

### CITY OF HENDERSONVILLE TREE BOARD

City Hall - Council Chambers | 160 Sixth Avenue E. | Hendersonville, NC 28792 Tuesday, February 20, 2024 – 2:00 PM

### **AGENDA**

- 1. CALL TO ORDER
- 2. APPROVAL OF AGENDA
- 3. APPROVAL OF MINUTES
  - A. Tree Board Minutes January 16, 2024
- 4. **NEW BUSINESS** 
  - A. Public Relations Report Mary Jo Padget
  - B. Conditional Zoning District Approval Lofts at Chadwick
  - C. Conditional Zoning District Approval Kids City USA

#### 5. OTHER BUSINESS

A. Urban Forestry Plan - Chris Defiore

### 6. OLD BUSINESS

- A. Bradford Pear Exchange
- B. Earth Fest
- C. Tree Ordinance Revision Committee Glenn Lange
- D. NeighborWoods

### 7. ADJOURNMENT

The City of Hendersonville is committed to providing accessible facilities, programs and services for all people in compliance with the Americans with Disabilities Act (ADA). Should you need assistance or an accommodation for this meeting please contact the City Clerk no later than 24 hours prior to the meeting at 697-3005.



# CITY OF HENDERSONVILLE TREE BOARD

City Operations Center – 305 Williams St | Hendersonville, NC 28792 Tuesday, January 16, 2024 – 2:00 PM

### **Minutes**

Members in Attendance: Council Member Roundtree, Janet Thew, Becca Doll, Natalie Wilcoxen, Mary Davis, Glenn Lange

Members not in Attendance: Will Coffee, Stephen Stark

#### 1. **CALL TO ORDER**

### 2. APPROVAL OF AGENDA

Motion to Approve: Mary Davis

Second: Glenn Lange

Approved

### 3. APPROVAL OF MINUTES

A. Minutes - December 12,2023

Motion to Approve: Becca Doll

Second: Natalie Wilcoxen

Approved

#### 4. **NEW BUSINESS**

A. Urban Forestry Plan Proposal - Chris Defiore

Proposal was presented to update the Tree Plan and make recommendations to transition it to an Urban Forestry Plan and prepare for future grant opportunities. Plan will be ready in February.

Chris DeFiore
cdefiore15@gmail.com
717-343-2636
Mark Stierwalt
Superintendent of Public Works
City of Hendersonville

I am submitting this proposal in response to the City of Hendersonville's request for a review of current urban forestry documents. The goal is to develop a report highlighting key points and recommendations on the City of Hendersonville's Urban Forestry efforts for the City Council.

My professional background includes serving as the Urban Forestry Project Manager with The Nature Conservancy in Connecticut. In this role, I successfully collaborated with cities such as Bridgeport, Norwalk, and New London, providing guidance on various aspects of urban forestry systems. These included community engagement, technical advice, municipality and non-profit communication, data collection, resource leveraging, and protocol development. Notably, in Bridgeport, I initiated and executed a successful tree planting program in collaboration with the city and 6 local non-profit organizations. I also have hands-on experience as a community forester professional with the Urban Resources Initiative in New Haven, managing a portfolio of resident-led greenspace projects. My responsibilities included co-visioning session facilitation, site surveys & design, tree plantings, structural pruning, and community outreach. My educational background includes a Masters of Forestry from the Yale School of the Environment and a Bachelors of Environmental Education from Warren Wilson College.

I firmly believe that urban forestry goes beyond trees; it is about fostering connections between communities and the natural world. I am eager to contribute my expertise to support Hendersonville in building community resilience through urban forestry.

Thank you for your consideration. I look forward to the opportunity to discuss it further. Sincerely,

-Chris DeFiore

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# **Project Proposal**

City of Hendersonville Urban Forestry Review

# Fee Proposal

Hourly Rate \$55/hour <b>Task</b>	<b>Estimated Hours</b>
Review Urban Forestry Documents	8
Drive-By Ground Truth of Canopy	4
Assessment	
Write Report: Summarize Findings &	16
Make Recommendations	
Incorporate Feedback into Final	4
Report	
Create and Give Final Presentation	6
Total	38

Overall project fee: **\$2090** (\$55 \* 38 hours) Paid 50% at completion of Report: Rough Draft

Remaining paid at complete of Report: Final Draft and Presentation

# Scope of Work

### Overview

Review, interpret, and summarize current urban forestry documents for the City of Hendersonville, NC. Convert findings into a summary document and a presentation to communicate key points to city council and other decision-makers.

### City of Hendersonville Urban Forestry Documents to be Reviewed:

- Street Tree Planting & Maintenance Plan (2010)
- Tree Canopy Cover Assessment (2023)
- City of Hendersonville Code of Ordinances Article IV. Trees and Shrubs
- Recommended Landscape Species List for Street Trees and Land Development Projects (2022)

### **Deliverables**

- Report written to communicate the following to city council and city decision-makers: Summary of key points from the documents listed above ■ Identify document components that may need updated or refreshed
- Identify items that may need further exploration or details
- Identify additional items that may need to be included
- o Recommendations for key "next steps" in advancing urban forestry in Hendersonville
- Feedback incorporated from rough draft submission
- Slideshow presentation that incorporates the key points of the report and Q & A

Motion to Approve: Becca Doll

Second: Glenn Lange

#### Approved

### B. Public Relations Update - Mary Jo Padgett

REPORT TO: Hendersonville Tree Board

FROM: Mary Jo Padgett, PR Consultant RE: Publicity Report for January Board meeting

DATE: January 16, 2024 Publicity/ events since last board meeting

- -- Web page update I created a photo-oriented summary report of Tree Board activities in 2023 (sometime called an annual report), which is now on the Tree Board web page on the City's website. Thank-you note to City Council and Volunteers -- A modified version of the 2023 annual report will soon be sent to City Council members and others as a way of saying thank you for support for Tree Board activities during the past year. PR for February educational program a news release was sent to early-deadline publications and a poster has been created for the Library to post (both are attached to this report). Feel free to pass those along to friends and associates. This will be posted on the City's website and disseminated to media in February. New Pollinator Trail
- I'm working with Sustainability Superintendent Caitlyn on dissemination of the new Pollinator Trail being developed through the Bee City USAHendersonville program (which falls under the Tree Board's jurisdiction). I'm hoping to coordinate a guided walk along the trail this spring as a Tree Board event. Upcoming Calendar of Events
- -- HENDERSONVILLE TREE BOARD CALENDAR 2024 Monday, February 26 -- All About Caring for the Trees in Your Backyard: How to Plant, Prevent Tree Damage, Prune, Avoid Common Tree Health Problems, and more ... Henderson County Library auditorium, 301 N. Washington Street, 5-6:30 p.m. Steve Pettis, well-known local expert, will share knowledge and experience on the subject using visual and descriptive methods. Pettis is a long-time agricultural advisor in his role as Henderson County agent of the N.C. State Cooperative Extension. Early Spring
- NeighborWoods Tree Planting Project. Hopefully the 62 trees that were planned for planting last Oct. at Henderson Village on U.S. 191; at Blue Ridge Villas, a development near Blue Ridge Mall; at Park Place condominiums on Greenville Hwy.; at homes in the historically Black neighborhood of 9th Avenue West, near Hendersonville Middle School; and in Druid Hills, where one homeowner will replace older trees with three new ones will now be delivered and planted. The trees will be planted in honor of long-time member and chair of Hendersonville Tree Board Mac Brackett, who retired at the end of 2023. The delay in planting was due to severe drought last fall. 5 Item B. Saturday, April 20 Hendo Earth Fest event on Main Street. 10 a.m.- 3 p.m. This is an educational event being coordinated by the Environmental and Sustainability Board for the Bee City USA-Hendersonville program. The event celebrates Earth Day, which is April 22. Tree Board members will also participate. Early May Arbor Day Celebration Late May Garden Jubilee June Pollinator Month

### C. Gen H - ESB and Tree Board Group Call February 7, 2023 1:00 pm

Meeting to discuss the Gen H Comprehensive Plan

### D. Thank You to Mack Bracket

Mac Brackett Received his honorary rocking chair for 23 years of dedicated service to the City of Hendersonville's Tree Board. A red oak tree will be dedicated in his honor in Clear Creek Park.

### E. Cavity Conservation Signs

Janet Thew discussed purchasing cavity conservation signs to support wildlife trees and raise awareness about leaving snags and dead trees to benefit wildlife and place some on trees in public spaces. The board was in agreement.

#### 5. OLD BUSINESS

### A. 2024-25 Tree Board Budget Discussion

The budget was discussed and approved for 2024-25

### **Budget for 2023/2024:**

Tree Replacement & Supplies	\$1500
Arborist Services	\$3000
Publicity	\$3500
Arbor Day	\$250
NeighborWoods	\$6000
Maintenance of Pollinator Beds at Hands On Museum and Bearcat Loop	\$2500
Maintenance of Pollinator Bed Four Seasons Boulevard (Triangle)	\$2500
Maintenance of Pollinator Bed Starbucks Four Seasons Boulevard	\$2500
Tree Planting on Greenway	\$5000
Welcome to Hendersonville Pollinator Bed - Hwy 64 East Near Walmart	\$40,000
Total Request -	\$67,750

Motion to Approve: Mary Davis

Second: Natalie Wilcoxen

Approved

### B. Garden Jubilee - Invasive/Non-native Species Education

Glenn Lange gave an update and the letter to vendors has been sent and another will go out before the event.

### C. Bradford Pear Exchange

Mary Davis and Becca Doll offered to champion the event which will take place at the City Operations center on May 4<sup>th</sup>, 2024.

### D. Earthfest - Tree Giveaway

Natalie Wilcoxen will champion the event. There will be a specimen tree giveaway to a city resident. The Tree Board will have a tent and volunteers to promote relevant issues.

### E. Tree Ordinance Revision Committee Update

Glenn Lange gave a brief update on the process.

