Planning Commission Members
District 1: Alan Patterson
District 2: T. Yokima Cureton
District 3: Charles Deese, Chair
District 4: Judianna Tinklenberg
District 5: James Barnett, Vice-Chair
District 6: Sheila Hinson
District 7: Ben Levine

County Attorney
Ginny L. Merck-Dupont

Clerk to Planning Commission
Jennifer Bryan

Development Services Director
Allison Hardin

February 1, 2024 | **5:00 PM** | **101 North Main Street, Lancaster, SC 29720**

LANCASTER COUNTY PLANNING COMMISSION
Council Chambers, Lancaster County Administration Building, 101 N. Main Street

WORKSHOP AGENDA

1. **Call to Order Regular Meeting and Roll Call Vote**

2. **New Business**

   a. RZ-2023-2125 Thompson

   Application by John Thompson to rezone approximately 3.82 acres at 1348 N. Rocky River Road (TM# 0058-00-064.00) from Rural Business (RUB) to General Business (GB), in order to allow development of a self-service storage facility.

   b. SD-2023-1136 Asbury Site

   Application by Landworks Design and Empire Communities for a Preliminary plat for approximately 90.7 acres located at Asbury Lane in Indian Land (TM#s 0007-00-022.00, 0007-00-022.01, 0007-00-022.02, 0007-00-022.03, 0007-00-022.04, 0007-00-022.05 & 0007-00-022.06) for a subdivision of 78 single-family lots. Revised due to boundary adjustment.

   c. SD-2022-2205 The Sands at Kershaw f/k/a Little Dude

   Application by Earl Coulston/Coulston Enterprises, for a Preliminary Plat for 38.02 acres located at the southeast corner of Fork Hill Road and Little Dude Avenue in Kershaw (TM #0141-00-024.00) for a single-family residential development of 74 lots.

   d. SD-2023-0325 Jasmine Hills

   Application by Mohamed Altwairgi/Rass Investments LLC for a Preliminary Plat for 34.14 acres straddling Pettus Road northwest of the intersection with Barberville Road (TM# 0003-00-058.00) for a subdivision of 75 single-family lots.

   e. NRN-2024-0155 Group Submittal- Site Plans

   Group submittal of road names submitted as part of Preliminary Plat and Site Plan process.

f. Other

i. UDO Update

ii. Comprehensive Plan Update

iii. Staffing Update

iv. Review of UDO Administrative Processes: Areas of Responsibility

3. <u>Adjourn</u>

Agenda Item Summary

Ordinance # / Resolution #: RZ-2023-2125 Thompson
Contact Person / Sponsor: M. Blaszyk
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider:

ATTACHMENTS:

Description	Upload Date	Type
Application	1/24/2024	Exhibit
Sketch Plan	1/24/2024	Exhibit
Sketch Plan Review Comments	1/24/2024	Exhibit

Lancaster County
South Carolina

Planning Department
P.O. Box 1809, 101 N. Main Street, Lancaster, SC 29721
Phone: 803.285.6005, planning@lancastercountysc.net
www.mylancastersc.org

ZONING MAP AMENDMENT APPLICATION

SUBMITTAL REQUIREMENTS

- Completed Application
- Signatures of Applicant and Property Owner
- Deed and survey plat or boundary survey
- Fees associated with review

GENERAL INFORMATION

Property Address 1438 N. Rocky River Rd.

City Lancaster State S.C. Zip 29720 Tax Parcel ID 0058-00-064.00

Current Zoning RUB Rural Business Current Use Automatic Car Wash + ATM

Proposed Zoning GB General Business Total Acres 3.82

Project Description Self Service Storage

Surrounding Property Description Exxon gas station, Restaurants car lot, Car washes, Mahaffey's Used Parts, ABC store, Dog Wash, Dollar General), Family Dollar Store

CONTACT INFORMATION

Applicant Name John Thompson

Address 2565 Pink Plyler Rd.

City Lancaster State S.C. Zip 29720 Phone 803-246-5108

Fax _____ Email thompsonscarwash@comporium.net

Property Owner Name John Thompson

Address 2565 Pink Plyler Rd.

City Lancaster State S.C. Zip 29720 Phone 803-246-5108

Fax _____ Email thompsonscarwash@comporium.net

I hereby certify that I have read this application and the information supplied herein is true and correct to the best of my knowledge. I agree to comply with all applicable County ordinances and state laws related to the use and development of the land. I further certify that I am the property owner, or his/her authorized agent, or the subject property. I understand that falsifying any information herein may result in rejection or denial of this request.

John Thompson — 10-31-23

Applicant — Date

John Thompson — 10-31-23

Property Owner(s) — Date

Attach owner's notarized written authorization with property information if the applicant is not the owner.

LANCASTER COUNTY OFFICE USE ONLY

Application Number _____ Date Received _____ Receipt Number _____

Amount Paid _____ Check Number _____ Cash Amount _____

Received By _____ Planning Commission Meeting Date _____

SCHEDULE/PROCESS 1. Submit Application

- The deadline for this application is at least 45 days prior to the Planning Commission meeting, held every third Tuesday of the month.
- After preliminary review, staff will determine when the case can be scheduled for a hearing with Planning Commission.
- An application withdrawal should be made in writing and received prior to public notice in order to receive a refund.
- Rezoning Application Fee – single parcel $435.00
- Rezoning Application Fee – multi parcel $610.00

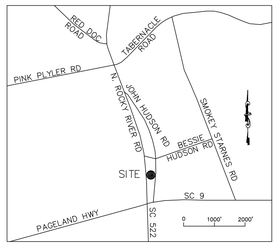
2. **Planning Commission**

- Conducts a public hearing on the application to receive input from Lancaster County citizens, applicant, and other interested parties.
- Reviews the application to ensure it is consistent with the Lancaster County Unified Development Ordinance, Comprehensive Plan, and all adopted County plans.
- Makes a recommendation to the County Council.

3. **County Council**

- Approves, denies, or submits application to the Planning Commission for further study.
- Action requires three readings for approval.
- Subsequent to final County Council action on rezoning, notice of action will be provided to the applicant, owner, and adjacent property owners.
- If applicant would like to request a special presentation, please notify the County Clerk @ (803) 416-9307 before 5:00pm on the first Monday of the month to make arrangements.

LOCATION MAP
LANCASTER COUNTY SC



ZONED RR
TAX MAP 0058-00-059.00

JOHN HUDSON ROAD
S29-748
66'R/W

N09°46'00"E
264.60'

N09°46'00"E
208.35'

N09°46'00"E
199.00'

33' R/W

15' BUILDING SETBACK

ZONED RUB
TAX MAP 0058-00-076.01

ZONED R45B

ZONED RUB
2.66 ACRES
PORTION OF TAX MAP 0058-00-064.00

ZONED RUB
.9 ACRES
PORTION OF TAX MAP 0058-00-064.00

S36°04'30"E
286.81'

261.88'

15' BUILDING SETBACK

50' BUILDING SETBACK

FUTURE DETENTION POND

S09°51'32"W
281.83'

S09°51'32"W
40.17'

S02°23'17"W
128.84'

N79°27'59"W
509.39'

215.41'

EXISTING
CAR WASH

N28°10'41"E
196.64'

191.64'

EXISTING SAND FILTER
DETENTION POND

EXISTING FIRE HYDRANT.

ROCKY RIVER ROAD, SC 522

ZONED RUB
TAX MAP 0058-00-088.00

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

REV.	DATE	DESCRIPTION

D H Hagins & Associates, LLC
Civil Consulting Engineers
2583 Kershaw Camden Hwy. Lancaster, SC 29720
Phone: (803) 286-4472

BUFORD CROSSROAD
STORAGE

PRELIMINARY
SITE PLAN

DATE: 11/30/23

SCALE: 1"=30'

JOB NO. 322.003

SHEET: 1

Lancaster County
Planning Department
P. O. Box 1809
Lancaster, SC 29721
803.285.6005
planning@lancastercountysc.net

December 18, 2023

John Thompson

1438 N Rocky RIver Road
Lancaster, SC 29720

Project Number	20232125
Project Name	John Thompson Mini Storage
Location	1438 N Rocky RIver Road
Stage	Sketch Plan
Parcel(s)	0058-00-064.00
Status	Not Approved

Dear: John Thompson

We have completed our review of the plan identified above. The comments listed on the attached report must be addressed in your next plan stage.

Sincerely,

Sincerely,

Plan Review Comments

Building - Darin Robinson - (803) 416-9399
drobinson@lancastersc.net

Conditional

Review Comments:

- Need determination of whether any of such new buildings are staffed, for level of requirement for Accessible parking and bath facility
- Are such new proposed storage buildings to be conditioned space?
- Are such storage buildings intended to be transient Self-service storage facilities?
- An automatic sprinkler fire protection system required where any building exceeds 2,500 sq.ft, unless 3-hour fire barrier wall placed every 2500 sq.ft. or all such Self-service storage facilities maximum one-story with all storage spaces accessed directly from the exterior
- Required 5% but not less than 1 Accessible storage space(s) for total facility spaces up to 200 for each building. Accessible individual self-service spaces to be dispersed throughout the various classes/sizes of storage spaces provided.

- Required Building permit for any fencing over 7 ft. height

*** Further detailed review upon next stage Civil review submittal

---

County Engineer - Stephen Blackwelder - 8035482406
sblackwelder@lancastersc.net

Conditional

Review Comments:

General Comments:
1. This project is within the SCDHEC storm sewer permitting area of Lancaster County.
a. Please coordinate with DHEC concerning Sediment and Erosion Control approval and provide a copy of approval prior to grading activities.
2. Most of our comments and questions will be at the Construction Document review of the civil plans. Below are some general observations from the sketch plan submitted.
3. On site erosion control measures will be required and will be evaluated during the civil plan review.
4. SCDOT encroachment permit will be needed for approval of the design and location of the access on Rocky River Road and any other work proposed on the SCDOT ROW.

Fire Marshal - John Magette - 8032838888
jmagette@lancastersc.net

Approved

Review Comments:

1. This is a sketch plan review only. A more detailed review will be competed at civil and building submission.
2. All buildings must be within 500 feet of a fire hydrant.
3. If buildings are sprinklered a fire hydrant will be required within 100 feet of an FDC.

Planning - Matthew Blaszyk - 803-285-6005
mblaszyk@lancastersc.net

Not Approved

Review Comments:

UDO 5.9.11 STORAGE – SELF-SERVICE [GB, RB, LI, HI]
A. Permitted Commercial Activities: The owner or operator of any self-storage warehouse, or portion thereof, shall not conduct any type of commercial activity except for the following:

1. Leasing of the storage units;

2. Rental and/or sale of moving supplies;

3. Rental and/or sale of moving equipment (the rental or sale of any moving trailers, trucks, or other vehicles shall only be permitted in districts that also permit Vehicle Rental/Sales/Leasing); and

4. Auctions or other sales of property that occur on a strictly temporary basis.

B. Sale of Personal Goods: It shall be unlawful for a lessee of any self-storage warehouse, or portion thereof, to sell or offer for sale any item of personal property or to conduct any type of commercial activity of any kind whatsoever, except in auctions organized by the owner or operator of the facility that occur on a strictly temporary basis.

C. Buffering: Such facilities must be buffered from adjacent properties with a Type A buffer in accordance with Section 7.1.5.

D. Accessory Dwellings: One accessory dwelling unit for a resident manager or security personnel only shall be permitted on the premises in a detached structure. No portion of any self-storage warehouse shall be used, on a temporary or permanent basis, as a dwelling unit.

UDO 7.1.5 A- Type A Buffer

Option 1: 20ft, 1 Canopy Tree, 2 Understory Trees, 8 Evergreen Shrubs per 100 linear feet

Option 2: 10ft, 2 Canopy Trees, 2 Understory Trees, 12 Evergreen Shrubs Per 100 linear feet

Required Opacity: Semi-opaque (i.e., having only seasonal horizontal openings not exceeding 25% of the total width from the ground to a height of 6 feet within 2 years of planting)

Sidewalks to adjacent parcels are required in the GB zoning district. UDO 6.3

Please identify the adjacent land uses to the site.

A full lighting plan is required at the Civil Submittal. More information on the required lighting plan can be found in section 7.3 of the UDO.

A full signage plan is required at the Civil Submittal. This is a separate permit that is process through our Zoning Department. More information on signage requirements can be found in section 7.4 of the UDO.

For the outdoor storage yard use type, All gas and oil shall be drained from vehicles stored or placed in any outdoor storage yard. UDO section 5.9.10.D.2. This would be a different use type than the designated “Storage-Self Service Mini”.

Advisory Comments:

The proposed Zoning from RUB to General Business would be considered spot zoning which is illegal in the State of South Carolina. Staff would not be able to support this rezoning proposal.

The applicant would need to go through the Minor Subdivision Process to divide the portion of TM Number 0058-00-0064.00 from the car wash. The minor plat would be approved if the rezoning has been approved.

E911 Address - Sandra Burton - (803) 416-9325 **Approved**
sburton@lanc911.com

Review Comments:

One address will be issued for the site and each building will be issued a number. Addresses will be issued during Civil Phase. At that time please send a CAD file of the footprints of buildings.

LC Water & Sewer District - Erin Evans - 8032856919 **Conditional**
eevans@lcwasd.org

Review Comments:

If water is needed for this site, a submittal will need to be made to LCWSD according to our Water and Wastewater Extension Policy.

LCWSD is a separate entity from the County. We have our own submittal requirements. Please check our website, www.lcwasd.org, under the Developers tab for our policies and procedures.

SCDOT - David Gamble - (803) 385-4280
GambleDD@scdot.org

Approved

Review Comments:

This review is a general access location review only and does not include required driveway widths, radius returns, pavement design or any other details. A full review for compliance with the SCDOT ARMS manual will be conducted when the SCDOT permit is applied for.

Agenda Item Summary

Ordinance # / Resolution #: SD-2023-1136 Asbury Site
Contact Person / Sponsor: M. Blaszyk
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider:
Copy of revised plat will be provided at Workshop.

TRC Review comments for the revision are not yet available. They will be attached to the agenda for the regular meeting.

ATTACHMENTS:

Description	Upload Date	Type
Application	12/8/2023	Exhibit
Preliminary Plat- December 2023	1/31/2024	Exhibit
Review Comments January 11, 2024	1/31/2024	Exhibit
TIA Review	1/9/2024	Exhibit
Covenants & Restrictions	1/3/2024	Exhibit

Planning Department
P.O. Box 1809, 101 N. Main Street, Lancaster, SC 29721
Phone: 803.285.6005, planning@lancastercountysc.net
www.mylancastersc.org

MAJOR SUBDIVISION PRELIMINARY PLAT

WHEN TO USE THIS PROCESS:

Use the attached checklist for subdivisions that

- Create 6 or more lots for any type of development; or
- Create new streets or alleys; or
- Increase the number of lots in a major subdivision previously approved by Lancaster County

APPLICATION AND APPROVAL PROCESS

- **Sketch Plan Application**: Complete the Sketch Plan review process prior to submission of a Major Subdivision Preliminary Plat. Sketch Plans are usually a one−sheet conceptual drawing. Refer to the **Sketch Plan Checklist** for additional information.
- **Required Pre-Application Conference**: Please call to schedule a Pre−Application Conference prior to submitting a Preliminary Plat application.The conference will be used to provide an overview of applicable standards and the approval process, as well as additional feedback on your sketch.
- **Traffic Impact Analysis**: Submit a TIA to County and SCDOT for review and Approval. This process is initiated by submitting a scoping request to County and SCDOT for approval prior to TIA preparation. Please note TIAs are reviewed on behalf of the County by consulting traffic engineers. Applicants are responsible for payment of consultant's fees prior to TIA review, based on an estimate prepared by County Engineering staff.

Prepare the Preliminary Plat using the attached checklist (see below) and the current UDO available on our website. Project can be submitted online by creating an account at https://evolvepublic.infovisionsoftware.com/lancaster/?portal=project

SUBMIT THE FOLLOWING ITEMS FOR PLAN REVIEW:

- Application with contact and project information (see p. 2)
- Fees: After submitting documents, you will receive an email with fees due and forms of payment accepted, along with a link to online payment portal. Plans will not be routed for review until payment and hard copies are received (if needed- see below).
- Two (2) paper copies of Preliminary Plat and Supporting Data is required for all submittals over 10 pages.

Plans will be reviewed by County staff and a notice of revision, if required, will be sent to the designated contact person. Prior to the Planning Commission meeting, staff will review the plan with the Technical Review Committee. After Planning Commission approves the plat, you will receive a notification that you can print the stamped digital set from Evolve Project Portal. Upon the approval of a Preliminary Plat, detailed plans for street construction, utility line installations,and similar approvals shall be included in detailed **Civil Construction Plans**.

PROJECT INFORMATION

Project Address/Location: _

Tax Map ID/Parcel No.: 0007-00-022.00, 0007-00-022.01, 0007-00-022.02, 0007-00-022.03, 0007-00-022.04, 0007-00-022.05, 0007-00-022.06

Project Description: 78 LOT SINGLE FAMILY SUBDIVISION

Applicant Name: LANDWORKS DESIGN GROUP, PA

Address: 1230 WEST MOREHEAD STREET, SUITE 304, CHARLOTTE, NC, 28208

Phone: 704-841-1604 X 717 Email: STUART.JOHNSON@LANDWORKSPA.COM

Property Owner Name: SEE ADDITIONAL SHEETS

Address: _

Phone: _____ Email: _____

Other Project Contacts

Name: EMPIRE COMMUNITIES

Address: 8008 CORPORATE CENTER DRIVE, CHARLOTTE, NC 28226

Phone: 704-602-3322 Email: DROBERTSON@EMPIRECOMMUNITIES.COM

Name: _____

Address: _

Phone: _____ Email: _____

Applicant Signature: _____ Date: 12-8-23

Owner Signature: SEE ADDITIONAL SHEETS Date: _____

Owner Signature: _____ Date: _____

(For additional owners, attach copies of this page with required signatures)

PRELIMINARY PLAT CHECKLIST

The following identifies information required on Preliminary Plat drawings; however, this checklist should not be used as a substitute to reviewing the UDO.

GENERAL PROJECT INFORMATION:

Please identify the following general information on the site plan drawing either within a notes section or on the plat drawing itself, as appropriate.

1. Proposed name of project.
2. Name, mailing address, email address, and phone number of the owner and/or developer and designer of the site plan.
3. Map scale using appropriate engineer's scale, north arrow, and date.
4. Vicinity map (1" = 1 mile min. scale).
5. Total acreage to be developed.
6. Boundaries of the tract to be developed with all bearings and distances. At least two points of the survey must be tied to SC geodetic control points [See State Plane Coordinate Checklist]
7. Proposed use of all lots to be used. See "zoning considerations" section above. Be sure to designate any lots proposed to be used for uses other than single−family residential.
8. Tax map number.
9. Zoning district classification and, if applicable, overlay zone(s).
10. Land use, zoning district classification, and tax map number of adjacent properties, names of adjacent developments, and owners of adjoining parcels.
11. Total number of lots and layout of all lots, including building setback lines, scaled dimensions, area in square feet, lot numbers (if multiple lots), and utility easements with width and use.
12. Location and dimensions of all proposed buildings including number of stories and total square footage by use.
13. Building setbacks and proposed impervious surface calculation.
14. In case of re−subdivision, submit a copy of existing plat.

EXISTING CONDITIONS:

Please identify the following existing conditions on the plan drawing that may be located on the subject property or adjacent areas.

1. Topography by contours at vertical intervals of not more than five feet. All elevations shall refer to Mean Sea Level Datum (if available).
2. Show location and right−of−way of existing streets, curb cuts, and driveways within 300 feet of the site.
3. Show location and footprint of existing buildings on adjacent parcels.
4. Show location of railroads and utility lines either on or adjacent to the property to be developed. Specify whether utility lines are in easements or rights−of−way and show location of poles/towers.
5. Size and location of existing sewers, water mains, storm drains, culverts or other underground facilities within the street or within the right−of−way of streets or roads

adjoining the tract. Show ditches, swales, and drainage easements adjacent to the proposed project.

6. Location, size, and use of any existing structures on the subject property that will remain on the site
7. Location of city limit lines, if adjacent to subject property.
8. Show location of nearest hydrant. Spacing should be 500 feet single−family residential (this distance is measured in the direction of fire truck travel).
9. The Fire Department will need access to within 150 feet of all points of the building.
10. Location of land subject to flooding and nearest 100−year flood zone and elevation.
11. Location of existing or planned public parks, schools, greenways, trails, or other major public amenity located within ½ mile of the development site.

ENVIRONMENTAL CONSIDERATIONS:

ENVIRONMENTALLY SENSITIVE LANDS

1. Depict any water resources subject to the UDO Chapter 8, Natural Resources Protection, and comply with all requirements laid out in the aforementioned section.
2. Depict any prohibitive/severe steep slope areas (greater than or equal to 3H:1V) and take into account the limitations on disturbance when designing the project.
3. Depict stormwater management areas.

