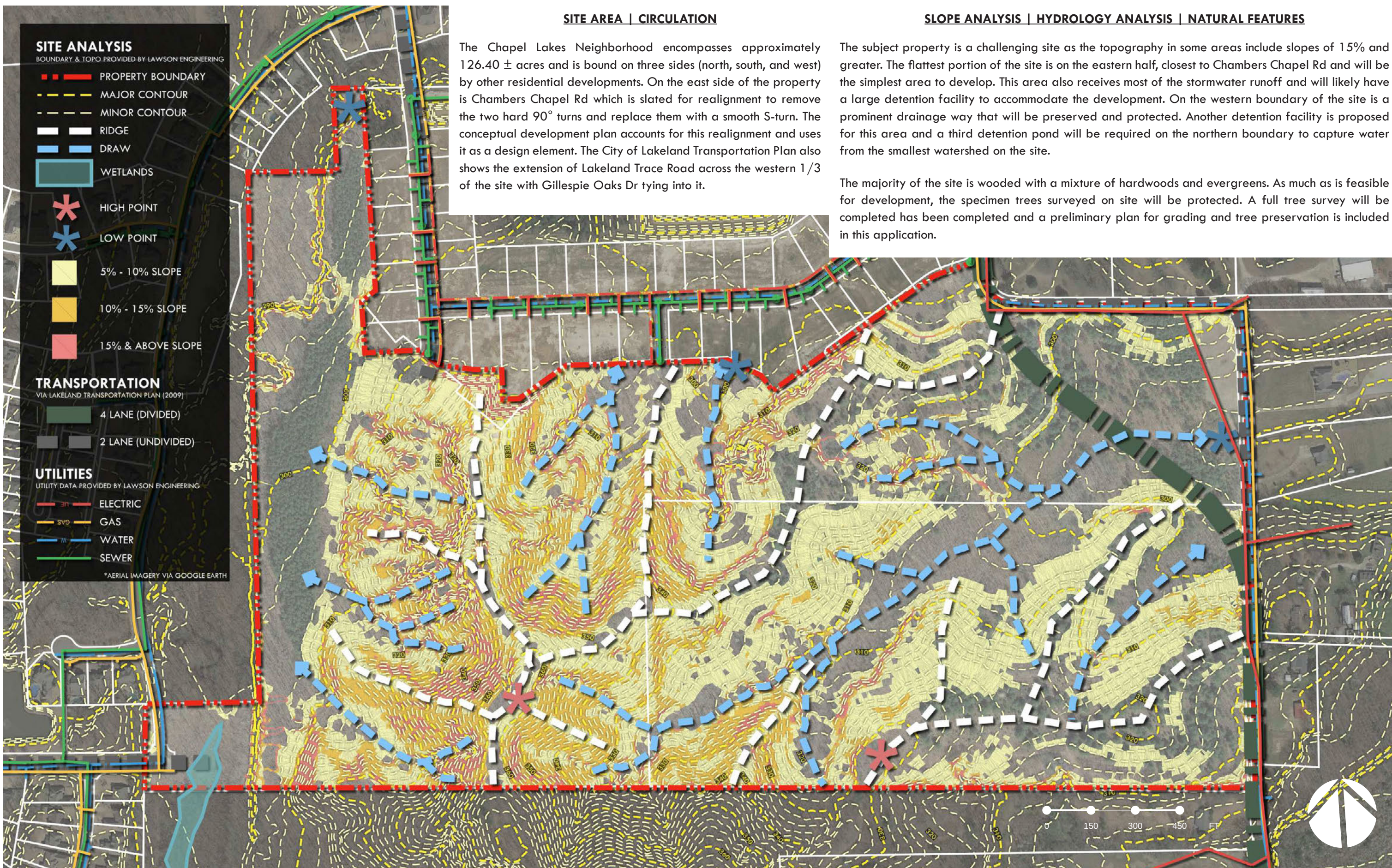
SITE AREA | CIRCULATION

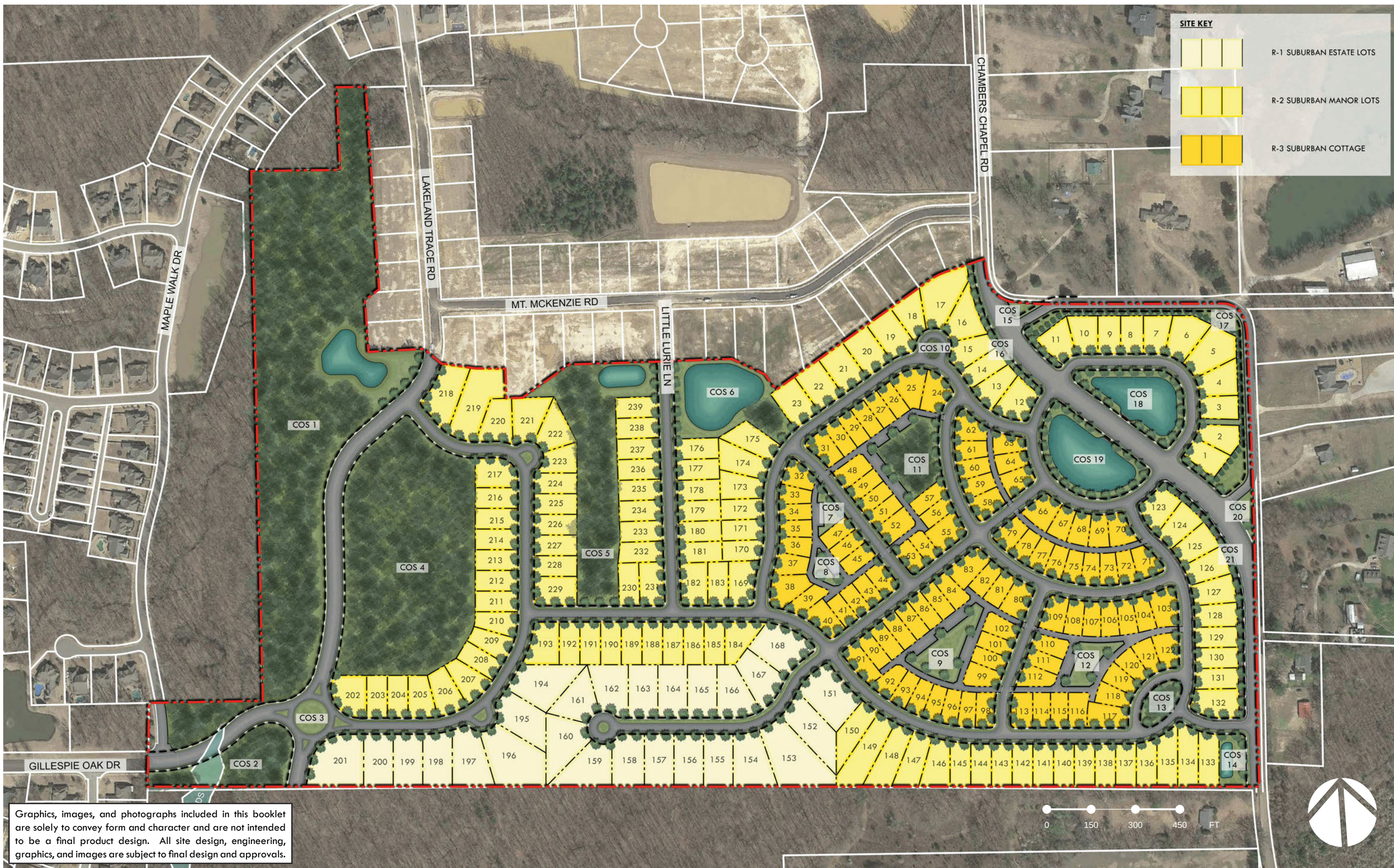
The Chapel Lakes Neighborhood encompasses approximately 126.40 ± acres and is bound on three sides (north, south, and west) by other residential developments. On the east side of the property is Chambers Chapel Rd which is slated for realignment to remove the two hard 90° turns and replace them with a smooth S-turn. The conceptual development plan accounts for this realignment and uses it as a design element. The City of Lakeland Transportation Plan also shows the extension of Lakeland Trace Road across the western 1/3 of the site with Gillespie Oaks Dr tying into it.

