



PLANNING COMMISSION

March 1, 2021

Virtual Meeting Using Video Conferencing Technology, Columbia, SC

**SITE PLAN REVIEW CASE SUMMARY
1307 MASON ROAD, TMS#11813-01-02
GARDEN LAKES APARTMENTS**

- Council District:** 1
- Proposal:** Request site plan approval for the construction of a 288-unit multi-family apartment development.
- Applicant:** Anthony Lawrence, GDA Partners
- Proposed Use:** Apartments
- Staff Recommendation:** Approval with staff comments.

Detail: This project entails the construction of a 288-unit multi-family development with a clubhouse/leasing office on ±29.28 acres at the corner of North Main Street and Mason Road. The site is currently wooded and contains two ponds. The landscape plan illustrates that a large portion of the existing trees and the ponds will be preserved. The required number of off-street parking spaces for this development is 576 parking spaces (2 parking spaces per dwelling unit) whereas the applicant proposes to provide 578.

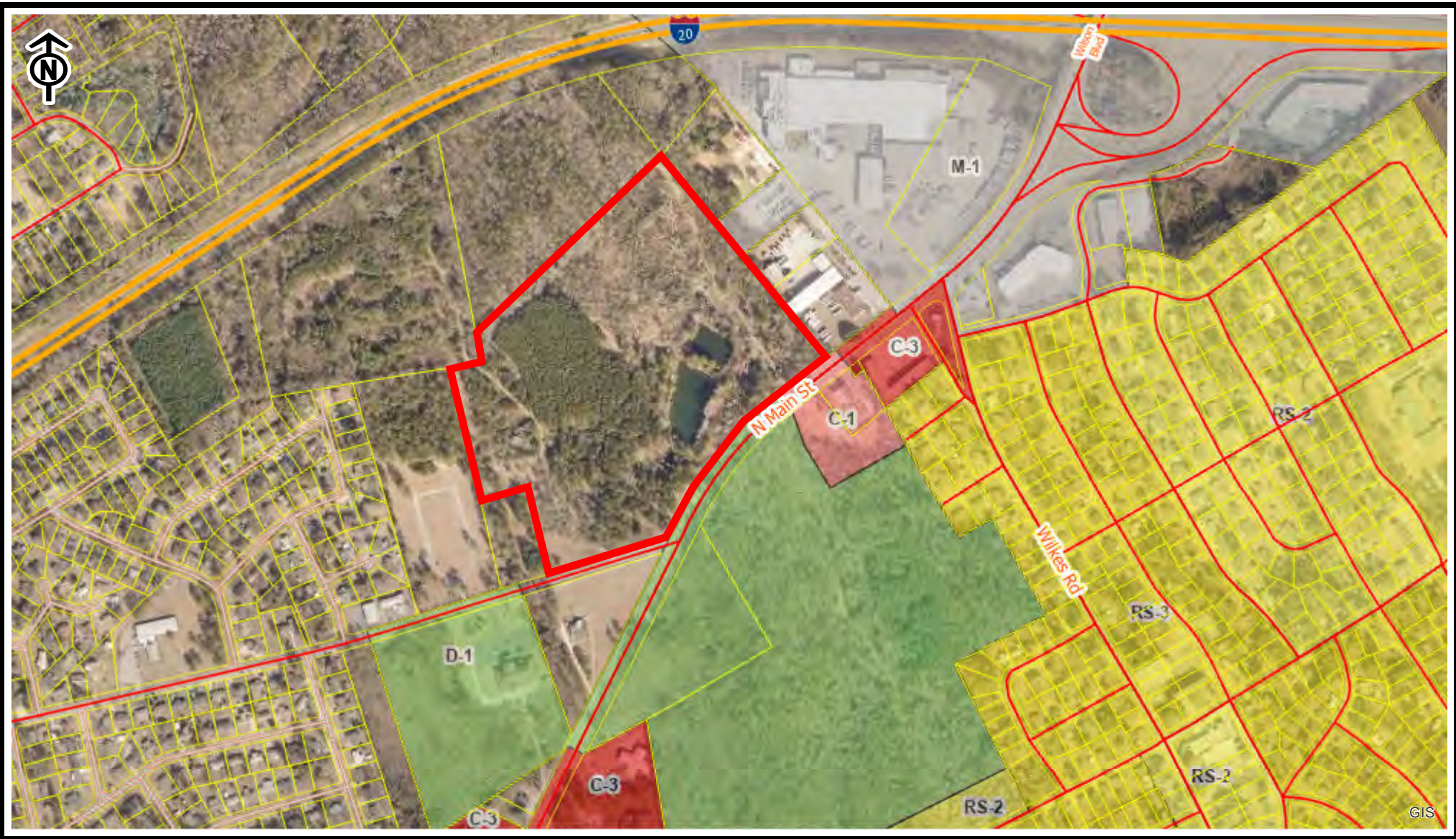
The development will be accessed from North Main Street and an emergency access will be provided along Mason Road. The applicant has submitted a traffic impact study that has been reviewed and approved by Traffic Engineering.

Should the Commission be inclined to grant approval of the site plan, staff would request that the Commission grant approval subject staff comments.

CITY REVIEWING AGENCY COMMENTS

<p>Lucinda Statler, Planning</p>	<p>Recommend approval with conditions:</p> <ol style="list-style-type: none"> 1. Provide a sidewalk along emergency access road to Mason Road, and along north side of Mason to connect to N Main. 2. Provide high-visibility crosswalks on Mason at N Main, and on N Main with a pedestrian refuge on N Main. 3. Provide high-visibility crosswalk at primary access road median and provide sidewalk on north side of access road from crosswalk to connect to sidewalk on North Main. 4. Regarding sidewalks internal to development- either move back from the curb to allow for car bumpers that may encroach into sidewalk, or widen sidewalks to 8'. 5. Please provide walking trails around the lakes to support the vision of
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	<p>the Walkable 29203 plan, which "encourages healthy lifestyles, increases resident safety, improves access to destinations, and furthers access to destinations, and furthers economic development opportunities. Walking for transportation, recreation, and exercise in the Crane Creek and North Main communities is safe, practical, and enjoyable. Residents have a high quality of life and are connected to one another and to local community resources..."</p>
Rachel Bailey, Zoning Administrator	<p>Recommend approval with condition:</p> <ol style="list-style-type: none"> 1. Approved conditioned on the approval of the height variance going before the Board on March 4, 2021.
Johnathan Chambers, Land Development Administrator	<p>Recommend approval with condition:</p> <ol style="list-style-type: none"> 1. Any work within the right-of-way will require City of Columbia and SCDOT encroachment permits. 2. Planning Commission review is contingent upon annexation and rezoning of the subject property.
Todd Beiers, Commercial Plans Examiner	<p>Recommend approval with condition:</p> <ol style="list-style-type: none"> 1. Compliance with all applicable building code requirements.
Scott Rogers, Utilities	<p>Recommend approval with conditions:</p> <ol style="list-style-type: none"> 1. Any needed upgrade, extension or relocation of City utilities must be provided by the developer and must meet the City's minimum design standards. 2. Any privately owned/maintained utilities or permanent structures cannot be located inside City of Columbia utility easements. 3. Water mains, sewer mains, water meters that are 4" or larger or any privately maintained utilities will not be allowed inside public right-of-ways or under sidewalks without an approved encroachment permit and written approval from the City Engineer. Coordination between the Civil Engineer, Architect and Mechanical Engineer to allow room for these utilities on the developed property is strongly suggested. 4. If sewer flows for this project result in flows of 4,000 gallons per day or above calculations must be submitted to the City's Engineering department to determine how the proposed project will affect the City's sewer system. Depending upon the effects of the projected flows this project may or may not be approved. If required, these calculations should be submitted to the Engineering department as soon as possible.
Andrew Ritter, Traffic Engineering	Recommend approval.
Kris Scott, Fire Department	Recommend approval.
Caleb King, Forestry	<p>Recommend approval with condition:</p> <ol style="list-style-type: none"> 1. Any new landscaping or irrigation installed in the right of way must be approved by Forestry and Beautification for species and spacing and maintained by the adjacent property owner in a manner to not interfere with vehicular and pedestrian traffic. SCDOT must approve any new landscaping installed along SCDOT roadways.
Mike Jaspers, Stormwater	Recommend approval.
Elle Matney, Parking	Recommend approval.
Robert Sweatt, Street Division	Recommend approval.
Samantha Yager, Solid Waste	Recommend approval.
Scott Holder, Landscaping	Recommend approval.

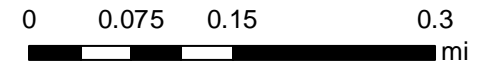


Garden Lakes
City of Columbia



This map was prepared using
the City GIS Viewer:
City of Columbia - GIS Division
Tuesday, February 2, 2021

- | | |
|-------------------------------|------------------|
| Tax Parcel Labels | State Maintained |
| Tax Parcel | Private |
| Street & Ownership | |
| Interstate | Others |
| Highway | |
| City Maintained | |



**CITY OF COLUMBIA
GIS DATA DISCLAIMER:**
The City of Columbia GIS data represented
on this map or plan is the product of the
compilation of data produced by others.
It is provided for informational purposes only
and the City of Columbia makes no representation
as to its accuracy. Its use without field verification
is at the sole risk of the user.



City of Columbia APPLICATION for SITE PLAN/SUBDIVISION PLAT REVIEW

OFFICE USE ONLY: Date Received _____ By _____

1) APPLICANT (Please Print)

Name:	Anthony Lawrence	Company:	GDA Partners
Tel. #:		Fax#:	
Mobile #:	803-622-6925	E-mail:	at.lawrence@yahoo.com

Do you own any of the property affected by this application? YES NO; If NO, provide Letter of Agency

2) THIS APPLICATION IS FOR (Check all that apply)

Group/Individual Commercial Development

Group Residential Development

Residential Subdivision

Planned Unit Development Site Review

Street Name(s)

3) PROPERTY

Address:	1307 Mason Road, Columbia, SC 29203		
TMS#:	R11813-01-02	Total Acreage:	29.2
Current Use:	Undeveloped raw land	Proposed Use:	Multifamily apartments
Current Zoning:	RU		
Number of Lots and/or Units:	1 Lot / 288 units	Total Sq. Ft.	353,000

4) DETAILED PROJECT DESCRIPTION: (Attach additional paper if you need more space)

Development consists of modern style workforce housing with a 3,600 square foot club house, 1,600 square foot mail/laundry building, dog friendly park, playground, expanded detention pond as a natural feature and green space for tenant use.

5) NEIGHBORHOOD CONSULTATION

Prior to the Planning Commission meeting, meet with the adjacent neighbors or neighborhood association to communicate details of the proposed project. Please note that this informational meeting is not required by ordinance, but is *strongly* encouraged. Contact information may be obtained from Zoning staff.

6) PLAN SUBMITTAL

Please refer to the Checklist for Site Plan Review for materials required for submittal with this application

7) SIGNATURE

Applicant Signature:	
Print Name:	Anthony Lawrence
Date:	1.26.2021

PC Date: _____

Action: _____



LETTER OF AGENCY BOARDS AND COMMISSIONS

TO: Planning and Development Services, City of Columbia

I, the undersigned property owner, do hereby attest that I am the person that holds, or I am authorized on behalf of the party that holds, fee simple interest in the following parcel(s):

COMMON STREET ADDRESS(ES): 1307 Mason Road

TAX MAP NUMBER(S): 11813-01-02

Further, I hereby authorize the persons and/or entities listed as AUTHORIZED AGENT(S) below to act on my behalf for the purpose of submitting documents, amending documents, meeting with staff, attending public meetings and hearings, and as otherwise may be necessary and proper to fulfill the required steps to request the following:

1. Variance, Special Exception, and/or Administrative Appeal (Board of Zoning Appeals)
2. Zoning Map Amendment (Planning Commission and City Council, if applicable)
3. Site Plan Review (Planning Commission or D/DRC)
4. Design Review (D/DRC)
5. Minor Subdivision (Staff)
6. Major Subdivision (Planning Commission)

***Please strike-through and initial any of the above-listed steps that do not fall under the scope of this Letter of Agency*