TREE RETENTION

1. Identify tree canopy retention areas.
2. Show trees that require protection.

LANDSCAPING

- Show landscaping for required site landscaping areas.

OPEN SPACE

1. Indicate if all or a portion of the site has been designated as an Open Space.
2. Calculate required common open space acreage.
3. Show any trails and greenways on the Lancaster County Carolina Thread Trail Master Plan that developer is required to construct.
4. Show all existing or planned public parks, schools, greenways, existing trails, or other major public amenities within ½ mile of the site, and pedestrian connections provided by the developer to those areas.

INFRASTRUCTURE CONSIDERATIONS:

GRADING, STORMWATER, AND UTILITY SYSTEM

Please identify the following proposed grading, stormwater, and utility system improvements.

1. Preliminary plan for sanitary sewers showing the location of manholes and points of discharge. Indicate direction of flow.
2. Preliminary plan for storm sewer system showing the location of outlets and direction of flow.
3. Preliminary plan of water supply system
4. All proposed easements.
5. Submit written verification to serve from all non−county utility service providers (gas, telephone, cable, and water and sewer district).
6. Proposed major contour changes in areas where substantial cut and/or fill is to be done.

Roads, Bridges, and Public Ways (UDO 6.13, pg. 21)

General design criteria are explained in two primary places in the UDO—Chapter 6 and Appendix C. Please refer to both when designing the community. The below is a brief summary of some of the "big picture" points, but those two sections in the Zoning Ordinance have many other requirements to which you will need to refer.

1. Connectivity is required within the neighborhood, and between the neighborhood and adjacent neighborhoods or other lands. Additionally, a second entrance is required for more than 100 units.
2. Traffic calming measures such as minimum street widths, short block lengths, on−street parking, controlled intersections, and roundabouts should be used per the UDO.
3. Sidewalks are required both internally, and in some cases, externally to the development and must be at least five feet wide.
4. Street trees are required to be planted in accordance with the UDO.
5. See Chapter 6: Subdivision and Infrastructure Standards and Appendix C – Manual of Specifications and Standard Details (MSSD), generally for road specifications, cross sections, and other important information. For example:
    a. Cul−de−sacs should be avoided except as described in the UDO.
    b. Gated communities have additional requirements as laid out in the UDO.
    c. Curb and gutter requirements are applicable in some districts as designated in the UDO.
6. Traffic Impact Analysis, refer to Chapter 6, Subdivision and Infrastructure Standards.

LOT DESIGN

Identify a lot configuration that complies with the following standards.

1. Lot designed to comply with the UDO design requirements
    a. Lots cannot be divided by City limit lines or zoning districts.
    b. Through lots are prohibited.

c. Flag lots are prohibited except where they are necessary to eliminate access onto arterial or collector roadways.

d. Side lot lines must be at right angles to straight street lines and radial to curved sidewalk and street lines.

USE-SPECIFIC STANDARDS

The UDO has standards associated with specific uses in order to minimize negative impacts and/or to help shape the design of a specific use. Design the proposed site plan in compliance with any applicable use−specific standards.

OVERLAY DISTRICTS

If an overlay district exists, be sure to address the applicable standards for it in the site design.

- ☐ **McWhirter Field Aviation Overlay** Please refer to the UDO for allowed uses and associated development criteria.
- ☐ **Carolina Heelsplitter Overlay**
- ☐ **Carolina Thread Trail Overlay**
- ☐ **Highway Corridor Overlay**
- ☐ **Equestrian Oriented Subdivision Overlay**

PROPERTY OWNERS

PARCEL: 0007-00-022.00
PROPERTY OWNER: LAWRENCE TERRY POTTS JR., PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR.
ADDRESS: 9246 OLD BAILES RD, INDIAN LAND, SC 29707
PHONE: 704-841-9415 EMAIL: Lpotts_25@yahoo.com
SIGNATURE: [signature] DATE: June 8, 2023

PARCEL: 0007-00-022.01
PROPERTY OWNER: DONNA SIGWART MCAFEE, EXECUTRIX FOR THE ESTATE OF SARAH SIGWART
ADDRESS: 7001 VALLEY HAVEN DR, CHARLOTTE, NC 28211
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.02
PROPERTY OWNER: WILLIAM M HAYES
ADDRESS: 9284 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.03
PROPERTY OWNER: WILLIAM TROY & ANGELA P ENNIS
ADDRESS: 9280 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.04
PROPERTY OWNER: MARJORIE POTTS MOORE
ADDRESS: 9322 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.05
PROPERTY OWNER: CHARLES THOMAS MOORE
ADDRESS: 7518 KARLEY CT, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-023.06
PROPERTY OWNER: EDITH POTTS JONES & LAWRENCE TERRY POTTS JR.
ADDRESS: 6393 HWY 55, CLOVER, SC 29710
PHONE: 704-841-9415 EMAIL: Lpotts_25@yahoo.com
SIGNATURE: [signature] DATE: June 8, 2023

PROPERTY OWNERS

PARCEL: 0007-00-022.00
PROPERTY OWNER: LAWRENCE TERRY POTTS JR., PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR.
ADDRESS: 9246 OLD BAILES RD, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.01
PROPERTY OWNER: DONNA SIGWART MCAFEE, EXECUTRIX FOR THE ESTATE OF SARAH SIGWART
ADDRESS: 7001 VALLEY HAVEN DR, CHARLOTTE, NC 28211
PHONE: 704-366-5709 EMAIL: mcafee-donna@yahoo.com
SIGNATURE: Donna Sigwart McAfee DATE: June 7, 2023

PARCEL: 0007-00-022.02
PROPERTY OWNER: WILLIAM M HAYES
ADDRESS: 9284 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.03
PROPERTY OWNER: WILLIAM TROY & ANGELA P ENNIS
ADDRESS: 9280 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.04
PROPERTY OWNER: MARJORIE POTTS MOORE
ADDRESS: 9322 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.05
PROPERTY OWNER: CHARLES THOMAS MOORE
ADDRESS: 7518 KARLEY CT, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-023.06
PROPERTY OWNER: EDITH POTTS JONES & LAWRENCE TERRY POTTS JR.
ADDRESS: 6393 HWY 55, CLOVER, SC 29710
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PROPERTY OWNERS

PARCEL: 0007-00-022.00
PROPERTY OWNER: LAWRENCE TERRY POTTS JR., PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR.
ADDRESS: 9246 OLD BAILES RD, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.01
PROPERTY OWNER: DONNA SIGWART MCAFEE, EXECUTRIX FOR THE ESTATE OF SARAH SIGWART
ADDRESS: 7001 VALLEY HAVEN DR, CHARLOTTE, NC 28211
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.02
PROPERTY OWNER: WILLIAM M HAYES
ADDRESS: 9284 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: William M. Hayes DATE: 6-8-23

PARCEL: 0007-00-022.03
PROPERTY OWNER: WILLIAM TROY & ANGELA P ENNIS
ADDRESS: 9280 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.04
PROPERTY OWNER: MARJORIE POTTS MOORE
ADDRESS: 9322 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.05
PROPERTY OWNER: CHARLES THOMAS MOORE
ADDRESS: 7518 KARLEY CT, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-023.06
PROPERTY OWNER: EDITH POTTS JONES & LAWRENCE TERRY POTTS JR.
ADDRESS: 6393 HWY 55, CLOVER, SC 29710
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PROPERTY OWNERS

PARCEL: 0007-00-022.00
PROPERTY OWNER: LAWRENCE TERRY POTTS JR , PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR
ADDRESS: 9246 OLD BAILES RD, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.01
PROPERTY OWNER: DONNA SIGWART MCAFEE, EXECUTRIX FOR THE ESTATE OF SARAH SIGWART
ADDRESS: 7001 VALLEY HAVEN DR, CHARLOTTE, NC 28211
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.02
PROPERTY OWNER: WILLIAM M HAYES
ADDRESS: 9284 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.03
PROPERTY OWNER: WILLIAM TROY & ANGELA P ENNIS
ADDRESS: 9280 ASBURY LN, INDIAN LAND, SC 29707
PHONE: 803-242-1375 EMAIL: pottsandpans@hotmail.com
SIGNATURE: William Troy Ennis / Angela P Ennis DATE: 6/8/23

PARCEL: 0007-00-022.04
PROPERTY OWNER: MARJORIE POTTS MOORE
ADDRESS: 9322 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.05
PROPERTY OWNER: CHARLES THOMAS MOORE
ADDRESS: 7518 KARLEY CT, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-023.06
PROPERTY OWNER: EDITH POTTS JONES & LAWRENCE TERRY POTTS JR.
ADDRESS: 6393 HWY 55, CLOVER, SC 29710
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PROPERTY OWNERS

PARCEL: 0007-00-022.00
PROPERTY OWNER: LAWRENCE TERRY POTTS JR , PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR
ADDRESS: 9246 OLD BAILES RD, INDIAN LAND, SC 29707
PHONE: EMAIL:
SIGNATURE: DATE:

PARCEL: 0007-00-022.01
PROPERTY OWNER: DONNA SIGWART MCAFEE, EXECUTRIX FOR THE ESTATE OF SARAH SIGWART
ADDRESS: 7001 VALLEY HAVEN DR, CHARLOTTE, NC 28211
PHONE: EMAIL:
SIGNATURE: DATE:

PARCEL: 0007-00-022.02
PROPERTY OWNER: WILLIAM M HAYES
ADDRESS: 9284 ASBURY LN, INDIAN LAND, SC 29707
PHONE: EMAIL:
SIGNATURE: DATE:

PARCEL: 0007-00-022.03
PROPERTY OWNER: WILLIAM TROY & ANGELA P ENNIS
ADDRESS: 9280 ASBURY LN, INDIAN LAND, SC 29707
PHONE: EMAIL:
SIGNATURE: DATE:

PARCEL: 0007-00-022.04
PROPERTY OWNER: MARJORIE POTTS MOORE
ADDRESS: 9322 ASBURY LN, INDIAN LAND, SC 29707
PHONE: 803-242-3378 EMAIL: margiepmoore@live.com
SIGNATURE: Marjorie Potts Moore DATE: 06/09/23

PARCEL: 0007-00-022.05
PROPERTY OWNER: CHARLES THOMAS MOORE
ADDRESS: 7518 KARLEY CT, INDIAN LAND, SC 29707
PHONE: EMAIL:
SIGNATURE: DATE:

PARCEL: 0007-00-023.06
PROPERTY OWNER: EDITH POTTS JONES & LAWRENCE TERRY POTTS JR.
ADDRESS: 6393 HWY 55, CLOVER, SC 29710
PHONE: EMAIL:
SIGNATURE: DATE:

ARCEL: 0007-00-022.00
ROPERTY OWNER: LAWRENCE TERRY POTTS JR., PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR.
DDRESS: 9246 OLD BAILES RD, INDIAN LAND, SC 29707
HONE: _____ EMAIL: _____
IGNATURE: _____ DATE: _____

ARCEL: 0007-00-022.01
ROPERTY OWNER: DONNA SIGWART MCAFEE, EXECUTRIX FOR THE ESTATE OF SARAH SIGWART
DDRESS: 7001 VALLEY HAVEN DR, CHARLOTTE, NC 28211
HONE: _____ EMAIL: _____
IGNATURE: _____ DATE: _____

ARCEL: 0007-00-022.02
ROPERTY OWNER: WILLIAM M HAYES
DDRESS: 9284 ASBURY LN, INDIAN LAND, SC 29707
HONE: _____ EMAIL: _____
IGNATURE: _____ DATE: _____

ARCEL: 0007-00-022.03
ROPERTY OWNER: WILLIAM TROY & ANGELA P ENNIS
DDRESS: 9280 ASBURY LN, INDIAN LAND, SC 29707
HONE: _____ EMAIL: _____
IGNATURE: _____ DATE: _____

ARCEL: 0007-00-022.04
ROPERTY OWNER: MARJORIE POTTS MOORE
DDRESS: 9322 ASBURY LN, INDIAN LAND, SC 29707
HONE: _____ EMAIL: _____
IGNATURE: _____ DATE: _____

ARCEL: 0007-00-022.05
ROPERTY OWNER: CHARLES THOMAS MOORE
DDRESS: 7518 KARLEY CT, INDIAN LAND, SC 29707
PHONE: 704 841-9415 EMAIL: _____
SIGNATURE: Charles Thomas Moore DATE: 6-13-2023

PARCEL: 0007-00-023.06
PROPERTY OWNER: EDITH POTTS JONES & LAWRENCE TERRY POTTS JR.
ADDRESS: 6393 HWY 55, CLOVER, SC 29710
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PROPERTY OWNERS

PARCEL: 0007-00-022.00
PROPERTY OWNER: LAWRENCE TERRY POTTS JR., PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR.
ADDRESS: 9246 OLD BAILES RD, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.01
PROPERTY OWNER: DONNA SIGWART MCAFEE, EXECUTRIX FOR THE ESTATE OF SARAH SIGWART
ADDRESS: 7001 VALLEY HAVEN DR, CHARLOTTE, NC 28211
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.02
PROPERTY OWNER: WILLIAM M HAYES
ADDRESS: 9284 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-022.03
PROPERTY OWNER: WILLIAM TROY & ANGELA P ENNIS
ADDRESS: 9280 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

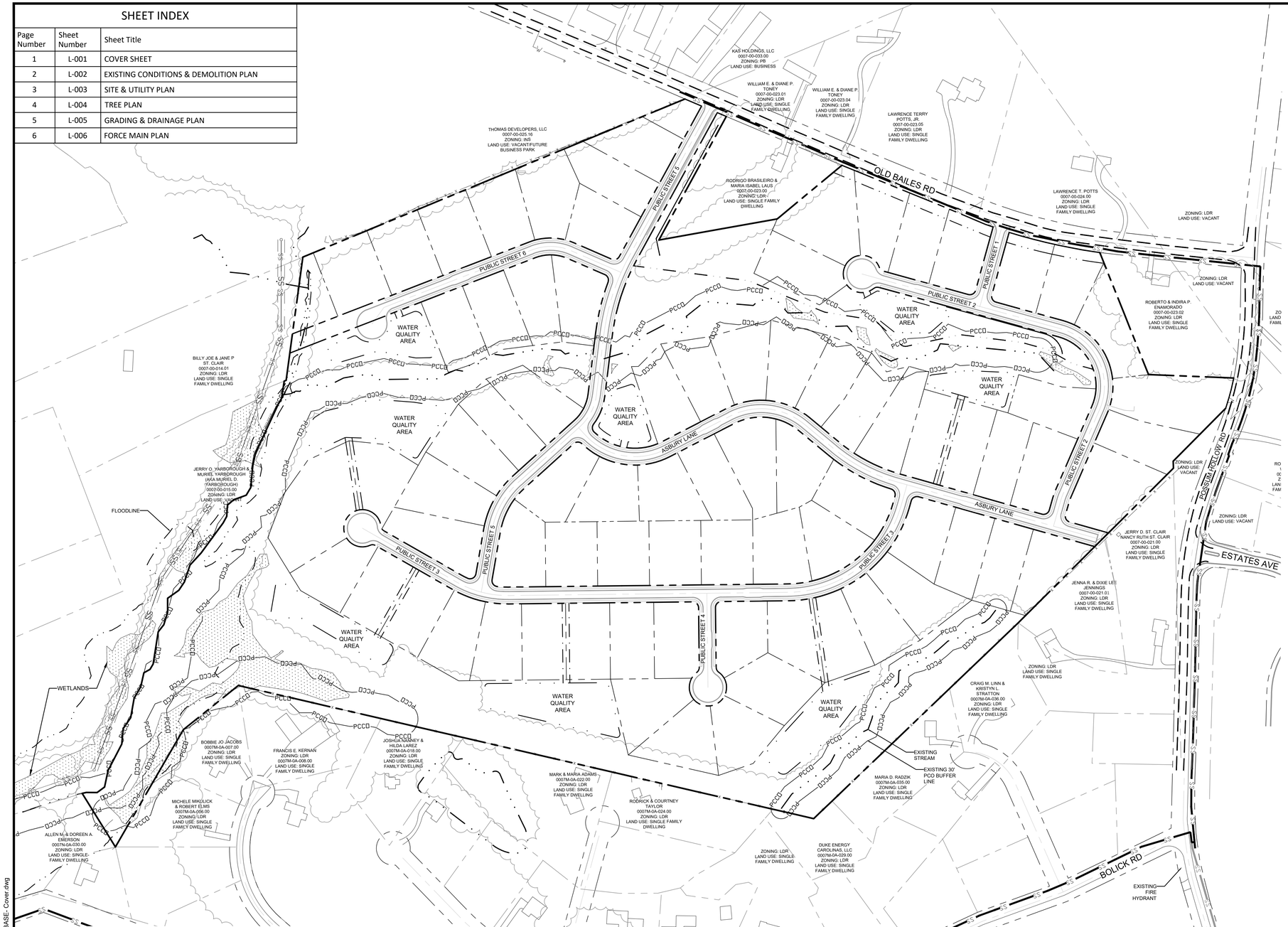
PARCEL: 0007-00-022.04
PROPERTY OWNER: MARJORIE POTTS MOORE
ADDRESS: 9322 ASBURY LN, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

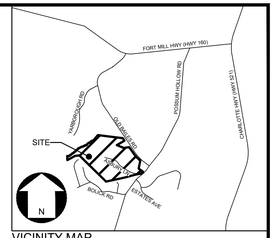
PARCEL: 0007-00-022.05
PROPERTY OWNER: CHARLES THOMAS MOORE
ADDRESS: 7518 KARLEY CT, INDIAN LAND, SC 29707
PHONE: _____ EMAIL: _____
SIGNATURE: _____ DATE: _____

PARCEL: 0007-00-023.06
PROPERTY OWNER: EDITH POTTS JONES & LAWRENCE TERRY POTTS JR.
Corrected ADDRESS: 6393 HWY 55, CLOVER, SC 29710 6393 Hwy 55 East, Clover, S.C. 29710
PHONE: 803-831-8200 EMAIL: Tonesedv@AOL.Com
SIGNATURE: Edith Potts Jones DATE: 6-7-2023

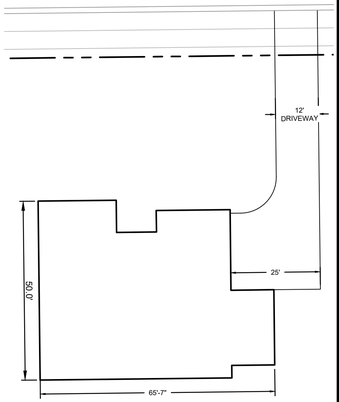
SHEET INDEX

Page Number	Sheet Number	Sheet Title
1	L-001	COVER SHEET
2	L-002	EXISTING CONDITIONS & DEMOLITION PLAN
3	L-003	SITE & UTILITY PLAN
4	L-004	TREE PLAN
5	L-005	GRADING & DRAINAGE PLAN
6	L-006	FORCE MAIN PLAN

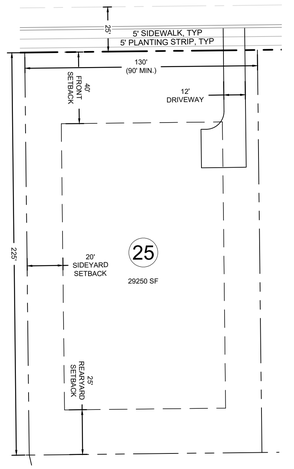




VICINITY MAP
NOT TO SCALE



TYPICAL BUILDING SIZE
SCALE: 1"=20'



TYPICAL LAYOUT
SCALE: 1"=40'

PROPERTY OWNERS

0007-00-022.00
OWNER(S):
LAWRENCE TERRY POTTS JR., INDIVIDUALLY AND AS PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR.
ANGELA POTTS ENNIS, BENEFICIARY
MARJORIE POTTS MOORE

0007-00-023.06
OWNER(S):
LAWRENCE TERRY POTTS JR., INDIVIDUALLY AND AS PERSONAL REPRESENTATIVE FOR THE ESTATE OF LAWRENCE TERRY POTTS SR.
EDITH POTTS JONES
ANGELA POTTS ENNIS
MARGIE POTTS MOORE

0007-00-022.03
OWNER(S):
WILLIAM TROY ENNIS
ANGELA POTTS ENNIS

0007-00-022.02
OWNER(S):
WILLIAM M. HAYES

0007-00-022.01
OWNER(S):
DONNA SIGWART MCAFEE AS EXECUTRIX FOR THE ESTATE OF SARAH SIGWART

0007-00-022.05
OWNER(S): CHARLES THOMAS MOORE

0007-00-022.04
OWNER(S):
MARJORIE POTTS MOORE

DEVELOPER

EMPIRE COMMUNITIES
8008 CORPORATE CENTER DRIVE, SUITE 300
CHARLOTTE, NC 28226
PHONE: 704-286-9154
CONTACT: DAN ROBERTSON
CONTACT EMAIL: DROBERTSON@EMPIRECOMMUNITIES.COM

CIVIL ENGINEER

STEVE WILSON, PE
LANDWORKS DESIGN GROUP, PA
1230 WEST MOREHEAD STREET, ST 304
CHARLOTTE, NC 28203
PHONE: 704-841-1604
CONTACT EMAIL: INFO@LANDWORKSPA.COM

LEGEND

- PROPERTY LINE
- PROPOSED ROW
- CONTOUR LINES
- EXISTING SEWER
- EXISTING WATER LINE
- EXISTING CREEK/STREAM
- TREELINE TO REMAIN
- PROPOSED SEWER
- PROPOSED WATER LINE
- PROPOSED LOT LINE
- PROPOSED WATER QUALITY AREA
- PC BUFFER LINE
- EXISTING FLOODPLAIN LINE

0 150' 300' 600'
SCALE: 1"=150'

REVISIONS:

No.	Date	By	Description

Landworks Design Group, PA
CREATING SPACES TO LIVE, WORK AND PLAY
1230 West Morehead Street, Suite 304
Charlotte, NC 28208
tel: 704-841-1604
fax: 704-841-1604

ASBURY SITE
INDIAN LAND, SC
EMPIRE COMMUNITIES
CHARLOTTE, NC

COVER SHEET

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECTURAL CORPORATION C-253 LANDWORKS DESIGN GROUP, P.A.