SLOPE ANALYSIS | HYDROLOGY ANALYSIS | NATURAL FEATURES

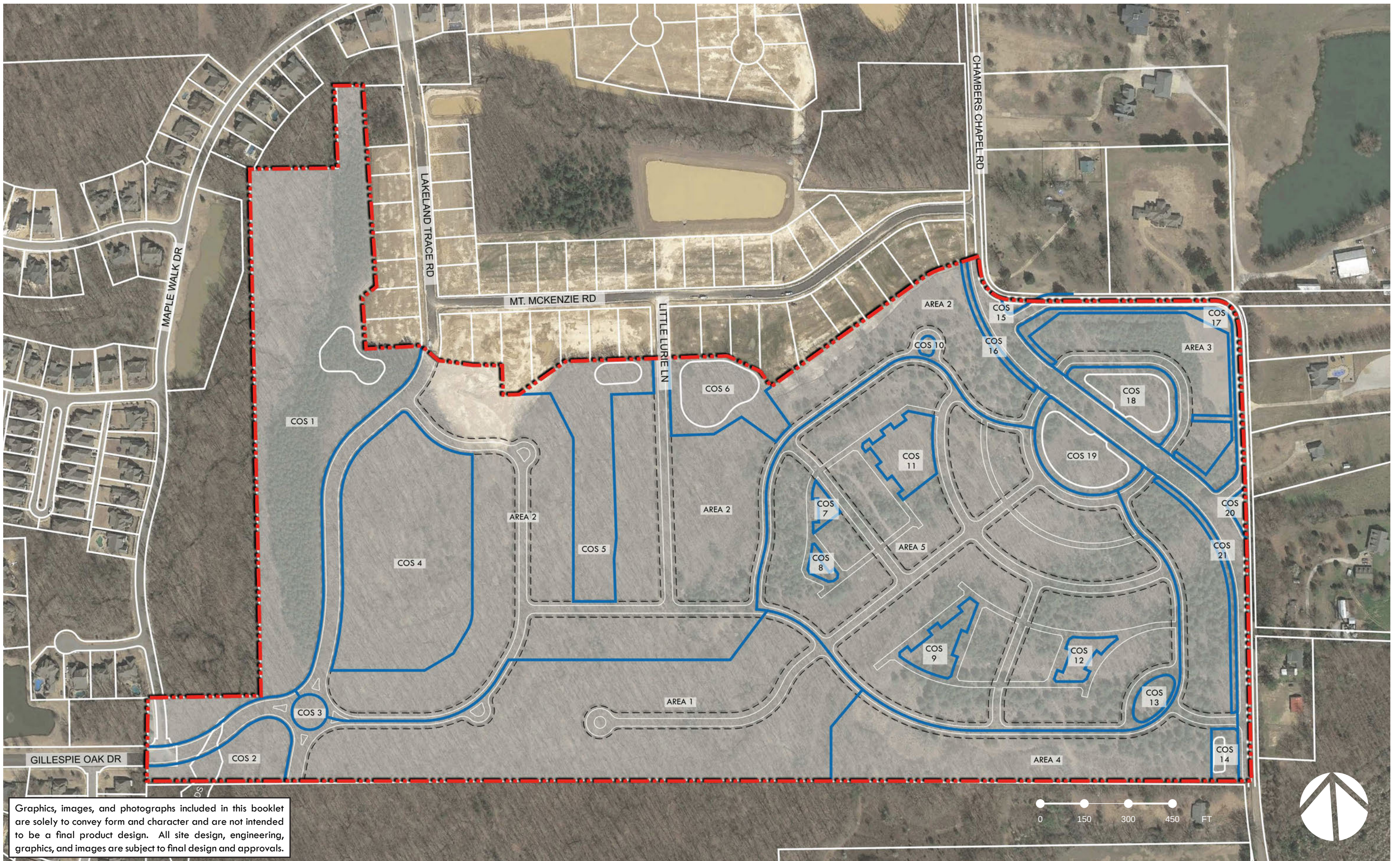
The subject property is a challenging site as the topography in some areas include slopes of 15% and greater. The flattest portion of the site is on the eastern half, closest to Chambers Chapel Rd and will be the simplest area to develop. This area also receives most of the stormwater runoff and will likely have a large detention facility to accommodate the development. On the western boundary of the site is a prominent drainage way that will be preserved and protected. Another detention facility is proposed for this area and a third detention pond will be required on the northern boundary to capture water from the smallest watershed on the site.

The majority of the site is wooded with a mixture of hardwoods and evergreens. As much as is feasible for development, the specimen trees surveyed on site will be protected. A full tree survey will be completed has been completed and a preliminary plan for grading and tree preservation is included in this application.





Graphics, images, and photographs included in this booklet are solely to convey form and character and are not intended to be a final product design. All site design, engineering, graphics, and images are subject to final design and approvals.



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CHAPEL LAKES PLANNED DEVELOPMENT
JULY 7, 2021
OUTLINE PLAN TEXT

I. GENERAL STATEMENT

Chapel Lakes Planned Development, a 126.4 acre ± tract of land located in Lakeland, Tennessee, is a Planned Development that provides a mixture of residential products and open spaces that complement the unique natural features of the area. It is the intent to develop Chapel Lakes with a cohesive neighborhood character through the use of unifying architectural guidelines and landscaping criteria. With distinctive entrances into the neighborhood, as well as various types of open spaces, Chapel Lakes will establish itself as a highly attractive and carefully planned neighborhood with its own “Sense of Place” and the feel of a quality community.

The Outline Plan shall serve as the land use and transportation plan for development of the site. It is understood that internal roadways and lot arrangements may be adjusted somewhat at the time of final design to take advantage of topography, utilities, storm drainage, detention, and market conditions along with other site considerations. The Conceptual Development Plan shall serve as a graphic illustration of the conceptual vision for the development.

The purpose of this General Statement is to set forth the conceptual vision of Chapel Lakes as depicted in the Conceptual Development Plan. The actual permitted uses, dimensional regulations, access and circulation and design criteria for the project shall at all times be governed by the Outline Plan and any Conditions of Approval, along with the Declaration of Covenants, Conditions, and Restrictions. The community will contain a mix of residential products, which not only reflects current residential market demands, but also exemplifies a complementary development to the surrounding area. It is anticipated that the various Areas may be developed as depicted on the Outline Plan to include:

- A. Areas 1-5

These Areas offer compatible and complementary residential products, all single-family dwellings, with quality architectural character, vivid streetscapes, and common area amenities. The well-planned pedestrian and vehicular circulation system accentuates natural views, enhances pedestrian safety, and connects neighborhood amenities.

Areas 1-4 are planned to have Street-Access lots. Area 5 is planned to have Rear-Access lots only.
- B. COS 1-21

Common open space areas located within Chapel Lakes Planned Development are intended to be common neighborhood amenities for Chapel Lakes residents. Some of these areas provide an open and friendly place for neighbors to gather and recreate whereas others soften transitions from surrounding streets and neighborhoods.

II. USES PERMITTED

- A. Area 1

Single-Family detached, street-access homes as regulated by the R-1 Suburban Estate district of the Lakeland Land Development Regulations, as modified herein, are allowed throughout these areas.
- B. Areas 2-4

Single-Family detached, street-access homes as regulated by the R-2 Suburban Manor district of the Lakeland Land Development Regulations, as modified herein, are allowed throughout these areas.
- C. Area 5

Single-Family detached, rear-access homes as regulated by the R-3 Suburban Cottage district of the Lakeland Land Development Regulations, as modified herein, are allowed throughout these areas.
- D. Common Open Spaces 1-21

Passive park areas, landscape areas, and common neighborhood amenities such as lakes (detention or retention), walking trails, sidewalks, open lawn areas, benches, and pavilions are allowed throughout these areas.

SITE DATA			
GENERAL SITE INFO			
GROSS ACREAGE	126.4 AC ±		
ROW DEDICATION	4.4 AC ±		
NET ACREAGE	122.1 AC ±		
RESIDENTIAL			
AREA	QTY	MIN. LOT SIZE	ACREAGE
1	26 ±	17,500 SF	16.3 AC ±
2	75 ±	10,000 SF	28.0 AC ±
3	11 ±	10,000 SF	4.0 AC ±
4	28 ±	10,000 SF	9.5 AC ±
5	99 ±	5,500 SF	26.7 AC ±
TOTAL	239 ±	LOTS	
GROSS DENSITY	1.89	DU/AC ±	
NET DENSITY	1.96	DU/AC ±	
COMMON OPEN SPACE			
COS 1		14.8 AC ±	
COS 2		1.4 AC ±	
COS 3		0.3 AC ±	
COS 4		7.8 AC ±	
COS 5		3.4 AC ±	
COS 6		2.0 AC ±	
COS 7		0.2 AC ±	
COS 8		0.1 AC ±	
COS 9		0.6 AC ±	
COS 10		0.1 AC ±	
COS 11		1.0 AC ±	
COS 12		0.4 AC ±	
COS 13		0.3 AC ±	
COS 14		0.4 AC ±	
COS 15		0.1 AC ±	
COS 16		0.2 AC ±	
COS 17		1.0 AC ±	
COS 18		1.4 AC ±	
COS 19		1.6 AC ±	
COS 20		0.1 AC ±	
COS 21		0.4 AC ±	
TOTAL COS	37.6 AC ±	30.8% ±	

ZONING	AREA NO.	ACREAGE	% OF TOTAL NET ACREAGE	LOTS	% OF TOTAL LOTS
SUBURBAN ESTATE (R1)	1	16.3 AC ±	13.3% ±	26 ±	10.9% ±
SUBURBAN MANOR (R2)	2, 3, 4	41.5 AC ±	34.0% ±	114 ±	47.7% ±
SUBURBAN COTTAGE (R3)	5	26.7 AC ±	21.9% ±	99 ±	41.4% ±
COMMON OPEN SPACE	COS 1-21	37.6 AC ±	30.8% ±		
TOTAL NET ACREAGE		122.1 AC ±		239 ±	

III. BULK REGULATIONS

Development of the neighborhood will be guided by the Outline Plan and the area use descriptions provided above. Development of individual parcels must be in compliance with the provisions for dimensional regulations and access and circulation conditions provided below.

Other restrictions not specifically addressed here or elsewhere in the conditions (and its attachments) including, but not limited to, setbacks, side and rear yard requirements, minimum lot areas, accessory uses, and parking and loading areas shall be as defined in the City of Lakeland Land Development Regulations (LDR) as applicable to the referenced District for the Area per section II. of this Outline Plan. Where provisions of this Outline Plan are in conflict with the above-referenced LDR, these provisions shall apply.

- A. Design Standards for Single-Family Detached Homes
1. All single-family detached residences shall follow the architectural guidelines within the City of Lakeland Land Development Regulations for the referenced District.