### 6. OTHER BUSINESS

A. Staff Comments

#### 7. ADJOURNMENT

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TREE BOARD – January 16, 2024

# HENDERSONVILLE TREE BOARD PROJECTS 2023



2023 Highlights: As part of the City's current strategic planning process, the Tree Board has participated in a group effort to **examine and update sections of the City Code and regulations** in regards to existing trees and proposed plantings. A Tree Canopy Survey, requested last year by the board, was conducted in 2023 in order to have concrete numbers as the City continues to grow. Methods that avoid loss of tree canopy and general loss of trees in the City's **Urban Forest coverage** is something the Tree Board continues to address. — During the year, the popular Bee City USA program was reorganized, now being managed by City staff, with emphasis on maintenance and expansion of pollinator-friendly landscapes. A new **Pollinator Trail** was mapped through the City and beyond. — The Tree Board organized other events and projects this year, which helped focus residents' interest in trees. — The board's long-time member and chair, Mac Brackett, announced his **retirement**, effective at the end of 2023. Tree Board members and City staff honored his excellent service and leadership.

Sunday, November 5 – Greenspace Enhancement Projects Walkabout. 2-3:30 p.m. Mark Stierwalt, City Public Works Superintendent, led an **exploration stroll** along the projected Oklawaha Greenway extension into a greenspace area along Clear Creek being developed for public use. Already graced with two ponds teaming with wildlife, healthy trees, and pollinator-friendly meadows, the future public greenspace was introduced. 15 attendees on a fine autumn day bushwacked along streams and strolled through open fields with Mark, full of enthusiasm and interest. Volunteer Ken Fitch recorded the event in photos.



October 1-14 – Neighbor Woods planting projects. 9th Avenue West homeowners and residents in Henderson Village, Blue Ridge Villas, Park Place, and Druid Hills neighborhood participated by ordering free trees. A **total of 62 trees**, including dogwoods, redbuds, sweetbay and saucer magnolias, serviceberry, crabapple, and red oak will be planted at those locations. The trees will be planted in honor of Tree Board Chair Mac Brackett, who will retire Dec. 31. (Due to extreme drought, this planting project did not take place. The trees were over-wintered and will be planted in Spring 2024.)



Saturday, Sept. 30 – Flock to the Rock at Chimney Rock Park. 10 a.m. – 3 p.m. The City was invited to host a Bee City USA booth at this event. The event, now in its 15<sup>th</sup> year, focuses on birding, but also includes discussion of Monarch migration and other pollinator information, as CRP is an official monarch waystation. The **Symbolic Monarch Migration** was going on in Henderson County schools during this same time period. Volunteers Patrice German, Friends of Bee City USA, and Jim Poe, Henderson County Beekeepers, manned the booth, which served about 110 attendees.

September – Monarch Migration Month. A number of events were scheduled during the month to celebrate the monarch migration, including school programs sponsored by Bee City USA - Hendersonville.



Mid-Aug.-Oct. 20 – Symbolic Monarch Migration. Bee City USA-Hendersonville invited local classrooms, youth organizations, and individual students to join this **international educational program**. A dropbox was set up at Bullington Gardens by Friends of Bee City USA with paper butterflies for visiting children to color, resulting in 31 butterflies from City residents and 42 from elsewhere. Sixty of those requested follow-up information on the "journey" of their butterflies to Mexico. They were informed when their symbolic butterflies arrived in Mexico and will receive a note next spring when the butterflies return, sent by school children in Mexico.

Sunday, August 20 – Guided Tree Walk on Hendersonville's Main Street. 2 p.m. City Arborist Bill Leatherwood led a walk along Main Street to discuss how the various types of trees and shrubs are maintained and supported by his crew to a create stress-free environment for healthy plants. About 15 attendees enjoyed the walk at no charge. Leatherwood's long-time assistant, Joe Weaver, came along too, several Tree Board members attended, and volunteer photographer Ken Fitch joined Mary Jo in taking photos along the way.

July 1 – Bee City USA-Hendersonville, which is a subsidiary program of the Tree Board, was reorganized and moved from Bullington Gardens management to City management under the new Sustainability coordinator.



June – Pollinator Month. Bee City USA-Hendersonville created/published an online calendar of educational events scheduled during Pollinator Month. June 3, for example, was Pollinator Day at the Hendersonville Maple Street Farmer's Market, garnering much interest from shoppers. After learning about the different types of antennae and the insects each type belongs to, kids made antennae; they also planted sunflower seeds in pots to take home. The Farmer's Market set up a Pollinator Passport hunt: kids got their "passport" checked off when they visited vendors selling goods made possible by pollinators. Each completed passport resulted in a prize.

May 27-28 – Garden Jubilee. This fun, annual event on a rainy weekend in downtown Hendersonville provided many visitors to the Bee City USA-Hendersonville tent. Where, as always, free seed packets were distributed, pollinator-friendly gardening info given, and handmade antennae-to-go distributed to anyone who wanted to wear them. Kids planted sunflower seed pots to take home. "Native Bees versus Honey Bees - We're All In This Together" was presented by John Gleman of Green River Bee Company at the Visitor Center stage.

Friday, May 12 – Arbor Day Celebration at Toms Park. Michele Garashi-Ellick, new president of Four Seasons Rotary, Public Works staff members, members of Four Seasons Rotary, members of the Tree Board, and a few members of the public presented the annual program to celebrate **Arbor Day**. Two stewartia trees were planted near the shuffleboard courts in a green area at the corner of Lily Pond Lane and W. Allen St. About 15 people attended, Mayor Volk proclaimed May 12 as Arbor Day in Hendersonville, and Ms. Garashi-Ellick spoke on behalf of the Rotary Club, which organized the event.





Saturday. April 22 – **Hendo Earth Day Fest** event on Main Street. Bee City USA-Hendersonville and Tree Board participated at this Earth Day festival organized by

Hendersonville Environmental Sustainability Board. Several hundred attendees learned about environmental programs and projects in and around the City.

Tuesday, March 21 – "Learn More about the NC Urban Forest Council." 5 p.m., Henderson County Public Library auditorium, Washington St.. A public educational program at no charge. Mark Foster, arborist for the City of Asheville and former chair of the NC Urban Forest Council, spoke about the mission, purpose, and services of the state's Council. About 20 people attended and contributed to the discussion. A Tree Board member welcomed all and presented the speaker, volunteer Ken Fitch took photos, and other volunteers helped sign people in. Tree Board brochures were made available.



Sunday, March 5 – A Guided Walk Along an Award-Winning Stream Restoration Project. 2 p.m. Mike Huffman, City Stormwater Division Manager, conducted a walkabout on the Allen Branch **streambank restoration project** (next to the US Post Office Annex, 90 Lakewood Rd). 17 people attended who were interested in the project and how it was accomplished. They were also interested in the work of the Tree Board and several took brochures while others signed up as potential volunteers. At least 2 people expressed interest in becoming a member of the Tree Board.



Winter 2023 -- Yarn-Bombing Project at the Train Depot. During the winter months, seven trees near the Historic Train Depot on Maple St. were wrapped in decorative, colorful yarn by the STEAP organization (and removed in spring when the trees began to bloom). This **tree-centric art installation** was approved by the Tree Board and appreciated by many who passed by.

Hendersonville Tree Board meets monthly at the City Operations Center, 305 Williams St., at 2 p.m. on the third Tuesday. The public is invited to attend.

GRAPHIC SCALE

( IN FEET )

1 inch = 30 ft.

PROPOSED DEVELOPMENT IS LIHTC (LOW INCOME HOUSING TAX DEVELOPER PROPOSED DEVELOPER PROPOSED DEVELOPER SHALL PROVIDE TREE PROTECTION DURING CONSTRUCTION PROCESS. THE PROPOSED TREE PROTECTION CREDIT) WITH ALL (60 UNITS) OF THE UNITS AT OR BELOW 80% FENCE LIMITS WILL NOT MEET THE CODE REQUIREMENTS OF 1' AMI. PROPOSED DEVELOPMENT WILL PROVIDE SENIOR AFFORDABLE HOUSING AS GOVERNED BY NORTH CAROLINA FOR EVERY 1" OF TREE DIAMETER BASED ON THE EXISTING HOUSING FINANCE AGENCY REQUIREMENTS. IMPERVIOUS COVERAGE AND TIGHT CONSTRAINTS OF THE SITE PROPOSED TREE PROTECTION WILL PROVIDE THE MAXIMUM AMOUNT OF TREE PROTECTION AS POSSIBLE. DEVELOPER HAS PROVIDED A TRAFFIC IMPACT STUDY TO THE

CITY OF HENDERSONVILLE WITH THE REZONING, BUT REQUEST TO DEFER THE TRAFFIC IMPACT ANALYSIS UNTIL AFTER THE

REZONING IS APPROVED.

PERIMETER AND INTERIOR PLANTINGS TREE AND 2 SHRUBS REQUIRED FOR EVERY 1,500 SQ. FT. OF VEHICULAR USE AREA. -TOTAL VEHICULAR USE AREA: ±27,400 SF -TOTAL TREES REQUIRED/PROPOSED:

WHEN A DEVELOPMENT CONTAINS 20 OR MORE PARKING SPACES, 50 PERCENT OF THE TREES AND SHRUBS REQUIRED MUST BE PLANTED IN ISLANDS OR MEDIANS LOCATED WITHIN THE PARKING LOT.

10' TYPE "B" BUFFER YARD -BUFFER ADJACENT TO RESIDENTIAL USES (PINS 9568922186, 9568923038 8 4 BROADLEAF CANOPY TREES, 25 EVERGREEN SHRUBS AND 33 FLOWERING SHRUBS PER 100 LINEAR FEET. -TOTAL LENGTH -TOTAL REQUIRED CANOPY TREES:

-EXISTING TREE CREDITS: (24", 26" & 29" OAK AND 13" PINE) -TOTAL PROVIDED CANOPY TREE/CREDITS: -TOTAL REQUIRED/PROPOSED EVERGREEN SHRUBS: 85/85 -TOTAL REQUIRED/PROPOSED FLOWERING SHRUBS: 113/113

NO LANDSCAPING SHALL BE WITHIN THE SIGHT TRIANGLES.