AUTHORIZED AGENT(S): Anthony Lawrence
803.622.6925

Name, Company/Firm, Telephone Number

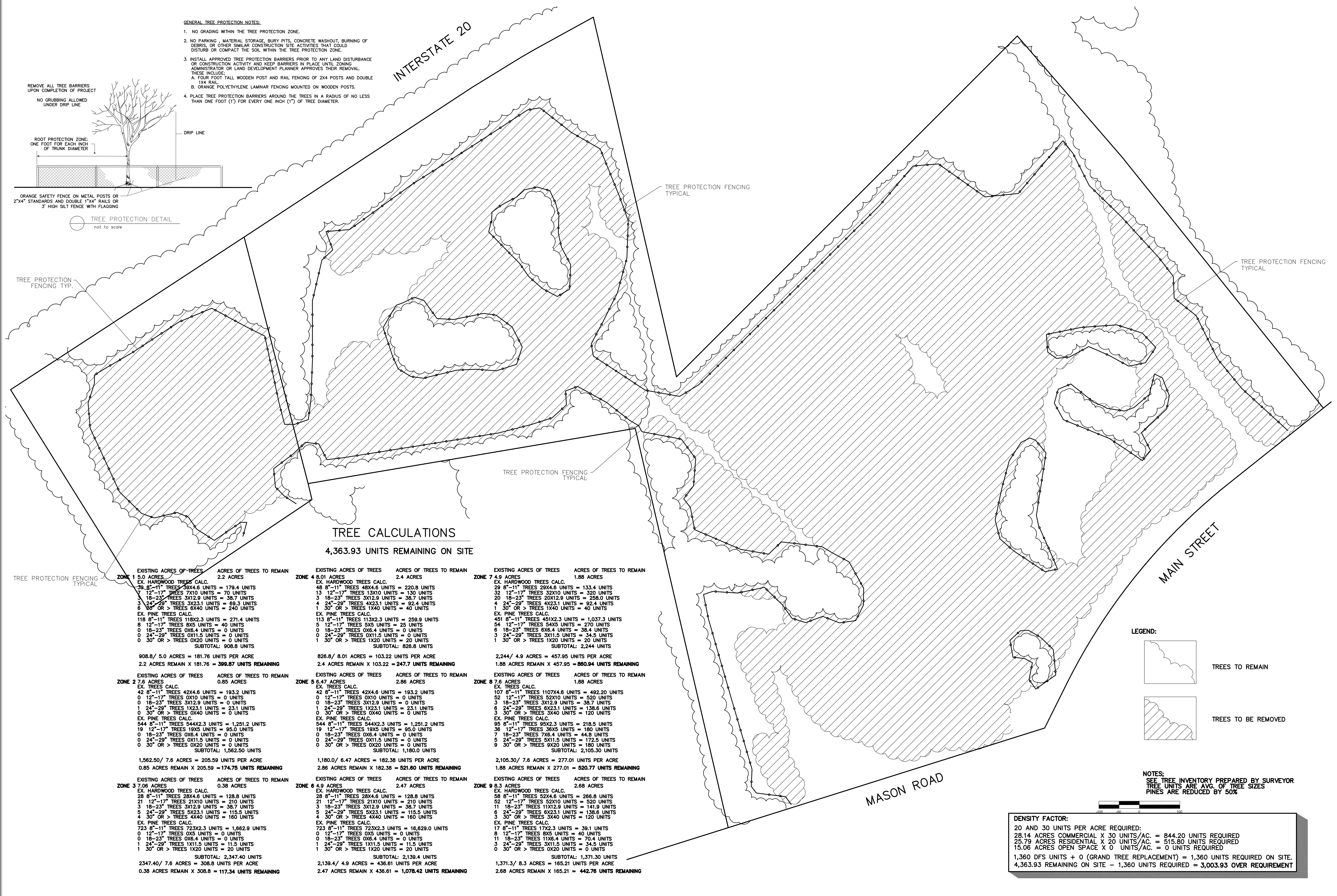
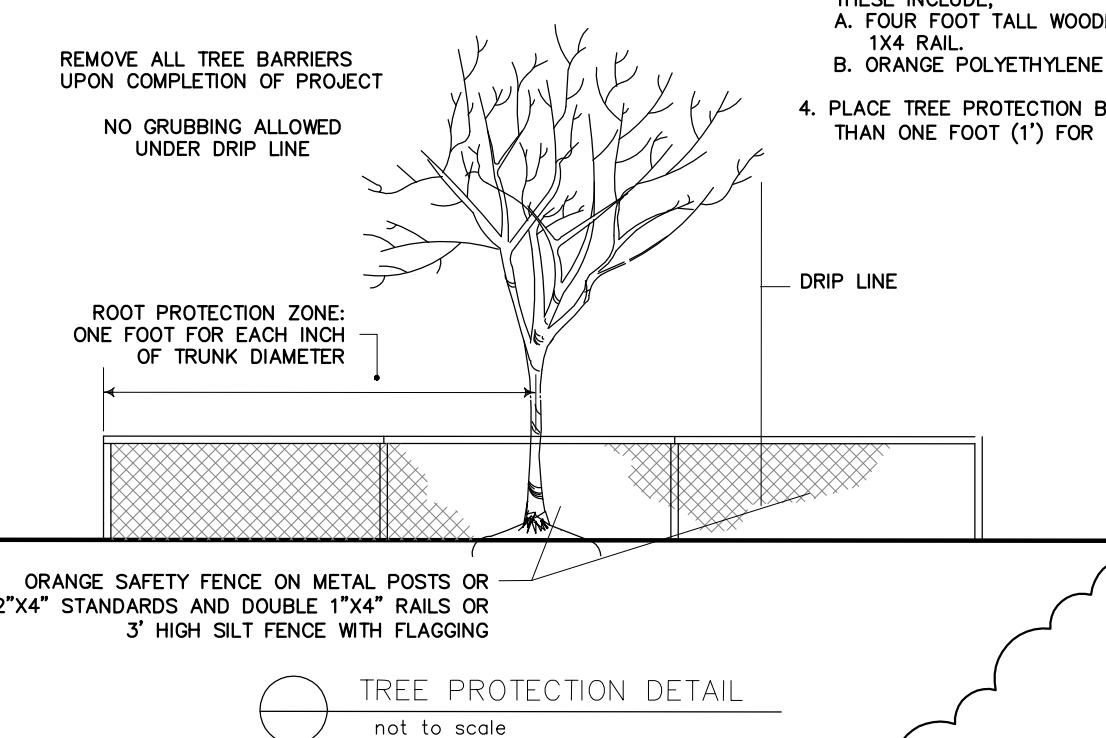
Please note that the Authorized Agent(s) will be the designated contact for all correspondence related to the above-listed steps

SIGNATURE OF PROPERTY OWNER: [Signature] DATE: 12-1-2020
PROPERTY OWNER NAME (PRINTED): Willie D. York

WITNESS TO SIGNATURE: [Signature] DATE: 12/01/2020
WITNESS NAME (PRINTED): Troy Washington

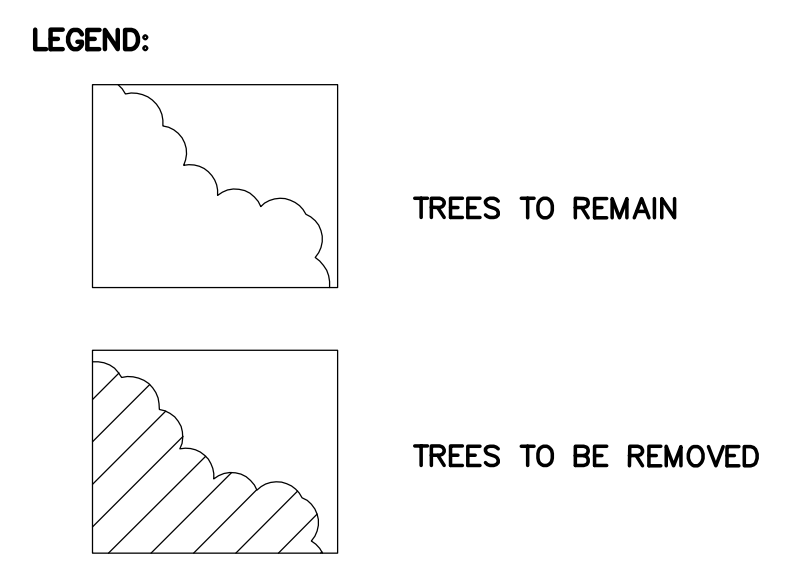
COPYRIGHT RESERVED - REPRODUCTION OR USE FOR ANY OTHER PURPOSE THAN THAT AUTHORIZED BY THE LANDPLAN GROUP SOUTH, INC. IS FORBIDDEN

- GENERAL TREE PROTECTION NOTES:**
- NO GRADING WITHIN THE TREE PROTECTION ZONE.
 - NO PARKING, MATERIAL STORAGE, BURY PITS, CONCRETE WASHOUT, BURNING OF DEBRIS, OR OTHER SIMILAR CONSTRUCTION SITE ACTIVITIES THAT COULD DISTURB OR COMPACT THE SOIL WITHIN THE TREE PROTECTION ZONE.
 - INSTALL APPROVED TREE PROTECTION BARRIERS PRIOR TO ANY LAND DISTURBANCE OR CONSTRUCTION ACTIVITY AND KEEP BARRIERS IN PLACE UNTIL ZONING ADMINISTRATOR OR LAND DEVELOPMENT PLANNER APPROVES THEIR REMOVAL. THESE INCLUDE:
 - FOUR FOOT TALL WOODEN POST AND RAIL FENCING OF 2X4 POSTS AND DOUBLE 1X4 RAIL.
 - ORANGE POLYETHYLENE LAMINAR FENCING MOUNTED ON WOODEN POSTS.
 - PLACE TREE PROTECTION BARRIERS AROUND THE TREES IN A RADIUS OF NO LESS THAN ONE FOOT (1') FOR EVERY ONE INCH (1") OF TREE DIAMETER.



TREE CALCULATIONS
4,363.93 UNITS REMAINING ON SITE

ZONE	EXISTING ACRES OF TREES	ACRES OF TREES TO REMAIN	EXISTING ACRES OF TREES	ACRES OF TREES TO REMAIN	EXISTING ACRES OF TREES	ACRES OF TREES TO REMAIN		
ZONE 1	5.0 ACRES EX. HARDWOOD TREES CALC. 39 8"-11" TREES 39X4.6 UNITS = 179.4 UNITS 12"-17" TREES 7X10 UNITS = 70 UNITS 18"-23" TREES 3X12.9 UNITS = 38.7 UNITS 24"-29" TREES 3X23.1 UNITS = 69.3 UNITS 30" OR > TREES 6X40 UNITS = 240 UNITS EX. PINE TREES CALC. 118 8"-11" TREES 118X2.3 UNITS = 271.4 UNITS 8 12"-17" TREES 8X5 UNITS = 40 UNITS 0 18"-23" TREES 0X6.4 UNITS = 0 UNITS 0 24"-29" TREES 0X11.5 UNITS = 0 UNITS 0 30" OR > TREES 0X20 UNITS = 0 UNITS SUBTOTAL: 908.8 UNITS	2.2 ACRES	ZONE 4	8.01 ACRES EX. HARDWOOD TREES CALC. 48 8"-11" TREES 48X4.6 UNITS = 220.8 UNITS 13 12"-17" TREES 13X10 UNITS = 130 UNITS 3 18"-23" TREES 3X12.9 UNITS = 38.7 UNITS 4 24"-29" TREES 4X23.1 UNITS = 92.4 UNITS 1 30" OR > TREES 1X40 UNITS = 40 UNITS EX. PINE TREES CALC. 113 8"-11" TREES 113X2.3 UNITS = 259.9 UNITS 5 12"-17" TREES 5X5 UNITS = 25 UNITS 0 18"-23" TREES 0X6.4 UNITS = 0 UNITS 0 24"-29" TREES 0X11.5 UNITS = 0 UNITS 1 30" OR > TREES 1X20 UNITS = 20 UNITS SUBTOTAL: 826.8 UNITS	2.4 ACRES	ZONE 7	4.9 ACRES EX. HARDWOOD TREES CALC. 29 8"-11" TREES 29X4.6 UNITS = 133.4 UNITS 13 12"-17" TREES 13X10 UNITS = 130 UNITS 20 18"-23" TREES 20X12.9 UNITS = 258.0 UNITS 4 24"-29" TREES 4X23.1 UNITS = 92.4 UNITS 1 30" OR > TREES 1X40 UNITS = 40 UNITS EX. PINE TREES CALC. 451 8"-11" TREES 451X2.3 UNITS = 1,037.3 UNITS 54 12"-17" TREES 54X5 UNITS = 270 UNITS 6 18"-23" TREES 6X6.4 UNITS = 38.4 UNITS 3 24"-29" TREES 3X11.5 UNITS = 34.5 UNITS 1 30" OR > TREES 1X20 UNITS = 20 UNITS SUBTOTAL: 2,244 UNITS	1.88 ACRES
908.8 / 5.0 ACRES = 181.76 UNITS PER ACRE 2.2 ACRES REMAIN X 181.76 = 399.87 UNITS REMAINING		826.8 / 8.01 ACRES = 103.22 UNITS PER ACRE 2.4 ACRES REMAIN X 103.22 = 247.7 UNITS REMAINING		2,244 / 4.9 ACRES = 457.95 UNITS PER ACRE 1.88 ACRES REMAIN X 457.95 = 860.94 UNITS REMAINING				
ZONE 2	2.6 ACRES EX. TREES CALC. 42 8"-11" TREES 42X4.6 UNITS = 193.2 UNITS 0 12"-17" TREES 0X10 UNITS = 0 UNITS 0 18"-23" TREES 0X12.9 UNITS = 0 UNITS 1 24"-29" TREES 1X23.1 UNITS = 23.1 UNITS 0 30" OR > TREES 0X40 UNITS = 0 UNITS EX. PINE TREES CALC. 544 8"-11" TREES 544X2.3 UNITS = 1,251.2 UNITS 19 12"-17" TREES 19X5 UNITS = 95.0 UNITS 0 18"-23" TREES 0X6.4 UNITS = 0 UNITS 0 24"-29" TREES 0X11.5 UNITS = 0 UNITS 0 30" OR > TREES 0X20 UNITS = 0 UNITS SUBTOTAL: 1,562.50 UNITS	0.85 ACRES	ZONE 5	6.47 ACRES EX. TREES CALC. 42 8"-11" TREES 42X4.6 UNITS = 193.2 UNITS 0 12"-17" TREES 0X10 UNITS = 0 UNITS 0 18"-23" TREES 0X12.9 UNITS = 0 UNITS 1 24"-29" TREES 1X23.1 UNITS = 23.1 UNITS 0 30" OR > TREES 0X40 UNITS = 0 UNITS EX. PINE TREES CALC. 544 8"-11" TREES 544X2.3 UNITS = 1,251.2 UNITS 19 12"-17" TREES 19X5 UNITS = 95.0 UNITS 0 18"-23" TREES 0X6.4 UNITS = 0 UNITS 0 24"-29" TREES 0X11.5 UNITS = 0 UNITS 0 30" OR > TREES 0X20 UNITS = 0 UNITS SUBTOTAL: 1,800.0 UNITS	2.86 ACRES	ZONE 8	7.6 ACRES EX. TREES CALC. 107 8"-11" TREES 107X4.6 UNITS = 492.20 UNITS 57 12"-17" TREES 57X10 UNITS = 570 UNITS 3 18"-23" TREES 3X12.9 UNITS = 38.7 UNITS 6 24"-29" TREES 6X23.1 UNITS = 138.6 UNITS 3 30" OR > TREES 3X40 UNITS = 120 UNITS EX. PINE TREES CALC. 95 8"-11" TREES 95X2.3 UNITS = 218.5 UNITS 36 12"-17" TREES 36X5 UNITS = 180 UNITS 7 18"-23" TREES 7X6.4 UNITS = 44.8 UNITS 5 24"-29" TREES 5X11.5 UNITS = 57.25 UNITS 9 30" OR > TREES 9X20 UNITS = 180 UNITS SUBTOTAL: 2,105.30 UNITS	1.88 ACRES
1,562.50 / 2.6 ACRES = 205.59 UNITS PER ACRE 0.85 ACRES REMAIN X 205.59 = 174.75 UNITS REMAINING		1,800.0 / 6.47 ACRES = 182.38 UNITS PER ACRE 2.86 ACRES REMAIN X 182.38 = 521.60 UNITS REMAINING		2,105.30 / 7.6 ACRES = 277.01 UNITS PER ACRE 1.88 ACRES REMAIN X 277.01 = 520.77 UNITS REMAINING				
ZONE 3	7.06 ACRES EX. HARDWOOD TREES CALC. 28 8"-11" TREES 28X4.6 UNITS = 128.8 UNITS 21 12"-17" TREES 21X10 UNITS = 210 UNITS 3 18"-23" TREES 3X12.9 UNITS = 38.7 UNITS 6 24"-29" TREES 6X23.1 UNITS = 138.6 UNITS 4 30" OR > TREES 4X40 UNITS = 160 UNITS EX. PINE TREES CALC. 723 8"-11" TREES 723X2.3 UNITS = 1,662.9 UNITS 0 12"-17" TREES 0X5 UNITS = 0 UNITS 0 18"-23" TREES 0X6.4 UNITS = 0 UNITS 0 24"-29" TREES 0X11.5 UNITS = 0 UNITS 1 30" OR > TREES 1X20 UNITS = 20 UNITS SUBTOTAL: 2,347.40 UNITS	0.38 ACRES	ZONE 6	4.9 ACRES EX. HARDWOOD TREES CALC. 28 8"-11" TREES 28X4.6 UNITS = 128.8 UNITS 21 12"-17" TREES 21X10 UNITS = 210 UNITS 3 18"-23" TREES 3X12.9 UNITS = 38.7 UNITS 6 24"-29" TREES 6X23.1 UNITS = 138.6 UNITS 4 30" OR > TREES 4X40 UNITS = 160 UNITS EX. PINE TREES CALC. 723 8"-11" TREES 723X2.3 UNITS = 1,662.9 UNITS 0 12"-17" TREES 0X5 UNITS = 0 UNITS 0 18"-23" TREES 0X6.4 UNITS = 0 UNITS 0 24"-29" TREES 0X11.5 UNITS = 0 UNITS 1 30" OR > TREES 1X20 UNITS = 20 UNITS SUBTOTAL: 2,139.4 UNITS	2.47 ACRES	ZONE 9	8.3 ACRES EX. HARDWOOD TREES CALC. 58 8"-11" TREES 58X4.6 UNITS = 266.8 UNITS 52 12"-17" TREES 52X10 UNITS = 520 UNITS 11 18"-23" TREES 11X12.9 UNITS = 141.9 UNITS 6 24"-29" TREES 6X23.1 UNITS = 138.6 UNITS 3 30" OR > TREES 3X40 UNITS = 120 UNITS EX. PINE TREES CALC. 723 8"-11" TREES 723X2.3 UNITS = 391.1 UNITS 8 12"-17" TREES 8X5 UNITS = 40 UNITS 11 18"-23" TREES 11X6.4 UNITS = 70.4 UNITS 1 24"-29" TREES 1X11.5 UNITS = 11.5 UNITS 0 30" OR > TREES 0X20 UNITS = 0 UNITS SUBTOTAL: 1,371.30 UNITS	2.68 ACRES
2,347.40 / 7.6 ACRES = 308.8 UNITS PER ACRE 0.38 ACRES REMAIN X 308.8 = 117.34 UNITS REMAINING		2,139.4 / 4.9 ACRES = 436.61 UNITS PER ACRE 2.47 ACRES REMAIN X 436.61 = 1,078.42 UNITS REMAINING		1,371.3 / 8.3 ACRES = 165.21 UNITS PER ACRE 2.68 ACRES REMAIN X 165.21 = 442.76 UNITS REMAINING				