B. Minimum Building Setbacks per Area

1. Area 1

a. Minimum Front Yard Setback30'

b. Minimum Side Yard Setback 10'

c. Minimum Rear Yard Setback30'

2. Areas 2-4

a. Minimum Front Yard Setback30'

b. Minimum Side Yard Setback 5'

c. Minimum Rear Yard Setback25'

3. Area 5

1. Minimum Front Yard Setback..... 15'

2. Minimum Side Yard Setback 5'

3. Minimum Rear Yard Setback..... 5'

4. Fence Setback Against Service Drive..... 5'

C. Minimum Lot Widths per Area

1. Area 1 100'

2. Areas 2-4.....70'

3. Area 550'

NOTE: Lot widths shall be measured at the designated front yard building setback. The developer may include lots wider than the minimum in order to provide a more diverse product mix.

D. Minimum Lot Size per Area

1. Area 1 17,500 SF

2. Areas 2-4..... 10,000 SF

3. Area 5 5,500 SF

E. Maximum Building Heights and Maximum Building Coverage shall be as regulated by the City of Lakeland Land Development Regulations.
- IV. ROADWAYS, ACCESS, AND PARKING
- A. Chambers Chapel Road shall be constructed per the City of Lakeland Transportation Plan, with an 86’ Right-of-Way width.

B. Lakeland Trace Road and the extension of Gillespie Oak Drive west of Lakeland Trace Road shall be constructed per the City of Lakeland Transportation Plan, with a 66’ Right-of-Way width.

C. Interior public streets within Area 1 may utilize a modified Rural Neighborhood Street Type with a 55’ typical Right-of-Way width. Medians are permitted to accommodate grading and tree preservation. The trail within this Street Type may be a minimum of 5’ wide to ensure connectivity with the rest of the pedestrian network.

D. Interior public streets within Areas 2-5 may utilize the Urban Neighborhood Street Type with a 54’ typical Right-of-Way width.

E. All corner radii at intersections of public streets within the development may be a minimum of 15’ at the R.O.W.

F. Head-in parking may be provided directly off of any interior public street or private service drive adjacent to a Common Open Space to facilitate resident access to common amenities.

G. Service drives shall be a minimum of 20 feet in width.

H. All service drives shall be owned and maintained by the Homeowners’ Association.

I. The minimum driveway clearance for corner lots shall be 10’ from the point of tangency of the radius curvature of the ROW to the edge of driveway.
- V. LANDSCAPING, SCREENING, AND OPEN SPACE
- A. All public streets shall have street trees per the Streetscape Cross-Sections of the Chapel Lakes PD booklet.

B. A 30’ landscape buffer shall be provided between Chambers Chapel Road and adjacent lots, per the Landscape Plan and 86’ ROW Streetscape Cross-Section of the Chapel Lakes PD booklet.

C. All new landscaped areas, except for Common Open Spaces intended to become naturalized, must be irrigated with a subsurface irrigation system.

D. All required landscaping shall be located on the property such that it shall not interfere with any utility easements and may be altered according to MLGW requirements.

E. A Homeowners’ Association shall be established at the time of recording of any final plat. Any buffer areas, retention basins, landscape areas, open areas, street medians, entrance signs, pedestrian areas/easements, and any other common elements and/or easements proposed to be dedicated to the Homeowners’ Association in that phase shall be deeded over to the Homeowners’ Association with the recording of the final plat of that respective phase. A copy of the finalized incorporation papers and any deeds transferring common elements to the Homeowners’ Association shall be submitted to the City of Lakeland for inclusion in the file.

F. All Common Open Space areas, internal medians, streetscape areas, and neighborhood greens/parks shall be privately owned and maintained by a Homeowners’ Association..

G. All Common Open Space may include amenities such as walking trails, sidewalks, open lawn areas, shelter structures, bike racks, lighting, and benches where appropriate.
- VI. SIGNAGE
- A. All signage (temporary and permanent) will follow the City of Lakeland Land Development Regulations.
- CHAPEL LAKES PLANNED DEVELOPMENT

Lakeland, Tennessee

14

Page 99 of 117
- OUTLINE PLAN TEXT

VII. DRAINAGE FACILITIES & SERVICES

- A. The stormwater drainage system shall be designed and constructed to the design standards required by the City of Lakeland.
- B. A Storm Water Pollution Prevention Plan (SWPPP) will be filed with the state authorities prior to commencement of construction.
- C. According to the FEMA Flood Insurance Rate Map, this property does not lie in any Special Flood Hazard Areas as identified in Community Panel Numbers 47157 C0215G and 47157 C0330G, dated February 6, 2013.
- D. Grading and storm drainage plans shall be established per the City of Lakeland Land Development Regulations.
- E. All public stormwater drainage shall require a public easement.

VIII. SANITARY SEWER & SERVICES

- A. A Master Sanitary Sewer Concept Plan shall be submitted at the time a Phase One Preliminary Plan is submitted for review and approval.
- B. The City of Lakeland will provide sanitary sewer service.
- C. Sanitary sewer improvements shall be provided under contract in accordance with the City of Lakeland Land Development Regulations and the State of Tennessee regulations.
- D. Sizes of sanitary sewer lines shall be determined at the time a Final Plan is submitted to the Town Engineer.
- E. Sanitary Sewer Plans shall be submitted to the Tennessee Department of Environmental Conservation (TDEC) for written approval.
- F. All sanitary sewer located in a private drive or otherwise outside of public right-of-way shall be within a public easement.

IX. WATER SERVICE / UTILITIES

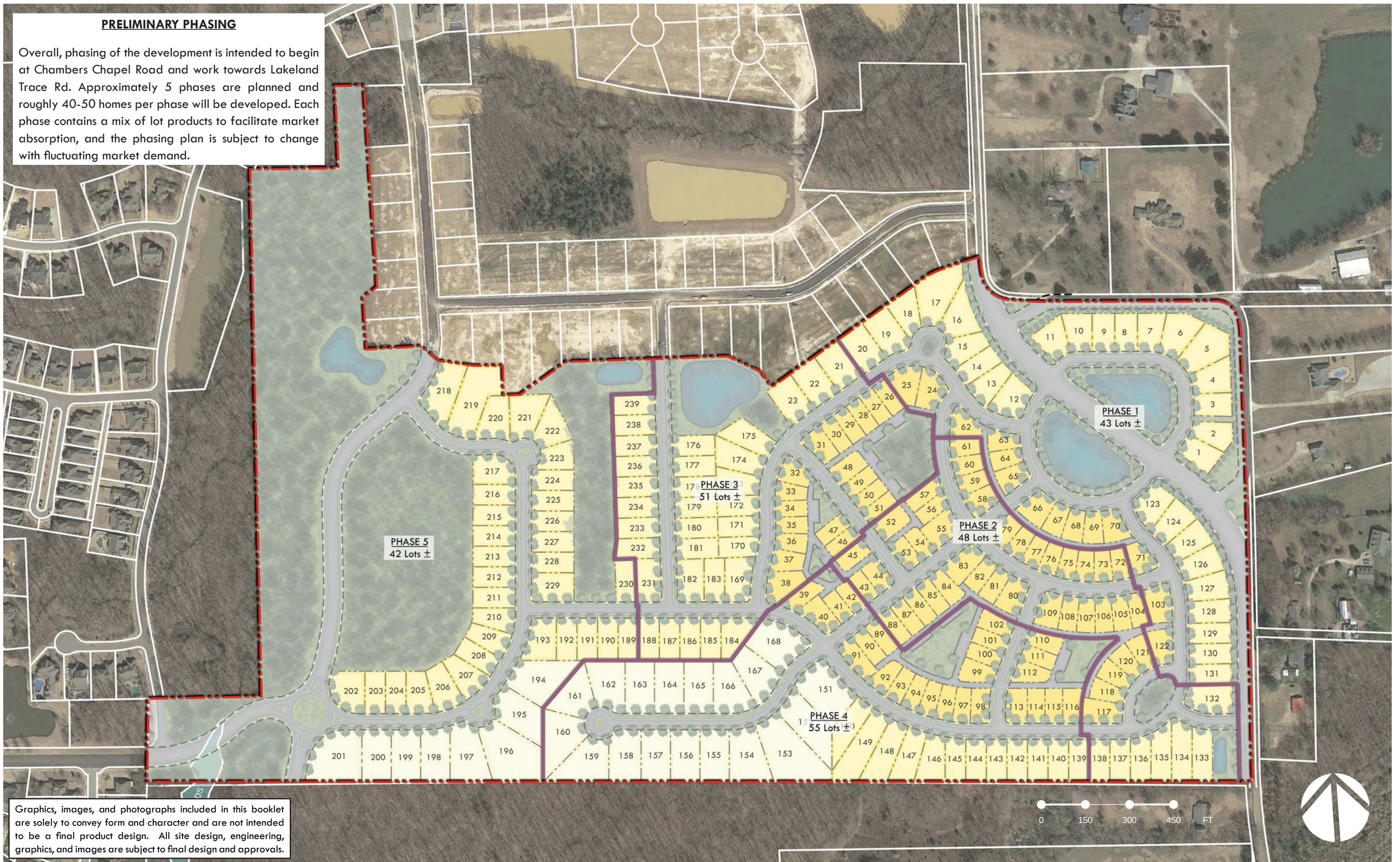
- A. Public water improvements shall be provided by the Developer under contract in accordance with the City of Lakeland Land Development Regulations and the State of Tennessee regulations.
- B. All utilities and services to be installed underground, with the exception of three-phase electric.
- C. All water services located in a private drive or otherwise outside of public right-of-way shall be within a public easement.