-TOTAL LINEAR FOOTAGE OF RIGHT OF WAY: -NO OVERHEAD ELECTRIC R/W WITH LARGE MATURING: -OVERHEAD ELECTRIC R/W WITH SMALL MATURING: -REQUIRED LARGE/SMALL MATURING (40'/30' ON CENTER): 12/6 -EXISTING TREE CREDITS: (12", 14", 16" OAK & 14" & 18" PINE) -TOTAL PROPOSED SMALL/LARGE MATURING TREES:

-TOTAL REQUIRED/PROVIDED CANOPY TREE/CREDITS: 18/23

-TOTAL SHRUBS REQUIRED/PROPOSED:

A VEGETATIVE BUFFER SHALL CONSIST OF AT LEAST ONE EVERGREEN OR DECIDUOUS SHRUB PLANTED FOR EVERY FIVE LINEAR FEET OF BUFFER -TOTAL LINEAR FT. OF FRONTAGE (CHADWICK):

PLANTING STRIPS ONE LARGE EVERGREEN OR DECIDUOUS TREE AND FIVE EVERGREEN OR DECIDUOUS SHRUBS SHALL BE PLANTED FOR EVERY 40 LINEAR FEET OF PROPERTY LINE THAT PARALLELS THE VEHICULAR USE AREA (100 FT.). -TOTAL LINEAR FEET OF PLANTING STRIP:

-TOTAL TREES REQUIRED: -TOTAL PROPOSED TREES: -TOTAL SHRUBS REQUIRED/PROVIDED:

LANDSCAPE CALCULATIONS

GORDON DOOLEY HOLDIGS LLC PROPERTY OWNERS: 904 GREENVILLE HWY HENDERSONVILLE NC 28792 9568-92-904 PARCEL #: DEED BOOK & PAGE: 3914/462 TOTAL SITE ACREAGE: ±2.25 AC

Item B.