NOTES:
SEE TREE INVENTORY PREPARED BY SURVEYOR
TREE UNITS ARE AVG. OF TREE SIZES
PINES ARE REDUCED BY 50%

DENSITY FACTOR:
20 AND 30 UNITS PER ACRE REQUIRED:
28.14 ACRES COMMERCIAL X 30 UNITS/AC. = 844.20 UNITS REQUIRED
25.79 ACRES RESIDENTIAL X 20 UNITS/AC. = 515.80 UNITS REQUIRED
15.06 ACRES OPEN SPACE X 0 UNITS/AC. = 0 UNITS REQUIRED

1,360 DFS UNITS + 0 (GRAND TREE REPLACEMENT) = 1,360 UNITS REQUIRED ON SITE.
4,363.93 REMAINING ON SITE - 1,360 UNITS REQUIRED = **3,003.93 OVER REQUIREMENT**

THE LANDPLAN GROUP SOUTH
LANDSCAPE ARCHITECTURE • ENGINEERING • PLANNING
1021 PICKENS STREET
COLUMBIA, SOUTH CAROLINA 29201
P. 803.256.0562
F. 803.256.0572
WWW.LANDPLANGROUP.COM

AZUREST DEVELOPMENT
COLUMBIA, SOUTH CAROLINA

TREE PROTECTION PLAN

BY: [Signature] MADDITT
DATE: 09.11.17
FILE NAME: DRAWINGS/217/217-BASELINE-DWN.
JOB #: **0827**
SCALE: **1" = 100'**
SHEET: **1 OF 4**

PRELIMINARY LANDSCAPE PACKAGE

ISSUED: JANUARY 27, 2021



GARDEN LAKES APARTMENTS

APARTMENT PARCEL PORTION OF
TAX ID# R11813-01-02
COLUMBIA, SOUTH CAROLINA

PRELIMINARY
LANDSCAPE PLAN PACKAGE

INDEX OF DRAWINGS

- D1-00 TREE INVENTORY, PROTECTION & REMOVAL SCHEDULE
- D1-01 TREE INVENTORY, PROTECTION & REMOVAL PLAN
- L0-00 SITE KEY PLAN
- L1-00 PLANTING NOTES & SCHEDULE
- L1-01 LANDSCAPE PLAN
- L1-02 LANDSCAPE PLAN
- L1-03 LANDSCAPE PLAN
- L1-04 LANDSCAPE PLAN
- L1-05 LANDSCAPE PLAN
- L1-06 LANDSCAPE PLAN
- L1-07 LANDSCAPE PLAN
- L1-08 LANDSCAPE PLAN
- L1-09 LANDSCAPE PLAN
- L1-10 LANDSCAPE DETAILS

OWNER:
GDA DEVELOPMENT PARTNERS
260 W. COLEMAN BLVD. SUITE B
MT. PLEASANT, SC 29464
TEL: (843) 297-1499

Designed By:



2937 EDENVALE RD. ■ JOHNS ISLAND ■ SC ■ 29455
WWW.INNOVATIONS-DESIGN.COM ■ 309-642-1117

Consultants:

Garden Lakes Apartments
COLUMBIA, SOUTH CAROLINA

Rev:	Date:	Description:	By:
△			
△			
△			
△			
△			
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Date: 01/27/2021	Scale: See Plan
Drawn By: VH	Designed By: VH
Approved By: WR	Project No: 21001
©Innovations Design Group, Inc.	

Scale:	Sheet Number:
PRELIMINARY PLANS - NOT FOR CONSTRUCTION	-

FILE: F:\VIG-Server\4 Studio\Projects\2021\Garden Lakes Apartments\2_Autocad\15 Permitt\21001_Tree Mitigation Plan Set.dwg
 PRINT DATE: 27-Jan-21
 DRAWING SIZE: 24" X 36"

TREE PROTECTION REQUIREMENTS:

- Tree protection zone.* The tree protection zone extends one foot in radius from the tree for each one inch of tree diameter (measured at four and one-half feet above ground level) or one-half the tree's height, whichever is greater. To protect the roots in this tree protection zone, the following are required:
- Layout of the site utility and grading plans must accommodate the required tree protection zone. Utilities must be placed along corridors between tree protection zones.
 - Construction site activities such as parking, material storage, bury pits, concrete washout, burning of debris, shall not be allowed within tree protection zones.
 - If there is no alternative location, utility lines may be tunneled or bored under the tree and its roots at a 25-inch minimum depth. Such work must be shown on the approved tree protection plan.
 - Protective barriers or tree fencing shall be installed along the outer edge of and completely surrounding the tree protection zones. Acceptable tree barriers include: four-foot-high wooden post and rail fence with two-inch by four-inch posts and a double one-inch by four-inch rail or four-foot-high orange polyethylene laminar safety fencing mounted on wooden posts, or any fencing method approved by the zoning administrator. All tree protection barriers must be installed prior to, and maintained throughout, the land disturbance and construction process and may not be removed until approved by the zoning administrator. See Detail 1/D1-00.
 - Curb stops, concrete curb, or other devices to prevent vehicular damage to required trees must be shown on the landscape plan and installed prior to final inspection.

TREE REMOVAL MUST COMPLY WITH THE FOLLOWING:

- Requesting removal of protected trees.*
- General procedure.** If an owner/developer proposes to remove any protected trees (see (b) above), then he/she must document the request and submit it as part of the landscape plan. The request shall be subject to the approval of the zoning administrator in conjunction with landscape plan/ zoning permit approval.
 - Criteria for removal of grand trees.** It shall be unlawful to remove a grand tree without the written permission of the zoning administrator. The location of grand trees requested to be removed shall be indicated on the landscape plan and/or tree protection plan. The following criteria shall be utilized in evaluating requests to remove grand trees or stands of trees: topography of the site; proposed grade changes; location of utilities and driveways; location of the trees; proposed tree planting or transplanting to compensate for tree removal; public safety; tree health, condition and longevity; tree species; and any historic, aesthetic or exceptional quality associated with the tree(s).
 - Requirements for replacement of grand trees.** When removal of grand trees is approved, the following replacement requirements shall apply: Grand trees shall be replaced with shade trees wherever possible. An equal number of density factor units of replacement trees shall be planted to replace the density factor units for trees removed. This planting shall be in addition to the required density factor for the site.

REQUIRED DENSITY FACTOR FOR THE SITE (DFS):

- Requirements, general.* All developments to which this section applies, other than single-family residential subdivisions, shall be required to meet the minimum density factor for a site (DFS) of 30 units per acre. Multiplying the number of site acres in a development by 30 gives the required DFS. The minimum tree density of 30 units per acre shall include trees required in the street protection yard, buffer transition yard and vehicular surface areas.
- Compliance with required DFS.** To determine the number of trees that must be planted to comply with DFS requirements, the landscape plan submitted with the zoning permit application must be evaluated. The following steps must then be taken to determine any additional tree planting requirements:
 - Calculation of existing density factor (EDF).** Calculate the existing density factor (EDF) for all trees indicated on the landscape plan as remaining on the site following development. (These trees are required to be protected during construction according to section 17-419). EDF is determined by converting the diameter-at-breast-height (D.B.H.) for each individual existing tree (indicated as remaining) to density factor units using the following table. For softwoods, such as pine or cedar, multiply the units listed below by 0.5. Palmetto trees shall have the value of 1.0 unit each. These units are then totaled to determine the EDF for the site.
 - Calculating required replacement density factor (RDF).** To calculate the required replacement density factor, subtract the EDF from the required density factor for the site (DFS).

SITE CALCULATIONS:

29.2 ACRE SITE X 30 UNITS PER ACRE = 876 DFS REQUIRED

TREES SAVED (EDF) = 793.25 EDF
(SEE TABLE 1.1 FOR CALCULATIONS)

GRAND TREES REMOVED = 324.9 UNITS
(SEE TABLE 1.2 FOR CALCULATIONS)

876 DFS REQUIRED - 793.25 EDF TREES SAVED = 82.75 DFS REQUIRED

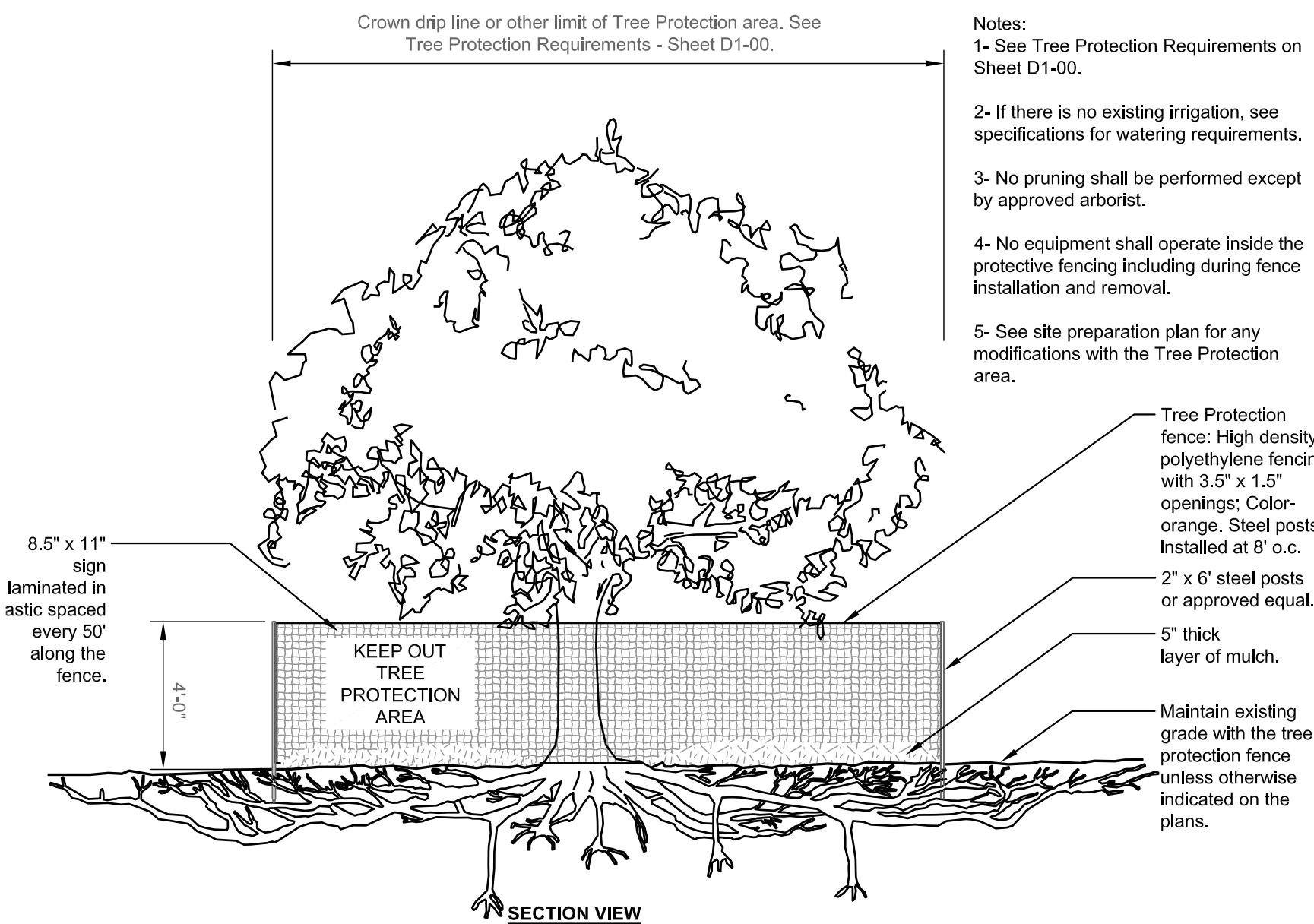
82.75 DFS + 324.9 UNITS FROM GRAND TREE REMOVAL = 407.65 TOTAL REQUIRED CREDITS (RDF)