X. DEVELOPMENT PHASING

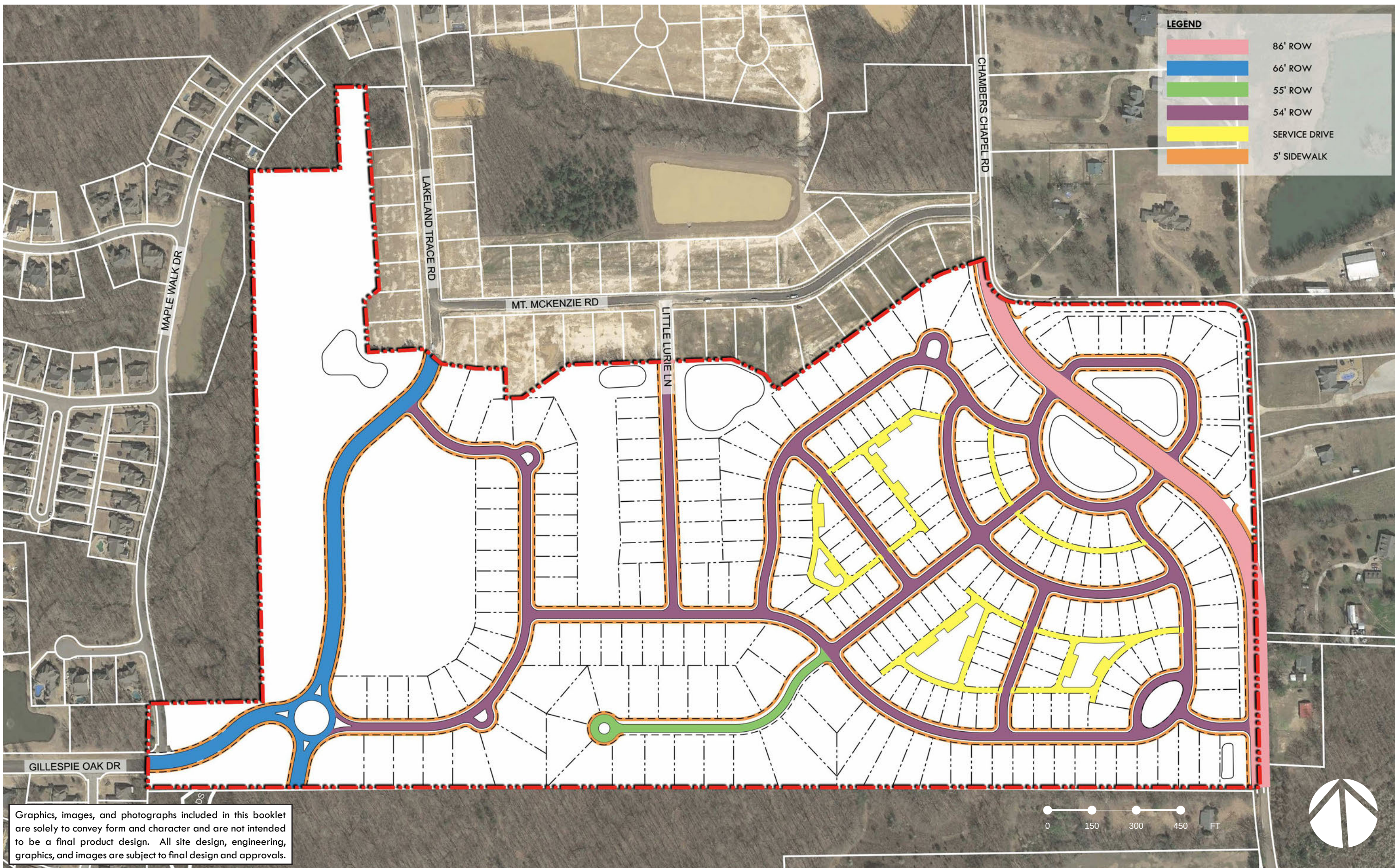
- A. The Development is planned to be constructed in 5 phases, with the first phase planned to begin construction in 2021. See the Preliminary Phasing Plan for more details.
- B. The Preliminary Phasing Plan is subject to change as plans are finalized and as market demands fluctuate. Construction of phases may be singular or a mix to meet current and future market demands.
- C. The synchronization of Phases of Chapel Lakes Planned Development may be modified by the Developer at any time to allow for current and future market demands.
- D. Minor changes to lot configuration may occur with the final plans.

PRELIMINARY PHASING

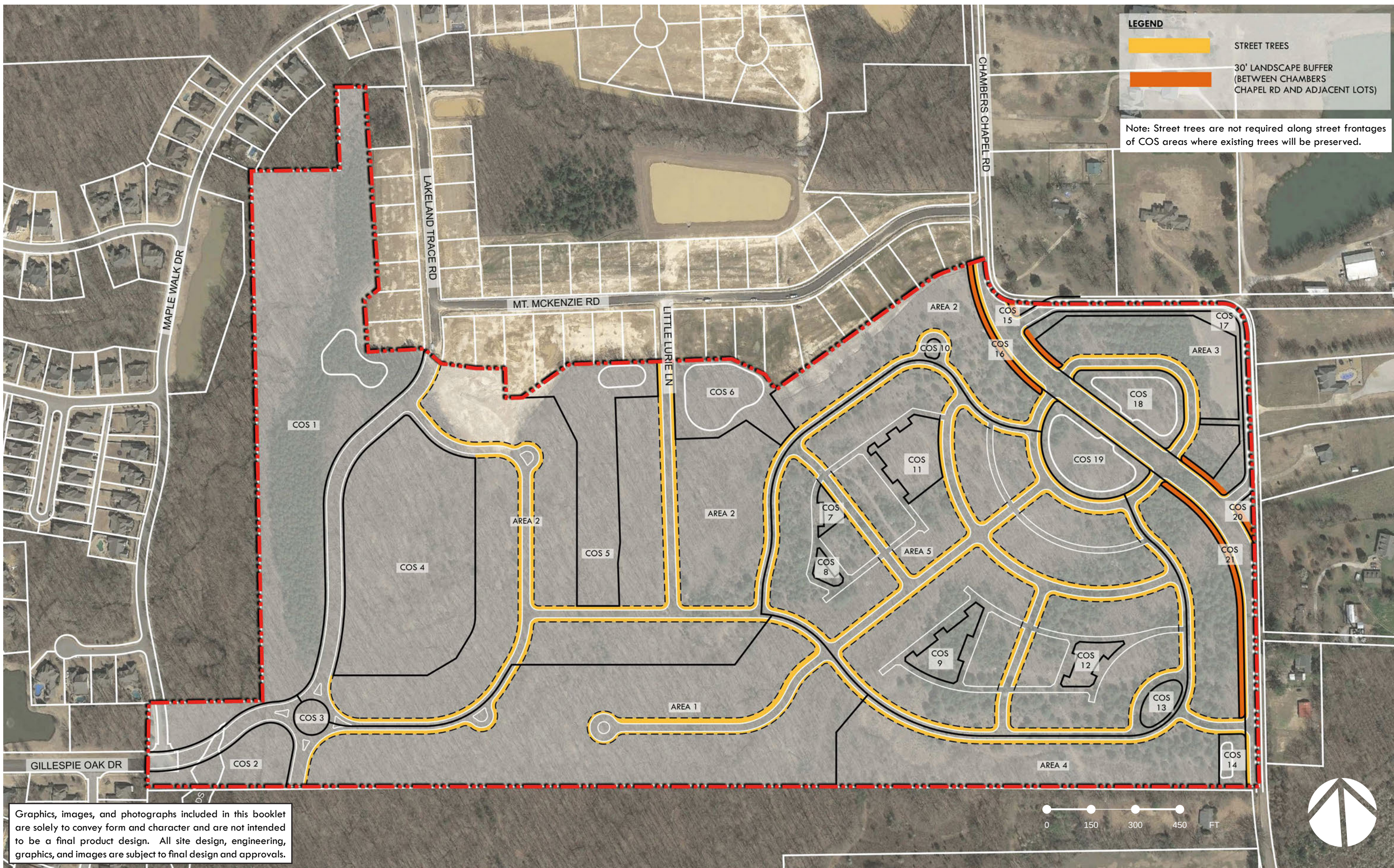
Overall, phasing of the development is intended to begin at Chambers Chapel Road and work towards Lakeland Trace Rd. Approximately 5 phases are planned and roughly 40-50 homes per phase will be developed. Each phase contains a mix of lot products to facilitate market absorption, and the phasing plan is subject to change with fluctuating market demand.