GHMU-CZD GHMU-CZD **CURRENT ZONING:** PROPOSED ZONING: EXISTING USE: VACANT

MULTI-FAMILY HOUSING (SENIOR) PROPOSED USE: (LOW-INCOME) PROPOSED UNITS: PROPOSED DENSITY: 26.67 DU/AC

~~~~ (36'-3" (3 STORIES))PROPOSED BUILDING HEIGHT: FRONT SETBACK:

SIDE YARD: -15' (BASED ON 2 STORY) + 5' (ONE ADDITIONAL STORY) REAR YARD: -15' (BASED ON 2 STORY) + 5' (ONE ADDITIONAL STORY)

REQUIRED PARKING: -1.0 SPACE PER UNIT (ELDERLY MULTIFAMILY DWELLING) PROPOSED PARKING:

OPEN SPACE/FOOTPRINT REQUIRED

±24,500 SF PROPOSED FOOTPRINT: GROSS FLOOR AREA (EXCLUDING GAZEBO) ±73,500 SF REQUIRED MINIMUM COMMON SPACE: 10% (9,801 SF) PROPOSED COMMON SPACE: 12.7% (±12,400 SF) (HATCHED AREA INDICATED COMMON SPACE)

PROPOSED ASPHALT AREA: ±27,400 SF PROPOSED SIDEWALK AREA: ±6,430 SF TOTAL PROPOSED BUILT UPON AREA: ±58,330 SF

30.000 SF / 30.6% REQUIRED MINIMUM OPEN SPACE: 500 SF PER DWELLING UNIT OR 9% OF LOT AREA WHICHEVER IS GREATER

500 SF/UNITS X 60 UNITS = 30,000 (OR 30.6%) PROPOSED OPEN SPACE: 39,680 SF / 40.5%

DEVELOPMENT SUMMARY

ENGINEERING

MC ENGINEERING, INC. 2110 BEN CRAIG DR., STE. 400 CHARLOTTE, NC 28262 PHONE 704.510.9797

PROPOSED DEVELOPMENT: THE LOFTS AT CHADWICK **APARTMENTS** 

> CHADWICK AVE HENDERSONVILLE, NC

> > **DEVELOPED BY:**

BROADCRAFT CONSTRUCTION & DEVELOPEMENT, INC

> ROCKBRIDGE ROAD MILLS RIVER, NC 28759

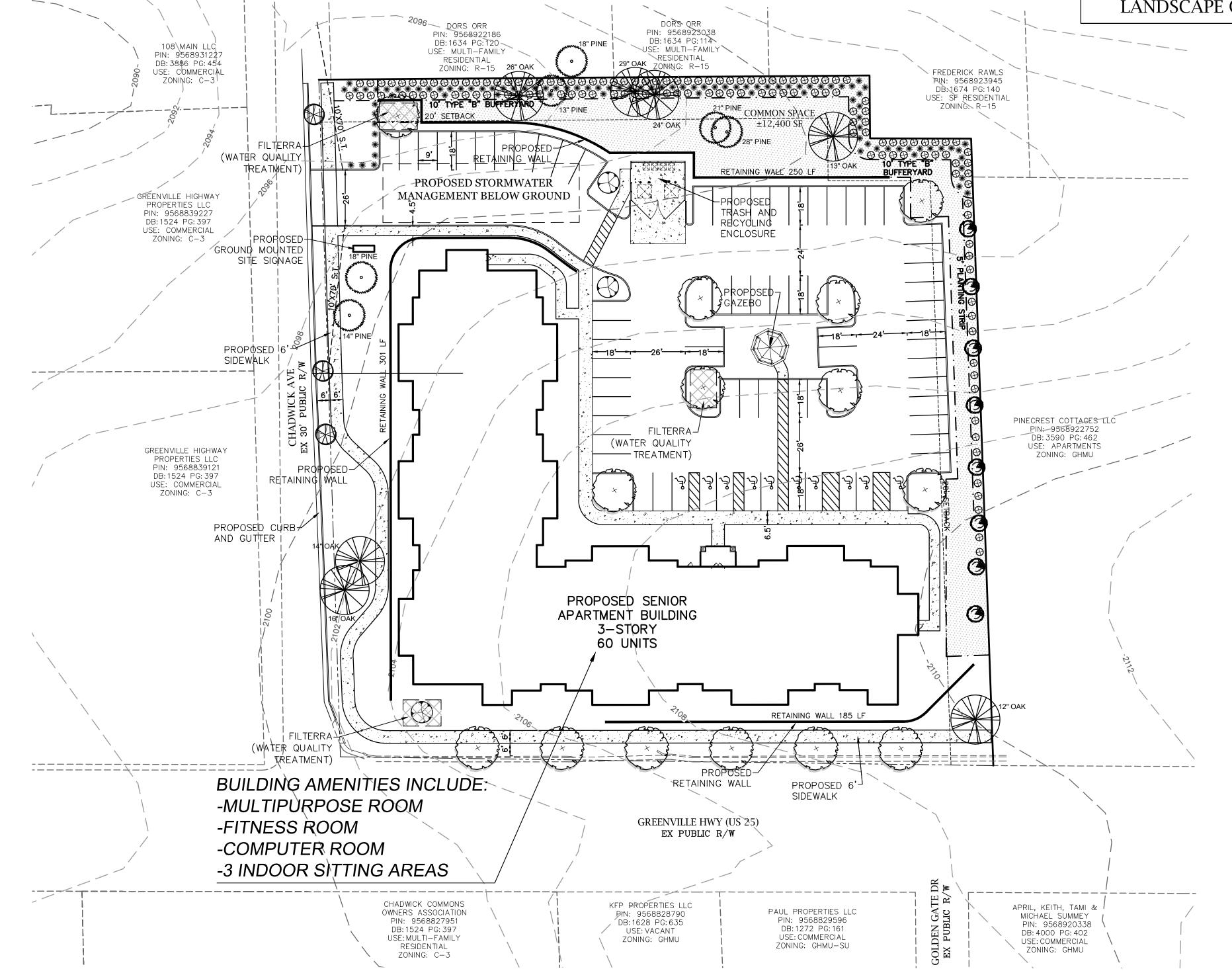
# REZONING SITE PLAN

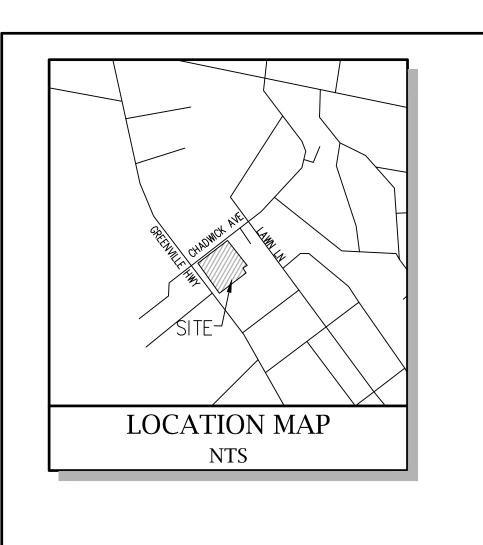
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CAD FILE: PROJECT NO .: DESIGNED BY: DATE:

24-002 BASE.DWG 24-002 JANUARY 29, 2024

RZ1.0





GRAPHIC SCALE

( IN FEET ) 1 inch = 30 ft.





EXISTING TREES TO REMAIN

Item B.



EXISTING TREES TO BE REMOVED (48 TREES)

TREE LEGEND





Mc Engineering, Inc. 2110 BEN CRAIG DR., STE. 400 CHARLOTTE, NC 28262 PHONE 704.510.9797

PROPOSED DEVELOPMENT: THE LOFTS AT CHADWICK **APARTMENTS** 

CHADWICK AVE HENDERSONVILLE, NC

DEVELOPED BY:

BROADCRAFT CONSTRUCTION & DEVELOPEMENT, INC

> ROCKBRIDGE ROAD MILLS RIVER, NC 28759

# REZONING TREE SURVEY

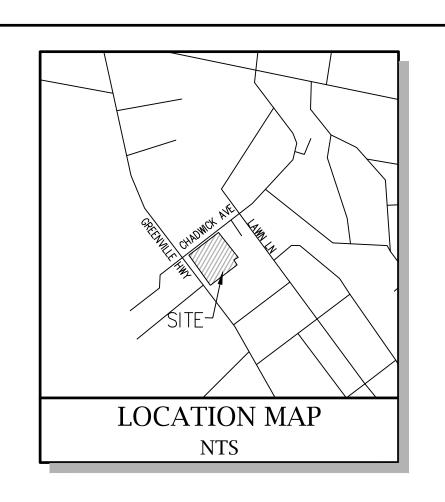
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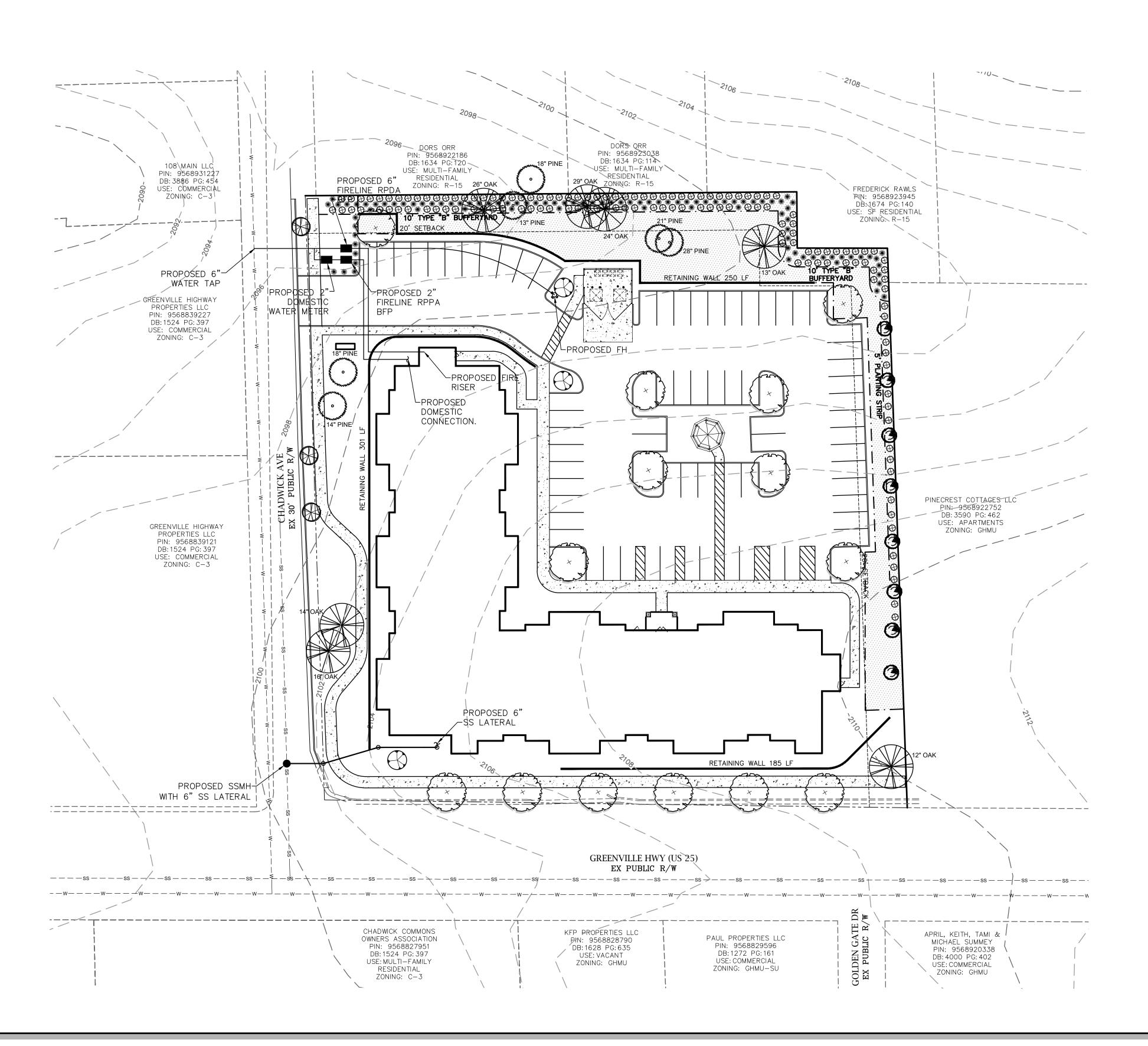
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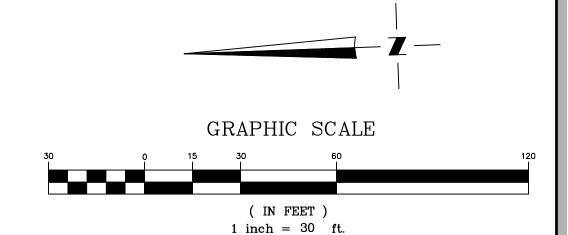
24-002 JANUARY 29, 2024

24-002 BASE.DWG

RZ2.0







C ENGINEERING

Item B.

MC ENGINEERING, INC. 2110 BEN CRAIG DR., STE. 400 CHARLOTTE, NC 28262 PHONE 704.510.9797

PROPOSED DEVELOPMENT:
THE LOFTS AT CHADWICK
APARTMENTS

CHADWICK AVE HENDERSONVILLE, NC

DEVELOPED BY:

BROADCRAFT CONSTRUCTION & DEVELOPEMENT, INC

> ROCKBRIDGE ROAD MILLS RIVER, NC 28759

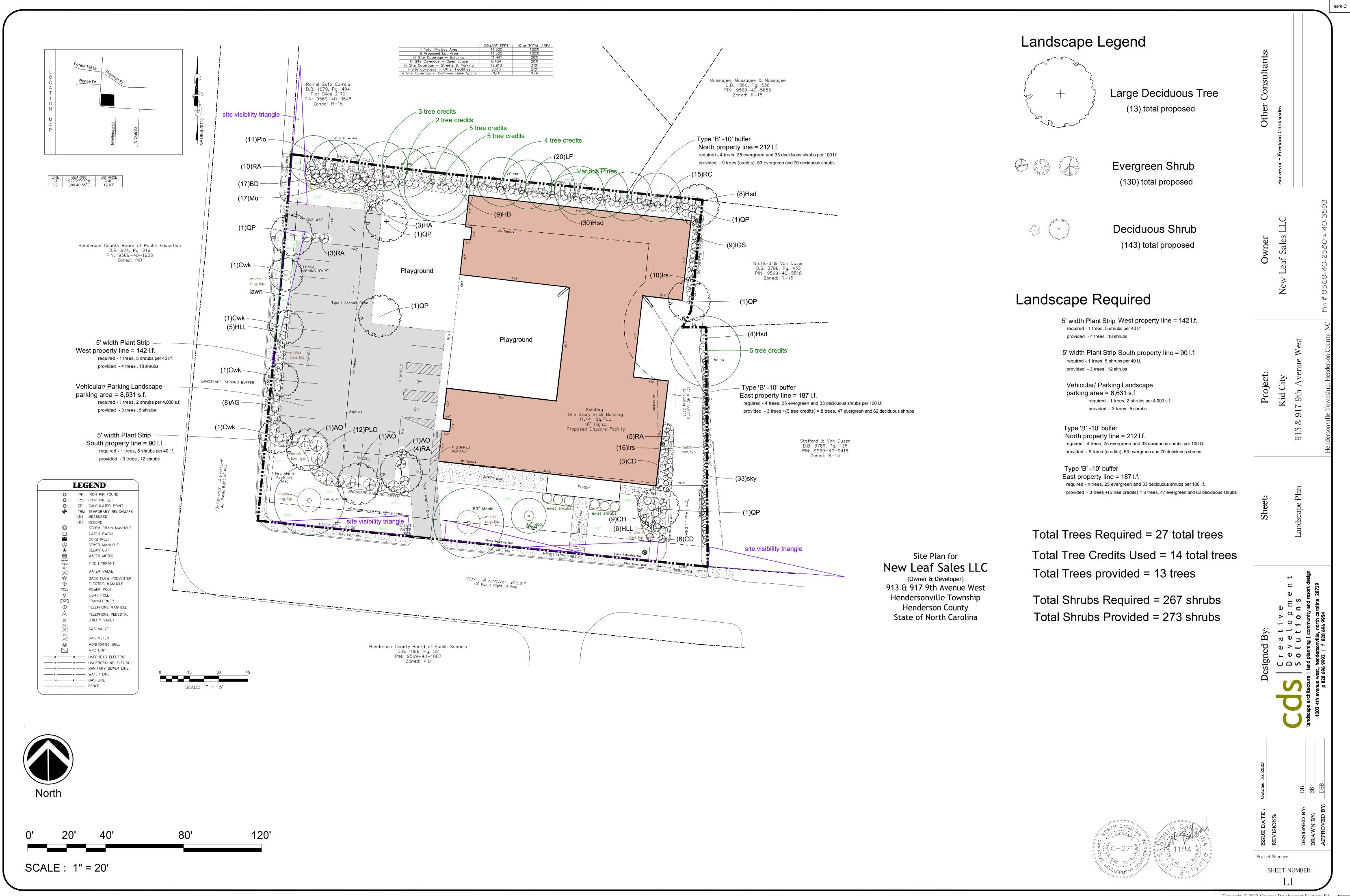
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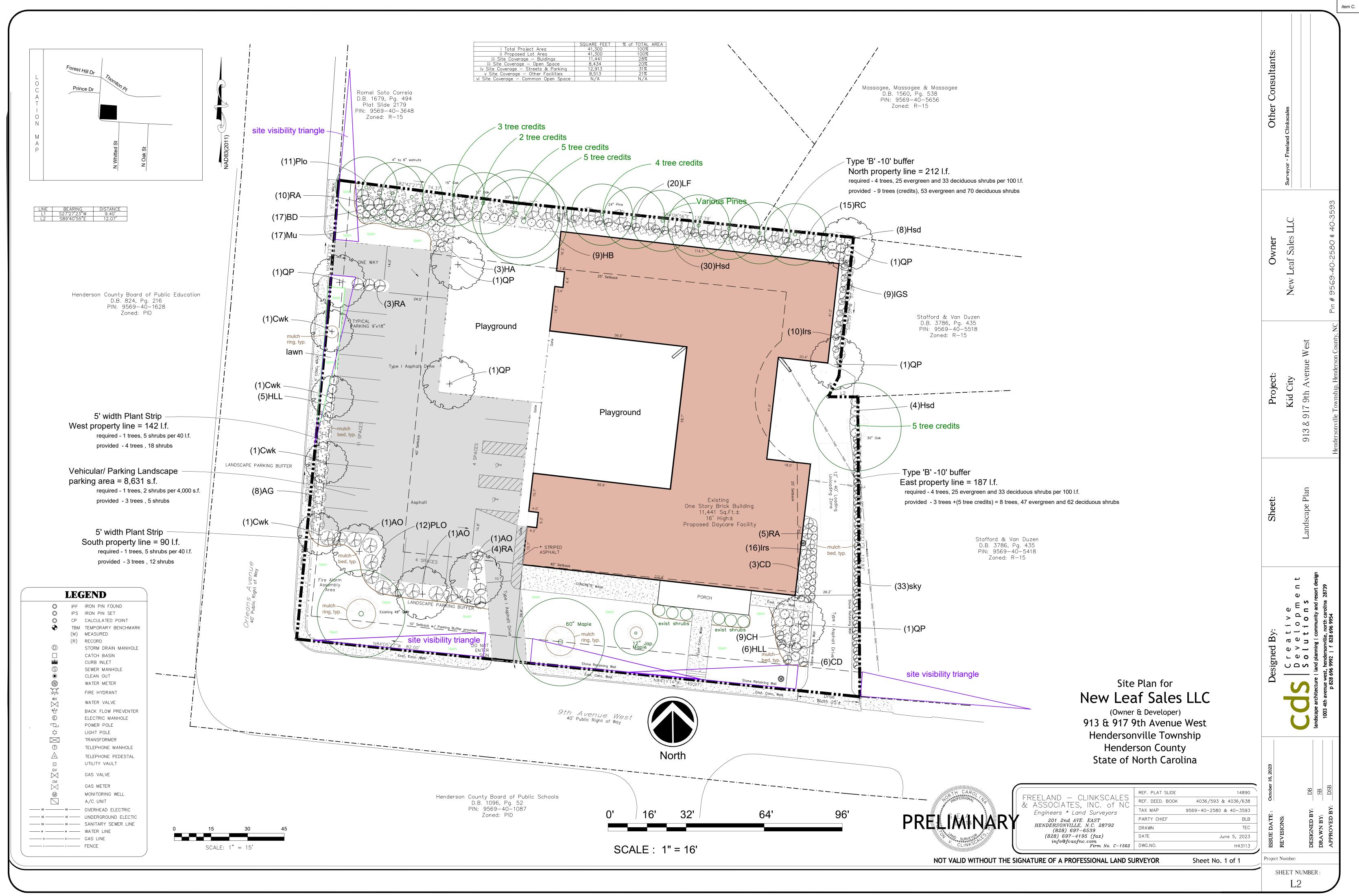
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24-002 BASE.DWG 24-002 JDM JANUARY 29, 2024

RZ3.0





# Large Trees - 13 Total

| <b>5</b> 4. <b>9</b> 5 |     |                               |                      |                        |                                              |
|------------------------|-----|-------------------------------|----------------------|------------------------|----------------------------------------------|
| Key                    | Qty | Botonical Name                | Common Name          | Size                   | Remarks All Plants to Meet Ansi Z60.1 Stnds. |
| AO                     | 3   | Acer 'October Glory'          | October Glory Maple  | 2" Caliper, 10' Height | B&B, Single Straight Leader                  |
| Cwk                    | 4   | Crategus viridis'Winter King' | Winter King Hawthorn | 2" Caliper, 10' Height | B&B, Single Straight Leader                  |
| QP                     | 6   | Quercus phellos               | Willow Oak           | 2" Caliper, 10' Height | B&B, Single Straight Leader                  |

# Evergreen Shrubs - 130 Total

| Key | Qty | Botonical Name                        | Common Name                 | Size                 | Remarks All Plants to Meet Ansi Z60.1 Stnds. |
|-----|-----|---------------------------------------|-----------------------------|----------------------|----------------------------------------------|
| AG  | 8   | Abelia grandiflora                    | Glossy Abelia               | 3 gallon, 18" Height | Full Plant                                   |
| IGS | 9   | Ilex glabra 'Shamrock'                | Shamrock Inkberry Holly     | 3 gallon, 18" Height | Full Plant                                   |
| Sky | 33  | Ilex crenata 'Sky Pencil'             | Sky Pencil Holly            | 3 gallon, 18" Height | Full Plant                                   |
| LF  | 20  | Leucothoe 'Margie Jenkins'            | Leucothoe 'Margie Jenkins'  | 3 gallon, 18" Height | Full Plant                                   |
| Plo | 27  | Prunus laurecarasus 'Otto Luyken'     | Otto Luyken Cherry Laurel   | 3 gallon, 18" Height | Full Plant                                   |
| RC  | 15  | Rhododendron catawb. 'English Roseum' | English Roseum Rhododendron | 3 gallon, 18" Height | Full Plant                                   |
| RA  | 18  | Rhododendron 'Autumn Amethyst'        | Autumn Amethyst Azalea      | 3 gallon,18" Height  | Full Plant                                   |

## DeciduousShrubs - 143 Total

| Key | Qty | Botonical Name                       | Common Name               | Size                 | Remarks All Plants to Meet Ansi Z60.1 Stnds. |
|-----|-----|--------------------------------------|---------------------------|----------------------|----------------------------------------------|
| BD  | 17  | Buddleia 'Miss Molly'                | Miss Molly Butterfly Bush | 3 gallon, 18" Height | Full Plant                                   |
| CD  | 9   | Calicarpa dichtoma                   | Purple Beautyberry        | 3 gallon, 18" Height | Full Plant                                   |
| СН  | 9   | Clethra alnifolia 'Hummingbird'      | Hummingbird Clethra       | 3 gallon, 18" Height | Full Plant                                   |
| HLL | 11  | Hydrangea 'Little Lime'              | Little Lime Hydrangea     | 3 gallon, 18" Height | Full Plant                                   |
| Hsd | 42  | Hydrangea 'Sikes Dwarf'              | Sikes Dwarf Hydrangea     | 3 gallon, 18" Height | Full Plant                                   |
| HA  | 3   | Hydrangea 'Amma Belle'               | Anna Belle Hydrangea      | 3 gallon, 18" Height | Full Plant                                   |
| НВ  | 9   | Hydrangea paniculata 'Bobo'          | Bobo Hydrangea            | 3 gallon, 18" Height | Full Plant                                   |
| Irs | 26  | Ilex 'Res Sprite'                    | Red Sprite Holly          | 3 gallon, 12" Height | Full Plant                                   |
| MU  | 17  | Muhlenbergia reverchonii 'Undaunted' | Undaunted Muhly Grass     | 3 gallon, 12" Height | Full Plant                                   |



MD - Undaunted Muhly Grass



Irs - Red Sprite Holly



AO - October Glory Maple



Cwk - Winter King Hawthorn



QP - Willow Oak



AG - Glossy Abelia



PLO - Otto Luyken **Cherry Laurel** 



Sky - Sky Pencil Holly



IGS - Shamrock Inkberry Holly



LF - Margie Jenkins Leucothoe



RC - English Roseum Rhodo



RA - Autumn Amethyst Azalea

Hsd - Sikes Dwarf Hydrangea



BD - Miss Molly Butterfly Bush



CD-Purple Beautyberry



HLL - Little Lime Hydrangea

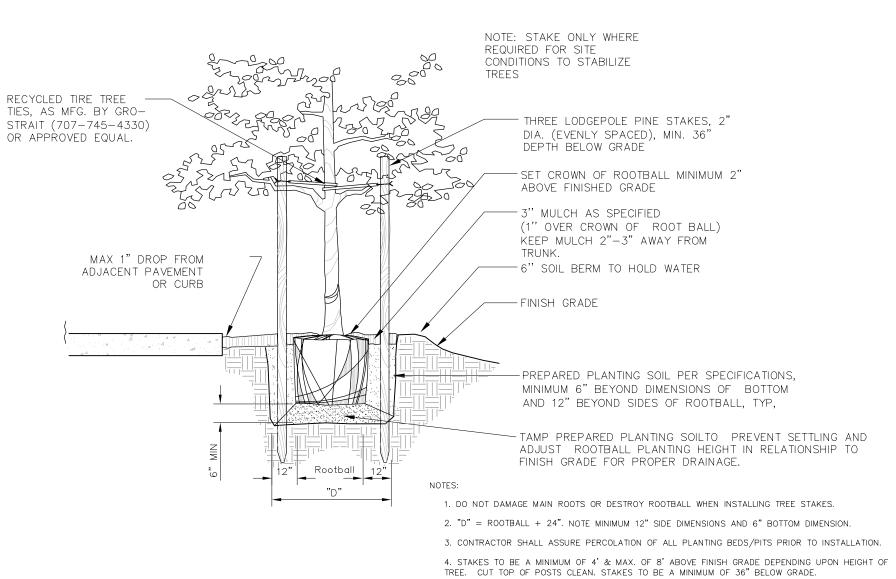


# Landscape Notes

BE 'DBH' MEASURED 6" ABOVE GROUND)

1. ALL AREAS SHOWN AS LARGE TREES, SMALL FLOWERING TREES, AND SHRUB AND PERENNIAL LANDSCAPING ON THE LANDSCAPE PLAN IS TO BE MULCHED AND SHALL RECEIVE A 3" DEPTH OF SHREDDED PINE BARK MULCH.

- 2. CONTRACTOR SHALL VERIFY QUANTITIES ON THE PLAN AND IS RESPONSIBLE FOR ALL PLANTS AS SHOWN ON THE PLANT LIST. REPORT ANY DISCREPANCIES TO LANDSCAPE ARCHITECT. PROVIDE UNIT PRICES FOR ALL PLANT AND TREE MATERIALS.
- 3. CONTRACTOR SHALL GUARANTEE ALL PLANTINGS FOR ONE YEAR FROM COMPLETION OF WORK. REPLACEMENT PLANTS AND LABOR SHALL BE PROVIDED AT CONTRACTORS' EXPENSE.
- 4. PRUNE ONLY AS DIRECTED BY LANDSCAPE ARCHITECT. DO NOT REMOVE THE CENTRAL LEADER OF ANY TREE OR PLANT. PLANTS SHALL NOT HAVE A SHEARED APPEARANCE AND MUST MEET MINIMUM SIZES AS INDICATED ON THE PLANT LIST. 5. ALL PLANT MATERIAL IS TO CONFORM TO THE LATEST EDITION OF AMERICAN STANDARDS FOR NURSERY STOCK. SEE PLANT LIST FOR SPECIFICATIONS AND SIZES. (NOTE: SIZE TO