SOUTH CAROLINA REGISTERED LANDSCAPE ARCHITECTURAL CORPORATION 1233

CORPORATE CERTIFICATIONS
NC PE : C-2930 NC LA : C-253
SC ENG : NO. 3589 SC LA : NO. 211

Project Manager: MDL
Drawn By: CAC
Checked By: MDL
Date: 12/08/2023
Project Number: 23031

Sheet Number:

L-001

SHEET # 1 OF 6

P:\2023 Jobs\23031 - Asbury Lane Site - Empire\CAD\Sketch Planning\Asbury Sketch BASE- Cover.dwg

THOMAS DEVELOPERS, LLC
0007-00-025.16
ZONING: INS
LAND USE: VACANT/FUTURE BUSINESS PARK

POTTS, JR.
0007-00-023.05
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

RODRIGO BRASILEIRO & MARIA ISABEL LAUS
0007-00-023.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

OLD BAILES RD

EXISTING 18" FORCE MAIN

LAWRENCE T. POTTS
0007-00-024.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

VICINITY MAP
NOT TO SCALE
FORT MILL HWY (HWY 160)
YARBOROUGH RD
BAILES RD
SITE
POSSUM HOLLOW RD
HOLLOW RD
ESTATES AVE
POSSUM HOLLOW RD
N

STORMWATER INFLOW

EXISTING SANITARY SEWER

STORMWATER INFLOW

ZONING: LDR
LAND USE: VACANT

ROBERTO & INDIRA P. ENAMORADO
0007-00-023.02
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

BILLY JOE & JANE P ST. CLAIR
0007-00-014.01
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

PC BUFFER 50' FROM CL

EXISTING STREAM

WETLANDS

PROPERTY LINES TO BE REMOVED

EXIST. 6" WATER LINE

JERRY O. YARBOROUGH & MURIEL YARBOROUGH (AKA MURIEL D. YARBOROUGH)
0007-00-015.00
ZONING: LDR
LAND USE: VACANT

WETLANDS

ASBURY LN

POSSUM HOLLOW RD

ZONING: LDR
LAND USE: VACANT

30' EASEMENT DB 177, PG 133, PB 3850, PG 613

EXISTING ROAD TO BE REMOVED

JERRY D. ST. CLAIR
NANCY RUTH ST. CLAIR
0007-00-021.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

STRUCTURE TO BE REMOVED (TYP)

EXIST. TREELINE TO BE REMOVED

STORMWATER INFLOW

ESTATES AVE

DRAINAGE PATH

EXISTING TREELINE TO BE CLEARED

FLOODLINE FEMA FIRM PANEL 45057C0060D

GENNA R. & DIXIE LEE JENNINGS
0007-00-021.01
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

PC BUFFER 50' FROM CL

PC BUFFER 30' FROM CL

ZONING: LDR
LAND USE: SING
FAMILY DWELLI

CRAIG M. LINN & KRISTYN L. STRATTON
0007M-0A-036.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

STORMWATER OUTFLOW

FRANCIS E. KERNAN
ZONING: LDR
0007M-0A-008.00
LAND USE: SINGLE FAMILY DWELLING

BOBBIE JO JACOBS
0007M-0A-007.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

JOSHUA NANNEY & HILDA LAREZ
0007M-0A-018.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

6' DUKE ENERGY EASEMENT DB 1552, PG 162

MARK & MARIA ADAMS
0007M-0A-022.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

RODRICK & COURTNEY TAYLOR
0007M-0A-024.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

EXISTING HOME (TYP)

PROJECT BOUNDARY

EXISTING STREAM

MARIA D. RADZIK
0007M-0A-035.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

MICHELE MIKULICK & ROBERT ELMS
0007M-0A-006.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

STORMWATER OUTFLOW

ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

DUKE ENERGY CAROLINAS, LLC
0007M-0A-029.00
ZONING: LDR
LAND USE: SINGLE FAMILY DWELLING

LEGEND
- PROPERTY LINE
- PROPOSED ROW
- EXISTING R/W LINE
- BUILDING TO BE REMOVED
- EXISTING WETLANDS
- 550 MAJOR CONTOUR LINES
- 549 MINOR CONTOUR LINES
- EXISTING SEWER
- EXISTING SEWER EASEMENT
- EXISTING WATER LINE
- EXISTING CREEK/STREAM
- EXISTING TREELINE
- EXISTING TREELINE TO BE CLEARED
- DRAINAGE PATHS
- PCCD PC BUFFER LINE
- EXISTING FLOODPLAIN LINE

N
0 100' 200' 400'
SCALE: 1"=100'

REVISIONS:

No.	Date	By	Description

Landworks Design Group, PA
CREATING SPACES TO LIVE, WORK AND PLAY
1230 West Morehead Street, Suite 304
Charlotte, NC 28208
tel: 704-841-1604
fax: 704-841-1604

ASBURY SITE
INDIAN LAND, SC
EMPIRE COMMUNITIES
CHARLOTTE, NC

EXISTING CONDITIONS

NORTH CAROLINA LANDSCAPE ARCHITECTURE C-253 LANDWORKS DESIGN GROUP, P.A.

SOUTH CAROLINA LANDSCAPE ARCHITECTURE 1233 LANDWORKS DESIGN GROUP, P.A.

CORPORATE CERTIFICATIONS
NC PE : C-2930 NC LA : C-253
SC ENG : NO. 3599 SC LA : NO. 211

Project Manager: MDL
Drawn By: SCJ
Checked By: MDL
Date: 12/08/2023
Project Number: 23031

Sheet Number:

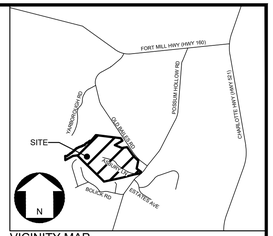
L-002

SHEET # 2 OF 6

P:\2023 Jobs\23031 - Asbury Lane Site - Empire\CAD\Sketch Planning\Asbury Sketch Base_10.9.23.dwg

SITE DATA:

TAX PARCEL ID:	007-00-022.00, 0007-00-022.01, -00-022.02, 0007-00-022.03,0007-00-022.04, 07-00-022.05, 0007-00-023.06
ACREAGE:	±95.35 AC (4,153,450 S.F.)
EXISTING ZONING:	LDR
EXISTING USE:	SINGLE FAMILY RESIDENTAIL & VACANT
PROPOSED USE:	SINGLE-FAMILY DETACHED DWELLINGS
LOTS PROPOSED:	78 LOTS
PROPOSED DENSITY:	0.82 DUA (1.5 DUA MAX)
MIN. LOT WIDTH:	90' (W/ PUBLIC SEWER)
MIN. LOT AREA:	29,040 S.F
FRONT SETBACK:	40' FROM R/W
SIDE YARD:	20'
CORNER YARD:	20'
REAR YARD:	25'
OPEN SPACE REQUIRED:	10% OF SITE (415,345 S.F. OR 9.54 AC)
OPEN SPACE PROVIDED:	1,332,730 SF - 231,403 (STORM PONDS) = 26.51% OF SITE (±1,101327 S.F. OR ±25.28 AC)
PARK LAND REQUIRED:	50% OF OPEN SPACE REQ'D (207,672.5 S.F.)
PARK LAND PROVIDED:	50% OF OPEN SPACE (± 550,663.5 S.F.)
LINK/NODE RATIO:	1.33
PROPOSED SANITARY SEWER MANHOLES:	31'
PROPOSED SANITARY SEWER LINE:	7,671'
PROPOSED 12" WATER LINE:	2,522'
PROPOSED 8" WATER LINE:	7,856'



VICINITY MAP
NOT TO SCALE

ASBURY SITE
INDIAN LAND, SC
EMPIRE COMMUNITIES
CHARLOTTE, NC

SITE & UTILITY PLAN

CORPORATE CERTIFICATIONS
NC PE : C-2930 NC LA : C-253
SC ENG : NO. 3599 SC LA : NO. 211

Project Manager:	MDL
Drawn By:	SCJ
Checked By:	MDL
Date:	12/08/2023
Project Number:	23031

Sheet Number:

L-003

SHEET # 3 OF 6

REVISIONS:

No.	Date	By	Description

LEGEND
- PROPERTY LINE
- PROPOSED ROW
- 550 CONTOUR LINES
- EXISTING SEWER
- W EXISTING WATER LINE
- EXISTING CREEK/STREAM
- SS PROPOSED SEWER
- 6W PROPOSED 6" WATER LINE
- 2W PROPOSED 2.5" WATER LINE
- PROPOSED LOT LINE
- PROPOSED SETBACK LINE
- PROPOSED WATER QUALITY AREA
- PROPOSED UTILITY EASEMENT
- OE EXISTING OVERHEAD POWER LINE
- EXISTING CREEK/STREAM
- PCCO PC BUFFER LINE
- EXISTING FLOODPLAIN LINE
- EXISTING WETLANDS

0 100' 200' 400'
SCALE: 1"=100'

Landworks Design Group, PA
CREATING SPACES TO LIVE, WORK AND PLAY
1230 West Morehead Street, Suite 304
Charlotte, NC 28208
tel: 704-841-1604
fax: 704-841-1604

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STREET TREE CALCULATIONS

PUBLIC STREET 1 = 382 LF TOTAL FRONTAGE
TREES REQUIRED: 382 / 40 LF = 9.55 = 10 LARGE MATURING TREES
TREES PROVIDED: 10 LARGE MATURING TREES

PUBLIC STREET 2 = 2,720 LF TOTAL FRONTAGE
TREES REQUIRED: 2,720 / 40 LF = 68 LARGE MATURING TREES
TREES PROVIDED: 68 LARGE MATURING TREES

PUBLIC STREET 3 = 1,827 LF TOTAL FRONTAGE
TREES REQUIRED: 1,827 / 40 LF = 91.35 = 92 LARGE MATURING TREES
TREES PROVIDED: 92 LARGE MATURING TREES

PUBLIC STREET 4 = 662 LF TOTAL FRONTAGE
TREES REQUIRED: 662 / 40 LF = 16.55 = 17 LARGE MATURING TREES
TREES PROVIDED: 17 LARGE MATURING TREES

PUBLIC STREET 5 = 3,150 LF TOTAL FRONTAGE
TREES REQUIRED: 3,150 / 40 LF = 78.75 = 79 LARGE MATURING TREES
TREES PROVIDED: 79 LARGE MATURING TREES

PUBLIC STREET 6 = 1,870 LF TOTAL FRONTAGE
TREES REQUIRED: 1,870 / 40 LF = 46.75 = 47 LARGE MATURING TREES
TREES PROVIDED: 47 LARGE MATURING TREES

ASBURY LANE = 3,296 LF TOTAL FRONTAGE
TREES REQUIRED: 3,296 / 40 LF = 82.4 = 83 LARGE MATURING TREES
TREES PROVIDED: 83 LARGE MATURING TREES

OLD BAILES RD
PROPOSED 30' BUFFER
PUBLIC STREET 1
PUBLIC STREET 2
PUBLIC STREET 3
PUBLIC STREET 4
PUBLIC STREET 5
PUBLIC STREET 6
ASBURY LANE
POSSUM HOLLOW RD
OPEN SPACE
PARK IN OPEN SPACE W/ WALKING TRAIL (± 4.77 AC)
WALKING TRAIL
50' PCO BUFFER FROM STREAM CL
35' PCO BUFFER FROM STREAM CL
PROPOSED SITE WALL
PROP. SIGN
PROP. FH
PROP. 42' SSWR ESMT
PROP. 20' BMP ACCESS ESMT
PROP. 30' STORM ESMT
EXISTING SANITARY SEWER
PROPOSED FUTURE SSWR CONNECTION
EXIST. WATER LINE
FLOODLINE
FLOODLINE - FEMA FIRM PANEL 45057C0060Q
WETLANDS
WATER QUALITY (±0.64 AC-FT)
WATER QUALITY (±1.0 AC-FT)
WATER QUALITY (±0.39 AC-FT)
WATER QUALITY (±0.45 AC-FT)
WATER QUALITY (±0.41 AC-FT)
WATER QUALITY (±0.85 AC-FT)
20' SDE
30' SSWR ESMT

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	SPACING	QTY
	Acer saccharum / Sugar Maple	B & B	2" Cal. Min.	8`ht. min.	40` o.c. min.	105
	Liriodendron tulipifera / Tulip Poplar	B & B	2" Cal. Min.	8`ht. min.	40` o.c. min.	117
	Quercus virginiana / Southern Live Oak	B & B	2" Cal. Min.	8`ht. min.	40` o.c. min.	87
	Ulmus parvifolia / Lacebark Elm	B & B	2" Cal. Min.	8`ht. min.	40` o.c. min.	87

LEGEND
- PROPERTY LINE
- PROPOSED ROW
- SS EXISTING SEWER
- W EXISTING WATER LINE
- EXISTING CREEK/STREAM
- SS PROPOSED SEWER
- 6W PROPOSED 6" WATER LINE
- 2W PROPOSED 2.5" WATER LINE
- PROPOSED LOT LINE
- PROPOSED SETBACK LINE
- PROPOSED WATER QUALITY AREA
- PROPOSED UTILITY EASEMENT
- OE EXISTING OVERHEAD POWER LINE
- EXISTING TREELINE
- EXISTING CREEK/STREAM
- PCCD PC BUFFER LINE
- EXISTING FLOODPLAIN LINE
- EXISTING WETLANDS

N

0 100' 200' 400'
SCALE: 1"=100'

REVISIONS:

No.	Date	By	Description

Landworks Design Group, PA
CREATING SPACES TO LIVE, WORK AND PLAY
1230 West Morehead Street, Suite 304
Charlotte, NC 28208
tel: 704-841-1604
fax: 704-841-1604

ASBURY SITE
INDIAN LAND, SC
EMPIRE COMMUNITIES
CHARLOTTE, NC

STREET TREE PLAN

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECTURAL CORPORATION C-253 LANDWORKS DESIGN GROUP P.A.

SOUTH CAROLINA REGISTERED LANDSCAPE ARCHITECTURAL CORPORATION 1233 MATTHEW D. LANGSTON

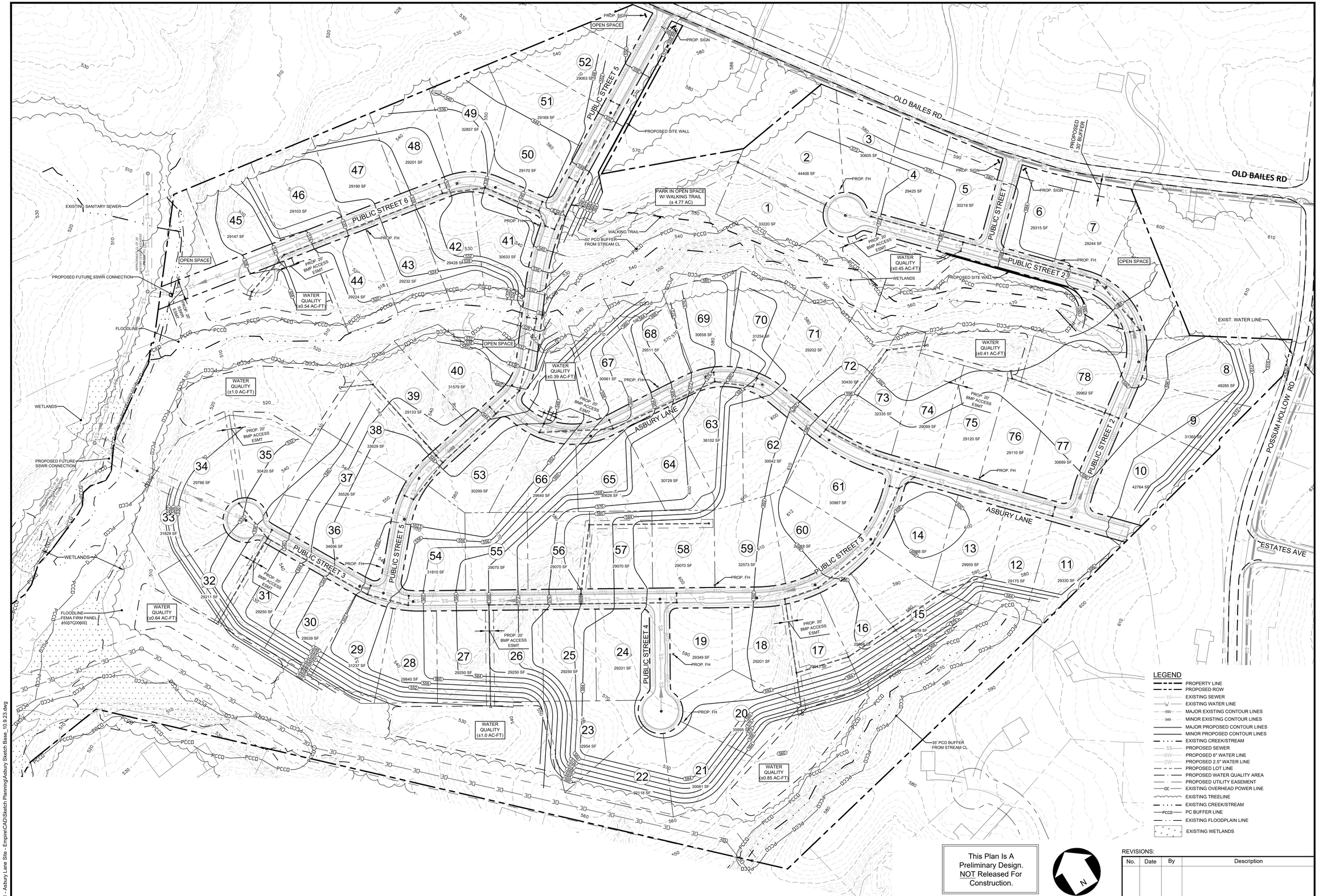
CORPORATE CERTIFICATIONS
NC PE ; C-2930 NC LA ; C-253
SC ENG ; NO. 3599 SC LA ; NO. 211

Project Manager: MDL
Drawn By: SCJ
Checked By: MDL
Date: 12/04/2023
Project Number: 23031

Sheet Number:
L-004

SHEET # 4 OF 6

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LEGEND

- PROPERTY LINE
- PROPOSED ROW
- SS — EXISTING SEWER
- W — EXISTING WATER LINE
- 550 — MAJOR EXISTING CONTOUR LINES
- 549 — MINOR EXISTING CONTOUR LINES
- MAJOR PROPOSED CONTOUR LINES
- MINOR PROPOSED CONTOUR LINES
- EXISTING CREEK/STREAM
- SS — PROPOSED SEWER
- 6"W — PROPOSED 6" WATER LINE
- 2"W — PROPOSED 2.5" WATER LINE
- PROPOSED LOT LINE
- PROPOSED WATER QUALITY AREA
- PROPOSED UTILITY EASEMENT
- OE — EXISTING OVERHEAD POWER LINE
- EXISTING TREELINE
- EXISTING CREEK/STREAM
- PCCD — PC BUFFER LINE
- EXISTING FLOODPLAIN LINE
- EXISTING WETLANDS

This Plan Is A Preliminary Design. NOT Released For Construction.

0 100' 200' 400'

SCALE: 1"=100'

REVISIONS:

No.	Date	By	Description

Landworks Design Group, PA
CREATING SPACES TO LIVE, WORK AND PLAY
1230 West Morehead Street, Suite 304
Charlotte, NC 28208
tel: 704-841-1604
fax: 704-841-1604

ASBURY SITE
INDIAN LAND, SC
EMPIRE COMMUNITIES
CHARLOTTE, NC

GRADING & DRAINAGE PLAN

NORTH CAROLINA C-253 LANDWORKS DESIGN GROUP P.A.