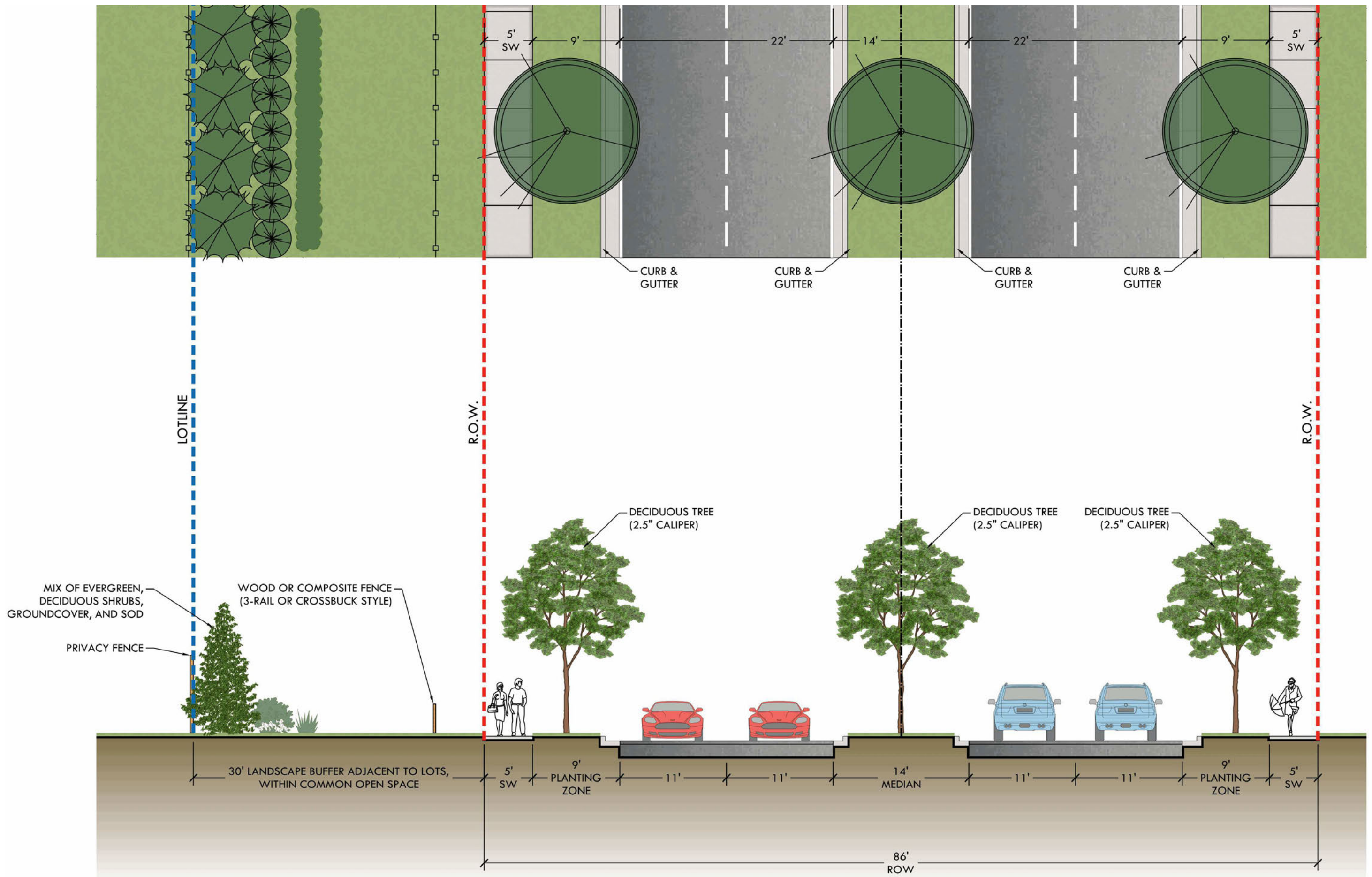
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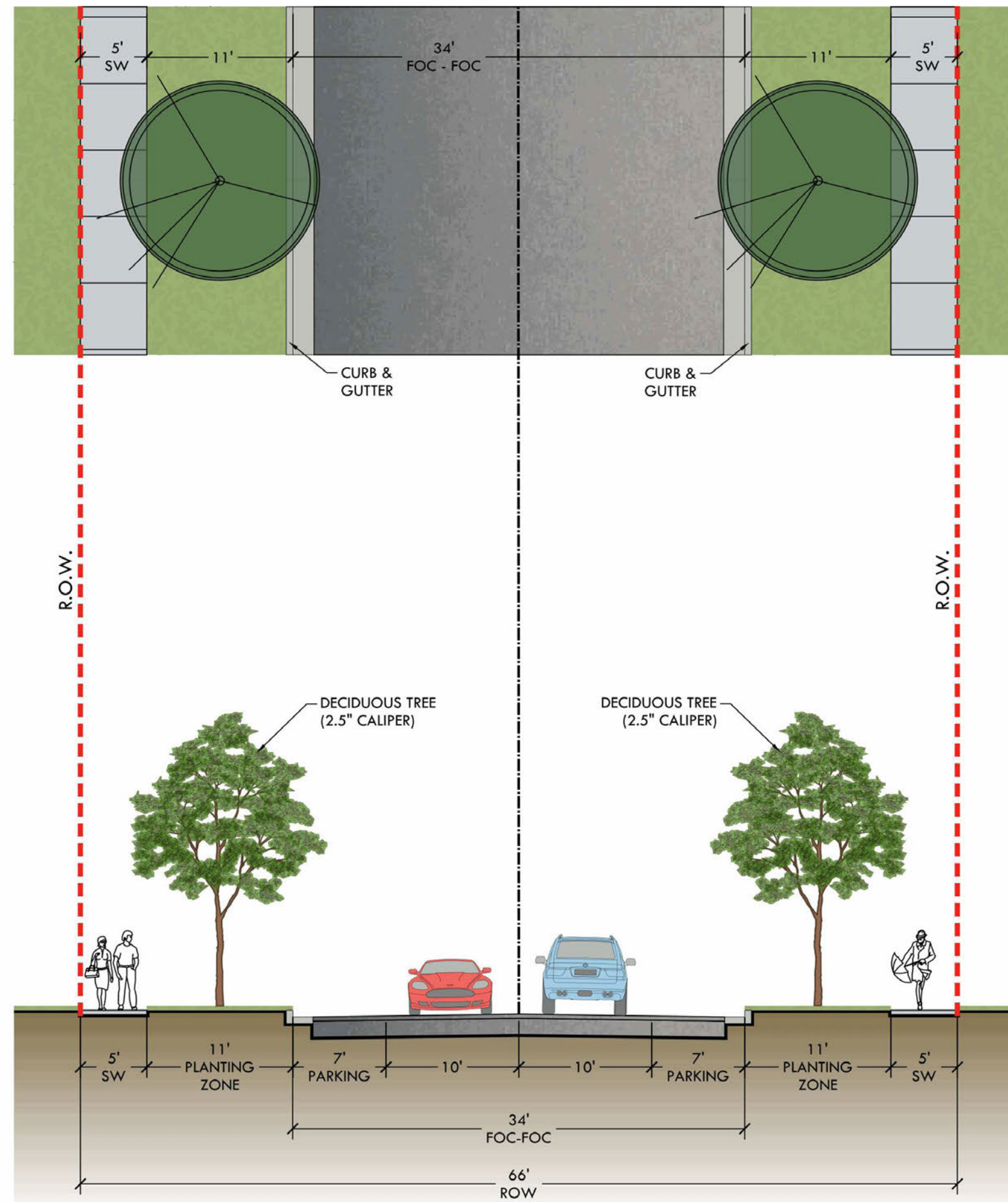