- 6. LANDSCAPE ARCHITECT AND/OR OWNER RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL, ESPECIALLY DUE TO UNDERSIZED OR DAMAGED MATERIALS.
- 7. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND IDENTIFICATION OF ALL UTILITIES. ANY UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S COST.
- 8. ALL DEMOLISHED MATERIALS AND TRASH ARE TO BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
- 9. ALL PLANTINGS HOLES AND BEDS ARE TO BE CLEANED OF ROCKS AND DEBRIS >1", EACH PLANT OR TREE IS TO BE HOLE AMENDED AND THE EXISTING NATIVE SOIL IS TO BE AMENDED WITH 25% OF NATURES HELPER AND 25% OF ORGANIC COMPOST (OR APPROVED EQUAL), THEN THOROUGHLY MIXED TOGETHER TO CREATE A PLANTING SOIL MIX.
- 10. ALL EXISTING AND PROPOSED TREES NOT CONTAINED WITHIN A MULCHED BED ARE TO RECEIVE A 3" DEPTH OF A 4' DIAMETER CIRCLE OF ABOVE SPECIFIED MULCH AROUND EACH TREE. EXCEPT WHERE TREES OCCUR IN SWALES, DITCHES, OR DRAINAGE PATTERNS, THEN ONLY USE 1' DIAMETER CIRCLES.
- 11. REPORT ANY POORLY DRAINED SOILS OR ANY DRAINAGE PROBLEMS TO LANDSCAPE ARCHITECT IMMEDIATELY. FAILURE TO REPORT SUCH CONDITIONS WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR CORRECTING THE PROBLEM AND REPLACING DAMAGED OR LOST PLANTS. PROPER PLANT DRAINAGE IS DEFINED BY FLOODING PLANTING HOLE TO SURROUNDING SOIL LEVEL WITH WATER AND COMPLETE PERCOLATION OF THE WATER WITHIN THE HOLE IN A 24 HOUR PERIOD.
- 12. LANDSCAPE ARCHITECT OR OWNER TO FIELD APPROVE THE PLACEMENT OF ALL PLANT MATERIALS.
- 13. FINE GRADE ALL PLANTING AREAS TO INSURE PROPER DRAINAGE. AREAS TO BE SEEDED ARE TO BE FREE OF DEBRIS AND ROCKS > 1" PRIOR TO LAYING SOD OR APPLYING SEED.
- 14. PRIOR TO INSTALLATION, CONTRACTOR SHALL REVIEW PLANT AND LIGHT LOCATIONS WITH LANDSCAPE ARCHITECT OR OWNER TO ELIMINATE CONFLICTS.
- 15. PROVIDE LABOR, EQUIPMENT, MATERIALS, AND SERVICE NECCESSARY TO COMPLETE THE LANDSCAPE WORK.
- 16. INSTALL ALL PLANT MATERIALS IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES.
- 17. MAINTAIN ALL PLANT MATERIALS UNTIL FINAL ACCEPTANCE OR SUBSTANTIAL COMPLETION OF WORK. MAINTENANCE TO INCLUDE: WATERING, MULCHING, WEEDING, SPRAYING, MOWING, STRAIGHTENING, FERTLIZING, CLEANUP, ECT.

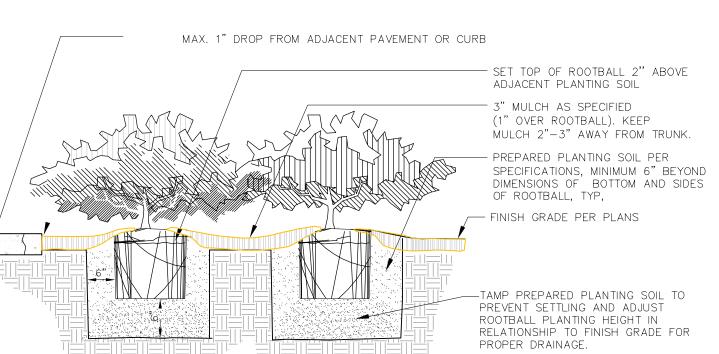


Tree Planting Detail

5. THIS DETAIL INCLUDES TREES WITH 3  $\frac{1}{2}$  CALIPER AND BELOW.

HA - Anna Belle Hydrangea

1. DETAIL APPLIES TO MATERIALS PLANTED AT GREATER THAN 18" O.C. 2. CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING BEDS/PITS PRIOR TO INSTALLATION AND INSURE POSITIVE DRAINAGE OF ALL PLANTING AREAS, SEE NOTES AND SPECIFICATIONS.

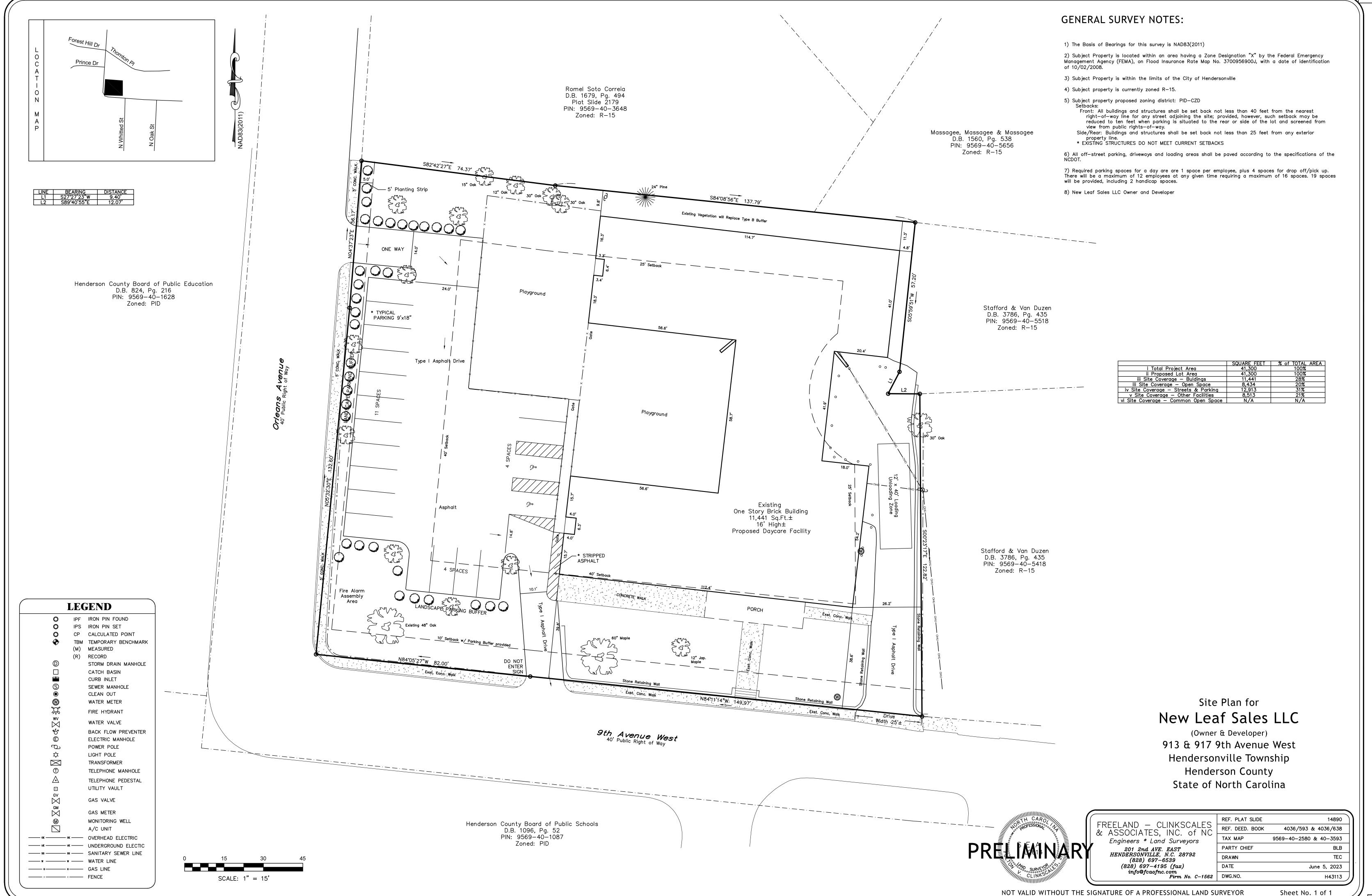


**Shrub Planting Detail** 

SHEET NUMBER:

Project Number:

O O



# City of Hendersonville

Prepared by:

Chris DeFiore

February 2024

Urban Forestry

Management Recommendations

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# **Executive Summary**

#### Outline

- What is Urban & Community Forestry?
- Summarize Document
- Provides interpretations and recommendations
- The following management recommendations are based upon a review of the Street Tree
  Planting & Maintenance Plan(December 2010), Recommended Landscape Species List
  (September 2023), Tree Canopy Assessment Report (October 2023), Article IV- Trees and
  Shrubs Tree Protection Ordinance(Draft), and a driving and walking tour of Hendersonville City.
- Note: No stakeholder analysis, certain goals were assumed in this document, this document doesn't serve as a management plan, but as a stepping stone towards one
- Challenges to come, growth and development, inequities, climate change, disconnection from nature

**Primary Management Recommendations** 

#### Coordination

- Create Urban Forester Position
- Develop & Maintain Tree Inventory
- Set Goals

#### Protection & Maintenance

- Prioritize education and enforcement strategies to protect trees from "common offenses" (e.g. volcano mulching, weed wacker damage, topping)
- Prioritize Establishment Care of Planted Trees
- Develop Tree Protection Ordinances for New Development

#### > Growth

Prioritize strategies to grow the canopy equitably across the city

### Community Forestry

Cultivate an Environmental Stewardship Culture

# **Management Recommendations**

### Overview

17 Urban & community forestry recommendations are listed in the 4 charts (Coordination, Protection & Maintenance, Growth, Community Forestry) that follow. Often, multiple strategies are listed as tools for meeting each recommendation. A proposed phase is associated with each strategy in order to prompt consideration of where it might fall along a progression. More detailed information on each strategy can be found below each table.

\*Primary Management Recommendations

### **Recommendations**

|                                        | Coordination                                                                                   |   |   |   |  |
|----------------------------------------|------------------------------------------------------------------------------------------------|---|---|---|--|
| Recommendation                         | Recommendation Strategies                                                                      |   |   |   |  |
|                                        | Create an Urban Forester position*                                                             | 1 |   |   |  |
| 1. Increase City Staff                 | Ensure competitive pay for any arborist/forester staff                                         | 1 |   |   |  |
| Capacity                               | Consider adding position to support urban forester                                             |   | 2 |   |  |
|                                        | Consider creating a City Conservation Corps or similar program                                 |   |   | 3 |  |
| Develop & Maintain     Tree Inventory* | Hire a consultant to complete a tree inventory and ensure this data will be managed afterwards |   | 2 |   |  |

|   |                                                        |                                                                                                                                           |   |   |   | <b>1</b> /1 |
|---|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|-------------|
|   | 3. Coordinate Across                                   | Create opportunities for cross-training between departments                                                                               |   | 2 |   |             |
|   | Departments & Management Plans                         | Ordinance: Ensure that relevant departments/staff are included in process at the appropriate time                                         |   | 2 |   |             |
|   |                                                        | Set overarching goals for management of the urban forest                                                                                  | 1 |   | 3 |             |
| 1 | 4. Set Goals*                                          | Set Urban Canopy Goals focused on equitably growing the canopy across the city                                                            | 1 |   | 3 |             |
|   | 5. Complete Urban & Community Forestry Management Plan | Hire a consultant to guide the city through an Urban & Community Forestry Management Plan. Prioritize the stakeholder engagement process. |   |   | 3 |             |

### Recommendation 1: Increase City Staff Capacity

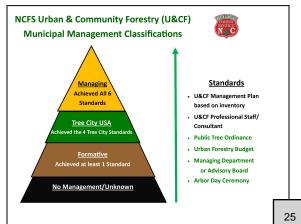
**Strategy 1a:** Create an Urban Forester position\*

> Create a full-time Urban Forester position with the City of Hendersonville. Alternatively, an Urban Forester Position could be jointly funded by cooperating cities in the area (e.g. Mills River, Fletcher). Sharing an Urban Forester would decrease costs and serve as

a vehicle for greater coordination across municipalities.

> The Urban Forester role will provide the increased capacity and necessary expertise required for strategically planning and implementing many of the recommendations laid out in the rest of this document. This is especially important as development pressure increases.

➤ While enforcement and assisting developers with navigating the tree ordinances will be a crucial part of the Urban Forester's role it is important to balance this "reactive" component of the role with the many other crucial components of the role including but not limited to cross-training city staff, maintaining tree inventory data, strategic



Item A.