SOUTH CAROLINA 1233 MATTHEW D. LANGSTON

CORPORATE CERTIFICATIONS
NC PE : C-2930 NC LA : C-253
SC ENG : NO. 3599 SC LA : NO. 211

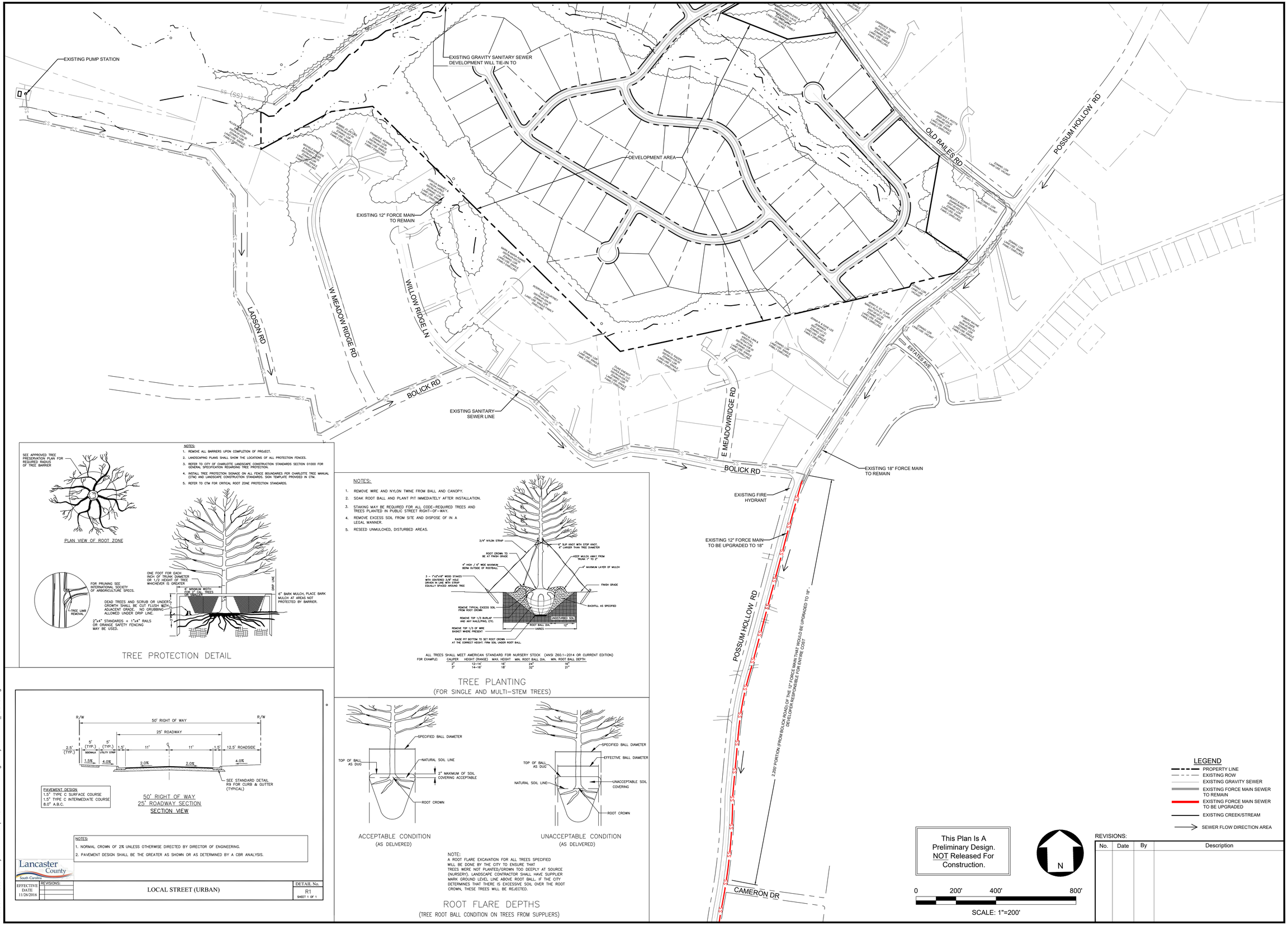
Project Manager:	MDL
Drawn By:	SCJ
Checked By:	MDL
Date:	12/04/2023
Project Number:	23031

Sheet Number:

L-005

SHEET # 5 OF 6

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NOTES:

1. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
2. LANDSCAPING PLANS SHALL SHOW THE LOCATIONS OF ALL PROTECTION FENCES.
3. REFER TO CITY OF CHARLOTTE LANDSCAPE CONSTRUCTION STANDARDS SECTION 01000 FOR GENERAL SPECIFICATION REGARDING TREE PROTECTION.
4. INSTALL TREE PROTECTION SIGNAGE ON ALL FENCE BOUNDARIES PER CHARLOTTE TREE MANUAL (CTM) AND LANDSCAPE CONSTRUCTION STANDARDS. SIGN TEMPLATE PROVIDED IN CTM.
5. REFER TO CTM FOR CRITICAL ROOT ZONE PROTECTION STANDARDS.

TREE PROTECTION DETAIL

NOTES:

1. REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
3. STAKING MAY BE REQUIRED FOR ALL CODE-REQUIRED TREES AND TREES PLANTED IN PUBLIC STREET RIGHT-OF-WAY.
4. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
5. RESEED UNMULCHED, DISTURBED AREAS.

ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2014 OR CURRENT EDITION)

FOR EXAMPLE:	CALIPER	HEIGHT (RANGE)	MAX. HEIGHT	MIN. ROOT BALL DIA.	MIN. ROOT BALL DEPTH
	2"	12'-14'	16'	24"	16"
	3"	14'-16'	18'	32"	21"

TREE PLANTING
(FOR SINGLE AND MULTI-STEM TREES)

PAVEMENT DESIGN
1.5" TYPE C SURFACE COURSE
1.5" TYPE C INTERMEDIATE COURSE
8.0" A.B.C.

50' RIGHT OF WAY
25' ROADWAY SECTION
SECTION VIEW

NOTES:

1. NORMAL CROWN OF 2% UNLESS OTHERWISE DIRECTED BY DIRECTOR OF ENGINEERING.
2. PAVEMENT DESIGN SHALL BE THE GREATER AS SHOWN OR AS DETERMINED BY A CBR ANALYSIS.

Lancaster County, South Carolina

EFFECTIVE DATE	REVISIONS:	LOCAL STREET (URBAN)	DETAIL No.
11/26/2016			R1
			SHEET 1 OF 1

ACCEPTABLE CONDITION
(AS DELIVERED)

UNACCEPTABLE CONDITION
(AS DELIVERED)

NOTE:
A ROOT FLARE EXCAVATION FOR ALL TREES SPECIFIED WILL BE DONE BY THE CITY TO ENSURE THAT TREES WERE NOT PLANTED/GROWN TOO DEEPLY AT SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOT BALL. IF THE CITY DETERMINES THAT THERE IS EXCESSIVE SOIL OVER THE ROOT CROWN, THESE TREES WILL BE REJECTED.

ROOT FLARE DEPTHS
(TREE ROOT BALL CONDITION ON TREES FROM SUPPLIERS)

LEGEND

- PROPERTY LINE
- EXISTING ROW
- EXISTING GRAVITY SEWER
- EXISTING FORCE MAIN SEWER TO REMAIN
- EXISTING FORCE MAIN SEWER TO BE UPGRADED
- EXISTING CREEK/STREAM
- SEWER FLOW DIRECTION AREA

This Plan Is A Preliminary Design. NOT Released For Construction.

N

0 200' 400' 800'

SCALE: 1"=200'

REVISIONS:

No.	Date	By	Description

Landworks Design Group, PA
CREATING SPACES TO LIVE, WORK AND PLAY
1230 West Morehead Street, Suite 304
Charlotte, NC 28208
tel: 704-841-1604
fax: 704-841-1604

ASBURY SITE
INDIAN LAND, SC
EMPIRE COMMUNITIES
CHARLOTTE, NC

EXHIBIT: SEWER FORCE MAIN UPGRADES

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT C-253 LANDWORKS DESIGN GROUP, P.A.

SOUTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1233 MATTHEW D. LANGSTON

CORPORATE CERTIFICATIONS
NC PE : C-2930 NC LA : C-253
SC ENG : NO. 3589 SC LA : NO. 211

Project Manager:	MDL
Drawn By:	SCJ
Checked By:	MDL
Date:	12/08/2023
Project Number:	23031

Sheet Number:

L-006

SHEET # 6 OF 6

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Lancaster County
Planning Department
P. O. Box 1809
Lancaster, SC 29721
803.285.6005
planning@lancastercountysc.net

January 11, 2024

Stuart Johnson
Landworks
1230 West Morehead Street STE 304
CHarlotte, NC 28208

Project Number	20231136
Project Name	Asbury Site
Location	9322 Asbury Ln, Indian Land, SC
Stage	Preliminary Plat
Parcel(s)	0007-00-022.04
Status	Not Approved

Dear: Stuart Johnson

We have completed our review of the plan identified above. The comments listed on the attached report must be addressed and revised plans submitted with a response letter.

If the attached comments require changes to the plans, please submit the requisite number of sets, along with a pdf of the plan set on a CD, to the Lancaster County Planning Department.

Once revised plans are received, they will be submitted to staff for review.

Please be aware that plans will not be routed for review without a response letter

Sincerely,

Plan Review Comments

County Engineer - Stephen Blackwelder - 8035482406 — Conditional
sblackwelder@lancastersc.net

Review Comments:

General Comments:
1. The preliminary nature of this plan does not provide adequate detail to formally comment, but the following are items of note from the information given. Most of our comments will be in the Civil Plan review phase.
2. TIA- Is under review separately.
3. Old Bailes Road is road maintained by Lancaster County. An encroachment permit for that access and any other work done on Old Bailes ROW will need to be processed and approved.
4. Stream and Wetland delineation studies will need to be conducted on this site to determine locations of those environmentally sensitive areas
5. Permits from the Army Corp of Engineers will be necessary for any stream crossings and/or filling in the stream buffer areas for this project. This can be a lengthy process.
6. The LCWSD will need to provide a capability and capacity letter for the final proposal prior to a grading permit being issued.
7. We are a designated review authority for SC DHEC for the area where this project is located. As such, once all Lancaster County approvals are complete, we will submit the final NOI and a cover letter to SC DHEC. The owner will need to pay the SC DHEC permit fee and the permit will be processed by DHEC.
8. The topography of this site will be challenging and require careful planning, engineering, and construction practices to be successful while not harming the existing streams that are close by.
a. There are several proposed lots with natural draw areas running through them.
9. We suspect there are several wells at the house sites on the various parcels for this project. If the wells are to be closed, the SC DHEC regulations for properly closing wells will need to be followed. We suggest placing these regulations in the demolition plan sheet so the contractor has the information and understands our expectations.
10. All BMP ponds will need a minimum 10' wide access road for equipment to access for maintenance of the ponds during and after construction. This road must have no greater than 4:1 slope at any point.
11. The retaining wall parallel with Street 5 is a reverse wall (in a cut section). We highly recommend these to be 10' + 1.2 X height of the wall from a property line.

Advisory Comments:

Advisory Comments:

1. We like the idea of aligning the new Asbury Lane with the existing Estates Avenue. Our concern is that the connection will never get built if it is not a part of this project. The adjacent parcels are not of sufficient size to support construction of a major subdivision. If developed as a single-family unit, Lancaster County has no recourse to require the future developer to complete this connection. It is likely this will never connect.

E911 Address - Sandra Burton - (803) 416-9325 — Approved
sburton@lanc911.com

Review Comments:

1. Please submit a list of road names to be considered for this subdivision. They will need to be compared to roads names within Lancaster County along with surrounding counties. They cannot be similar in sound or spelling for 911 purposes. The names must go before the Planning Commission for final approval.
2. A CAD file, in the State Plane Coordinate System of 1983, needs to be submitted to addresser@lanc911.com during the Civil phase. Please send in a version around 2010 and no 3D.
3. Once approval is received for the Civil Plans, the subdivision name cannot be changed.

Fire Marshal - John Magette - 8032838888 — Approved
jmagette@lancastersc.net

Review Comments:

LC Water & Sewer District - Erin Evans - 8032856919 **No Review Done**
eevans@lcwasd.org

Review Comments:

LCWSD is a separate entity from the County. We have our own submittal requirements. Please check our website, www.lcwasd.org, under the Developers tab for our policies and procedures.

The developer must submit 2 sets of hard copy water and sewer plans directly to LCWSD, adhering to the LCWSD Water & Wastewater Extension Policy.

Planning - Allison Hardin - 803-416-9422 **Not Approved**
ahardin@lancastersc.net

Review Comments:

Plat shows roads as "public streets." County will not accept streets. Re-label as "private."

BMP and common area access points should be unique to the common area, not public easements on private property.

Minimum lot area requirements apply to all lots, including open space. OS at Public Street 5 is less than 29,040 sq ft.

Tree planting plan is too crowded. Live oaks need 30 - 40 feet between them alone, not in partnership with maples. Oak roots will take away water and nutrients from maples and maple growth being faster can shade out the oak. Maples are more susceptible to fire. Refer to https://www.scfc.gov/management/urban-forestry/urban-tree-species-guide-for-south-carolina/ for recommendations.

Tree planting plan also strays from planting in ROW in cul-de-sacs. Trees are part of infrastructure and need to remain in common areas. Alternative plan is needed.

Ensure sidewalk width is 5' throughout subdivision.

LC School District - Bryan Vaughn - (803) 286-6972 **No Review Done**
Bryan.Vaughn@lcsd.k12.sc.us

Review Comments:

SCDOT - David Gamble - (803) 385-4280 **No Review Done**
GambleDD@scdot.org

Review Comments:

This site does not directly access a state maintained road.

All required TIA mitigation must be permitted and completed.

Impact Fee - Chanda Kirkland - 803-416-9390 **Approved**
ckirkland@lancastersc.net

Review Comments:

This project is located in the Pleasant Valley Fire District and Indian Land School, the following impact fees apply:

The Lancaster County Service Impact fee for each housing unit is $1,969.00. The Lancaster County School District impact fee is $9,441.00 per housing unit.

Fees will be collected at the time of building permit issuance. Should you wish to arrange prepayment that can be coordinated after you receive final plat approval. This is only an estimate and not an invoice for payment.

Development Impact fees increase July 1. If you have any questions or would like further information on the Development

Impact fee you can contact me.

DESIGN RESOURCE GROUP

TRANSPORTATION TECHNICAL MEMORANDUM (TTM)



Date: December 20, 2023

To: Stephen Blackwelder
Environmental Compliance Manager
Lancaster County Government

From: Michael Wickline, PE
Principal
Design Resource Group, PA (COA-2370)

Subject: **Asbury Lane Site – Updated Site Plan and Traffic Evaluation (972-002)**

Summary

Per the request of Lancaster County Staff, the purpose of this memorandum is to provide a traffic evaluation for the updated Asbury Lane site to address the change in access, reduction in density, and validate the Asbury Lane Traffic Impact Analysis that was previously completed by BGE and approved by SCDOT and Lancaster County staff.

Original and Updated Proposed Access

According to the rezoning plan included in the approved TIA (See RZ-1), access to the development was expected to occur via three access locations:

- Proposed Access "A" (Full Movement) – unsignalized access located on Old Bailes Road approximately 740feet west of Possum Hollow Road
- Proposed Access "B" (Full Movement) – unsignalized access located on Old Bailes Road approximately 1,675 feet west of Possum Hollow Road
- Asbury Lane/Proposed Access "C" (Full Movement) – unsignalized access on Possum Hollow Road located at existing Asbury Lane

According to the updated site/sketch plan (See L-003), access to the development is expected to occur via two access locations:

- Proposed Access "A" (Full Movement) – unsignalized access located on Old Bailes Road approximately 600 feet west of Possum Hollow Road
- Proposed Access "B" (Full Movement) – unsignalized access located on Old Bailes Road approximately 1,600 feet west of Possum Hollow Road

Based on feedback and requests from Lancaster County Staff, the existing Asbury Lane has been shifted internally on site to stub at the property line and align opposite Estate Avenue for desired future connectivity.

Original and Updated Proposed Development Projected Traffic

The daily and peak-hour trip generation data for the site is presented in the table below for the original and updated single family development. Values derived for the anticipated trips generated by the site are obtained from the Institute of Transportation Engineers, Trip Generation Manual, 11th Edition, 2021.

Trip Generation Table

Land Use [ITE Code]			Weekday Daily	AM Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total
Original Plan/Approved TIA									
Single Family Homes [210]	170	DUs	1644	31	90	121	103	61	164
Updated Plan									
Single Family Homes [210]	78	DUs	803	15	44	59	50	29	79

Reference:
Trip Generation, 11th Edition, Institute of Transportation Engineers, Washington, DC. 2021.

The approved TIA was completed with the assumption of 170 total single-family homes and estimated peak hour trip generations for the AM (121 total trips) and PM (164 total trips) peak hours were analyzed across the required study area.

The updated plan is now only proposing 78 single family homes for development which is anticipated to generate 59 AM peak and 79 PM peak hour trips, which is a reduction of 62 trips in the AM peak hour and 85 trips in the PM peak hour.

BGE's approved TIA provided analysis results for seven existing intersections as well as the three proposed access locations (see Figure 1 Project Location exhibit from BGE's TIA). Per the results and recommendations, the only suggested improvement required for the development was a westbound right turn lane on Possum Hollow Road at US 521 with 100 feet of storage.

Based on this approved analysis and the anticipated decrease in site trips, the analysis recommendations should still be considered acceptable for all intersections previously studied. In coordination with Lancaster County staff, an agreement has been made to organize a proportionate monetary contribution from the development to be used in the county in lieu of this specific improvement, since this intersection is already set to be significantly improved by offsite developments in the area.

It is our professional opinion that the approved TIA should still be considered acceptable, and an updated TIA should not be required for the development due to the significant reduction in density. In coordination with Lancaster County staff, agreement to the validity of the approved TIA for use in the development of the updated site has been confirmed.

Lancaster County staff's only concern was understanding the potential impacts associated with the removal of the site access to Possum Hollow Road specifically to the intersection of Possum Hollow Road and Old Bailes Road, due all of the proposed site traffic now using Old Bailes Road instead of the additional distribution of traffic the Possum Hollow Road access (Asbury Lane) provided.

To address this concern, the above estimated trip generation for the updated site plan was assigned to the network to show the anticipated trips expected to travel to/from and through the Possum Hollow Road and Old Bailes Road intersection.

The overall directional distribution from the approved traffic study was used to determine the appropriate expectation of travel options available. Both the distribution from the approved TIA as well as the updated distribution are shown on Figure 1 for comparison.

The estimated trip generation was assigned to the intersection using the percentages shown on Figure 1. Figure 2 shows the approved TIA's estimated site trip assignment that was used in the traffic analysis as well as the updated developments anticipated site trip assignment.