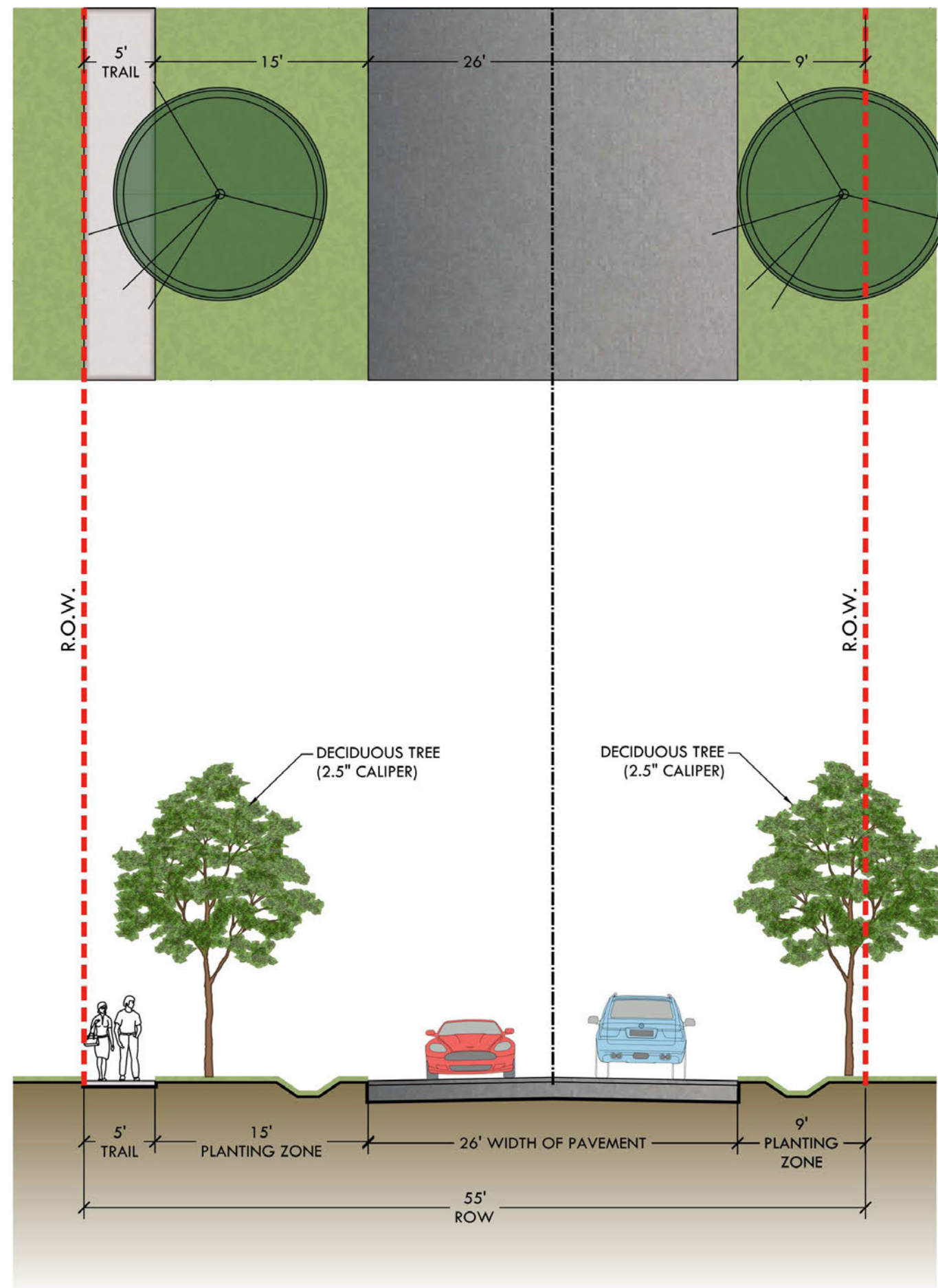
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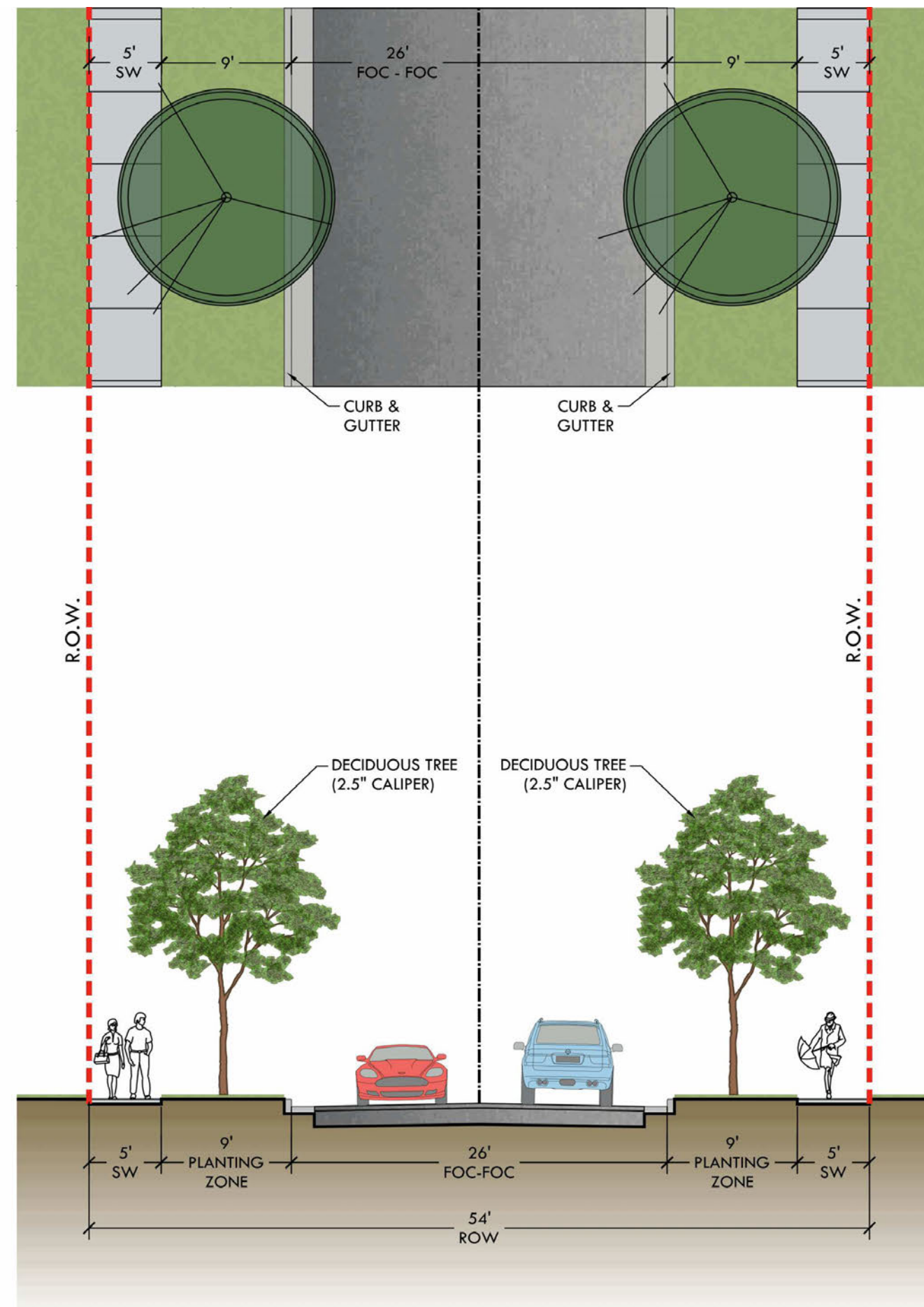


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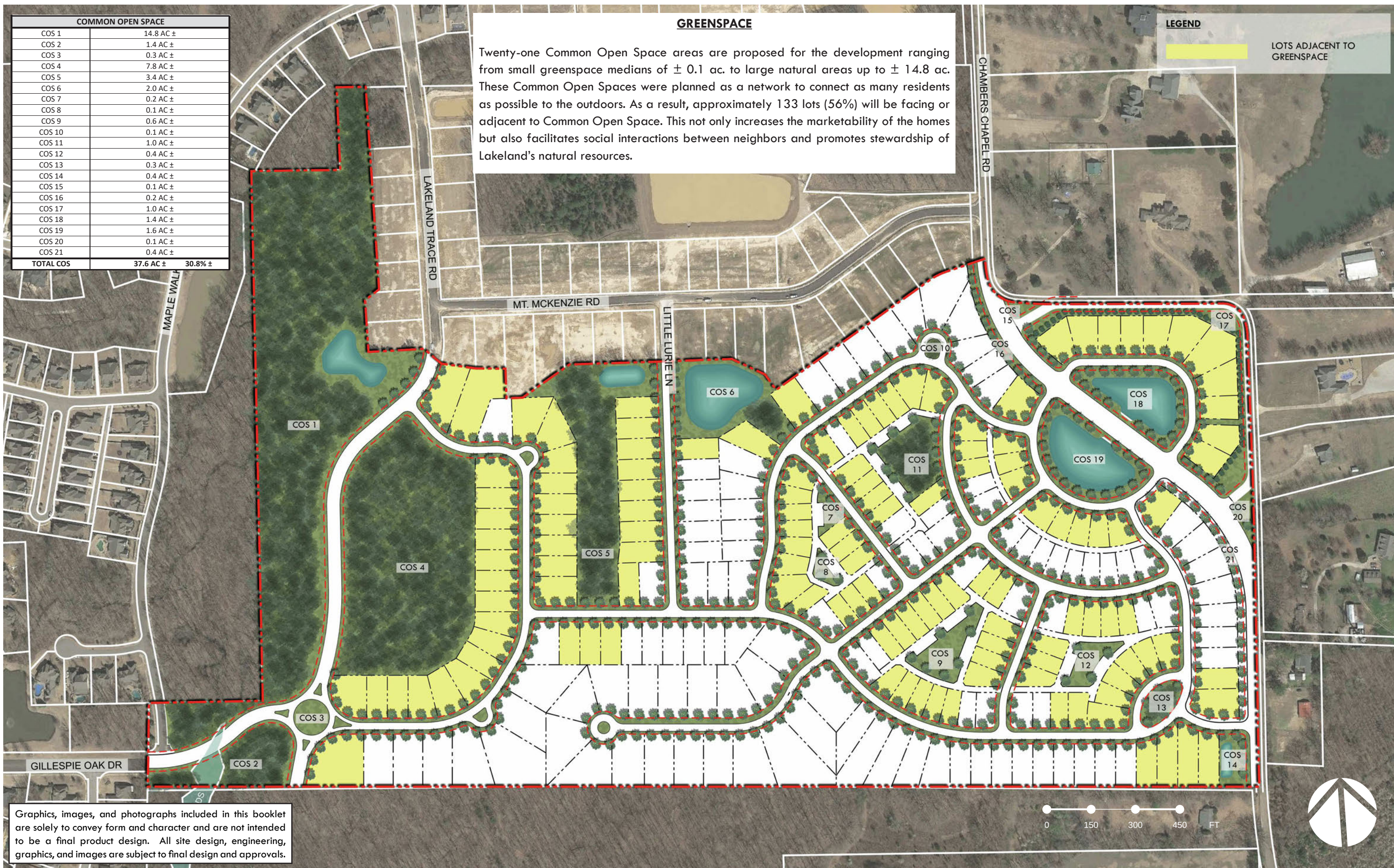
COMMON OPEN SPACE		
COS 1	14.8 AC ±	
COS 2	1.4 AC ±	
COS 3	0.3 AC ±	
COS 4	7.8 AC ±	
COS 5	3.4 AC ±	
COS 6	2.0 AC ±	
COS 7	0.2 AC ±	
COS 8	0.1 AC ±	
COS 9	0.6 AC ±	
COS 10	0.1 AC ±	
COS 11	1.0 AC ±	
COS 12	0.4 AC ±	
COS 13	0.3 AC ±	
COS 14	0.4 AC ±	
COS 15	0.1 AC ±	
COS 16	0.2 AC ±	
COS 17	1.0 AC ±	
COS 18	1.4 AC ±	
COS 19	1.6 AC ±	
COS 20	0.1 AC ±	
COS 21	0.4 AC ±	
TOTAL COS	37.6 AC ±	30.8% ±

GREENSPACE

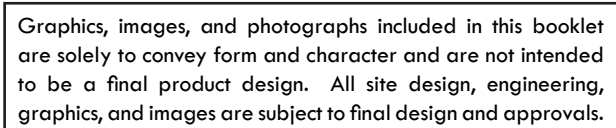
Twenty-one Common Open Space areas are proposed for the development ranging from small greenspace medians of ± 0.1 ac. to large natural areas up to ± 14.8 ac. These Common Open Spaces were planned as a network to connect as many residents as possible to the outdoors. As a result, approximately 133 lots (56%) will be facing or adjacent to Common Open Space. This not only increases the marketability of the homes but also facilitates social interactions between neighbors and promotes stewardship of Lakeland's natural resources.