planning, stakeholder engagement, grant management, outreach resource development, tree maintenance and planting program development, tree removal management, and most importantly leading the implementation of many of the recommendations in this document.

➤ Hiring an Urban Forester increases Hendersonville's status on the NC Forest Service's Urban & Community Forestry Municipal Management Classification to 5/6

Strategy 1b: Ensure competitive pay for any arborist/forester staff

> Oftentimes cities pay their parks and arborist crews lower wages than local contractors. This usually results in extremely high turnover of city staff. This high turnover causes a disproportionate amount of time spent hiring and training new staff and a lesser experienced crew resulting in lower quality work. Ensure that pay for city positions is competitive with local contractors

Strategy 1c: Consider adding position to support urban forester

As development pressures increase, Hendersonville grows in size and population, and Urban Forestry programming grows, there will be an increased need for assisting urban forestry staff. This staff member can help with a variety of tasks including new development site visits and coordinating an urban forestry corps(Strategy 1d). This position would also help avoid gaps in coverage (especially important for communication with contractors) when the Urban Forester is away from work.

Strategy 1d: Consider creating a City Conservation Corps or similar program

> A City Conservation Corps (or a similar program) for young adults would serve to provide extra help with tasks such as establishment care, plantings, outreach, greenspace management, etc. as well as adding capacity to the NeighborWoods program.

### Recommendation 2: Develop & Maintain Tree Inventory\*

Strategy 2a: Hire a consultant to complete a tree inventory and ensure this data will be managed afterwards

- > A good complete tree inventory will provide the city the geolocation, dbh, species, and maintenance needs of all the public trees within the city. This data will help the city
  - o Identify under-canopied areas at a finer scale than a canopy assessment

Item A.

- Determine the city's species composition and age-class distribution to more strategically select species and location new plantings
- o Increase efficiency in conducting tree removals and pruning
- o Track new plantings and schedule routine establishment care and health assessment checks
- > An Urban Forester should be hired before conducting a tree inventory to ensure that the data will be maintained
- > Systems should be developed ensuring that all tree workers (city staff, Neighborwoods, etc.) are updating the tree inventory
- > The tree inventory can be shared publicly to gather more public interest in the urban forest
- > A tree inventory is a necessary step towards reaching a 6/6 on the NC Forest Service's Urban & Community Forestry Municipal Management Classification and getting a Urban & Community Forest Management Plan
- > Tree Inventory Platforms
  - TreePlotter(PlanITGeo)- This platform is gaining tons of popularity right now. PlanItGeo has partnered with the NC Forest
     Service on it's tree inventory grant and the new NC Urban & Community Forestry Cloud
  - ArcGIS & ArcGIS Field Maps App- This is the basis of most tree inventory programs. Since most cities already have a GIS
    department, this could be an affordable way to go and is very easy to set up for someone with GIS experience. It also
    could serve as a temporary system for tracking trees until a professional inventory is conducted. The data can be moved
    into TreePlotter and many of the other systems when ready
  - There are many others, whichever system you choose ensure that you will own and have access to the data at the end of the inventory

### Recommendation 3: Coordinate Across Departments & Management Plans

Strategy 3a: Create opportunities for cross-training between departments

Strategy 3b: Ordinance: Ensure that relevant departments/staff are included in process at the appropriate time

- Tree pits and root space- coordinate with sidewalk improvements
- Parks, silvicultural and natural regeneration opportunities

### **Recommendation 4: Set Goals**

Strategy 4a: Set overarching goals for management of the urban forest

Strategy 4b: Set Urban Canopy Goals focused on equitably growing the canopy across the city

Set Goals by neighborhoods & census tracts? overall=35%, every neighborhood should be 30%?

- How much do forests grow on their own?
- Use Inventory and ITree

### Recommendation 5: Complete an Urban & Community Forestry Management Plan

**Strategy 5a:** Hire a consultant to guide the city through an Urban & Community Forestry Management Plan. Prioritize the stakeholder engagement process.

|    | Protection & Maintenance  |                                                                                                                                                                                                                                |       |   |   |  |
|----|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|---|--|
|    | Recommendation            | Strategies                                                                                                                                                                                                                     | Phase |   |   |  |
| 6. | Prevent Human-Caused Tree | Prioritize education and enforcement strategies to protect young trees "common offenses" (e.g. volcano mulching, weed wacker damage, topping)  Ordinance: Update Arborist license requirements: See Article IV Recommendations | 1     | 2 |   |  |
|    |                           | Increase capacity to perform establishment care tasks (NeighborWoods, Conservation Corps, City etc.)                                                                                                                           | 1     |   |   |  |
| 7. | Prioritize                | Establish routine tree check-ins at year 1 & year 3  Ensure watering plans are set before planting. Prioritize stewardship contracts whenever possible but utilize the most practical watering system for the situation        | 1     |   |   |  |
|    | of Planted Trees          | Maintain tree inventory data by consistently tracking all tree plantings, maintenance, and removals                                                                                                                            |       | 2 |   |  |
|    |                           | Ordinance: Set newly-planted tree "establishment care" requirements and contracts for contractors                                                                                                                              |       | 2 |   |  |
|    |                           | Post signage informing the public of hazardous tree removals                                                                                                                                                                   | 1     |   |   |  |
| 8. | • • •                     | Develop a Cost-Share Program to support the removal of hazardous trees on private property for low-income households                                                                                                           |       | 2 |   |  |
|    | Hazardous Trees           | Strategize methods for the strategic removal of young invasive trees                                                                                                                                                           |       |   | 3 |  |

|   |                                                         |                                                                                                                                                    |   |   | Iten | η A. |
|---|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---|---|------|------|
|   |                                                         | Utilize tree inventory to strategize staged tree removals                                                                                          |   |   | 3    | T    |
|   |                                                         | Streamline negotiation & enforcement process between city staff and developers                                                                     |   | 2 |      |      |
|   |                                                         | Balance implementation of ordinances with staff's capacity to support                                                                              | 1 | 2 | 3    |      |