Based on the analysis and the comparison shown on Figure 2, the following total traffic by direction is shown below:

Eastbound Old Bailes Road:

Original TIA

- 41 AM peak trips
- 27 PM peak trips

Updated Site Plan

- 28 AM peak trips
- 19 PM peak trips

Northbound Possum Hollow Road:

Original TIA

- 8 AM peak trips
- 13 PM peak trips

Updated Site Plan

- 4 AM peak trips
- 13 PM peak trips

Southbound Possum Hollow Road:

Original TIA

- 13 AM peak trips
- 41 PM peak trips

Updated Site Plan

- 6 AM peak trips
- 20 PM peak trips

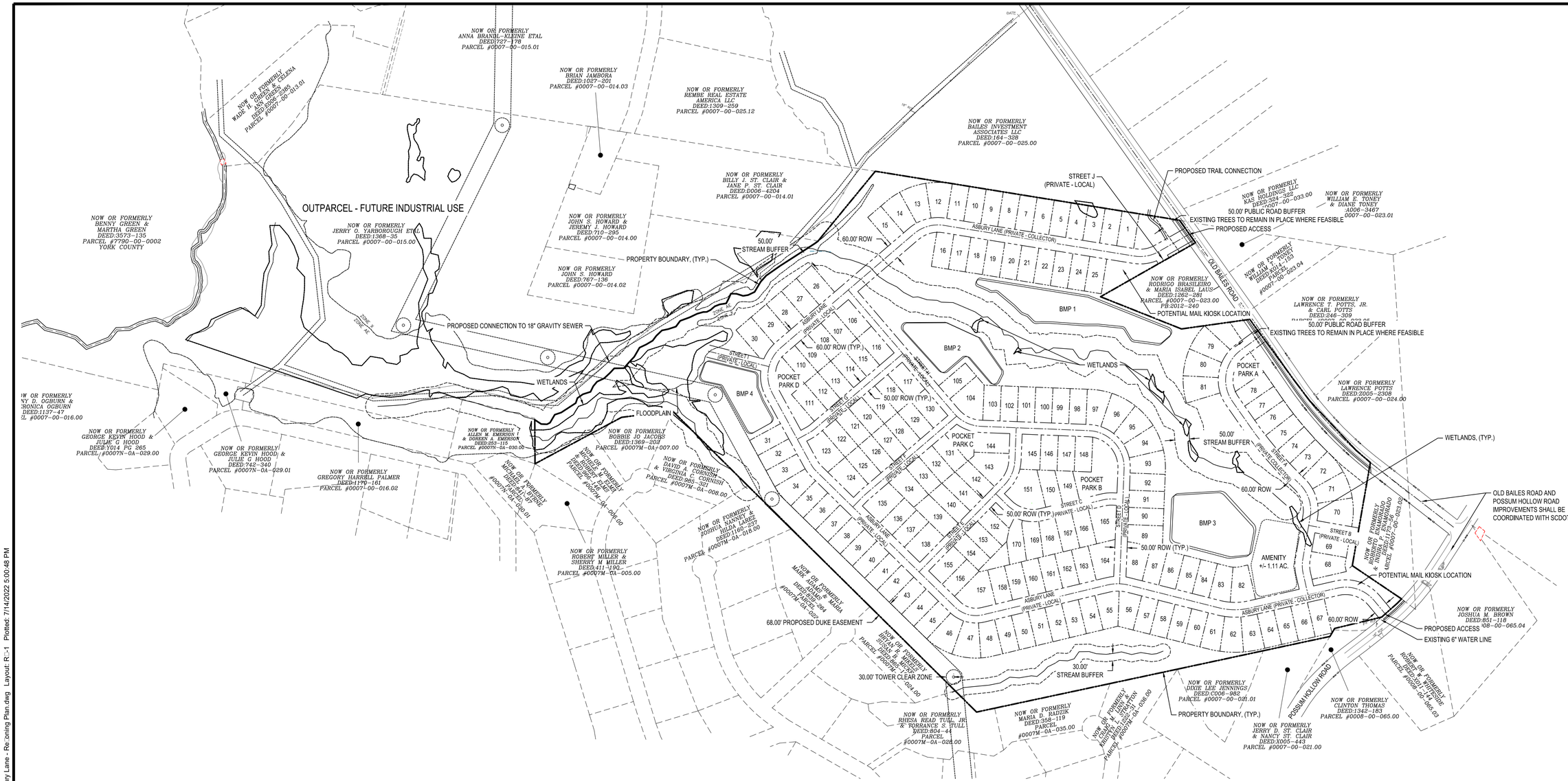
Conclusion

It is our professional opinion that the approved TIA should still be considered acceptable, and an updated TIA should not be required for the development due to the significant reduction in density. Based on the traffic analysis and site trip assignment comparison, the removal of the Possum Hollow Road Access does not materially impact the approved analysis results or cause any additional concerns at the intersection of Possum Hollow Road and Old Bailes Road especially considering the reduction in density.

Please contact us should you have any questions or need any additional information.

Attachments: RZ-1 – Original Rezoning Plan (from TIA)
L-003 – Updated Sketch Plan
Figure 1 - Project Location Exhibit (from TIA)
Figure 1 – Site Directional Distribution Comparison
Figure 2 – Site Trip Assignment Comparison

cc: File



SITE DATA

TOTAL ACREAGE:	± 95.85 AC
TAX PARCEL NUMBERS:	0007-00-015.00, 0007-00-22.00, 0007-00-022.01, 0007-00-022.02, 0007-00-022.03, 0007-00-022.04, 0007-00-023.06
EXISTING ZONING:	LDR, LOW DENSITY RESIDENTIAL
PROPOSED ZONING:	MDR, MED. DENSITY RESIDENTIAL
EXISTING USES:	VACANT / SINGLE FAMILY RESIDENTIAL
PROPOSED USE:	SINGLE FAMILY RESIDENTIAL
MAXIMUM DENSITY:	2.50 DUA
PROPOSED DENSITY:	1.79 DUA
MAXIMUM BUILDING HEIGHT:	35'
PROPOSED DWELLING UNITS:	170 UNITS
MINIMUM LOT AREA:	10,000 SF
MINIMUM LOT WIDTHS:	70' WIDTH
TYPICAL LOT SIZE:	70' X 143'

OPEN SPACE

REQUIRED OPEN SPACE:	20% (19.17 AC)
PROVIDED OPEN SPACE:	19.17 AC MINIMUM (20%)

BUFFERS

PUBLIC STREET BUFFER:	50'
STREAM BUFFER 20 AC - 1 SQ MILE:	30'
STREAM BUFFER > 1 SQ MILE:	50'
WATER QUALITY BUFFER 1 AC - 2.5 AC:	30'
WATER QUALITY BUFFER > 2.5 AC:	50'

SETBACKS

FRONT SETBACK:	30'
REAR YARD:	25'
SIDE YARD:	10'
STREET SIDE YARD:	15'

IMPERVIOUS AREA

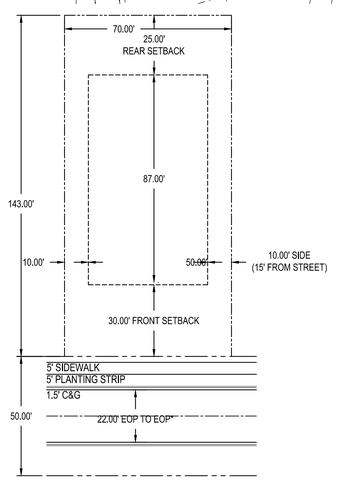
MAX. IMPERVIOUS AREA:	55% (52.71 AC)

PARKING

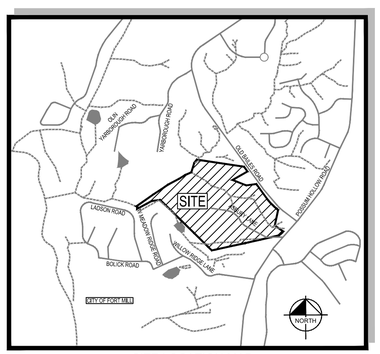
SPACES REQUIRED:	170 SPACES (170 UNITS x 1 SPACES/UNIT)
SPACES PROPOSED:	680 SPACES
GARAGE SPACES:	340 SPACES
DRIVEWAY SPACES:	340 SPACES

SITE NOTES

1. SITE PLAN IS SCHEMATIC IN NATURE, SOME VARIATIONS TO PLAN MAY OCCUR IN FINAL DESIGN BUT SHALL MEET THE OVERALL INTENT OF THIS PLAN AND SHALL COMPLY WITH THE APPLICABLE ORDINANCE REQUIREMENTS.
2. VEHICULAR ACCESS TO THE SITE SHALL BE AS GENERALLY DEPICTED ON THE REZONING PLAN. THE PLACEMENT AND CONFIGURATION OF THE VEHICULAR ACCESS POINTS ARE SUBJECT TO ANY MINOR MODIFICATIONS REQUIRED TO ACCOMMODATE FINAL SITE AND CONSTRUCTION PLANS AND DESIGNS AND AS REQUIRED FOR APPROVAL BY THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION (SCDOT) AND LANCASTER COUNTY PUBLIC WORKS.
3. INTERNAL ROAD DESIGN BASED ON LANCASTER COUNTY RESIDENTIAL STREET STANDARDS.
4. ALL HOMES SHALL BE SERVED BY LANCASTER COUNTY WATER AND SEWER DISTRICT.
5. THIS DEVELOPMENT MAY BE CONSTRUCTED IN PHASES.
6. TREE PRESERVATION AREAS SHALL BE PROVIDED WHEREVER POSSIBLE ON SITE. AT THE DEVELOPER'S DISCRETION, TREE SAVE AREAS SHALL MEET THE GUIDELINES OF COUNTY UDO SECTION 7.1.2.
7. TO THE EXTENT PRACTICAL, DEVELOPER WILL MAINTAIN EXISTING VEGETATION WITHIN THE 50' BUFFER ADJACENT TO EXISTING OLD BAILES ROAD AND POSSUM HOLLOW ROAD. WHERE THE BUFFER IS DISTURBED, DEVELOPER WILL INSTALL MITIGATION TREES PER THE UDO.
8. EROSION CONTROL AND STORMWATER MEASURES, THROUGH THE USE OF BEST MANAGEMENT PRACTICES, SHALL BE DESIGNED AND MAINTAINED TO MEET AND/OR EXCEED LOCAL, STATE, AND FEDERAL RULES AND REQUIREMENTS. THE DESIGN OF THESE STRUCTURES SHALL BE SUCH THAT ADJACENT STREAMS, CHANNELS, AND DRAINAGE WAYS ARE PROTECTED AS REQUIRED BY THESE REGULATIONS. THE LOCATION, SIZE AND TYPE OF STORM WATER MANAGEMENT SYSTEMS DEPICTED ON THE REZONING PLAN ARE SUBJECT TO REVIEW AND APPROVAL AS PART OF THE FULL DEVELOPMENT PLAN SUBMITTAL.
9. ASBURY LANE FROM OLD BAILES TO STREET H, STREET A, AND ASBURY LANE FROM POSSUM HALLOW TO STREET D HAVE 24' PAVEMENT



TYPICAL LOT LAYOUT
SCALE: 1" = 30'



SITE LOCATION MAP
NOT TO SCALE

N

0 100' 200' 400'
SCALE: 1" = 200'

811 Know what's below. Call before you dig.

REV	DATE	DESCRIPTION

DESIGNED BY: AH
DRAWN BY: AH
REVIEWED BY:

BGE
1111 METROPOLITAN AVE, SUITE 250
CHARLOTTE, NC 28204
WWW.BGEINC.COM
NC LICENSE #C-4397

D·R·HORTON America's Builder
8001 ARROWRIDGE BLVD.
CHARLOTTE, NC 28273

ASBURY LANE
LANCASTER COUNTY / NC / 29707

REZONING PLAN

NOT FOR CONSTRUCTION

FILE NUMBER: 7734-05

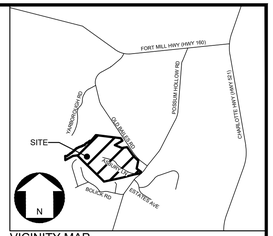
DATE: 07/14/2022

R□-1

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SITE DATA:

TAX PARCEL ID:	007-00-022.00, 0007-00-022.01, -00-022.02, 0007-00-022.03,0007-00-022.04, 07-00-022.05, 0007-00-023.06
ACREAGE:	±95.35 AC (4,153,450 S.F.)
EXISTING ZONING:	LDR
EXISTING USE:	SINGLE FAMILY RESIDENTAIL & VACANT
PROPOSED USE:	SINGLE-FAMILY DETACHED DWELLINGS
LOTS PROPOSED:	78 LOTS
PROPOSED DENSITY:	0.82 DUA (1.5 DUA MAX)
MIN. LOT WIDTH:	90' (W/ PUBLIC SEWER)
MIN. LOT AREA:	29,040 S.F
FRONT SETBACK:	40' FROM R/W
SIDE YARD:	20'
CORNER YARD:	20'
REAR YARD:	25'
OPEN SPACE REQUIRED:	10% OF SITE (415,345 S.F. OR 9.54 AC)
OPEN SPACE PROVIDED:	1,332,730 SF - 231,403 (STORM PONDS) = 26.51% OF SITE (±1,101327 S.F. OR ±25.28 AC)
PARK LAND REQUIRED:	50% OF OPEN SPACE REQ'D (207,672.5 S.F.)
PARK LAND PROVIDED:	50% OF OPEN SPACE (± 550,663.5 S.F.)
PROPOSED SANITARY SEWER MANHOLES:	31'
PROPOSED SANITARY SEWER LINE:	7,671'
PROPOSED 12" WATER LINE:	2,522'
PROPOSED 8" WATER LINE:	7,856'



VICINITY MAP
NOT TO SCALE

Landworks Design Group, PA
CREATING SPACES TO LIVE, WORK AND PLAY
1230 West Morehead Street, Suite 304
Charlotte, NC 28208
tel: 704-841-1604
fax: 704-841-1604

ASBURY SITE
INDIAN LAND, SC
EMPIRE COMMUNITIES
CHARLOTTE, NC

SITE & UTILITY PLAN

CORPORATE CERTIFICATIONS
NC PE : C-2930 NC LA : C-253
SC ENG : NO. 3599 SC LA : NO. 211

Project Manager:	MDL
Drawn By:	CAC
Checked By:	MDL
Date:	12/08/2023
Project Number:	23031

Sheet Number:

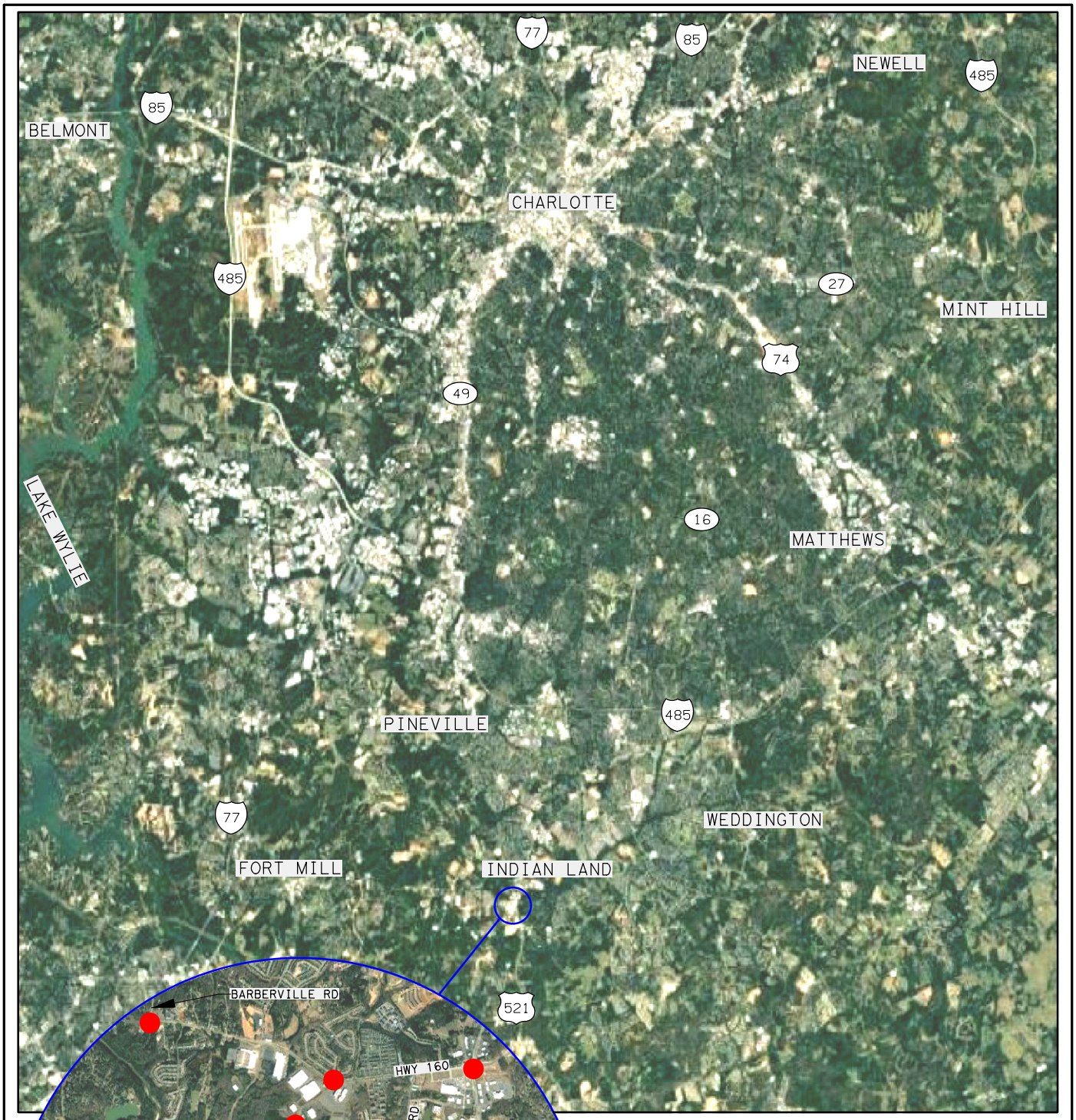
L-003

SHEET # 3 OF 6

REVISIONS:

No.	Date	By	Description

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LEGEND

STUDY INTERSECTION

PROJECT LOCATION

N

N. T. S.

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1111 Metropolitan Ave., Suite 250, Charlotte, NC 28204
Tel: 980-220-2322 • www.bgeinc.com
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PROJECT LOCATION

ASBURY LANE TIA
FORT MILL, SC

DATE:	FIGURE:	PAGE:
JUNE 2021	1	3

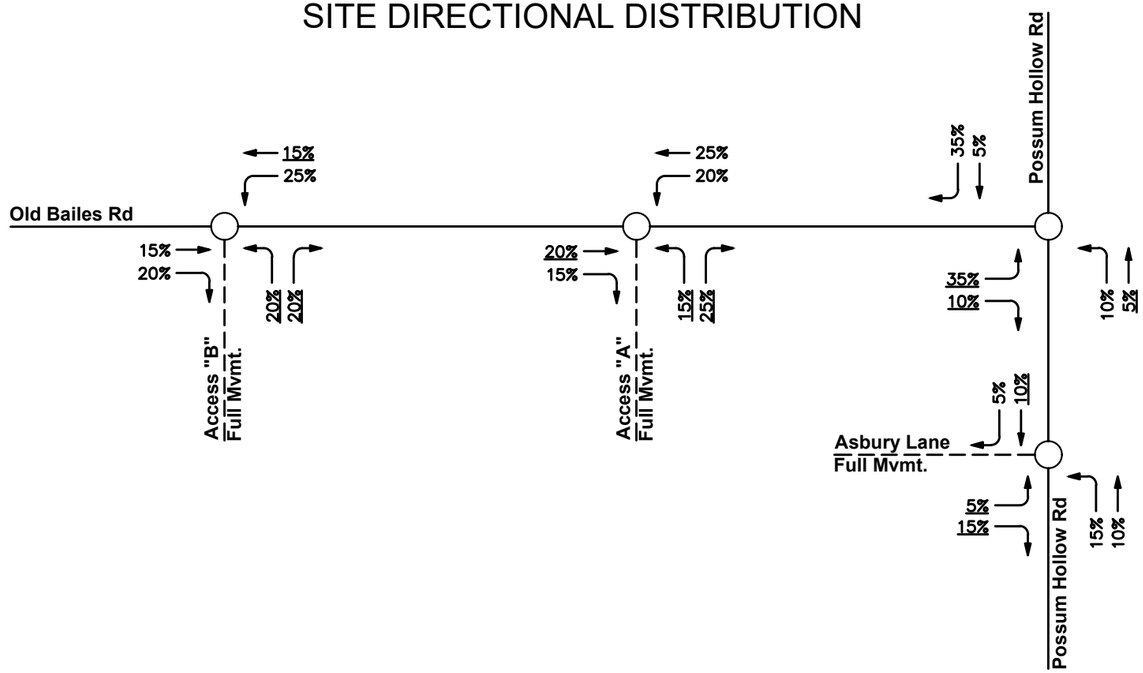
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LEGEND

- Stop Sign Control
- Directional Movement

xx%/xx% Enter/Exit Distribution Percentage

ORGINAL TIA
SITE DIRECTIONAL DISTRIBUTION

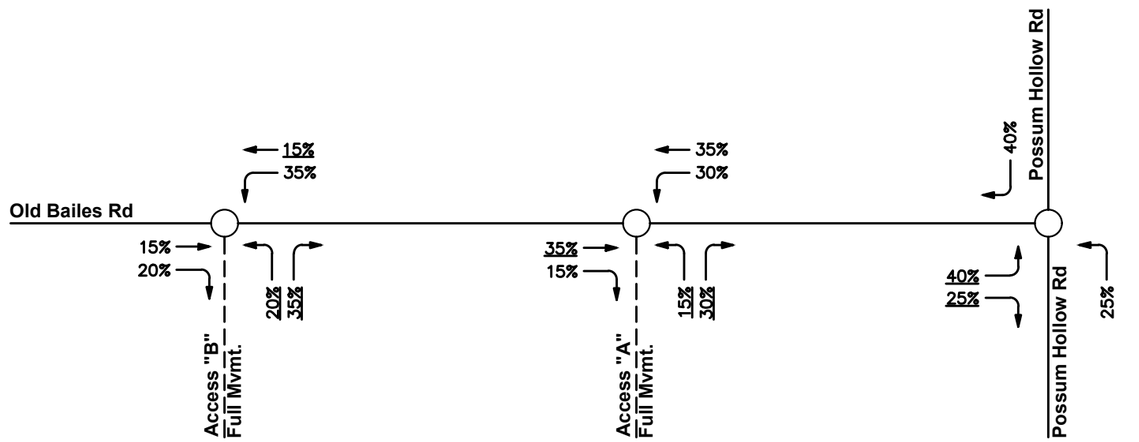


LEGEND

- Stop Sign Control
- Directional Movement

xx%/xx% Enter/Exit Distribution Percentage

UPDATED SITE PLAN
SITE DIRECTIONAL DISTRIBUTION



DESIGN RESOURCE GROUP
LANDSCAPE ARCHITECTURE
CIVIL ENGINEERING
TRANSPORTATION PLANNING
O 2459 Wilkinson Blvd, Ste 200 Charlotte, NC 28208
P 704.343.0608
W www.drgrp.com

ASBURY LANE TES
FORT MILL, SC

D.R. HORTON
8001 ARROWRIDGE BOULEVARD
CHARLOTTE, NC 28273

SITE DIRECTIONAL DISTRIBUTION

0 XX' XX' N
SCALE: NTS

PROJECT #: 972-002
DRAWN BY: PAH
CHECKED BY: MWW

DECEMBER 2023

REVISIONS:
1.