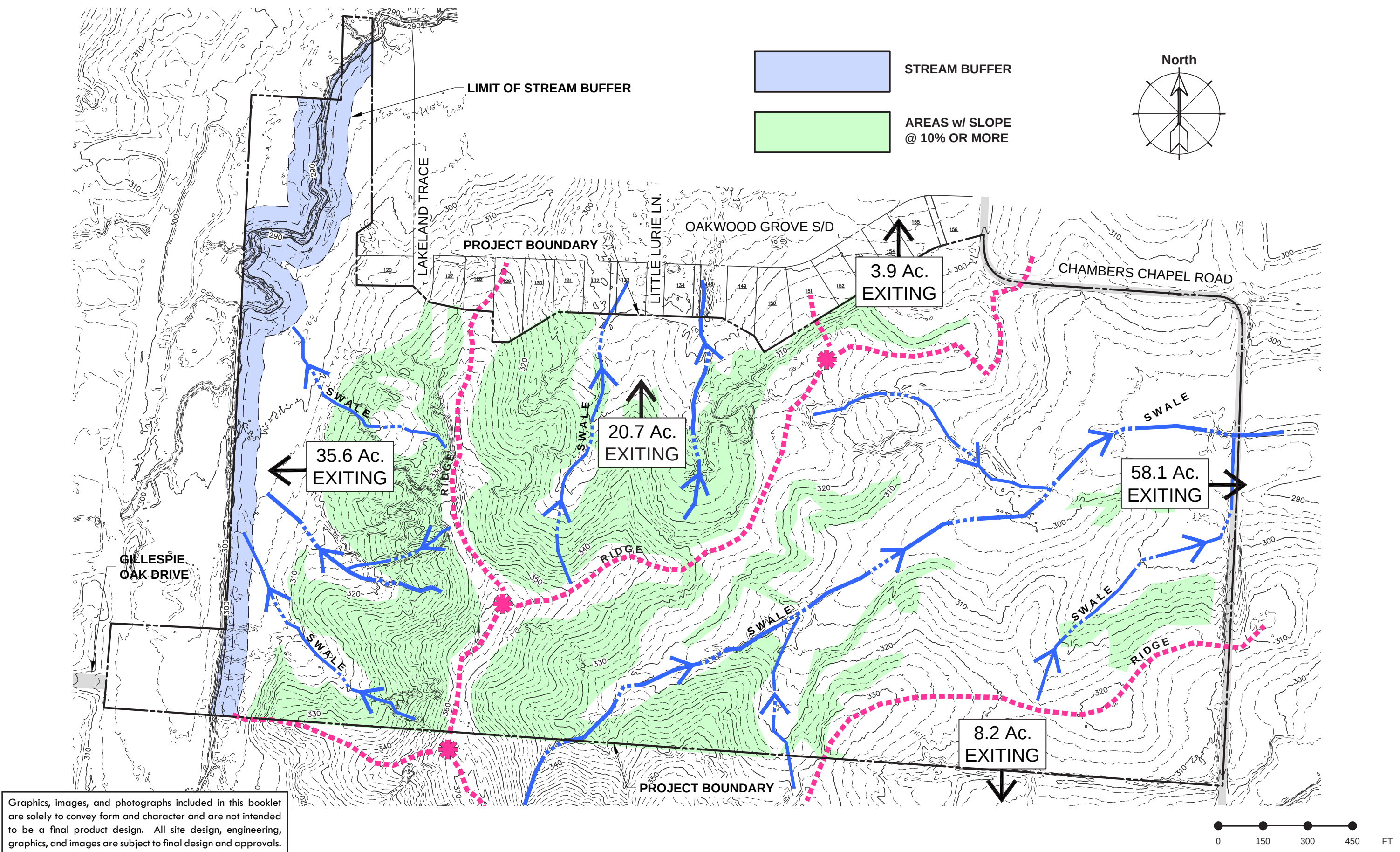
LEGEND

LOTS ADJACENT TO GREENSPACE



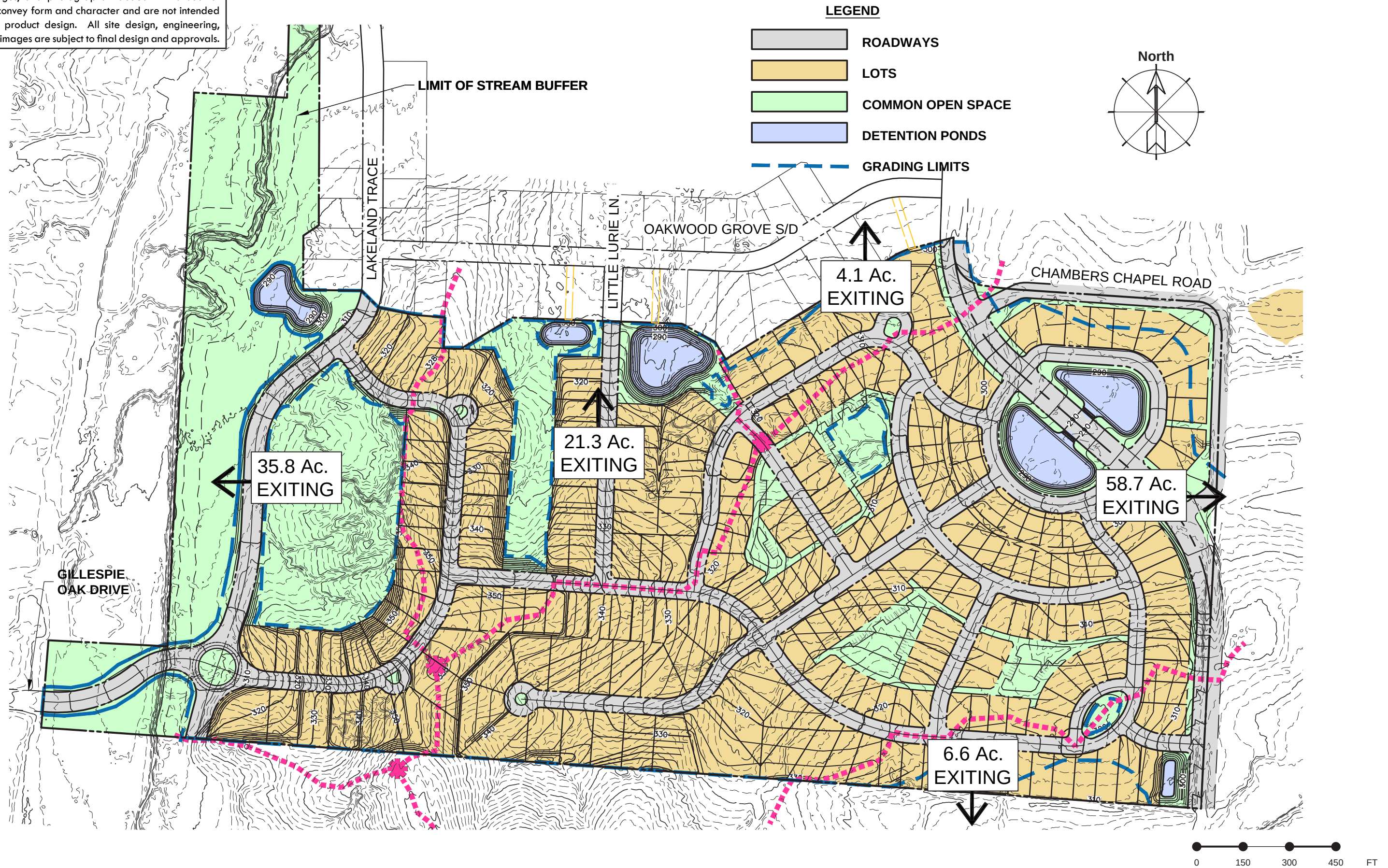
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Tree Density Calculation						
	Development Net Acreage		122.1	Ac.		
	Site Density Factor (SDF)		2442			
	Existing Density Factor (EDF)		7301.3			
	Replacement Density Factor (RDF)		0			
Summary of Data						
	Existing Trees (Arborist)		7178	Trees		
	Existing Trees (Not Survey Located)		516	Trees	Assumed Remove for Calculations	
	Existing Trees (On-Site)		7131	Trees		
	Trees to Remain (On-Site)		2078	Trees		
	Percent of Trees to Remain (On-Site)		29.1%			
	Existing Specimen Trees (On-Site)		533	Trees		
	Specimen Trees to Remain (On-Site)		140	Trees		
	Percent of Specimen Trees to Remain (On-Site)		26.3%			