TREE INVENTORY FOR TREES REMAINING ON SITE (EDF)				
SIZE (B.D.H.)	HARDWOOD QTY	SOFTWOOD QTY	DENSITY FACTOR UNITS - 50% for Softwoods	TOTAL DENSITY FACTOR UNITS
8"	2	-	3.6	7.2
10"	-	3	4.8	7.2
11"	3	3	5.6	24.75
12"	1	2	6.0	12
13"	3	3	6.4	28.8
14"	2	2	6.8	20.4
15"	3	-	7.2	21.6
16"	3	3	7.6	34.2
17"	1	-	8.0	8
18"	2	-	8.4	16.8
19"	2	-	8.8	17.6
21"	-	1	9.6	4.8
22"	1	1	10.4	15.6
23"	2	-	17.4	34.8
24"	5	1	18.6	102.3
25"	1	2	20.4	40.8
26"	-	1	22.2	11.1
27"	-	2	24.0	24
28"	2	-	25.8	51.6
31"	3	-	31.2	93.6
32"	-	1	33.6	16.8
35"	1	1	40.2	60.1
43"	1	-	60.6	60.6
49"	1	-	78.6	78.6
			EXISTING GRAND TOTAL	793.2500

TABLE 1.1

TREE INVENTORY FOR GRAND TREES TO BE REMOVED				
SIZE (B.D.H.)	HARDWOOD QTY	SOFTWOOD QTY	DENSITY FACTOR UNITS - 50% for Softwoods	TOTAL DENSITY FACTOR UNITS
26"	1	-	22.2	22.2
27"	1	-	24.0	24.0
28"	1	-	25.8	25.8
30"	2	-	29.4	58.8
32"	1	-	33.6	33.6
33"	1	-	35.4	35.4
36"	1	-	42.6	42.6
39"	-	1	49.8	24.9
42"	1	-	57.6	57.6
			REPLACEMENT GRAND TOTAL	324.9000

TABLE 1.2



1 D1-00
1/4" = 1'-0"

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Consultants:

Garden Lakes Apartments
 COLUMBIA, SOUTH CAROLINA
TREE INVENTORY, PROTECTION & REMOVAL SCHEDULE

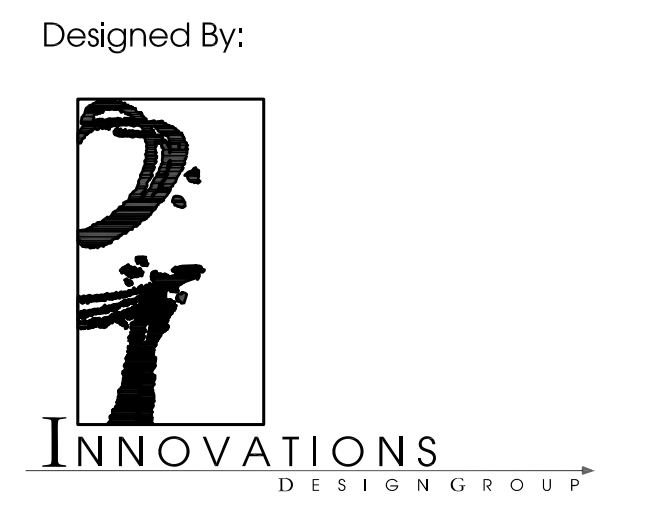
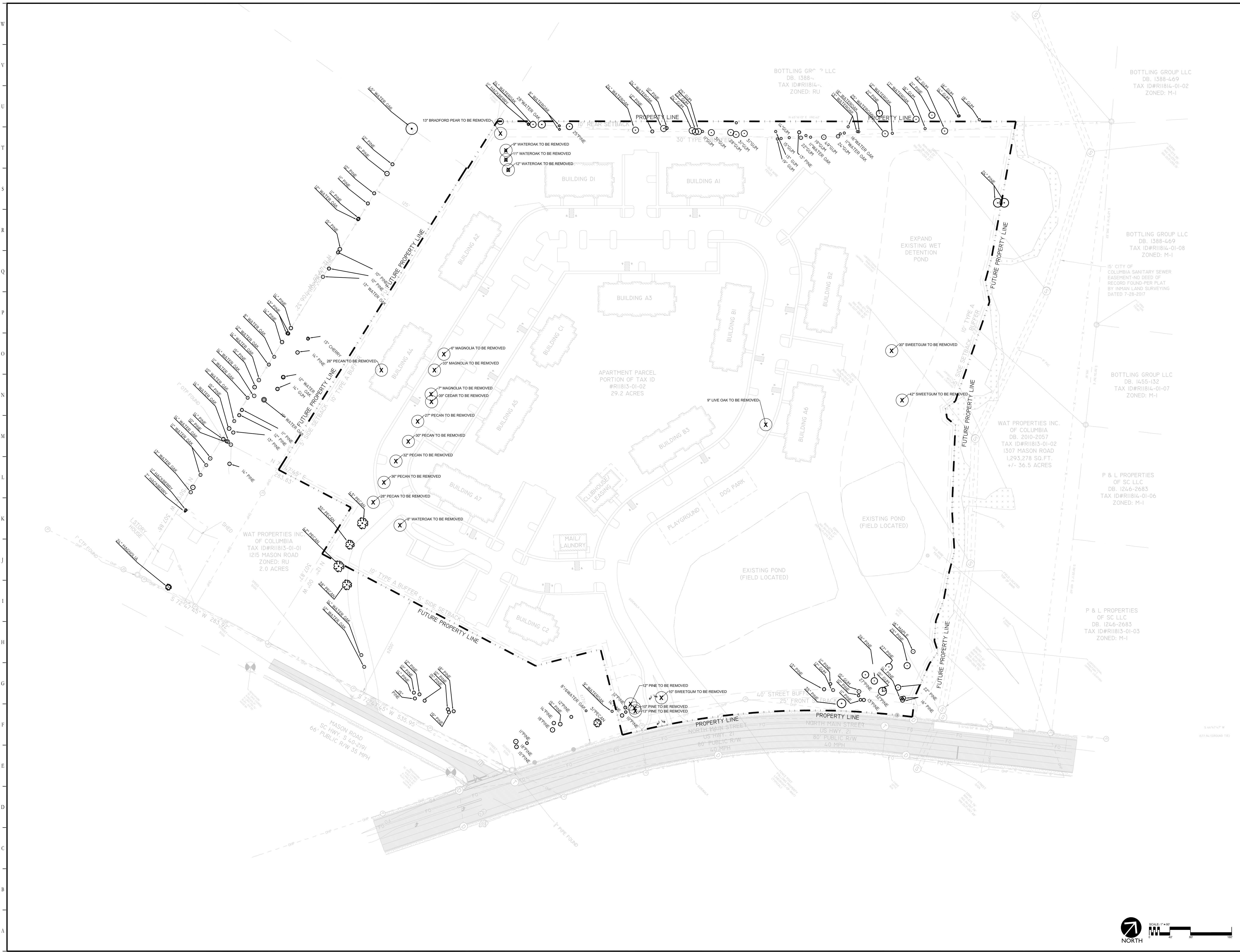
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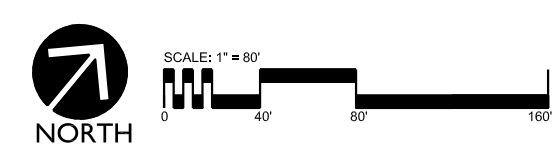
TREE INVENTORY, PROTECTION & REMOVAL PLAN

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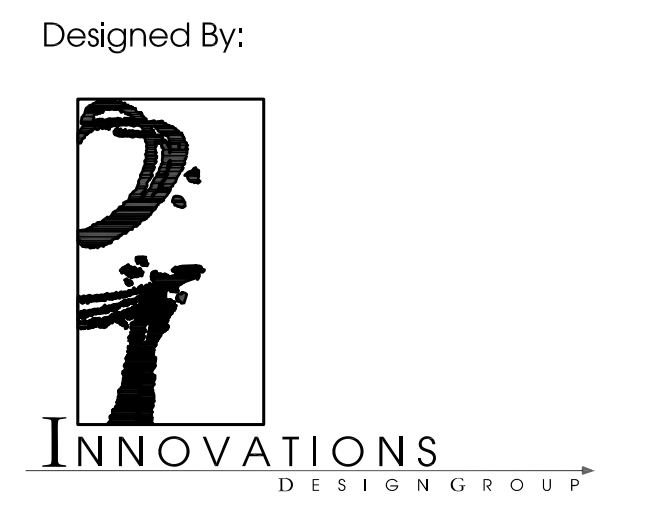
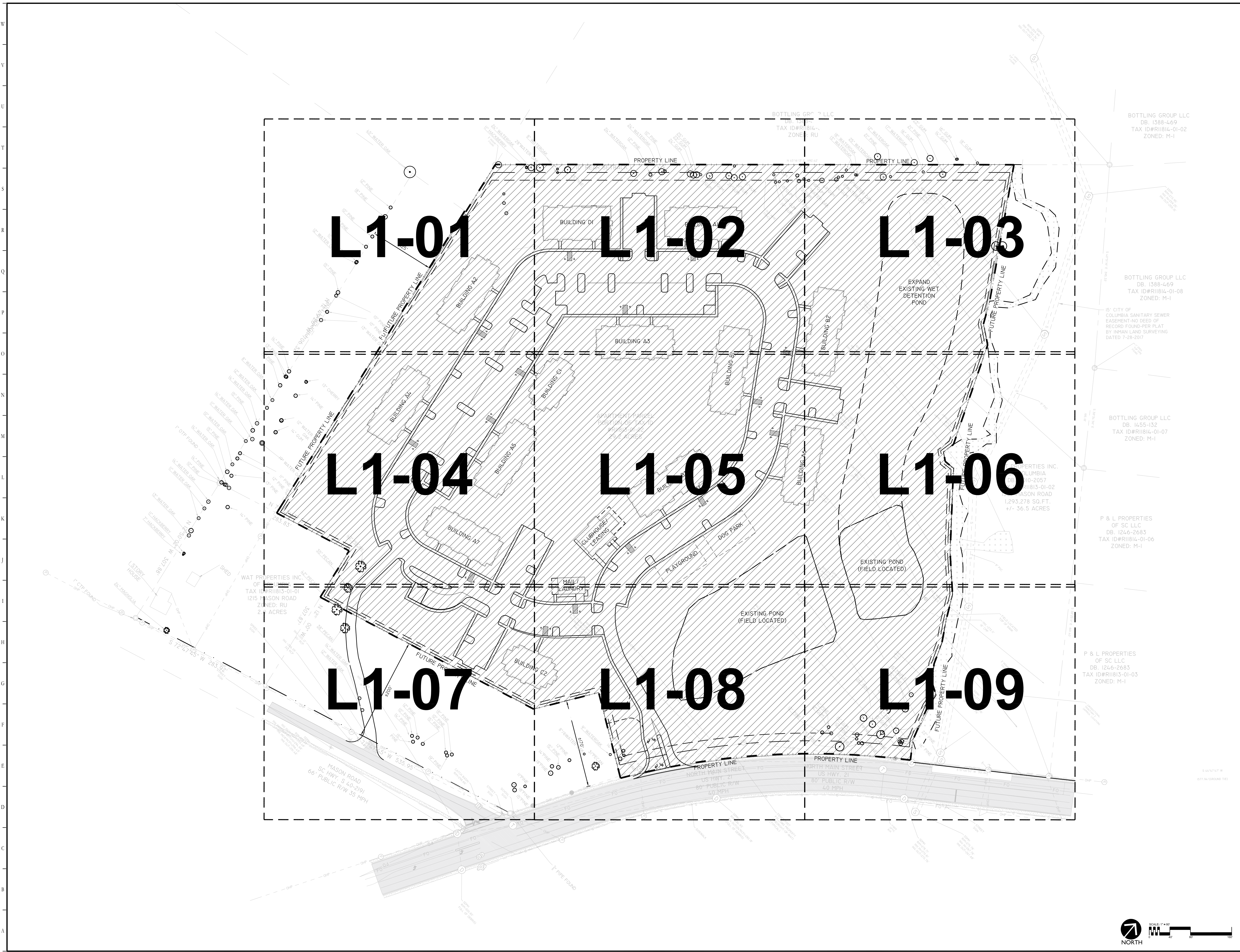
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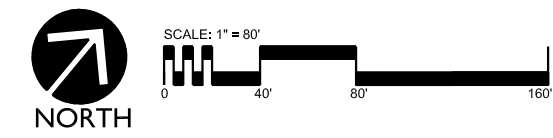
SITE KEY PLAN

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LANDSCAPE INSTALLATION NOTES :