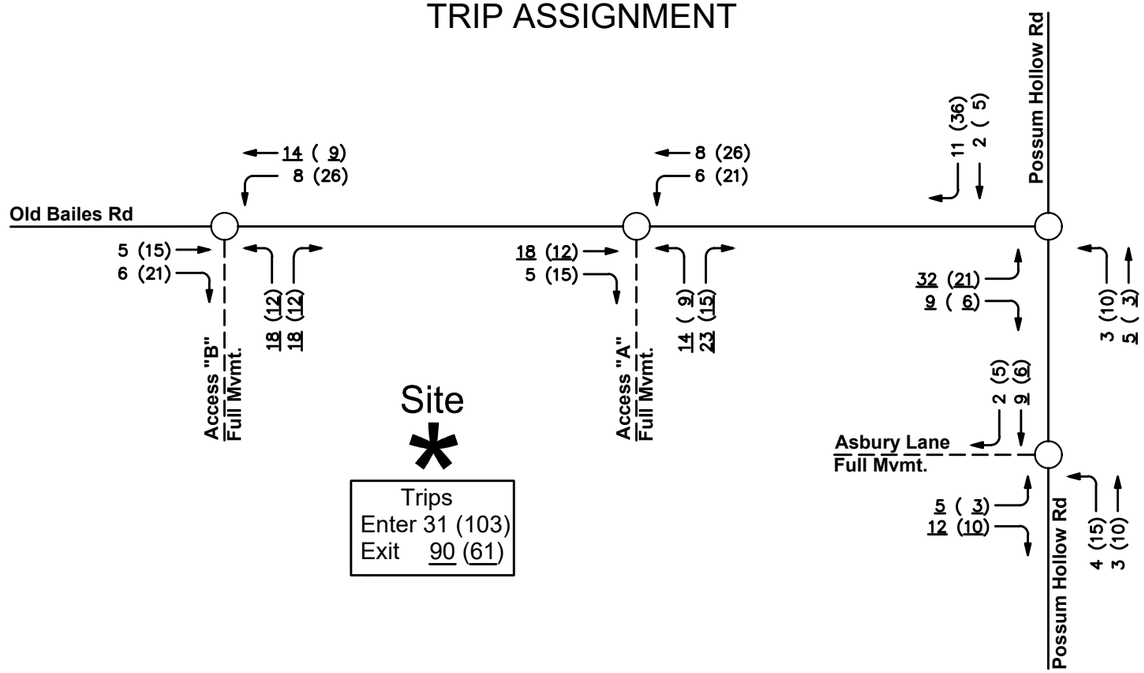
Figure 1

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LEGEND

- Stop Sign Control
- Directional Movement
- VOLUMES: AM (PM)

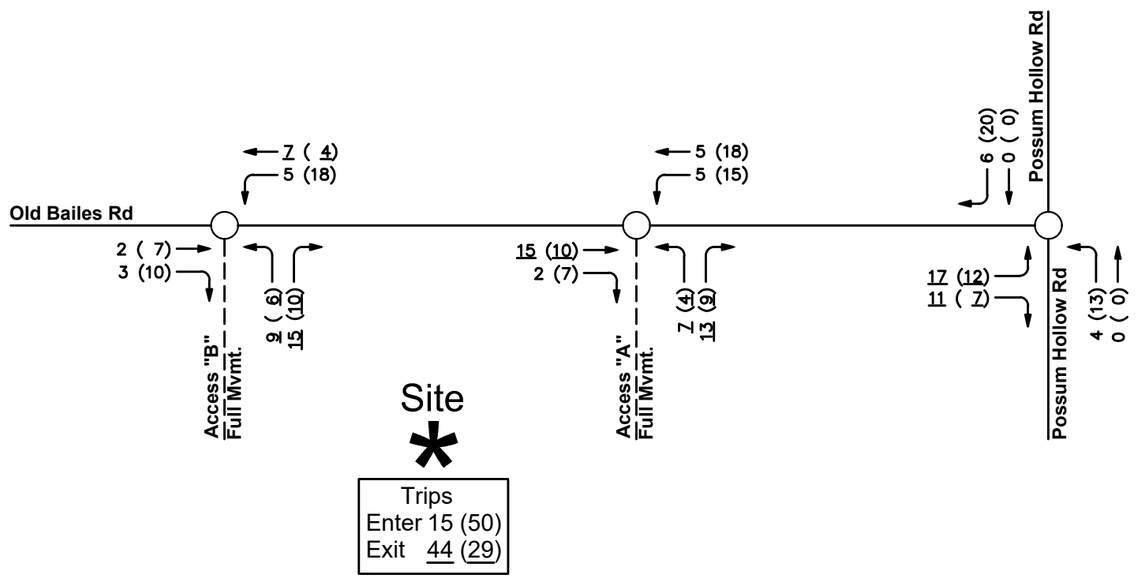
ORIGINAL TIA TRIP ASSIGNMENT



LEGEND

- Stop Sign Control
- Directional Movement
- VOLUMES: AM (PM)

UPDATED SITE PLAN TRIP ASSIGNMENT



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D.R. HORTON
8001 ARROWRIDGE BOULEVARD
CHARLOTTE, NC 28273

TRIP ASSIGNMENT

0 XX' XX' N
SCALE: NTS

PROJECT #: 972-002
DRAWN BY: PAH
CHECKED BY: MWW

DECEMBER 2023

REVISIONS:
1.

Figure 2

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DECLARATION

OF

COVENANTS, CONDITIONS AND RESTRICTIONS

FOR

ASBURY SUBDIVISION

THIS DOCUMENT REGULATES OR PROHIBITS THE DISPLAY OF

POLITICAL SIGNS

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Exhibit A Additional Property

Exhibit B Articles of Incorporation of XXXXXXXXXXX HOMEOWNERS ASSOCIATION, INC.

Exhibit C Bylaws of XXXXXXXXXXX HOMEOWNERS ASSOCIATION, INC.

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR XXXXXXXXXXX ("Declaration") is made as of the _____ day of _____, 2023, by **EHC HOMES LP**, a Delaware limited partnership ("Declarant").

STATEMENT OF PURPOSE

Declarant is the developer and owner of certain real property located in Town of XXXX in XXXXX County, North Carolina (the "Property", as further defined herein). Declarant desires to create on the Property a residential community of single-family homes to be named "XXXXXXX" ("Subdivision").

Declarant desires to maximize the attractiveness of the Subdivision, to prevent any future impairment thereof, to prevent nuisances and enhance the value of all properties within the Subdivision. Furthermore, Declarant desires to provide for the construction, maintenance and upkeep of any Common Areas and related easements within the Subdivision (whether in an improved or unimproved state) all for the common use and benefit of all Owners.

Declarant desires to provide for a system whereby all Owners will pay for the maintenance and upkeep of any Common Areas, in accordance with an established budget set by the Board.

Declarant desires to develop the Property in accordance with the North Carolina Planned Community Act, §47F-1-101, *et seq*. (the "Act") and to subject the Property to the covenants, conditions, restrictions, easements, charges and liens set forth in this Declaration, which are for the benefit of the Property and each Owner.

Declarant further desires to form, or has formed, a North Carolina non-profit corporation to be known as XXXXXXXX Homeowners Association, Inc., to which will be delegated and assigned the powers of owning, maintaining and administering the Common Areas, administering and enforcing the covenants and restrictions, and collecting and disbursing the Assessments, in order to efficiently preserve, protect and enhance the value of the Subdivision, to ensure, for the benefit of each Owner, the specific rights, privileges and easements in the Common Areas, and to provide for the maintenance and upkeep of the Common Areas, as provided in this Declaration and the Bylaws.

NOW, THEREFORE, Declarant declares that all of the Property shall be held, transferred, sold, conveyed and occupied subject to the covenants, conditions, restrictions, easements, charges and liens set forth in this Declaration, which shall run with the Property and be binding on and inure to the benefit of all parties owning any right, title or interest in the Property or any part thereof, their heirs, successors and assigns.

ARTICLE I

DEFINITIONS

All capitalized terms used in this Declaration shall have the meanings set forth in ARTICLE I and/or the Statement of Purpose.

Section 1.1 "Additional Property" shall mean and refer to (i) any additional real estate adjacent or contiguous to the Property shown on the Plat recorded in Plat Book 95 at Pages 87-91 in the Registry, including, without limitation, the Real Property described on **Exhibit A** attached hereto, or (ii) any property located within one (1) mile of any boundary of the Property shown on the Plat or described on **Exhibit A**, all or a portion of which may be made subject to the terms of this Declaration in accordance with the provisions of **Section 2.2**.

Section 1.2 "Amenity Area(s)" shall mean all real property and interests in real property, together with any Improvements situated thereon, intended for the common use and benefit of the Association and the Owners of the Property and designated as an "Amenity Area" (or similar terms) in the Declaration, on a Plat or on another document recorded in the Registry.

Section 1.3 "Annual Assessment" shall mean and refer to the amount to be levied annually by the Association against each Lot, as set forth in **Section 6.3**.

Section 1.4 "Architectural Control Committee" or "ACC" shall mean and refer to the committee that oversees the development and enforcement of the Guidelines and performs certain other functions described in ARTICLE IX.

Section 1.5 "Articles of Incorporation" or "Articles" shall mean and refer to the Articles of Incorporation for the Association attached as **Exhibit B**.

Section 1.6 "Assessments" shall mean and refer to the Annual Assessments, Supplemental Annual Assessments, Special Assessments, and Special Individual Assessments applicable to a Lot.

Section 1.7 "Association" shall mean and refer to XXXXXXXXX HOMEOWNERS ASSOCIATION, INC., a North Carolina non-profit corporation, its successors and assigns.

Section 1.8 "Board," "Board of Directors," and/or "Directors" shall mean and refer to the Board of Directors of the Association, which shall be elected and shall serve pursuant to the Bylaws.

Section 1.9 "Building Envelope" shall mean the portion of each Lot behind the front, side and rear building setback or yard lines, as applicable, as noted on the Plat.

Section 1.10 "Bylaws" shall mean and refer to the Bylaws for the Association, substantially in the form attached as **Exhibit C**, as amended, from time to time.

Section 1.11 "Common Area" or "Common Areas" shall mean all real property and interests in real property, together with any Improvements situated thereon, intended for the

common use and benefit of the Association and the Owners of the Property and designated as a "Common Area" or "Common Space" (or similar terms) in the Declaration, on a Plat or on another document recorded in the Registry. Common Areas may be owned or leased by the Association or dedicated to the Association on a Plat or they may be owned by another person with the Association having a right or easement therein. Common Areas shall include all and refer collectively to all Entrance Monument Easement Area(s), the Amenity Area(s), Street Lights, cluster mailboxes, Landscape Easement Area(s), Public Roads (prior to their acceptance for maintenance by the NCDOT or other governmental entity), and any other property or easements designated on the Plat as "COS," "Common Area Open Space", or other similar designation, all other property located outside of the Lots, except for public utility easements and Public Roads after their acceptance for maintenance by the NCDOT or other governmental entity. The listing and description of the components of the Common Areas are illustrative of Declarant's present plans only and do not constitute a guaranty by Declarant or the Association that all or any part of such components will be constructed or installed by Declarant or the Association at any future time. Declarant reserves the right, but not the obligation, to provide additional Common Areas within the Subdivision. No portion of the Property designated "Future Development" on the Plat shall be deemed to be a Common Area unless and until it is declared to be a Common Area in a Supplemental Declaration.

Section 1.12 "CPI" shall mean and refer to the Consumer Price Index, All Urban Consumers, United States, All Items (1982-84 = 100) issued by the U.S. Bureau of Labor Statistics, as amended from time to time, for the most recent 12-month period for which the CPI is available.

Section 1.13 "Declarant" shall mean and refer to EHC HOMES LP, a Delaware limited partnership, and such of its successors and assigns to whom the rights of Declarant, in whole or in part, are transferred by written instrument recorded in the Registry in accordance with **Section 12.5**.

Section 1.14 "Declarant Control Period" shall mean the period of time from the date of recordation of this Declaration in the Registry through and including the date that the first of the following to occur: (i) the date that is fifty (50) years following the date of recordation of this Declaration in the Registry; or (ii) the date Declarant extinguishes the Declarant Control Period by giving the Association written notice of termination.

Section 1.15 "Entrance Monument(s)" shall mean any entrance monuments and entrance signs located in the Entrance Monument Easement Area(s), together with lighting, irrigation system, landscaping and other Improvements which may be constructed in such Entrance Monument Easement Area(s).

Section 1.16 "Entrance Monument Easement Area(s)" shall mean and refer to one or more easement areas reserved and granted by Declarant in **Section 7.8**, over portions of the Common Area, to be used as one or more entryways for the Subdivision or specific neighborhoods therein or other locations designated by Declarant.

Section 1.17 "Guidelines" shall mean and refer to the Architectural Guidelines published by the ACC, as set forth in **Section 9.3**.

Section 1.18 "Impervious Surfaces" shall mean and refer to any Improvements which cannot be penetrated by surface water, as determined under applicable governmental regulations.

Section 1.19 "Improvement" or "Improvements" shall mean and refer to any and all man-made changes or additions to any portion of the Property.

Section 1.20 "Initial Property" shall mean and refer to the property shown on the Plat recorded in Plat Book 95, Pages 87-91 in the Registry, including the Lots, Public Roads and Common Areas.

Section 1.21 "Landscape Easement Area" shall mean and refer to the landscape easement now or hereafter granted by Declarant along both sides of the main entrance road into the Subdivision and any other such areas designated as a landscape easement, landscape or right of way buffer, sign easement, or other similar designation on the Plat, all of which shall be maintained by the Association, as more particularly set forth in **Section 7.8**.

Section 1.22 "Lot" or "Lots" shall mean and refer to the separately numbered parcels depicted on the Plat.

Section 1.23 "Maximum Annual Assessment" shall mean and refer to the maximum Annual Assessment that may be charged in a calendar year, as set forth in **Section 6.4.1**.

Section 1.24 "Member" shall mean and refer to every person or entity that holds a membership in the Association.

Section 1.25 "Mortgage" shall mean and refer to any mortgage constituting a first lien on a Lot.

Section 1.26 "Mortgagee" shall mean and refer to the owner and holder of a Mortgage on a Lot.

Section 1.27 "NCDOT" shall mean and refer to the North Carolina Department of Transportation.

Section 1.28 "Owner" shall mean and refer to the record owner, whether one or more persons or entities, of fee simple title to any Lot within the Subdivision, including the Declarant if it owns any Lot, but excluding any Mortgagee.

Section 1.29 "Parking Area(s)" shall mean and refer to the parking lot or lots which may be constructed over the Amenity Area(s) and/or other Common Areas for the common use, benefit and enjoyment of the Owners, their families, guests and invitees.

Section 1.30 "Plat" shall mean and refer to (i) the plat of the Subdivision recorded in Plat Book 95, Pages 87-91, in the Registry, (ii) any plats of any portions of the Additional Property which are subjected to this Declaration, and (iii) any revisions of such plat or plats recorded in the Registry.

Section 1.31 "Property" shall mean and refer to the Initial Property, together with any leasehold interest or easement which the Association has or may hereafter acquire in any property adjacent to the Subdivision, together with any Additional Property, if any, that is subsequently made subject to this Declaration pursuant to **Section 2.2**.

Section 1.32 "Public Roads" shall mean and refer to all roads and cul-de-sacs in the Subdivision and shown on the Plat as "Public R/W" or other similar designation, all to be maintained by the Association as more particularly set forth in **Section 4.6** until dedicated and accepted by the NCDOT or other governmental entity.

Section 1.33 "Registry" shall mean the Register of Deeds for XXXXX County, North Carolina.

Section 1.34 "Reserve Fund" shall mean and refer to the portion of the Annual Assessment to be used for the purposes set forth in **Section 4.7**.

Section 1.35 "Special Assessment" shall mean and refer to the amount levied by the Association for the purposes set forth in **Section 6.5**

Section 1.36 "Special Individual Assessment" shall mean and refer to the amount levied by the Association for the purposes set forth in **Section 6.6**.

Section 1.37 "Street Lights" shall mean and refer to those certain street lights that may be constructed upon, within and over the rights-of-way of the roadways and leased from Duke Energy.

Section 1.38 "Supplemental Annual Assessment" shall mean and refer to an amount levied by the Board in addition to the Annual Assessment, as set forth in **Section 6.4**.

Section 1.39 "Supplemental Declaration" means an instrument recorded in the Registry that subjects Additional Property to this Declaration and complementary additions to the covenants and restrictions as contemplated in **Section 2.2**, deems portions of the Property to be Common Area as set forth in **Section 1.10** or otherwise modifies this Declaration as permitted by the terms of this Declaration.

Section 1.40 "Water and Sewer System" shall mean and refer to the water and sewer system infrastructure constructed by Declarant in order to provide water and sewer services for the Subdivision and which shall be dedicated and accepted for public maintenance.

Section 1.41 "Working Capital Assessment" shall mean and refer to the amount to be levied at the initial sale of a Lot, as set forth in **Section 6.8**

ARTICLE II

PROPERTY SUBJECT TO THIS DECLARATION AND WITHIN THE JURISDICTION OF THE ASSOCIATION

Section 2.1 Property. The real property, which is and shall be held, transferred, sold, conveyed and occupied subject to this Declaration, is located in the Town of XXXX, XXXX County, North Carolina, as more particularly described and shown on the Plat.

Section 2.2 Additions to the Property.

2.2.1 Declarant may cause any portion of the Additional Property to be made subject to the terms and scheme of this Declaration by filing one or more Supplemental Declarations in the Registry executed by Declarant and the owner(s) of the property being annexed and containing a description of the Additional Property and a statement by the Declarant of its intent to extend the operation and effect of this Declaration to the Additional Property.

2.2.2 Any Supplemental Declaration may contain complementary additions to the covenants and restrictions contained herein as may be necessary in the judgment of the Declarant to reflect the different character of the Additional Property. No Supplemental Declaration shall revoke or modify the covenants and restrictions contained herein with respect to the Property, nor revoke or modify the covenants and restrictions established by previously filed Supplemental Declarations, without meeting the requirements for amendment set forth in **Section 12.3**. Notwithstanding the foregoing, Declarant or the Association shall have the right, without meeting the requirements for amendment set forth in **Section 12.3**, to amend this Declaration to reconfigure the Common Areas and/or the Amenity Area(s) to reflect the actual final configuration of such areas.

ARTICLE III

PROPERTY RIGHTS

Section 3.1 Ownership of Common Areas. From time to time before, and no later than, the expiration or termination of the Declarant Control Period, Declarant shall provide for the conveyance of fee simple title by special warranty deed to the Common Areas and any easements thereon to the Association, to be owned and maintained by the Association, which the Association shall be obligated to accept, without reservation. Declarant reserves the right, at any time prior to the expiration or termination of the Declarant Control Period, to construct, and establish easements therefor (including easements within the Common Area), (i) Entrance Monument(s); (ii) appropriate landscaping in any Entrance Monument Easement Area(s), Landscape Easement Area(s), and Common Areas; (iii) the Public Roads, as reflected on the Plat; (iv) pathways, trails, landscaped areas, and other improvements to the Common Areas deemed reasonable and necessary by Declarant; (v) the Water and Sewer System, (vi) stormwater drainage infrastructure, (vii) power, communications and utility easements, (viii) the Amenity Area(s); and (ix) any other common improvements and related easements established in the Subdivision in accordance with

the Plat, and applicable laws. Notwithstanding the recordation of any Plat or any other action by Declarant or the Association, all Common Areas shall remain private property and shall not be considered as dedicated to the use and benefit of the public (with the exception of the Public Roads, which will eventually be dedicated and accepted for public maintenance by the NCDOT and the water and sewer system, which will be dedicated and accepted for maintenance by the applicable governmental entity).