LEGEND

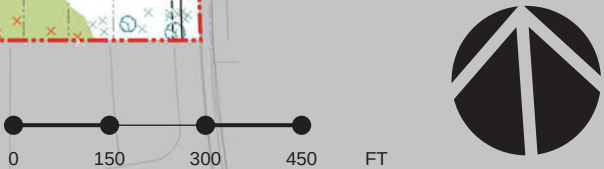
PROPOSED TREE SAVE AREAS
OUTSIDE LIMITS OF GRADING

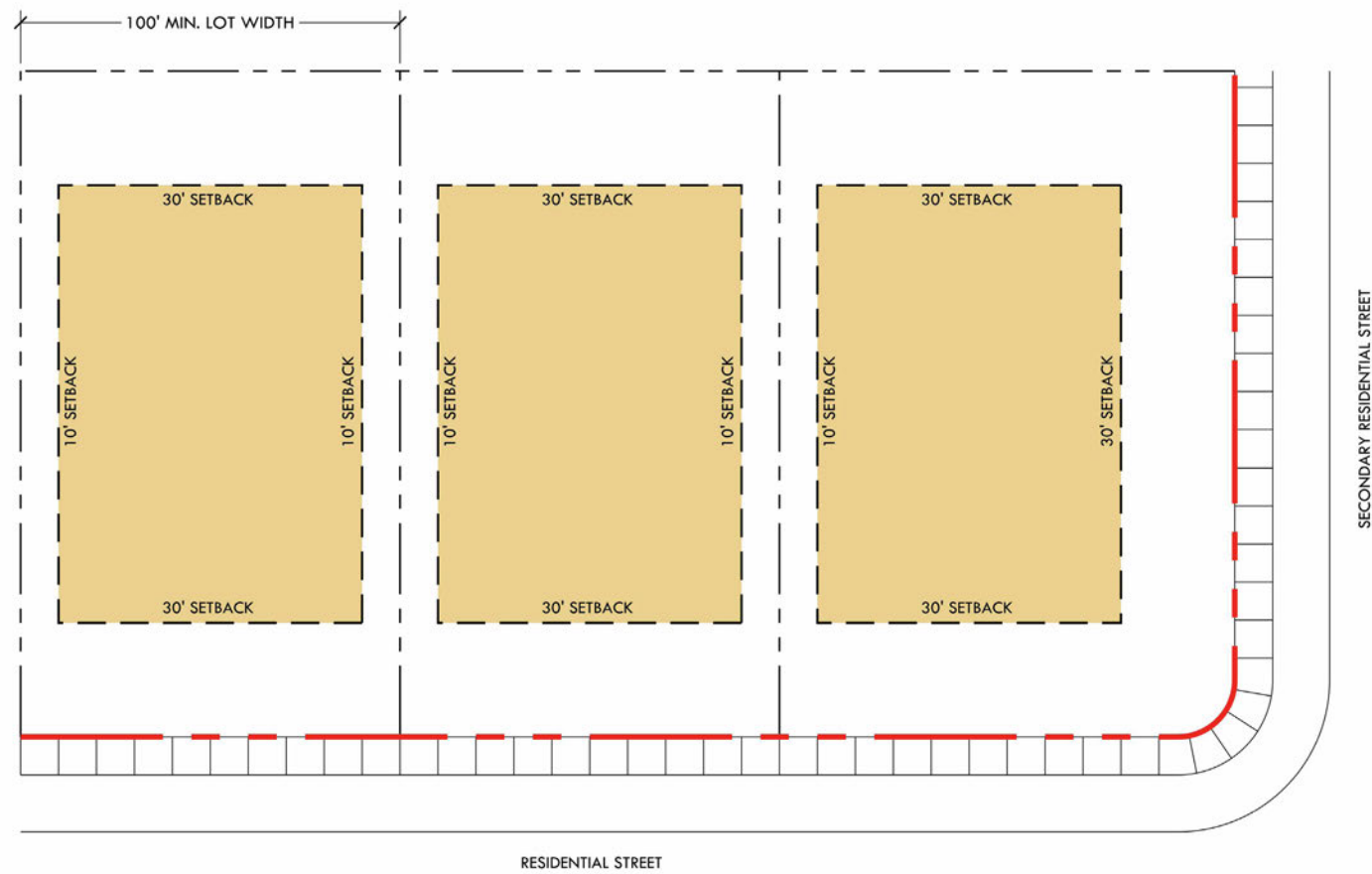
SPECIMEN TREE SAVED

NON-SPECIMEN TREE SAVED

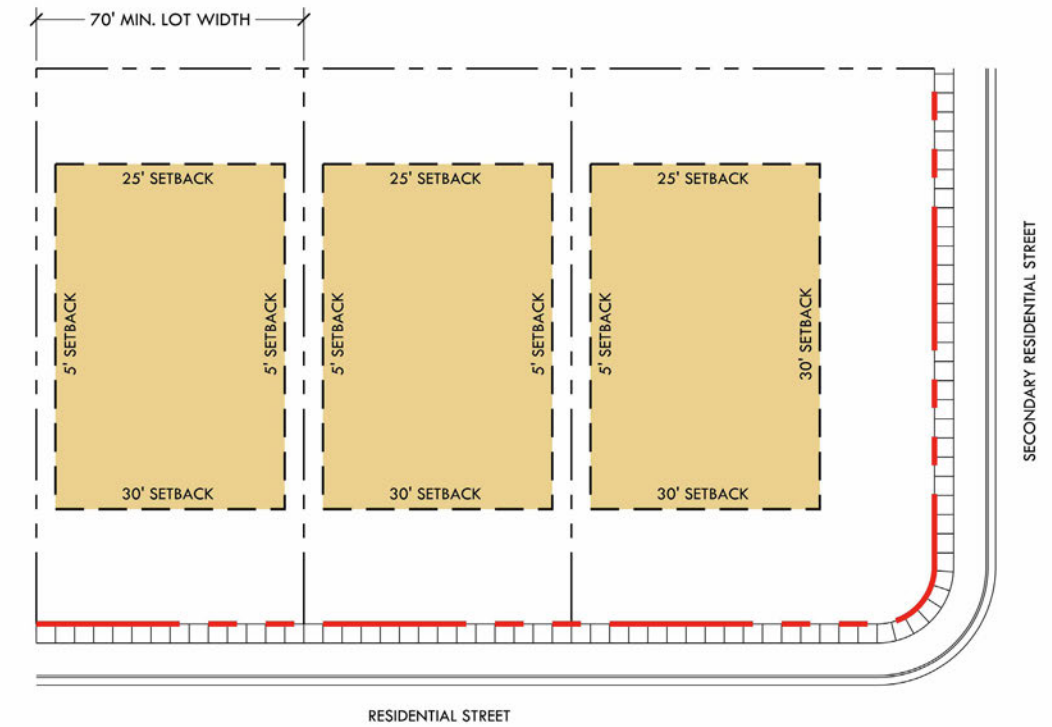
Note: A full tree survey and data chart of all trees is attached as a separate document.

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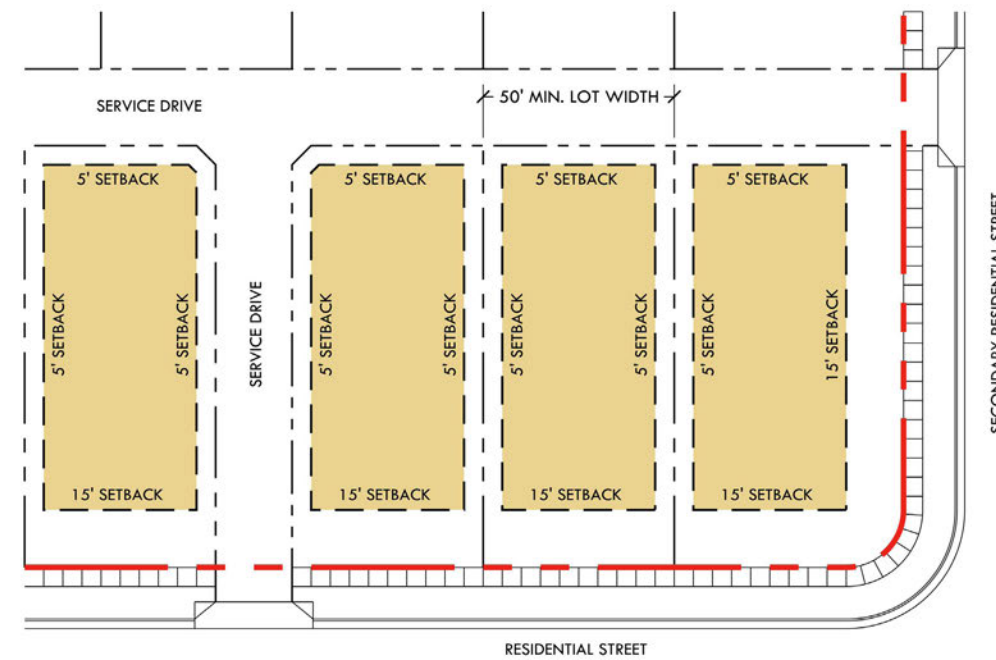




R-1 SUBURBAN ESTATE - AREA 1 (STREET-ACCESS)



R-2 SUBURBAN MANOR - AREAS 2, 3, & 4 (STREET-ACCESS)



R-3 SUBURBAN COTTAGE - AREA 5 (REAR-ACCESS)

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