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND BASE INFORMATION PRIOR TO INITIATING PLANTING INSTALLATION. ALL EXISTING PLANTING SHALL REMAIN INTACT AND UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS.
2. CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 48 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES, IRRIGATION AND ALL OTHER OBSTRUCTIONS AND COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO INITIATING OPERATIONS. DRAWINGS ARE PREPARED ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARING THESE DOCUMENTS.
3. CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH EXISTING SITE CONDITIONS PRIOR TO INITIATING PLANTING. ALL EXISTING SITE FURNISHINGS, PAVING, LANDSCAPE AND OTHER ELEMENTS TO REMAIN SHALL BE PROTECTED FROM ANY DAMAGE UNLESS OTHERWISE NOTED.
4. UNLESS OTHERWISE NOTED, THE LIMITS OF CONSTRUCTION ARE THE CLEARING LIMITS NOTED ON THE DRAWINGS. (REFER TO CIVIL ENGINEERING DRAWINGS.)
5. REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.
6. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT IN ORDER NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTOR'S OWN WORK.
7. CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE EXISTING GROUND COVER FOR ALL PLANTING BEDS AS SPECIFIED PRIOR TO PLANTING INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PORTIONS OF EXISTING LAWN AREAS DAMAGED WHILE COMPLETING PLANTING INSTALLATION WITH THE SAME GRASS SPECIES TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
8. THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING OF SOILS, AMENDMENTS, ETC. ASSOCIATED WITH THE WORK AND INCLUDED IN THE SPECIFICATIONS. PRIOR TO COMMENCEMENT OF THE LANDSCAPE PLANTING WORK, THE CONTRACTOR SHALL PROVIDE COMPLETE SOIL TESTS FOR AT LEAST TWO ON-SITE AREAS.
9. ALL TREES SHALL HAVE SIX FEET (6') CLEAR TRUNK UNLESS OTHERWISE SPECIFIED.
10. ALL CONTAINER SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS.
11. ALL TREE CALIPER SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS.
12. ANY TREES WITH A TRUNK FORMED "V" SHAPE CROTCH WILL BE REJECTED.
13. EROSION CONTROL FABRIC SHALL BE INSTALLED IN ALL SHRUB AND GROUND COVER PLANTING AREAS AS PER SPECIFICATIONS FOR ALL SLOPES THAT EXCEED 3:1.
14. TYPICALLY, SHRUB AND GROUND COVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A TRIANGULAR SPACING CONFIGURATION (STAGGERED SPACING). PLANT CENTER TO CENTER DIMENSIONS (O.C.) ARE LISTED UNDER "COMMENTS" ON THE PLANT LIST.
15. LANDSCAPE CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT.
16. LANDSCAPE CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO ALL EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
17. CONTRACTOR SHALL MULCH ALL NEW PLANT MATERIAL THROUGHOUT AND COMPLETELY TO DEPTH SPECIFIED.
18. NO SUBSTITUTIONS IN SIZE AND/OR PLANT MATERIAL WITHOUT APPROVAL BY TOWN OF SUMMERSVILLE PLANNING & LANDSCAPE ARCHITECT / OWNER'S REPRESENTATIVE.
19. CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES AND THE PROJECT MANUAL AND SPECIFICATIONS FOR FURTHER AND COMPLETE LANDSCAPE PLANTING INSTRUCTIONS.
20. LANDSCAPE CONTRACTOR SHALL COORDINATE ALL PLANTING WORK WITH IRRIGATION WORK. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HAND WATERING AS REQUIRED BY OWNER'S REPRESENTATIVE TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
21. LANDSCAPE CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED OFF-SITE DAILY. ALL MATERIALS, PRODUCTS AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
22. LANDSCAPE CONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION WORK. LANDSCAPE CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION.

LANDSCAPE REQUIREMENTS:

TOTAL PLANTING REQUIREMENT:
 (SEE SHEET D1-00 FOR CALCULATIONS)
876 DFS REQUIRED - 793.25 EDF TREES SAVED = 82.75 DFS REQUIRED
82.75 DFS + 324.9 UNITS FROM GRAND TREE REMOVAL =
407.65 TOTAL REQUIRED CREDITS (RDF)

238 REPLACEMENT HARDWOOD TREES @ 3" CALIPER X 1.5 UNITS = 357 UNITS
104 REPLACEMENT SOFTWOOD TREES @ 2" CALIPER X .5 UNITS = 52 UNITS
357 UNITS + 52 UNITS = 409 UNITS OF REPLACEMENT TREES

PARKING REQUIREMENTS:
 DEVELOPMENTS GREATER THAN TEN ACRES. FOR PROPERTIES GREATER THAN TEN ACRES IN SIZE, EACH INCREMENTAL INCREASE OF FIVE ACRES SHALL REQUIRE A CORRESPONDING INCREASE IN THE STREET PROTECTIVE YARD'S MINIMUM SQUARE FOOTAGE AND MINIMUM WIDTH BY FIVE FEET, BUT NO STREET PROTECTIVE YARD SHALL BE REQUIRED TO MEASURE GREATER THAN 50 FEET IN WIDTH.

DISTANCE FROM PARKING SPACES. NO VEHICULAR PARKING SPACE SHALL BE LOCATED FARTHER THAN 40 FEET FROM THE TREE TRUNK OF A SHADE TREE IN A PLANTING AREA WITH ONE TREE.

STREET PROTECTIVE YARDS FOR NEW DEVELOPMENTS:
 FOR PROPERTIES GREATER THAN TEN ACRES IN SIZE, EACH INCREMENTAL INCREASE OF FIVE ACRES SHALL REQUIRE A CORRESPONDING INCREASE IN THE STREET PROTECTIVE YARD'S MINIMUM SQUARE FOOTAGE AND MINIMUM WIDTH BY FIVE FEET, BUT NO STREET PROTECTIVE YARD SHALL BE REQUIRED TO MEASURE GREATER THAN 50 FEET IN WIDTH.

EACH STREET PROTECTIVE YARD SHALL CONTAIN AT LEAST ONE SHADE TREE FOR EVERY 40 LINEAR FEET OF STREET PROTECTIVE YARD OR FRACTION THEREOF, AS MEASURED ALONG THE PROPERTY LINE ABUTTING THE RIGHT-OF-WAY.

SHRUBS AND OTHER VEGETATION IN STREET PROTECTIVE YARDS NOT ADJACENT TO VEHICULAR SURFACE AREAS. IN STREET PROTECTIVE YARDS OTHER THAN THOSE FOR VEHICULAR SURFACE AREAS, SHRUBS, GROUND COVER, SMALL-MATURING TREES, OR TURF SHALL COVER AT LEAST 60 PERCENT OF THE STREET YARD AREA NOT USED FOR SHADE TREES OR FOR PEDESTRIAN OR VEHICULAR ACCESS.

BUFFER TRANSITION YARDS:
 TYPE A BUFFER - 10' WIDTH REQUIREMENT
 6" CAL. TREE DIA. & 20 SHRUBS / 100 LINEAR FEET

TYPE C BUFFER - 30' WIDTH REQUIREMENT
 8" CAL. TREE DIA. & 60 SHRUBS / 100 LINEAR FEET

PLANTING SPECIFICATIONS:
 TREES.

- (1) SIZE. ALL SHADE TREES PLANTED IN ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION SHALL BE A MINIMUM OF TEN FEET IN HEIGHT, AND SMALL-MATURING TREES A MINIMUM OF EIGHT FEET IN HEIGHT, WHEN PLANTED. BOTH SHADE TREES AND SMALL-MATURING TREES MUST BE TWO INCHES IN CALIPER (MEASURED ONE-HALF FOOT ABOVE GROUND LEVEL) WHEN PLANTED. ANY NEW TREES OF ABOVE FOUR-INCH CALIPER SIZE SHALL BE MEASURED 12 INCHES ABOVE THE GROUND.
- (2) SPREAD RELATIONSHIP. THE HEIGHT-TO-TRUNK CALIPER RATIO, ROOT BALL SIZES, OR SPREAD RELATIONSHIP FOR ANY TREE TO BE PLANTED SHALL MEET THE CURRENT "AMERICAN STANDARDS FOR NURSERY STOCK" AS SET FORTH BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- (3) MULTI-TRUNK TREES. ALL MULTI-TRUNK TREES MUST BE "TREE FORM" WITH A MAXIMUM OF THREE TO FIVE STEMS OR TRUNKS AND A MINIMUM HEIGHT OF EIGHT FEET AT PLANTING.

SHRUBS. ALL SHRUBS PLANTED TO MEET THE REQUIREMENTS OF THIS SECTION, UNLESS REQUIRED TO BE LARGER, AS SET FORTH IN LATER SUBSECTIONS SUCH AS "SCREENING, VEHICULAR SURFACE AREAS," ETC., SHALL BE A MINIMUM OF THREE-GALLON CONTAINER SIZE AND 18 INCHES IN HEIGHT OR SPREAD (DEPENDING ON WHETHER THE GROWTH HABIT IS UPRIGHT OR SPREADING) MEASURED FROM THE TOP OF THE ROOT ZONE.

MULCH. ALL PLANTED MATERIALS ARE TO BE MULCHED WITH AN APPROVED MATERIAL IN THE AMOUNT (DEPTH AND AREA) SPECIFIED IN THE GUIDELINES. GENERALLY, AN ORGANIC MATERIAL SUCH AS BARK MULCH OR PINE STRAW SHALL BE APPLIED AS FOLLOWS: FOR TREES AND SHRUBS, THREE TO FOUR INCHES DEEP AT THE BASE OF SHRUBS AND TREES FROM THE TRUNK TO THE DRIPLINE; FOR GROUND COVER AND PERENNIALS, ONE TO TWO INCHES DEEP SUFFICIENT IN COVERAGE TO CONSERVE MOISTURE AND SUPPRESS WEEDS WITHOUT INHIBITING GROWTH OF THE LANDSCAPE PLANTS.

PLANTING DETAILS: SEE SHEET L1-10.

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	
	ILV	28	Ilex vomitoria / Yaupon Holly	2" Cal.	8' - 10' Ht	
	LIN	36	Lagerstroemia indica 'Natchez' / White Crape Myrtle Multi-Trunk/3 Stems Min.	2" Cal.	10' Hgt.	
	MAV	28	Magnolia virginiana / Sweet Bay	2" Cal.	10' - 12' Ht	
	PIN	12	Pinus elliotti / Slash Pine	2" Cal.	10' Hgt.	
	QU3	134	Quercus virginiana / Southern Live Oak Single trunk/Full	3" Cal.	12-14' Ht.	
	ULM	104	Ulmus parvifolia 'Emer II' / 'Emer II' Allee Elm Single trunk/Full	3" Cal.	12-14' Ht.	
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	SPACING
	AZG	142	Azalea x George L. Taber / George Taber Azalea	3 gal.	36"Ht. x 36"Spr.	60" o.c.
	HYD	26	Hydrangea quercifolia / Oakleaf Hydrangea	3 gal.	24"-36"Ht X 24"-36" Sp	60" o.c.
	ILL	176	Illicium parviflorum 'Florida Sunshine' / Florida Sunshine Anise Tree	3 gal.	36"Ht. x 36"Spr.	60" o.c.
	LIG	370	Ligustrum japonicum 'Recurvifolium' / Wax leaf ligustrum	3 gal.	36"Ht. x 36"Spr.	60" o.c.
	LOR	73	Loropetalum chinense rubrum 'Ruby' / Dwarf Ruby Fringe Flower	3 gal.	36"Ht. x 36"Spr.	60" o.c.
	MYR	197	Myrica cerifera / Wax Myrtle Full to ground	3 gal.	36"Ht. x 36"Spr.	60" o.c.
	PIT	205	Pittosporum tobira 'Variegata' / Variegated Mock Orange	3 gal.	36"Ht. x 36"Spr.	60" o.c.
	RHI	131	Rhaphiolepis indica / Indian Hawthorn	3 gal.	36"Ht. x 36"Spr.	60" o.c.
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	SPACING
	SEED	785,730 sf	Cynodon dactylon 'Tif 419' / Bermuda Grass	--		

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Consultants:

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PLANTING NOTES AND SCHEDULE

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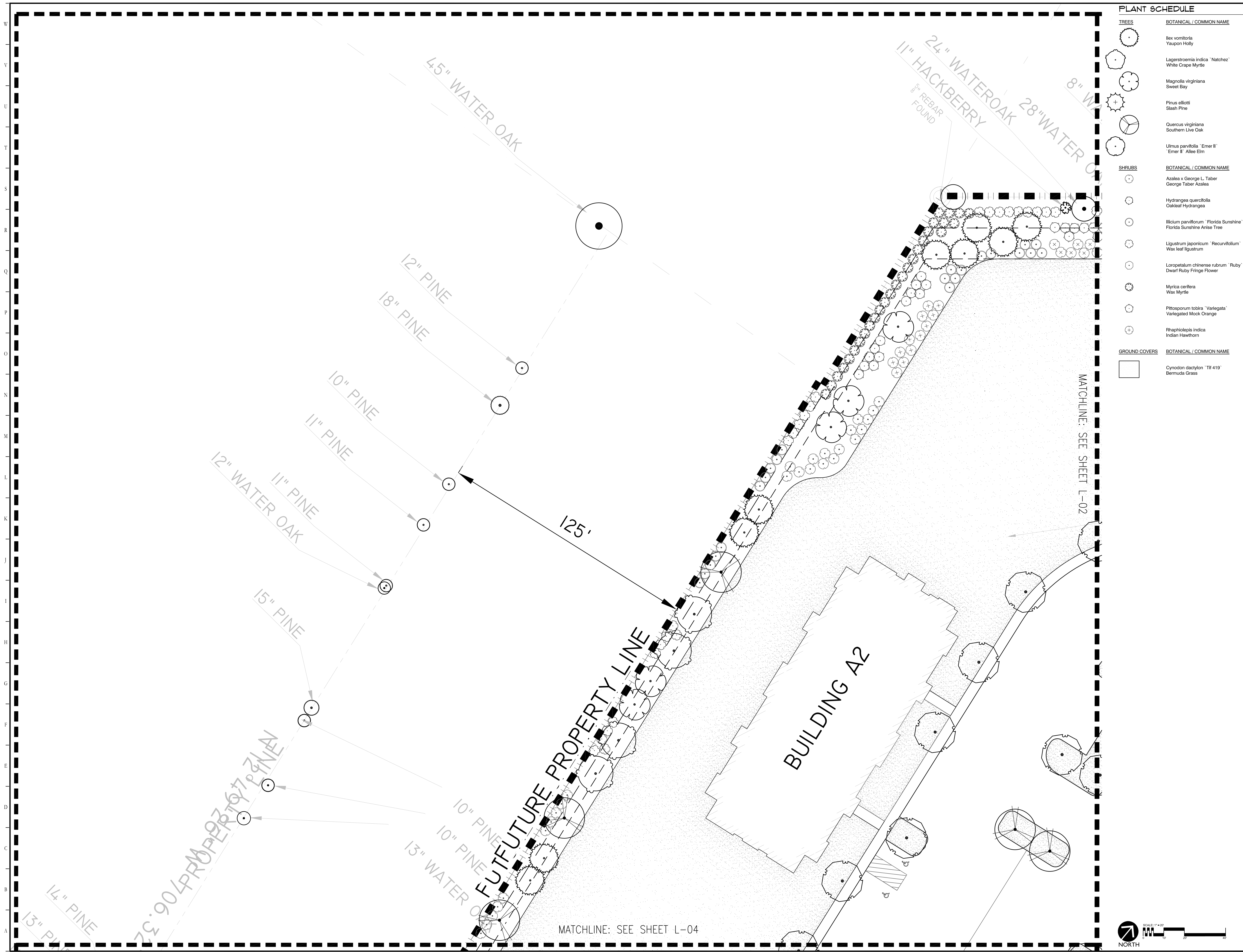
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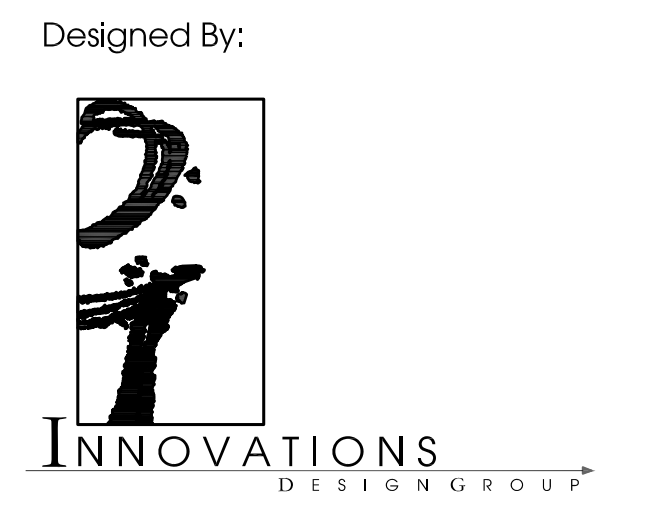
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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME
	Ilex vomitoria Yaupon Holly
	Lagerstroemia indica 'Natchez' White Crape Myrtle
	Magnolia virginiana Sweet Bay
	Pinus ellioti Slash Pine
	Quercus virginiana Southern Live Oak
	Ulmus parvifolia 'Emer II' 'Emer II' Allee Elm
SHRUBS	BOTANICAL / COMMON NAME
	Azalea x George L. Taber George Taber Azalea
	Hydrangea quercifolia Oakleaf Hydrangea
	Illicium parviflorum 'Florida Sunshine' Florida Sunshine Anise Tree
	Ligustrum japonicum 'Recurvifolium' Wax leaf Ligustrum
	Loropetalum chinense rubrum 'Ruby' Dwarf Ruby Fringe Flower
	Myrica cerifera Wax Myrtle
	Pittosporum tobira 'Variegata' Variegated Mock Orange
	Rhaphiolepis indica Indian Hawthorn
GROUND COVERS	BOTANICAL / COMMON NAME
	Cynodon dactylon 'TII 419' Bermuda Grass



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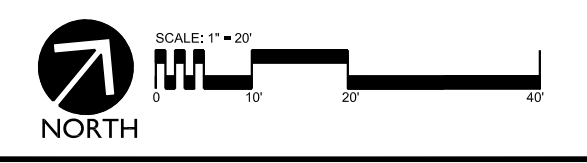
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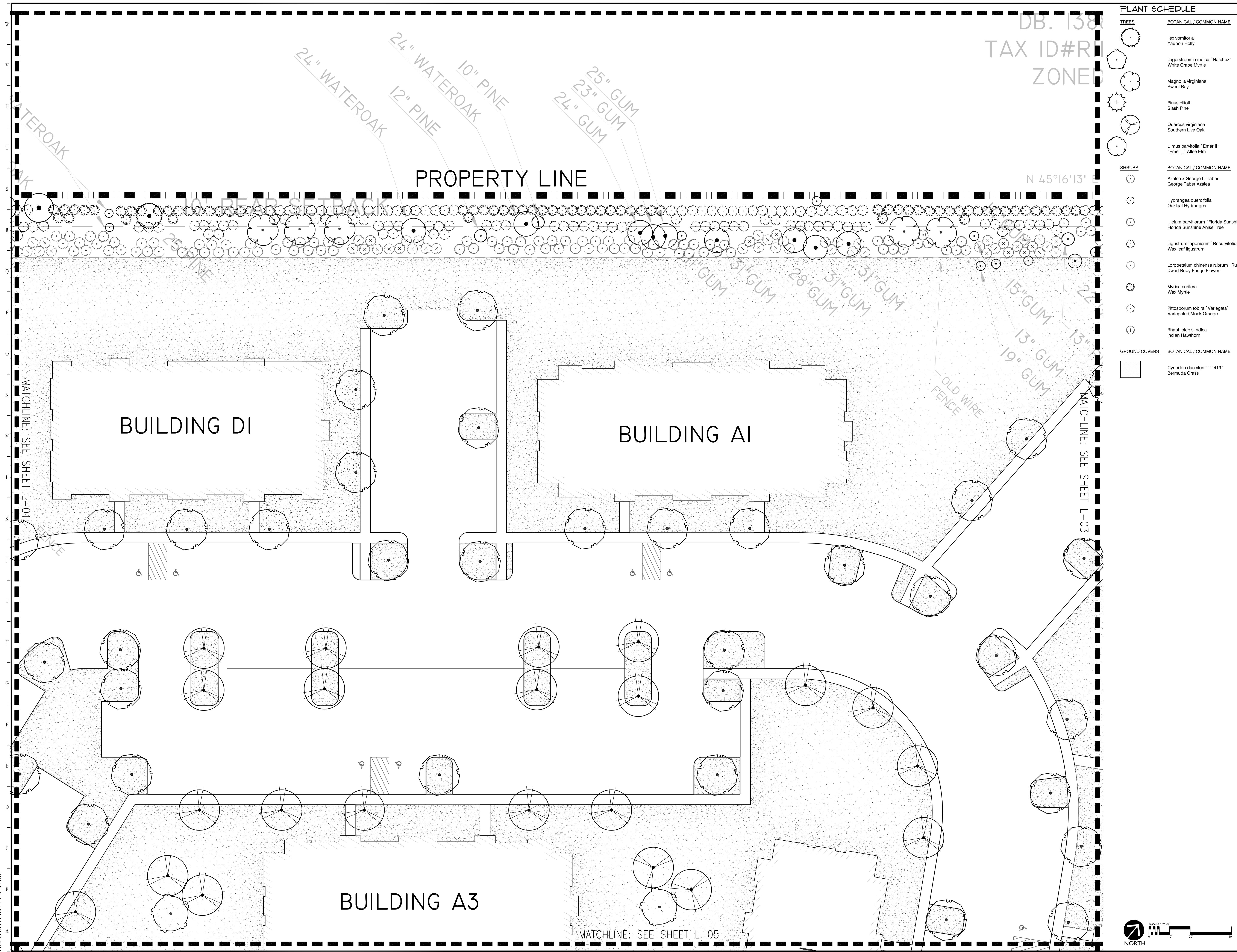
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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME
	Ilex vomitoria Yaupon Holly
	Lagerstroemia indica 'Natchez' White Crape Myrtle
	Magnolia virginiana Sweet Bay
	Pinus elliotti Slash Pine
	Quercus virginiana Southern Live Oak
	Ulmus parvifolia 'Emer II' Emer II Allee Elm
SHRUBS	BOTANICAL / COMMON NAME
	Azalea x George L. Taber George Taber Azalea
	Hydrangea quercifolia Oakleaf Hydrangea
	Illicium parviflorum 'Florida Sunshine' Florida Sunshine Anise Tree
	Ligustrum japonicum 'Recurvifolium' Wax leaf Ligustrum
	Loropetalum chinense rubrum 'Ruby' Dwarf Ruby Fringe Flower
	Myrica cerifera Wax Myrtle
	Pittosporum tobira 'Variegata' Variegated Mock Orange
	Rhaphiolepis indica Indian Hawthorn
GROUND COVERS	BOTANICAL / COMMON NAME
	Cynodon dactylon 'Tif 419' Bermuda Grass

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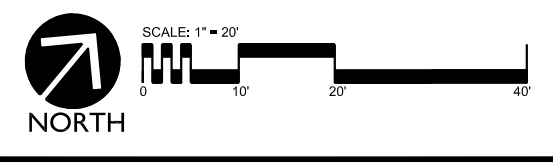
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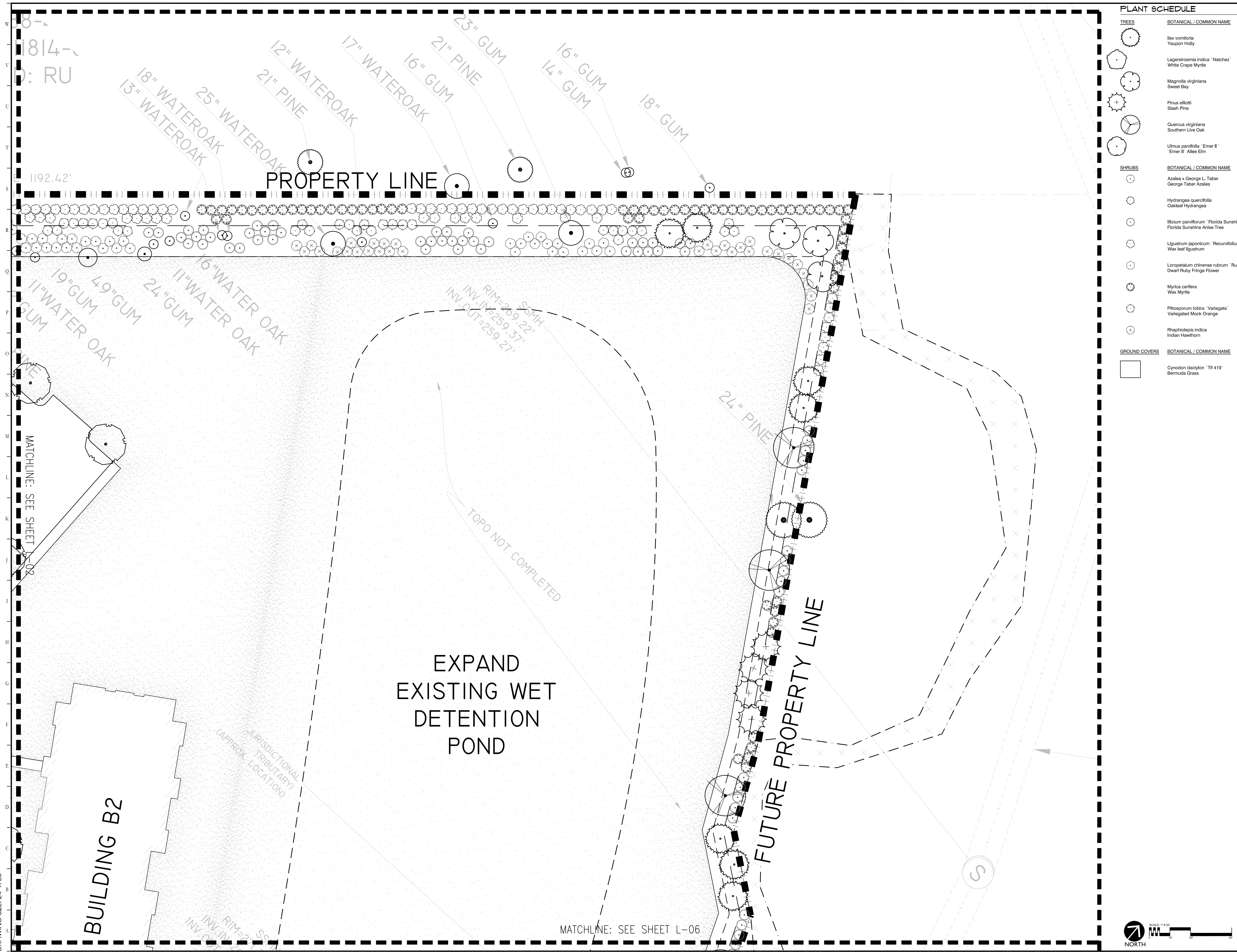
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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME
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	Lagerstroemia indica 'Natchez' White Crape Myrtle
	Magnolia virginiana Sweet Bay
	Pinus ellioti Slash Pine
	Quercus virginiana Southern Live Oak
	Ulmus parvifolia 'Emer II' 'Emer II' Alee Elm
SHRUBS	BOTANICAL / COMMON NAME
	Azalea x George L. Taber George Taber Azalea
	Hydrangea quercifolia Oakleaf Hydrangea
	Illicium parviflorum 'Florida Sunshine' Florida Sunshine Anise Tree
	Ligustrum japonicum 'Recurvifolium' Wax leaf Ligustrum
	Loropetalum chinense rubrum 'Ruby' Dwarf Ruby Fringe Flower
	Myrica cerifera Wax Myrtle
	Pittosporum tobira 'Variegata' Variegated Mock Orange
	Rhaphiolepis indica Indian Hawthorn
GROUND COVERS	BOTANICAL / COMMON NAME
	Cynodon dactylon 'Titi 419' Bermuda Grass