Section 3.2 Owners' Rights to Use and Enjoy Common Areas. Each Owner shall have the non-exclusive easement and right to use and enjoy the Common Areas, and such right shall be appurtenant to and conveyed with title to such Owner's Lot, subject to the following:

3.2.1 the right of the Association to promulgate and enforce reasonable rules and regulations governing the use of the Common Areas;

3.2.2 the right of the Association to charge reasonable admission and other fees for the use of the Amenity Area(s);

3.2.3 the right of the Association to suspend the voting rights of an Owner in the Association and the right of the Association to suspend the right to use the Amenity Area(s) by an Owner for any period during which any Assessment against his Lot remains unpaid, and for a period not to exceed sixty (60) days for any violation or infraction of its published rules and regulations;

3.2.4 the right of the Declarant or the Association to grant utility, drainage and other easements across the Common Areas;

3.2.5 the right of the Association to dedicate or transfer all or any part of the Common Areas to any public agency, authority or utility for such purposes and subject to such conditions as may be agreed to by the Members. No such dedication or transfer shall be effective unless an instrument agreeing to such dedication or transfer is signed by Members representing at least eighty percent (80%) of all votes entitled to be cast by all classes of Members;

3.2.6 the right of the Association, in accordance with the Articles of Incorporation and the Bylaws to borrow money secured by a lien on the Common Areas for the purposes of improving the Common Areas and the Improvements;

3.2.7 the right of Declarant to use the Common Areas for marketing purposes, including sales offices and/or showrooms, signage, and events, so long as Declarant's use does not unreasonably interfere with the use of the Amenity Area(s) by the other Owners and their families, guests and invitees;

3.2.8 the right of Declarant to use the Common Areas for the parking and staging of construction equipment, materials, and a construction trailer during the development of the Subdivision and the construction of homes therein, so long as Declarant's use does not unreasonably interfere with the use of the Amenity Area(s) by the other Owners and their families, guests and invitees; and

3.2.9 the provisions of ARTICLE VII.

Section 3.3 Delegation of Use. Any Owner may delegate, in accordance with the Bylaws, the Owner's right of enjoyment to the Common Areas and facilities located thereon to the members of the Owner's family and his guests, tenants, or invitees.

Section 3.4 Parking Area(s). Association shall maintain, repair and, if destroyed, replace as a common expense of the Association, any paved Parking Area(s) constructed by Declarant and located on the Common Areas. The Parking Area(s) shall be constructed and maintained in order to provide parking for the Owners, and may be used by Declarant and its assigns and the Owners, their families, guests and invitees, in connection with their use of the Amenity Area(s). No Parking Area(s) may be used for the storage of vehicles or for parking which is not in connection with the then current use of the Amenity Area(s) by Declarant and the Owners, their families, guests, and invitees. Notwithstanding the foregoing, during the Declarant Control Period, Declarant may use the Parking Area(s) for marketing purposes (including sales offices and/or showrooms, signage, and events) and parking and staging of construction equipment, materials, and a construction trailer during the development of the Subdivision and the construction of homes therein, so long as Declarant's use does not unreasonably interfere with the use of the Amenity Area(s) by the other Owners and their families, guests and invitees.

ARTICLE IV

THE ASSOCIATION

Section 4.1 Membership. Every Owner of a Lot shall be a Member of the Association. Membership shall be appurtenant to and may not be separated from ownership of any Lot, and shall be governed by the Bylaws.

Section 4.2 Classes of Membership and Voting Rights. The voting rights of the Members shall be appurtenant to the ownership of Lots. There shall be two (2) classes of Members with respect to voting rights:

4.2.1 Class A Members. Each Owner of a Lot shall be Class A Member, except Class B Members (as defined below). Each Class A Member will be entitled to one (1) vote for each Lot owned by such Class A Member. When more than one person owns an interest (other than a leasehold, security interest or mortgage) in any Lot, all such persons shall be Class A Members and their appurtenant voting rights shall be exercised as they, among themselves, determine, but in no event shall more than one (1) vote be cast with respect to any Lot.

4.2.2 Class B Members. Declarant shall be a Class B Member. A Class B Member will be entitled to four (4) votes for each Lot owned by the Class B Member. Regardless of the foregoing voting power held by Class A Members, Declarant shall retain all rights reserved and granted to Declarant under this Declaration during and after the expiration of the Declarant Control Period and Class B Membership period.

Section 4.3 Turnover Date. The Class B Membership shall cease and be converted to Class A Membership on the first to occur of the following events:

4.3.1 upon the expiration of the Declarant Control Period; or

4.3.2 upon the election of Declarant, in its sole discretion, to terminate the Class B Membership, at which point all Class B Membership rights shall be converted automatically to Class A Membership rights. Any such election, to be effective, must be in writing and recorded in the Registry.

Section 4.4 Availability of Documents. The Association shall maintain current copies of the Declaration, the Bylaws and other rules concerning the Subdivision as well as its own books, records, and financial statements which will be available for inspection by all Owners, Mortgagees and insurers and guarantors of Mortgages that are secured by Lots. All such documents shall be available upon reasonable notice and during normal business hours.

Section 4.5 Management Contracts. The Association is authorized to engage the services of any person, firm or corporation to act as managing agent of the Association at a compensation level to be established by the Board and to perform any or all of the powers and duties of the Association. Provided, however, that the term of any such agreement with a managing agent shall not exceed one (1) year and shall only be renewed by mutual agreement of the parties for successive one (1) year terms. Any such contract shall be terminable by the Association, with or without cause, upon ninety (90) days prior written notice to the manager, without payment of a termination fee.

Section 4.6 Maintenance. Prior to their acceptance for public maintenance, the Association shall maintain the Public Roads, provided that Declarant, in its sole discretion, has the right to reimburse the Association for maintenance costs until the NCDOT or other governmental entity accepts the Public Roads for maintenance. Such maintenance shall include repair and reconstruction, when necessary. Maintenance of the Public Roads shall conform to the standard of maintenance (if one is ascertainable) that would be required by the NCDOT or other governmental entity before it would accept such Public Roads for maintenance.

The Common Areas shall be maintained as more particularly described below:

4.6.1 Maintenance of the Entrance Monument(s) shall include maintenance, repair and reconstruction, when necessary, of the Entrance Monument(s), signage, irrigation, planters and lighting located within the Entrance Monument Easement Area(s) and Landscape Easement Area(s), and providing and paying for landscaping and utility charges for irrigating and lighting the monuments and signage located thereon (if applicable).

4.6.2 The Amenity Area(s) and all other Common Areas (and all associated Improvements) shall be kept clean and free from debris and maintained in an orderly condition consistent with their intended use, including any repair and replacement of any landscaping, utilities, or Improvements located thereon.

4.6.3 The Association shall not be responsible for the maintenance of any Lot or any portion of any Lot or the Improvements within the boundaries thereof, with the exception of the Entrance Monument Easement Area(s) or Landscape Easement Area(s) if located on any Lot.

Section 4.7 Reserve Fund. The Association shall establish and maintain an adequate reserve fund for the following purposes:

4.7.1 the periodic maintenance, repair, reconstruction and replacement of the Common Areas and any Improvements located on such Common Areas (including, but not limited to the Public Roads prior to acceptance for public maintenance) which the Association is obligated to maintain;

4.7.2 to fund unanticipated expenses of the Association; and/or

4.7.3 to acquire equipment or services deemed necessary or desirable by the Board, from time to time, in its discretion.

The Reserve Fund shall be collected and maintained out of the Annual Assessment as set forth in **Section 6.2**. The amount of the Reserve Fund shall be determined, from time to time, by the Board.

Section 4.8 Rules and Regulations. The Association shall have the power to adopt, amend and enforce rules and regulations applicable to the Property and to implement the provisions of this Declaration, the Bylaws, or Articles of Incorporation, including rules and regulations to prevent disorder and disturbances of the peace; to regulate parking; to regulate animals; to regulate signs; to regulate use of all Improvements on Common Areas to assure fullest enjoyment of use by the persons entitled to enjoy and use the same; to promote the general health, safety and welfare of persons within the Property; and to protect and preserve the Property, property values and property rights. All rules and regulations adopted by the Association shall be reasonable and shall be uniformly applied, except such rules may differentiate depending on whether they are being applied to Owners, their families, guests, or invitees. Notwithstanding the foregoing provisions of this Section, the Association shall not have the right or power to amend the Declaration or impose rules and regulations which limit or interfere with the rights of Declarant under the Declaration. A copy of the rules and regulations, as they may from time to time be adopted, amended or repealed shall be furnished to the Owners, or if applicable published on the Association's website, at least thirty (30) days before such rules and regulations become effective. Upon such effective date, the rules and regulations shall have the same force and effect as if they were set forth herein; provided, however, that the rules and regulations shall be enforceable only to the extent that they are not inconsistent with the Declaration, the Bylaws, or Articles of Incorporation, and may not be used to amend any of such documents. If any Owner has actual knowledge of any rules and regulations, such rules and regulations shall be enforceable against such Owner as though notice had been given.

ARTICLE V
GENERAL ASSESSMENT PROVISIONS

Section 5.1 Certificate Regarding Assessments. The Association shall, upon demand, and for a reasonable charge, furnish a certificate signed by an officer of the Association setting forth whether the Assessments on a specified Lot have been paid. A properly executed certificate as to the status of Assessments on a Lot is binding upon the Association as of the date of its issuance.

Section 5.2 Effect of Nonpayment of Assessments; Remedies of the Association. Any Assessment (or installment thereof) not paid by its due date, shall bear interest from such due date at the rate of eighteen percent (18%) per annum or the highest rate then permitted by law, whichever is less. In addition to such interest charge, the delinquent Owner shall also pay such late charge as may have been established by the Board to defray the costs arising because of late payment. The Association may bring an action at law against the delinquent Owner or foreclose the lien against the Lot and the right to use the Common Areas, and interest, late payment charges, costs and reasonable attorneys' fees related to such action or foreclosure shall be added to the amount of such Assessment. No Owner may waive or otherwise escape liability for the Assessments by not using the Common Areas, or by abandoning his Lot.

Section 5.3 Subordination of the Lien to Mortgages. The lien of the Assessments provided for in ARTICLE VI shall be subordinate to the lien of any first Mortgage on a Lot. Sale or transfer of any Lot shall not affect the Assessment lien. The sale or transfer of any Lot pursuant to Mortgage foreclosure, or any proceeding in lieu thereof, however, shall extinguish the lien of such Assessments as to payments that became due prior to such sale or transfer. Provided, however, that the Board may, in its sole discretion, determine that such unpaid Assessments should be collectable pro rata from all Owners, including the foreclosure sale purchaser. Such pro rata portions are payable by all Owners, notwithstanding the fact that such pro rata portions may cause the applicable Assessment (as applicable), to be in excess of the applicable Maximum Annual Assessment amount permitted hereunder. No sale or transfer shall relieve the purchaser of such Lot from liability for any Assessments thereafter becoming due or from the lien thereof, but the lien provided for herein shall continue to be subordinate to the lien of any Mortgage as above provided.

ARTICLE VI
COVENANT FOR ANNUAL AND SPECIAL ASSESSMENTS

Section 6.1 Creation of the Lien and Personal Obligation for Assessments. Upon the conveyance of any Lot from the Declarant to an Owner, an Owner of any Lot covenants and agrees to pay Assessments to the Association levied upon the Lots which it owns. Any such Assessment, together with interest, costs, and reasonable attorneys' fees, shall be a charge and a continuing lien upon the Lot against which each such Assessment is made. Each such Assessment, together with interest, costs and reasonable attorneys' fees, shall also be the personal obligation of the Owner of such Lot at the time when the Assessment is due or levied. The personal obligation for delinquent Assessments shall not pass to an Owner's successors in title unless expressly assumed. The Declarant shall not be responsible for the payment of Assessments.

Section 6.2 Purpose of Annual Assessment. The Annual Assessment shall be used as follows:

6.2.1 to repair, maintain, reconstruct (when necessary), keep clean and free from debris consistent with their intended use, the Common Areas, as more particularly set forth in **Section 4.6**;

6.2.2 to maintain and repair the Public Roads, as more particularly set forth in **Section 4.6**;

6.2.3 to pay all costs associated with the lease of the Street Lights, including but not limited to, monthly lease payments and utility costs;

6.2.4 to maintain and repair the Entrance Monument(s) and Entrance Monument Easement Area(s), Landscape Easement Area(s), Amenity Area(s) and any improvements within the Common Areas;

6.2.5 to pay the premiums on all insurance carried by the Association pursuant hereto or pursuant to the Bylaws;

6.2.6 to pay all legal, accounting, architectural, engineering, and other professional fees incurred by the Association in carrying out its duties as set forth herein or in the Bylaws; and

6.2.7 to maintain the Reserve Fund, as set forth in **Section 4.7**.

6.2.8 to operate any facility or amenity constructed in the Common Area for the common use and enjoyment of all Owners.

6.2.9 to maintain cluster mailboxes.

Section 6.3 Payment of Annual Assessment; Due Dates. The Annual Assessment shall commence as to each Lot on the date hereof, except as provided in **Section 6.7.2**. The Declarant shall set the amount and frequency of installments of the initial Annual Assessment prior to the conveyance of the first Lot to an Owner. The Board shall set the amount of the Annual Assessment as to each Lot for any calendar year at least thirty (30) days prior to January 1st of such calendar year, and the Association shall send written notice of the amount of the Annual Assessment, as well as the amount of the installment due, to each Owner on or before January 1st of such calendar year. The failure of the Association to send, or of an Owner to receive, such notice shall not relieve any Owner of its obligation to pay the Annual Assessment. Notwithstanding the foregoing, the Board may alter the dates of the fiscal year for setting the Annual Assessment and may increase or decrease the frequency of collection of Annual Assessment installments in any reasonable manner.

Section 6.4 Maximum Annual Assessment; Supplemental Annual Assessment.

6.4.1 For each year following the initial Annual Assessment, the Board has the authority to increase the Annual Assessment each year by a maximum amount equal to the previous year's Annual Assessment times the greater of the following: (i) ten percent (10%); or (ii) the annual percentage increase in the CPI (the "Maximum Annual Assessment"). (If the CPI is discontinued, the Board shall use the index most similar to the CPI that is published by the United States Government indicating changes in the cost of living.) If the Annual Assessment is not increased by the maximum amount permitted under the terms of this provision, the difference between any actual increase which is made and the maximum increase permitted for that year shall be computed and the Annual Assessment may be increased by that amount in a future year, in addition to the maximum increase permitted under

the terms of the preceding sentence for such future year, by a vote of the Board, and without a vote of the Members.

6.4.2 After the initial Annual Assessment, the Maximum Annual Assessment may be increased above the maximum amount set forth in **Section 6.4.1** by a vote of no less than two-thirds (2/3) of the eligible Members who are voting in person or by proxy at the annual meeting or at a special meeting duly called for this purpose, in accordance with the Bylaws.

6.4.3 The Board may set the Annual Assessment at an amount not in excess of the Maximum Annual Assessment. If the Board sets less than the Maximum Annual Assessment for any calendar year and thereafter, during such calendar year, determines that such lesser Annual Assessment cannot fund important and essential functions of the Association, the Board may, without a vote of the Members, levy a Supplemental Annual Assessment in accordance with the Bylaws. In no event shall the sum of the Annual Assessment and Supplemental Annual Assessment for any year exceed the applicable Maximum Annual Assessment for such year, other than as set forth in **Section 6.4.2**.

Section 6.5 Special Assessment. In addition to the Annual Assessment authorized above, the Association may levy, in any calendar year, a Special Assessment applicable to that year only for the purpose of defraying, in whole or in part, the cost of (i) the construction of any Common Area Improvements which are not originally constructed by Declarant; (ii) the reconstruction, repair or replacement of the Common Areas, including all Improvements located thereon, and including fixtures and personal property related thereto; or (iii) any other extraordinary, unanticipated cost which cannot otherwise be funded through the established Assessments for that current year.

Section 6.6 Special Individual Assessment. In addition to the Annual Assessments, Supplemental Annual Assessments, and Special Assessments authorized above, the Board shall have the power to levy a Special Individual Assessment applicable to any particular Owner (i) for the purpose of paying for the cost of any construction, reconstruction, repair or replacement of any damaged component of the Common Areas and/or any Improvements located thereon, caused by any act or omission of such Owner(s), members of such Owner's family, or such Owner's agents, guests, tenants, employees, or invitees and not the result of ordinary wear and tear; or (ii) for payment of liquidated damages, reimbursement amounts, fines, penalties or other charges imposed against any particular Owner relative to such Owner's failure to comply with the terms and provisions of this Declaration, the Bylaws, the Guidelines or any rules or regulations promulgated by the Association or the Declarant pursuant to this Declaration or the Bylaws. Provided, however, that Declarant shall not be obligated to pay any Special Individual Assessment, except with Declarant's prior written approval. The due date of any Special Individual Assessment levied pursuant to this **Section 6.6** shall be fixed in the Board's resolution authorizing such Special Individual Assessment. Upon the establishment of a Special Individual Assessment, the Board shall send written notice of the amount and due date of such Special Individual Assessment to the affected Owner(s) at least thirty (30) days prior to the date such Special Individual Assessment is due.

Section 6.7 Assessment Rate.

6.7.1 Subject to the exceptions set forth in **Section 6.7.2**, the Annual Assessments must be fixed at a uniform rate for all Lots; and

6.7.2 Until such time as Declarant conveys a Lot with a completed home on such Lot to the first Owner, or such earlier date as Declarant shall elect, the applicable Lot shall not be subject to an Annual Assessment, Supplemental Annual Assessment, Special Assessment, Special Individual Assessment, or any other assessment due and payable under this Declaration; provided, during any such period that such assessments on some or all of the Lots in the Subdivision are not being paid in accordance with the foregoing exemption, Declarant shall fund all annual operating budget deficits, if any, caused by a shortfall between the assessments collected and the expenses of the Association. Declarant's deficit funding obligation may be satisfied with in-kind payments of services or materials. Declarant's deficit funding obligation does not include any expenses the Association is unable to meet because of nonpayment of any assessment by Owners, or because of unusual or extraordinary expenses not included in the annual operating budget.

Section 6.8 Working Capital Assessment. In addition to the Annual Assessments, Supplemental Annual Assessments, Special Assessments, Special Individual Assessment, and all other assessments due and payable under this Declaration with respect to each Lot, the first Owner who acquires title to a Lot with a completed home on the Lot shall pay to the Association at the time of the closing of the purchase a Working Capital Assessment in an amount not to exceed the then current Annual Assessment. The purpose of the Working Capital Assessment is to provide necessary working capital and initial funding for general reserves for the Association. The Working Capital Assessment may be enforced and collected, and shall constitute an assessment lien, in the same manner as annual and special assessments against the first Owner and the Lot. It is the express intention of this Section that only one Working Capital Assessment shall be assessed against each Lot. During the Declarant Control Period, Declarant may, without the consent or approval of any other person or entity, amend this Declaration to decrease the Working Capital Assessment.

ARTICLE VII
RESTRICTIONS

Section 7.1 Land Use, Building Type and Residential Restriction. All Lots in the Subdivision shall be used only for private residential and recreational purposes. No structure shall be erected, altered, placed or permitted to remain on any Lot other than for use as a single family residential dwelling, unless otherwise provided herein, and only one single-family residential dwelling not exceeding three (3) stories in height above ground shall be erected or permitted to remain upon any Lot. No log cabin (or structure resembling a log cabin, or having the architectural characteristics of a log cabin), mobile home, modular home or shell home may be erected or permitted to remain on any Lot. A private garage, outbuildings, incidental to the residential use of the Lot are permitted, upon the condition that they are not rented, leased nor otherwise used for remuneration, subject to the other covenants and restrictions contained herein. No detached garage or outbuildings shall at any time be used as a residence. Any ownership or leasing arrangement

for a Lot having the characteristics of a vacation time-sharing ownership plan, a vacation time-sharing lease plan, or any other form of interval, sequential or shared ownership is expressly prohibited.

Section 7.2 Building Construction and Quality. All Improvements, buildings and outbuildings erected upon any Lot shall be constructed of new material of good grade, quality and appearance and shall be constructed in a proper, workmanlike manner. No building shall be erected unless it is completely underpinned with a solid brick, brick or stone-covered block or stucco foundation. No exterior surface of any building shall be asbestos shingle siding, imitation brick or stone-roll siding, or exposed concrete or cement blocks. The exterior surface of any garage, outbuilding or appurtenant structure or building erected on or located on any Lot shall be architecturally compatible with, and of material and construction comparable in cost and design to, the exterior surface of the dwelling located on the Lot. All buildings shall have roofs (except for dormers, porches and bay windows) of not less than six (6) vertical by twelve (12) horizontal pitch, and not less than twelve (12) inch overhang, covered with slate, cedar shakes, tile, composition (fiberglass), or architectural (sculpted) shingles.

Section 7.3 Temporary Structures; Structure Materials. No dwelling or building of a temporary nature shall be erected or allowed to remain on any Lot, and no metal, fiberglass, plastic, vinyl or canvas tent, barn, carport, garage, utility building, storage building or other metal, fiberglass, plastic, vinyl or canvas structure shall be placed on any Lot or attached to any dwelling. Provided, however, that Declarant reserves the right to erect or move temporary buildings or trailers onto the Lots owned by Declarant or in the Parking Areas, to be used for marketing purposes, including sales offices and/or showrooms, signage, and events, and for the parking and staging of construction equipment, materials, and a construction trailer during the development of the Subdivision and the construction of homes therein.