|   | 9. Develop Tree                                         | Conduct outreach to local contractors updating them of new ordinances                                                                              |   | 2 |      |      |
|   | Protection                                              | ?Maintain Canopy %, Measuring Canopy %, Tree Credit System close loopholes                                                                         | 1 |   |      |      |
|   | Ordinances for New                                      | <b>?Parking Lots-</b> Shaded area standard in 15 years from planting?, but balance with soil                                                       | 1 |   |      | 1    |
|   | Development                                             | volume                                                                                                                                             | I |   |      |      |
|   |                                                         | Ordinance: Create soil volume standards for tree plantings                                                                                         | 1 |   |      |      |
|   |                                                         | Ordinance: Maintain genetic, species, age, structural, and ecosystem diversity                                                                     |   | 2 |      |      |
|   |                                                         | Prioritize protecting forests and connectivity over individual trees                                                                               |   | 2 |      |      |
|   | 10. Strategically Develop<br>the Fee-in-Lieu<br>Program | Ensure fee-in-lieu doesn't accidentally replace city tree budget                                                                                   | 1 |   |      |      |
| , |                                                         | Explore alternative options to collecting a fee-in-lieu. Develop a menu of alternative nature-based solutions for negotiations with developers     |   | 2 |      |      |
|   |                                                         | Set appropriate fees to support the purchase, planning, planting, and maintenance of the trees in perpetuity. Explore additional uses for the fees |   | 2 |      |      |
|   |                                                         | Consider how to design a fee-in-lieu system that doesn't disproportionally penalize local contractors                                              |   | 2 |      |      |

## Recommendation 6: Prevent Human-Caused Tree Damage

**Strategy 6a:** Prioritize education and enforcement strategies to protect young trees "common offenses" (e.g. volcano mulching, weed wacker damage, topping)

- Educational materials could be developed informing contractors to not engage in these practices. Volcano mulching and topping are both legacy techniques that have been shown to be harmful to tree health.
- The following are all causes of slow tree death/shortened lifespans. In the case of volcano mulching and weed wacker trunk damage, the tree's health may not decline until many years later, after the establishment care period. A simple ordinance requiring developers to replace any dead or dying trees after 3 years of planting will not suffice in these cases.
  - Volcano Mulching- The Urban Forester can require volcano mulched trees to be re-mulched before approving the project and can penalize topping
  - Weed Wacker Trunk Damage- Create large mulch rings around trees and educate landscapers and mowing crews on protecting trunks
  - Topping- Enhance topping ordinance to guide tree workers towards directional pruning methods. Hire urban forester to further enforce the arborist licensing ordinance and/or penalize topping
  - Tree Pit Grates- Monitor city trees to make sure grates are not girdling trees. Remove girdling grates or replace them with grates that have removable rings for tree growth

Strategy 6b: Ordinance: Update Arborist license requirements: See Article IV Recommendations

### Recommendation 7: Prioritize Establishment Care of Planted Trees

Strategy 7a: Increase capacity to perform establishment care tasks (NeighborWoods, Conservation Corps, City etc.)

Strategy 7b: Establish routine tree check-ins at year 1 & year 3

**Strategy 7c:** Ensure watering plans are set before planting. Prioritize stewardship contracts whenever possible but utilize the most practical watering system for the situation

Strategy 7d: Maintain tree inventory data by consistently tracking all tree plantings, maintenance, and removals

Strategy 7e: Ordinance: Set newly-planted tree "establishment care" requirements and contracts for contractors

replacement of dead and unhealthy and poorly managed trees. OR fee-in-lieu for damaged trees (BUT volcanoes, trunk damage etc. may survive and struggle so look for more than survivability

### Recommendation 8: Support the Strategic Removal of Hazardous Trees

Strategy 8a: Post signage informing the public of hazardous tree removals

Strategy 8b: Develop a Cost-Share Program to support the removal of hazardous trees on private property for low-income households

**Strategy 8c:** Strategize methods for the strategic removal of young invasive trees

Strategy 8d: Utilize tree inventory to strategize staged tree removals

### Recommendation 9: Develop Tree Protection Ordinances for New Development

Strategy 9a: Streamline negotiation & enforcement process between city staff and developers

Who talks to developers during the process? Flexibility, Clear language in Ordinance on who enforces and makes decisions. Urban Forester gets to make site specific decisions. Remember, ecology is complex, allow urban forester to make judgment calls

Balance implementation of ordinances with capacity to support

Strategy 9b: Balance implementation of ordinances with staff's capacity to support

Strategic Enforcement. Don't overburden forester with enforcement duties. Penalties need to make sense. Support local economy, fees and overly bureaucratic processes will favor larger companies.

Strategy 9c: Conduct outreach to local contractors updating them of new ordinances

Outreach to local contractors- Notify of new ordinances and provide resource list (consultants for tree canopy assessment etc.). A their feedback!

Strategy 9d: Streamline negotiation & enforcement process between city staff and developers

**Strategy 9e:** Parking Lots

Decide what you want to prioritize here

Strategy 9f: Ordinance: Create soil volume standards for tree plantings

Soil Volume, topsoiling(double check NCDEQ rules are being followed) Tiny ROW strips

Setbacks

Strategy 9g: Ordinance: Maintain genetic, species, age, structural, and ecosystem diversity

- Species Diversity 10,20,30
- Maintain Age Diversity, Age Diversity replacement
- Maintain Local Germplasm & genetic Diversity
- Canopy Layers
- Ecosystem Diversity (Not just hard to develop areas)
- Parking lots-save 1 old tree? Wild idea! (Remember the human relationship to trees)

Strategy 9h: Prioritize protecting forests and connectivity over individual trees

Strategy 9i: Streamline negotiation & enforcement process between city staff and developers

- Woodland/Native Forest Protection
- Create wildlife corridors

Strategy 10a: Ensure fee-in-lieu doesn't accidentally replace city tree budget

**Strategy 10b:** Explore alternative options to collecting a fee-in-lieu. Develop a menu of alternative nature-based solutions for negotiations with developers

Exhaust other options first, leverage the contractors skills and resources

Menu of other options, remember the larger goal is ecological health

Nature-based solutions? ROW increase, bioswales. Get creative, this can be a negotiation process.

- Lots of strip mall heat islands
- Depaving?

**Strategy 10c:** Set appropriate fees to support the purchase, planning, planting, and maintenance of the trees in perpetuity. Explore additional uses for the fees

High enough cost to maintain a tree or land in perpetuity.

Consider capacity to use money and maintain

**Buy Land Now** 

Maintenance systems? Greenspace

Strategy 10d: Consider how to design a fee-in-lieu system that doesn't disproportionally penalize local contractors

### Growth

Item A