Designed By:

INNOVATIONS
DESIGN GROUP

2937 EDENVALE RD ■ JOHNS ISLAND ■ SC ■ 29455
 WWW.INNOVATIONS-DESIGN.COM ■ 309-642-1117

Consultants:

Garden Lakes Apartments
COLUMBIA, SOUTH CAROLINA

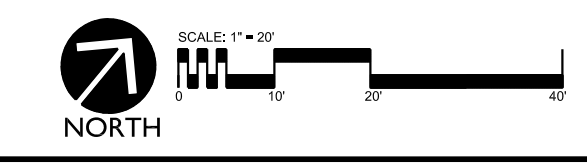
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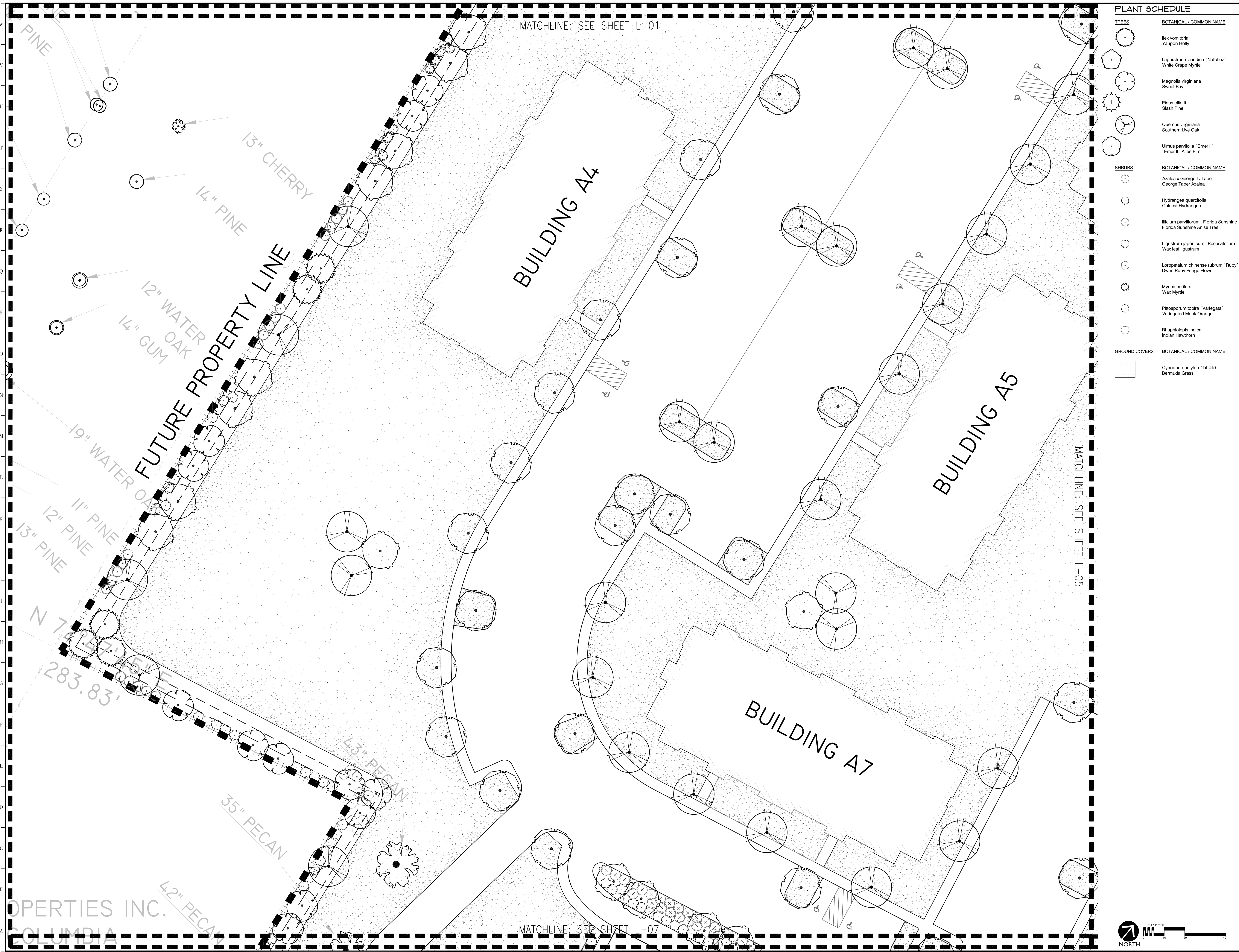
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L1-03



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MATCHLINE: SEE SHEET L-01

MATCHLINE: SEE SHEET L-05

MATCHLINE: SEE SHEET L-07

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME
	Ilex vomitoria Yaupon Holly
	Lagerstroemia indica 'Natchez' White Crape Myrtle
	Magnolia virginiana Sweet Bay
	Pinus ellioti Slash Pine
	Quercus virginiana Southern Live Oak
	Ulmus parvifolia 'Emer II' Emer II Allee Elm
SHRUBS	BOTANICAL / COMMON NAME
	Azalea x George L. Taber George Taber Azalea
	Hydrangea quercifolia Oakleaf Hydrangea
	Illicium parviflorum 'Florida Sunshine' Florida Sunshine Anise Tree
	Ligustrum japonicum 'Recurvifolium' Wax leaf Ligustrum
	Loropetalum chinense rubrum 'Ruby' Dwarf Ruby Fringe Flower
	Myrica cerifera Wax Myrtle
	Pittosporum tobira 'Variegata' Variegated Mock Orange
	Rhaphiolepis indica Indian Hawthorn
GROUND COVERS	BOTANICAL / COMMON NAME
	Cynodon dactylon 'TII 419' Bermuda Grass

Designed By:



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Consultants:

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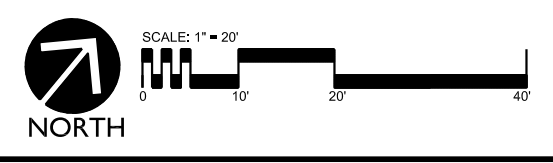
LANDSCAPE PLAN

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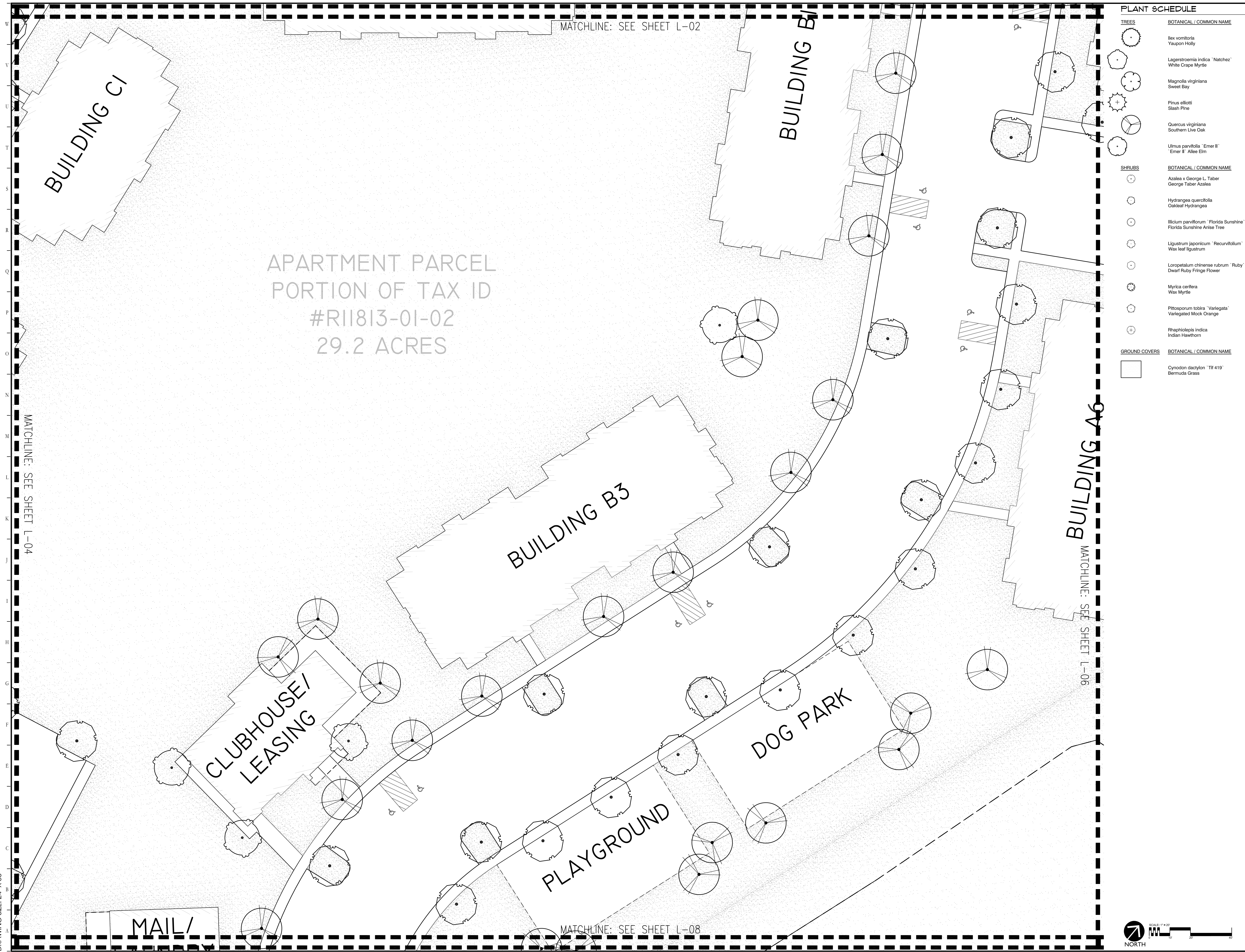
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L1-04



PROPERTIES INC.
COLUMBIA

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 PRINT DATE: 27-Jan-21
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APARTMENT PARCEL
 PORTION OF TAX ID
 #R11813-01-02
 29.2 ACRES

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME
	Ilex vomitoria Yaupon Holly
	Lagerstroemia indica 'Natchez' White Crape Myrtle
	Magnolia virginiana Sweet Bay
	Pinus ellioti Slash Pine
	Quercus virginiana Southern Live Oak
	Ulmus parvifolia 'Emer II' Emer II Allee Elm
SHRUBS	BOTANICAL / COMMON NAME
	Azalea x George L. Taber George Taber Azalea
	Hydrangea quercifolia Oakleaf Hydrangea
	Illicium parviflorum 'Florida Sunshine' Florida Sunshine Anise Tree
	Ligustrum japonicum 'Recurvifolium' Wax leaf Ligustrum
	Loropetalum chinense rubrum 'Ruby' Dwarf Ruby Fringe Flower
	Myrica cerifera Wax Myrtle
	Pittosporum tobira 'Variegata' Variegated Mock Orange
	Rhaphiolepis indica Indian Hawthorn
GROUND COVERS	BOTANICAL / COMMON NAME
	Cynodon dactylon 'T11 419' Bermuda Grass

Designed By:



INNOVATIONS
DESIGN GROUP

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Consultants:

Garden Lakes Apartments
 COLUMBIA, SOUTH CAROLINA

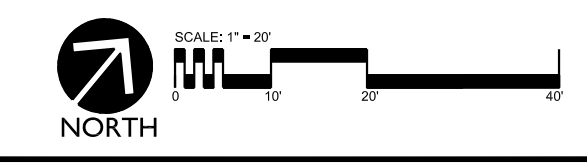
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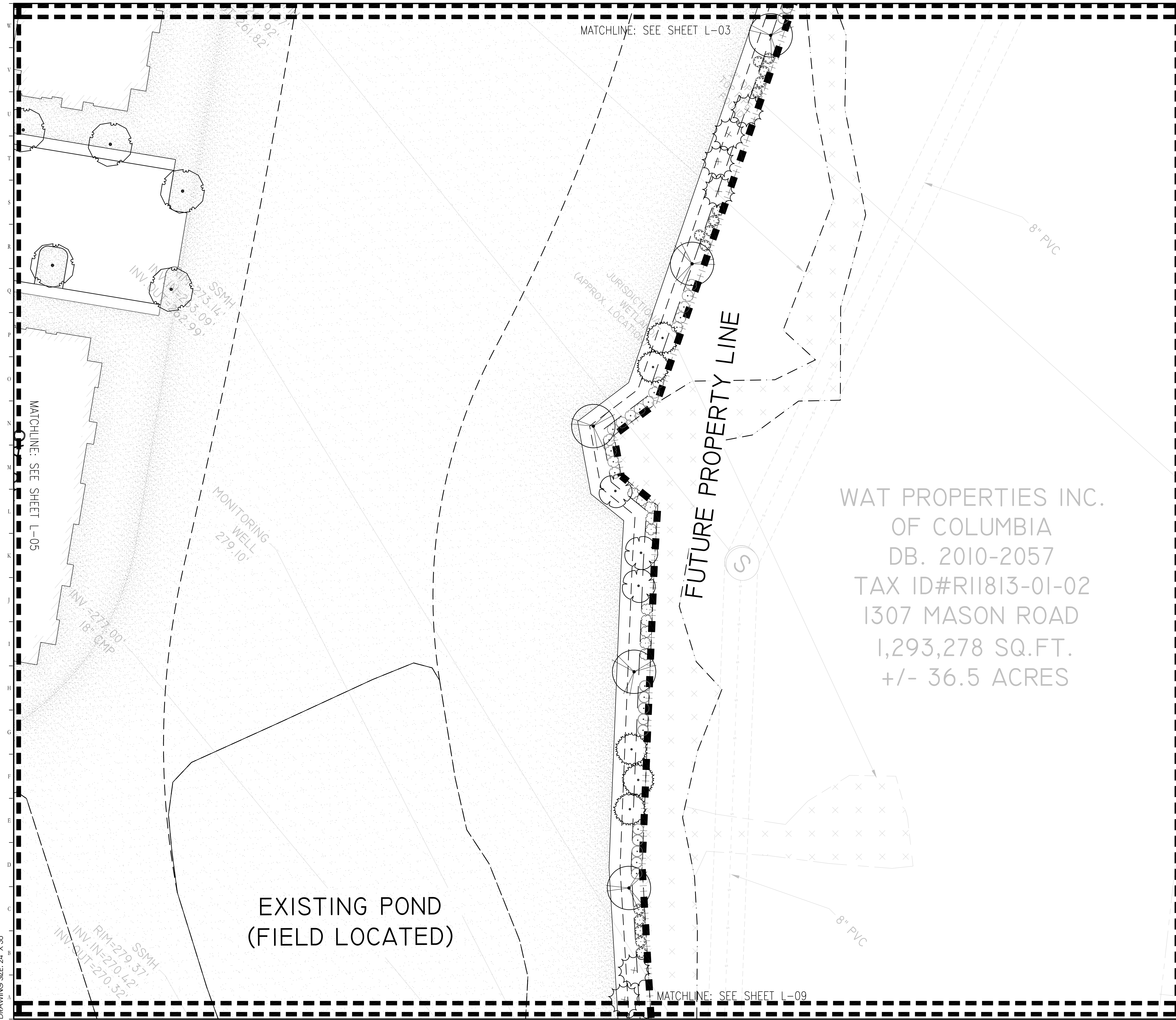
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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME
	Ilex vomitoria Yaupon Holly
	Lagerstroemia indica 'Natchez' White Crape Myrtle
	Magnolia virginiana Sweet Bay
	Pinus elliotti Slash Pine
	Quercus virginiana Southern Live Oak
	Ulmus parvifolia 'Emer II' Emer II Allee Elm
SHRUBS	BOTANICAL / COMMON NAME
	Azalea x George L. Taber George Taber Azalea
	Hydrangea quercifolia Oakleaf Hydrangea
	Illicium parviflorum 'Florida Sunshine' Florida Sunshine Anise Tree
	Ligustrum japonicum 'Recurvifolium' Wax leaf Ligustrum
	Loropetalum chinense rubrum 'Ruby' Dwarf Ruby Fringe Flower
	Myrica cerifera Wax Myrtle
	Pittosporum tobira 'Variegata' Variegated Mock Orange
	Rhaphiolepis indica Indian Hawthorn
GROUND COVERS	BOTANICAL / COMMON NAME
	Cynodon dactylon 'TII 419' Bermuda Grass

Designed By:



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DESIGN GROUP

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Consultants:

WAT PROPERTIES INC.
 OF COLUMBIA
 DB. 2010-2057
 TAX ID#R11813-01-02
 1307 MASON ROAD
 1,293,278 SQ.FT.
 +/- 36.5 ACRES

Garden Lakes Apartments
 COLUMBIA, SOUTH CAROLINA

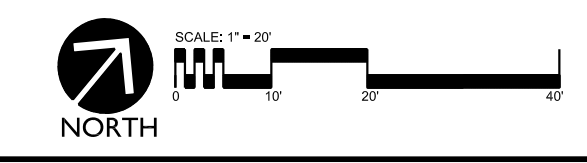
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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME
	Ilex vomitoria Yaupon Holly
	Lagerstroemia indica 'Natchez' White Crape Myrtle
	Magnolia virginiana Sweet Bay
	Pinus Elliotti Slash Pine
	Quercus virginiana Southern Live Oak
	Ulmus parvifolia 'Emer II' Emer II Alee Elm
SHRUBS	BOTANICAL / COMMON NAME
	Azalea x George L. Taber George Taber Azalea
	Hydrangea quercifolia Oakleaf Hydrangea
	Illicium parviflorum 'Florida Sunshine' Florida Sunshine Anise Tree
	Ligustrum japonicum 'Recurvifolium' Wax leaf Ligustrum
	Loropetalum chinense rubrum 'Ruby' Dwarf Ruby Fringe Flower
	Myrica cerifera Wax Myrtle
	Pittosporum tobira 'Variegata' Variegated Mock Orange
	Rhaphiolepis indica Indian Hawthorn
GROUND COVERS	BOTANICAL / COMMON NAME
	Cynodon dactylon 'TII 419' Bermuda Grass

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Consultants:

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COLUMBIA, SOUTH CAROLINA

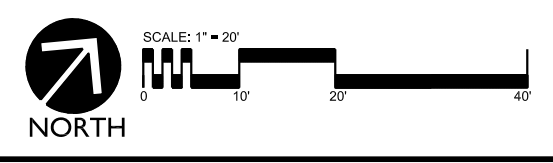
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PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME
	Ilex vomitoria Yaupon Holly
	Lagerstroemia indica 'Natchez' White Crape Myrtle
	Magnolia virginiana Sweet Bay
	Pinus Elliotti Slash Pine
	Quercus virginiana Southern Live Oak
	Ulmus parvifolia 'Emer II' Emer II Allee Elm
SHRUBS	BOTANICAL / COMMON NAME
	Azalea x George L. Taber George Taber Azalea
	Hydrangea quercifolia Oakleaf Hydrangea
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	Myrica cerifera Wax Myrtle
	Pittosporum tobira 'Variegata' Variegated Mock Orange
	Rhaphirolepis indica Indian Hawthorn
GROUND COVERS	BOTANICAL / COMMON NAME
	Cynodon dactylon 'Titi 419' Bermuda Grass

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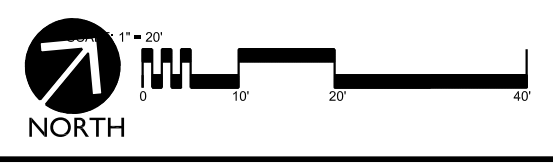
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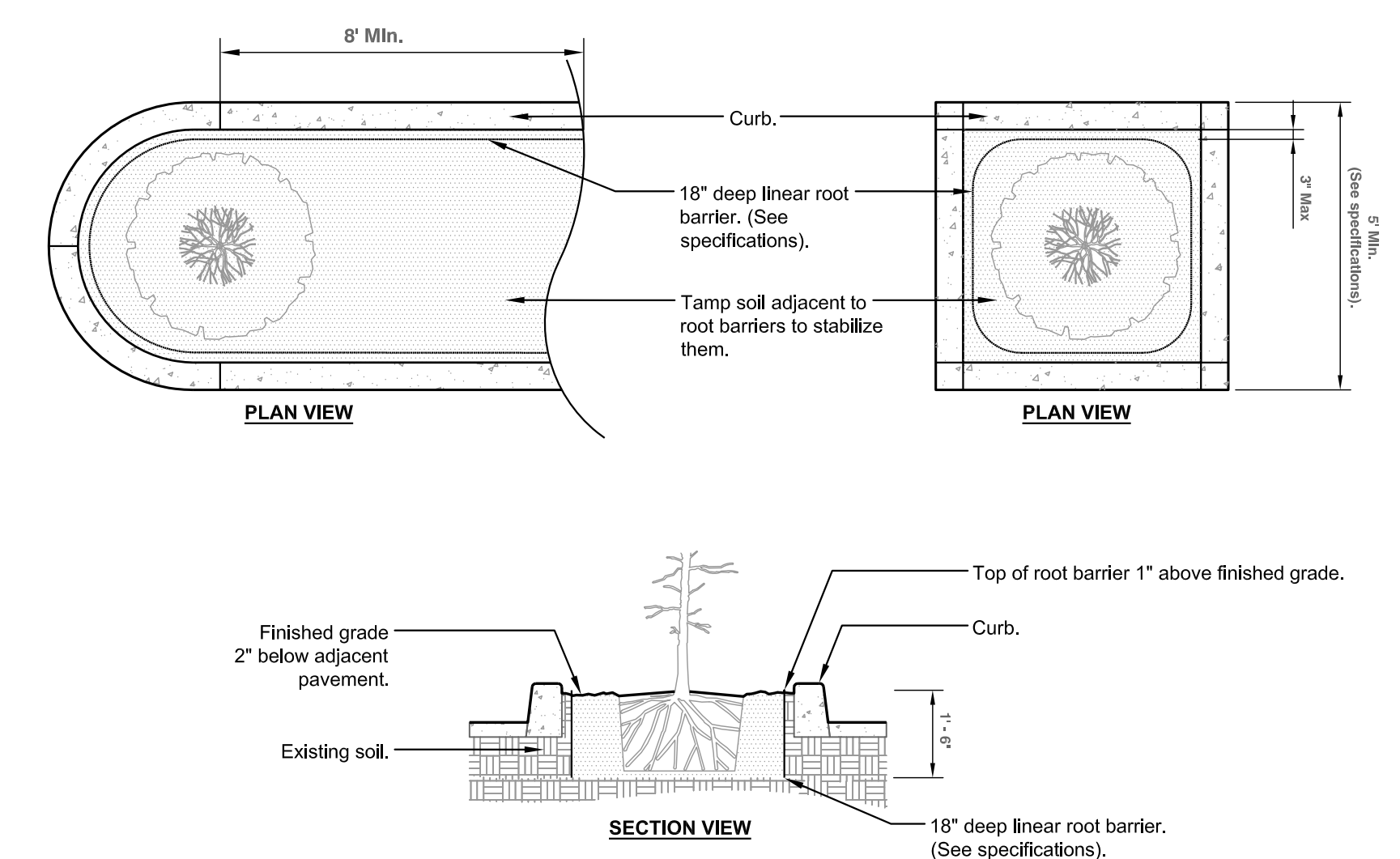
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1 TREE STAKING - LODGE POLES (2)
 1/2" = 1'-0"

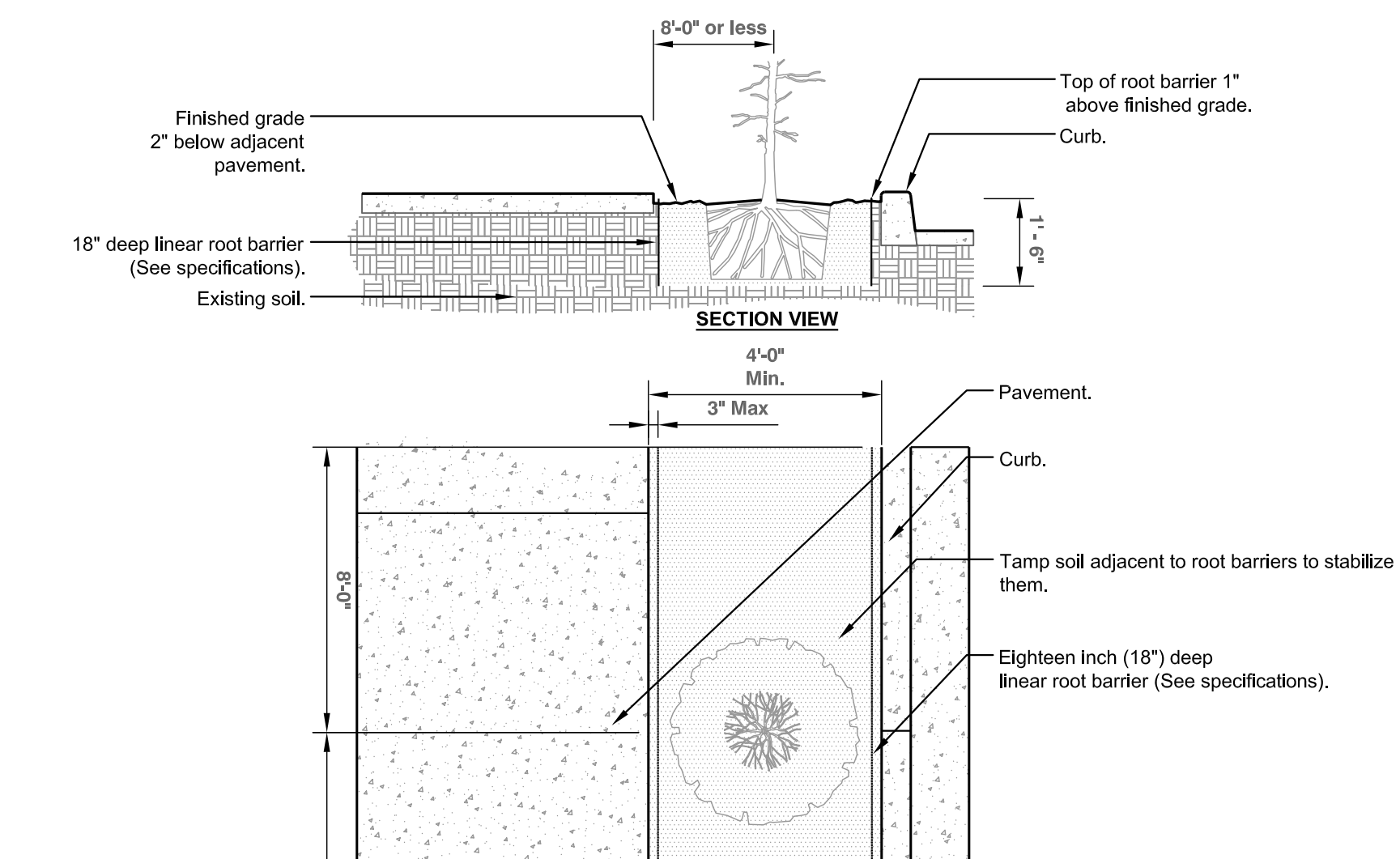


Notes:
 1- Root barriers shall be installed per manufacturer's specifications and recommendations.
 2- Root barriers shall be installed when root ball is located within 8' of pavement.

4 ROOT BARRIERS - PARKING LOT ISLANDS
 3/8" = 1'-0"



2 SHRUB - UNMODIFIED SOIL
 3/4" = 1'-0"



Notes:
 1- Root barriers shall be installed per manufacturer's specifications and recommendations.
 2- Root barriers shall be installed when root ball is located within 8' of pavement.

5 ROOT BARRIERS
 3/8" = 1'-0"



3 GROUNDCOVER
 3/4" = 1'-0"



Notes:
 1- See planting legend for groundcover species, size, and spacing dimension.
 2- Small roots (1/4" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periphery can be removed at the time of planting. (See root ball shaving container detail).
 3- Settle soil around root ball of each groundcover prior to mulching.

Consultants:

Garden Lakes Apartments
 COLUMBIA, SOUTH CAROLINA
 LANDSCAPE DETAILS

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