|                                               |                                                                                                                                                                                                                                                                       |       |   | Item / |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---|--------|
| Recommendation                                | Strategies                                                                                                                                                                                                                                                            | Phase |   | •      |
| 11. Update Planting Guidelines for Developers | Ordinance: Increase flexibility of ordinance and move specific planting standards to a planting guidelines document                                                                                                                                                   | 1     |   |        |
| 12. Increase Capacity of NeighborWoods        | Consider opportunities to increase NeighborWoods' capacity                                                                                                                                                                                                            | 1     |   |        |
| 13. Plant Trees                               | Prioritize strategies to grow the canopy equitably across the city  Guide species selections towards maintaining species and genetic diversity  Prioritize large tree planting project  Explore diversifying tree planting stock options (e.g. small trees, bareroot) | 1     | 2 |        |
|                                               | Support fruit tree plantings of low-maintenance species                                                                                                                                                                                                               |       | 2 |        |
| 14. Support Natural Regeneration              | Identify opportunities to support natural regeneration in forested areas and edge environments                                                                                                                                                                        |       |   | 3      |

Recommendation 11: Update Planting Guidelines for Developers

Strategy 1a: Ordinance: Increase flexibility of ordinance and move specific planting standards to a planting guidelines document

- Don't include size of planting stock!
- Planting best practices-No volcanoes! Ordinances

Recommendation 12: Support & Increase Capacity of NeighborWoods

Strategy 1a: Consider opportunities to increase NeighborWoods' capacity

Inventory updates, pruning, marking natural regeneration

Financial and training support

### **Recommendation 13: Plant Trees**

Strategy 1a: Prioritize strategies to grow the canopy equitably across the city

Equity & Access- Create systems to further improve equitable access to NeighborWood trees

Utilize Canopy Data, Tree Equity Score, and Tree inventory to guide targeted outreach and tree plantings in under-canopied neighborhoods

**Strategy 1b:** Guide species selections towards maintaining species and genetic diversity

Strategy 1c: Prioritize large tree planting project

Strategy 1d: Explore diversifying tree planting stock options (e.g. small trees, bareroot)

Strategy 1a: Support fruit tree plantings of low-maintenance species

### Recommendation 14: Support Natural Regeneration

Strategy 1a: Identify opportunities to support natural regeneration in forested areas and edge environments

Item A.

# **Community Forestry**

| Recommendation                          | Strategies                                                                                                                                             |   | Phase |   |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---|-------|---|
| 15. Increase Education                  | Update NeighborWoods' Website  Consider developing tree stewardship training programs                                                                  | 1 |       | 3 |
|                                         | Create paid opportunities for youth                                                                                                                    |   |       | 3 |
| 16. Connect and Involve<br>Stakeholders | Further connections and conversation opportunities with all potential stakeholders (developers, public health, community gardens, etc.)                | 1 | 2     | 3 |
|                                         | Provide public access to tree inventory map                                                                                                            |   | 2     |   |
| 17. Cultivate an                        | Prioritize tree stewardship contracts & tree tags                                                                                                      | 1 |       |   |
| Stewardship Culture                     | Consider developing a neighborhood forest steward program to support the stewardship of trees in locations where stewardship contracts are impractical |   |       | 3 |
|                                         | Identify opportunities to support greenspace stewardship and creation                                                                                  |   |       | 3 |

Recommendation 15: Increase Education

Strategy 15a: Update NeighborWoods' Website

Strategy 15b: Consider developing tree stewardship training programs

Strategy 15c: Create paid opportunities for youth

### Recommendation 16: Connect and Involve Stakeholders

**Strategy 1a:** Further connections and conversation opportunities with all potential stakeholders (developers, public health, community gardens, etc.)

### Recommendation 17: Cultivate an Environmental Stewardship Culture

Strategy 17a: Provide public access to tree inventory map

**Strategy 17b:** Prioritize tree stewardship contracts & tree tags

**Strategy 17c:** Consider developing a neighborhood forest steward program to support the stewardship of trees in locations where stewardship contracts are impractical

Strategy 17d: Identify opportunities to support greenspace stewardship and creation

# Notes on Hendersonville Urban Forestry Documents

# Street Tree Planting & Maintenance Plan-December 2010

The Street Tree Planting & Maintenance Plan is a fairly comprehensive document and guide for urban forestry in Hendersonville. Many of the ideas included in the document are also included in this document's recommendations. Below are some of the shared recommendations that deserve to be highlighted again.

### **Key Overlapping Recommendations**

- > Establishment Care!
- **>**
- $\triangleright$
- $\triangleright$

In the 14 years since the preparation of The Street Tree Planting & Maintenance Plan there have been many developments in the urban forestry field as well as significant changes in the Western North Carolina Region. Below are some of the most critical recommendation updates and ideas not included in The Street Tree Planting & Maintenance Plan.

### **Key Updates and New Recommendations**

- > Equity
- > Diversity expansion
- > Community Forestry/Stewardship
- > Tree Protection Ordinances

# Recommended Landscape Species List- September 2023

- > Rock star
- > How is this communicated?
- Add Diversity expectations?

## Tree Canopy Assessment Report- October 2023

Interpreting the document

### Tree Canopy Assessment

- Overall Tree Canopy Loss Stats
- Breakdowns by
  - Land Type
  - Zoning
  - Income
  - People of Color
  - Unique Stats
- Notes on those stats and reality
- Vacant Lots, Parks, Greenspaces
- Urban Heat Island effect, inequities in tree canopy covery
- Tree Canopy Study
  - Interpreting the Maps
  - Feedback
  - Missing Maps:
    - Maps needs to have landmarks on it
    - tree canopy values by neighborhood
    - Tree canopy- Zoning overlaid with census blocks(current tree canopy)
    - Map canopy % by neighborhood & add landmarks to maps (roads and big points)
- o Ground Truthing, driving and walking tour

### Article IV- Trees and Shrubs

Additional feedback within documents

## Tree Protection Ordinance (Draft)

Additional feedback within documents

# **Resources**

- Tree Equity Score
- NC Urban & Community Forestry Cloud
- Itree tools
- ISA Guide to Tree Ordinances
- Tree Ordinances

About the Author

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