Section 7.4 Building Setback Lines. No building on any Lot (including any stoops, porches, or decks) shall be erected or permitted to remain outside the Building Envelope. The foregoing notwithstanding, outbuildings (as set forth in **Section 7.16**) or similar minor aesthetic Improvements may encroach into the rear setback, provided that they: (i) are single story; (ii) contain less than one hundred fifty (150) square feet; and (iii) are not enclosed by walls or other surfaces unless such surfaces meet the openness test established for perimeter fencing in **Section 7.10**.

If any zoning or subdivision ordinance, floodway regulations or other ordinance, law or regulation applicable to a Lot prescribes greater setbacks, then all buildings erected during the pendency of that zoning or subdivision ordinance, floodway regulations or other ordinance, law or regulation shall be governed by the greater setbacks. No structures or Improvements may be constructed or placed within the right-of-way of any of the Public Roads (so as to prevent such Public Roads from being accepted for maintenance by the NCDOT or other applicable governmental entity). If an Owner violates this provision, the Owner of the nonconforming Lot shall reimburse Declarant, the Association or the ACC (as applicable) within five (5) business days following the submission of an invoice for any costs or expenses incurred by Declarant, the Association or the ACC for delaying the acceptance for maintenance of the Public Roads and such fines as may be levied by the Board. The Association shall have the authority but not the obligation, in its sole discretion, to levy a Special Individual Assessment against an Owner who

fails to abide by the terms of this **Section 7.4**, to recoup the expenses incurred by Declarant and/or the Association in seeking to cure any such violation and/or any fine, and shall be subject to the Association's Assessment collection remedies as specified in ARTICLE V of this Declaration.

Section 7.5 Minor Setback Violations. In the event of the unintentional violation of any of the building setback restrictions, in the amount of ten percent (10%) or less of the applicable setback restriction, Declarant reserves the right, during the Declarant Control Period, and thereafter the Board reserves the right, but is not obligated, to waive in writing such violation of the setback restrictions upon agreement of the Owner of the Lot upon which the violation occurs and the Owner of any Lot adjoining the violated setback, provided that such change is not in violation of any zoning or subdivision ordinance or other applicable law or regulation or, if in violation, only if a variance or other similar approval has been received from the appropriate governmental authority.

Section 7.6 Combination or Subdivision of Lots. Except as otherwise set forth herein, no Lot shall be subdivided by sale or otherwise so as to reduce the Lot area shown on the Plat. However, an Owner may combine one Lot with contiguous Lot(s) so long as the parcel or parcels which result from such combination do not violate any applicable zoning ordinance, subdivision ordinance or other applicable law or regulation. In the event that two or more Lots are completely combined so as to create one parcel, the resulting parcel shall be considered as one Lot for the purposes of this ARTICLE VII, but shall continue to be considered as two or more Lots for all other purposes (including voting and Assessments). Furthermore, the Owner of any Lot which combines with all or a portion of contiguous Lot(s) shall be solely responsible for any costs which may result from such combination, including the costs of relocating any existing easements. Notwithstanding the foregoing, Declarant reserves the right to change the boundaries or dimensions of any Lots still owned by Declarant or for any reason and any Lot or Lots which result from such change by Declarant shall not be subject to any additional Assessment.

Section 7.7 Reserved Easements. Declarant hereby reserves easements for the installation and maintenance of utilities (water and sewer system, electricity, gas, telephone, storm drainage, cable television, etc.) and drainage facilities over the Common Area, the portion of each Lot outside the Building Envelope and as may otherwise be shown on a Plat. Additional easements for the installation and maintenance of storm drainage facilities and utilities and other purposes deemed necessary or appropriate by Declarant or applicable governmental agencies (e.g., sight triangles, fire hydrants, entry signage, temporary construction easements, etc.) are reserved as more particularly shown and delineated on the Plat and in other recorded easement documents. Within such easements, no structure, planting or other materials shall be placed or permitted to remain which may damage or interfere with the installation and maintenance of utilities, which may interfere with drainage and the flow of water within the easement areas or which may interfere with the purpose for which such easement was granted. The Owner of each Lot shall maintain that portion of the Lot lying within the easement areas as defined herein and shall maintain any Improvements located thereon, except those Improvements installed and maintained by a public authority or utility company. All utility meters must be located at the rear of the dwellings. Declarant reserves the right to create and impose additional easements over any unsold Lot or Lots for the installation and maintenance of roads, drainage, utilities, fire hydrants, sight triangles, entry signage and any other purposes deemed necessary or appropriate by Declarant by the recording of appropriate instruments, and such easements shall not be construed to invalidate any of these

covenants. Declarant reserves an easement over the Common Area for the purposes of enjoyment, use, access and development of the Additional Property whether or not that Additional Property is made subject to this Declaration. This easement includes a right of ingress and egress over the Common Area for construction of roads and for connecting and installing utilities. Declarant shall be responsible for any damage caused to the Common Area as a result of its respective actions in connection with development of that Additional Property. If the easement is exercised for permanent access to that Additional Property and that Additional Property or any portion thereof benefiting from the easement is not made subject to this Declaration, then Declarant, its successors or assigns, shall enter into a reasonable agreement with the Association to share the cost of any maintenance the Association provides to or along any roadway providing access to that Additional Property.

Section 7.8 Entrance Monument Easement Area(s) and Landscape Easement Area(s). Declarant hereby grants, establishes, creates and reserves for the benefit of Declarant and the Association, and their successors and assigns, non-exclusive perpetual easements for the purpose of landscaping and maintaining the entryway and erecting and maintaining the Entrance Monument(s) for the Subdivision. Declarant or the Association shall have the right to enter, landscape and maintain the Entrance Monument Easement Area(s) as an entryway to the Subdivision. Further, Declarant or the Association may erect and maintain one or more stone monuments, with an entrance sign bearing the name of the Subdivision and Declarant and may erect and maintain lighting for the Entrance Monument(s), planters and other Improvements typically used for an entryway. Declarant further hereby grants, establishes, creates and reserves for the benefit of Declarant and the Association, and their successors and assigns, non-exclusive perpetual easements for the purpose of landscaping and maintaining the property adjacent to the main entry road(s) for the Subdivision.

Section 7.9 Stormwater Drainage Easement. Declarant reserves over the Common Areas an easement for installing, maintaining, repairing, and replacing facilities for the drainage of stormwater runoff from the Lots and Public Roads within the Subdivision.

Section 7.10 Fences and Walls. No fence or wall of any kind may be constructed on any Lot unless and until the ACC has given its prior written approval of the color, size, design, materials and location for such fence or wall. Without limiting the foregoing sentence, (a) all fences shall be constructed of black wrought iron or aluminum, provided, that, stone or brick columns supporting fence sections may be permitted; (b) no chain link or stockade style fences are permitted; (c) no wood or picket fences are permitted; (d) no fence or support column shall be over five (5) feet high; and (e) no fence, screening or wall shall be erected, placed or maintained on any Lot nearer to any roadway fronting such lot than the rear building corner of the main structure constructed on such lot unless otherwise approved in writing by the ACC. Any fence to be positioned within easements and/or public rights of way, located on any lot, may be removed by those agencies at any time, and without prior notification, to access their easements and/or public rights of way for required maintenance. Replacement costs of any removed fencing will be the responsibility of the Owner. Provided, however, that the restrictions described in this **Section 7.10** shall not apply to any Improvements originally installed by Declarant on any Common Area. Additional restrictions and requirements may apply as established in the Guidelines.

Section 7.11 Signs. No signs of any kind may shall be displayed to the public view on any Common Area, other than the Entrance Monument(s), as set forth in **Section 7.8**. No signs of any kind may be displayed to the public view on any Lot, with the following exceptions which may not exceed five (5) square feet in size: (a) one sign (on the Lot only) advertising the Property for sale or rent; (b) one sign on the Lot only used to advertise the Lot during the construction and sales period; and (c) temporary political signs. These restrictions shall never apply to permanent Entrance Monument(s) or to temporary entry signs or advertising by Declarant, or for sale signs installed by Declarant or its agents prior to the sellout of the Subdivision.

Section 7.12 Antennas; Satellite Dishes or Discs. No radio or television transmission or reception towers, antenna, satellite dishes or discs shall be erected or maintained on any Lot, except that: (i) a satellite dish designed to receive direct broadcast satellite services, including direct-to-home satellite services, that is one meter or less in diameter; or (ii) a satellite dish designed to receive video programming services via multipoint distribution services, including multichannel multipoint distribution services, instructional television fixed services and local multipoint distribution services, that is one meter or less in diameter or diagonal measurement; or (iii) an antenna that is designed to receive television broadcast signals shall be permitted on Lots, subject to ACC approval and such reasonable requirements as to location and screening as may be set forth in the Guidelines, consistent with applicable zoning ordinance, subdivision ordinance or other applicable law or regulation, to minimize obtrusiveness as viewed from streets and adjacent property. Declarant and/or the Association shall have the right, without obligation, to erect an aerial, satellite dish or other apparatus for a master antenna, cable or other communication system for the benefit of all or a portion of the Property, should any master system or systems be utilized by the Association and require such exterior apparatus.

Section 7.13 Basketball Goals. Permanent basketball goals shall not be installed on any Lot unless and until the ACC has given its prior written approval of its appearance and location. Basketball goals must not be used on or to create an obstacle to use of common areas, sidewalks, or streets. The base to any non-permanent basketball goal must be filled with sand or water. The placing of heavy materials on top of the base of a non-permanent basketball goal to improve stability is unsightly and not allowed. Non-permanent basketball goals are not intended to be permanent or semi-permanent and should be stored out of sight of the street if not in weekly use.

Section 7.14 Play Equipment. Children's play equipment, swing sets, or trampolines shall not be installed on any Lot unless and until the ACC has given its prior written approval of its appearance and location. Such play equipment should be located to have minimal visual impact on adjacent Lots and streets and the ACC may require landscape screening in its sole discretion. The equipment must be manufactured of natural wood and all accessories should be of a solid earth-tone color. Metal swing sets are not permitted.

Section 7.15 Outbuildings and Accessory Structures. The construction and location of outbuildings (gazebos, potting sheds, storage sheds, statues, play houses, etc.) shall be subject to the review and approval of the ACC. Outbuildings shall be placed behind the footprint of the home, their openings shall not face the street and, except as set forth in **Section 7.4**, shall be within the Building Envelope. The ACC may require landscape screening of these structures in its sole discretion.

Section 7.16 Pool, Therapy Pools and Spas. ACC approval is required for the installation of any outdoor hot tub, Jacuzzi, sauna or spa (collectively "spas") and swimming pools and related equipment. Plans for proposed swimming pools, spas, surrounding decks, fencing and screening must be approved by the ACC before any clearing, grading or construction is commenced. Spas shall be located in the rear yard only, shall be installed in such a way that it is not immediately visible to adjacent property owners and shall not create an unreasonable level of noise for adjacent property owners. Any spa shall be an integral part of the deck or patio area and/or the rear yard landscaping. Owners are required to install safety features such as locks or covers for spas when such are not in use. Pools shall be an integral part of the deck or patio area and/or rear yard landscaping. Any pool shall be located in the rear yard, shall be installed in such a way that it is not immediately visible to adjacent property owners, and shall not create an unreasonable level of noise for adjacent property owners. Pools shall be fenced for safety purposes and Owners may be required to install safety features such as locks or covers for these items when they are not in use. Pools, decks and related equipment will not be allowed outside of the Building Envelope. Above ground pools are prohibited.

Section 7.17 Lot Maintenance; Trash Disposal. Each Owner shall keep his Lot in a clean and orderly condition and shall keep the Improvements thereon in a suitable state of painting and repair, promptly repairing any damage caused by fire or other casualty. No clothes line may be erected or maintained on any Lot. No Lot shall be used in whole or in part for storage of trash of any character whatsoever. No trash, rubbish, stored materials or similar unsightly items shall be allowed to remain on any Lot outside of an enclosed structure, except when temporarily placed in closed, sanitary containers pending removal by trash collection authorities or companies. All trash enclosures must be submitted to the ACC and approved prior to installation. Trash containers may be placed outside of an enclosed area only between the hours of 6:00 PM the day preceding trash collection and 6:00 PM the day of trash collection.

Section 7.18 Parking. No truck or commercial vehicle in excess of one-ton load capacity, or any vehicle under repair, wrecked or junked motor vehicle shall be parked upon or permitted to remain on any Lot, Common Area, or other portion of the Property. No trailer, mobile home, recreational vehicle, camper or boat shall be used as a residence, either temporarily or permanently. No trailer, mobile home, recreational vehicle, camper or boat shall be parked upon or be permitted to remain on any Lot for a period exceeding twenty-four (24) hours, unless it is parked off the Public Roads and not within the front or side yard of the Lot. All automobiles, trucks, trailers, campers, motor homes and recreational vehicles must have a current license plate affixed and all such vehicles must be parked in a carport, enclosed garage, or on a concrete or asphalt driveway.

Section 7.19 Public Water and Sewer System. Declarant shall construct the public Water and Sewer System. All pipes and other equipment necessary for the operation and maintenance of the Water and Sewer System shall be located within the utility easements described in **Section 7.7**, or within Public Road rights-of-way. Upon its completion, the Water and Sewer System and all mains, pipes, equipment and other personal property which is part thereof, shall become the property of XXXXX County. The Water and Sewer System shall be the sole source of potable water for the Subdivision, and no well may be dug or constructed on any Lot for the purpose of providing a domestic water supply; provided, however, the construction or installation of a well for irrigation purposes is permitted, provided, that the housing for the well pump be screened as determined by the ACC.

Section 7.20 Nuisances. No noxious or offensive trade or activity shall be carried on or upon any Lot or Common Area, nor shall anything be done thereon which may be or become an annoyance or nuisance to the neighborhood. No substance, thing or material shall be kept upon any Lot or Common Area that will emit foul or obnoxious odors, or that will cause any noise that will or might disturb the peace and quiet of the occupants of surrounding property. No animals, livestock, or poultry of any kind shall be raised, bred, or kept on any Lot or Common Area with the exception of dogs, cats, or other household pets, which may be kept or maintained provided they are not kept, bred, or maintained for commercial purposes. No more than three (3) household pets shall be kept or maintained per Lot, except for newborn offspring of such household pets that are under nine (9) months in age.

Section 7.21 Diligent Construction. All construction, landscaping or other work which has been commenced on any Lot must be continued with reasonable diligence to completion and no partially completed houses or other Improvements shall be permitted to exist on any Lot or Common Area, except during such reasonable time period as is necessary for completion. The exterior of all houses and other structures must be completed within one (1) year from the date of commencement of construction, except where such completion is impossible due to strikes, fires, national emergency or natural calamities. No construction materials of any kind may be stored within the right-of-way of any Public Roads. The responsible Owner shall repair any damage to any Public Roads, curb or sidewalk or any part of any Common Area or any utility system caused by their negligence. If such responsible party fails to repair such damage, Declarant or the Association may make or provide for such repairs, and the responsible Owner shall immediately reimburse the repairing party for its reasonable out-of-pocket expenses in making such repairs. The Owner of each Lot shall at all times keep contiguous public and private areas reasonably free from any dirt, mud, garbage, trash or other debris which is occasioned by construction of Improvements on the Lots, Public Roads, and any Common Areas. Declarant or the Association may provide for the cleaning of public and private areas due to the activities of the responsible party and may assess the responsible party a reasonable charge not to exceed the actual cost for such cleaning. Declarant and each Owner shall, consistent with standard construction practices, keep all portions of the Lots, Public Roads, and Common Areas free of unsightly construction debris and shall at all times during construction either provide dumpsites for the containment of garbage, trash or other debris which is caused by construction of Improvements on a Lot or Common Areas, or take other measures consistent with standard construction practices necessary to keep the Lot, Public Roads, and all Common Areas free of such garbage, trash, or other debris. Each Owner shall be responsible for erosion control protection during any grading, site preparation or earth-disturbing operation, as described and defined in the Guidelines.

Section 7.22 Mail and Newspaper Boxes.

7.22.1 Declarant is required by the United States Postal Service to install cluster mailboxes within Common Areas or on Lots within the Subdivision. Mail will not be delivered to any other location, and no Owner shall have the right to install any other mailbox or receptacle for the receipt of mail, newspapers, packages, or similarly delivered items on a Lot without the prior written approval of the ACC, which approval may be withheld in the ACC's sole discretion. Declarant hereby reserves for the benefit of itself, the Association, the Owners, and the United States Postal Service and its successors and assigns easements for access to and the

installation, use, maintenance, repair, and replacement of cluster mailboxes and mailbox shelters over the Common Areas and Lots. Within such easements, no structure, planting or other materials shall be placed by any Owner or permitted to remain which may damage or interfere with the installation and maintenance of the mailboxes or mailbox shelters or which may interfere with the purpose for which such easement was granted. The Owner of each Lot shall maintain that portion of the Lot lying within the easement areas as defined herein, provided the cluster mailboxes and mailbox shelters (and pads) shall be maintained by the Association. Declarant reserves the right to create and impose additional easements over any unsold Lot or Lots for the installation and maintenance of additional cluster mailboxes and mailbox shelters.

7.22.2 If, at any time in the future, the cluster mailboxes and mailbox shelters provided for above are removed or replaced with individual mailboxes in accordance with applicable law, the ACC shall have the right to approve the location, color, size, design, lettering, and all other design aspects of mailboxes and receptacles for the receipt of mail, newspapers, packages, or similarly delivered items as well as Lot identification markers. The ACC shall have the right to require uniform mailboxes utilized in the Subdivision. If a mailbox and/or post is damaged, the Owner must install the same color, style, and material of post and box that was first installed. If the Owner does not replace the damaged mailbox and/or post within thirty (30) days after its damage or destruction, the Association may replace the damaged item and assess the Owner for the cost thereof.

Section 7.23 Lawn Furniture and Statues. No lawn furniture or decorative items, such as statuettes or renderings of animate or inanimate objects, shall be maintained in the front or side yards of any Lot unless shielded from view by landscaping, a fence or a wall approved in advance in writing by the ACC.

Section 7.24 Non-Waiver. No delay or failure on the part of an aggrieved party to invoke an available remedy with respect to a violation of any provision contained in or referred to in this Declaration shall be held to be a waiver by that party of any right available to the party upon the recurrence or continuance of the violation or the occurrence of a different violation.

Section 7.25 Removal of Mature Trees; Landscaping. Except for trees removed by Declarant, any "street trees" installed by Declarant and any "mature trees" may not be cut down or otherwise removed without the specific written approval of the Declarant or the ACC. For purposes of this Declaration, the term "mature trees" shall mean all evergreen or deciduous trees with a caliper of four (4) inches or greater, measured at a point which is twelve inches (12") from ground level. Furthermore, in the event that trees, shrubs or ground cover are completely removed (as opposed to thinned) in connection with the improvement of any Lot, such cleared portions of the Lot shall be covered with grass or shall be landscaped with plants, shrubs, trees, mulch, wood chips, pine needles and/or similar landscaping Improvements. Landscape rocks are not permitted in street tree beds or front yard planting beds that are within view from the street.

Declarant hereby reserves the right and easement benefiting Declarant, the Association, and/or the ACC to go upon any Lot or other portion of the Property to replant or order the

replanting of any "street trees" or "mature trees" removed within the Subdivision in violation of the terms of this **Section 7.22**. If Declarant, the Association, and/or the ACC exercises its easement rights pursuant to the terms of this **Section 7.22**, the Owner of the nonconforming Lot shall reimburse Declarant, the Association, and/or the ACC (as applicable) within five (5) business days following the submission of an invoice for any costs or expenses incurred. The exercise or non-exercise of the easement rights contained in this **Section 7.22**, shall be subject to the discretion of the Declarant, the Association, and/or the ACC, provided that Declarant, the Association, and/or the ACC shall not have the obligation to exercise such rights. Declarant, the Association and/or the ACC shall have the authority to levy a Special Individual Assessment against an Owner who cuts, damages, or removes any "street trees" or "mature trees" on any part of the Common Areas, their Lot or any other Lot in violation of the above provisions or the Guidelines.

Section 7.26 Impervious Surfaces. The construction of Impervious Surfaces on each Lot (including, but not limited to, the home, driveways, patios, and outbuildings) shall not exceed any maximum allocated Impervious Surfaces for such Lot as designated on the Plat. Any sidewalk located within the sidewalk easements designated on the Plat shall be expressly excluded from the Impervious Surface calculation for each Lot. Notwithstanding the foregoing, during the Declarant Control Period, Declarant may unilaterally alter the Impervious Surface limitation on a per Lot basis so long as such new allocation does not violate any applicable zoning ordinance, subdivision ordinance or other applicable law or regulation.

Section 7.27 Additional Use Restrictions. The Board may adopt such additional use restrictions, rules or regulations, applicable to all or any portion of the Property as permitted by applicable law. The Board may waive or modify application of those use restrictions that it has authority to enforce with respect to any Lot(s) as the Board deems appropriate.

Section 7.28 Long Term Rental of Lots. Each Lot may be leased to a third party provided that the following conditions are met: (a) not less than the entire Lot is being leased, (b) the term of such lease is not less than twelve (12) months; and (c) the Lot is not being rented for transient or hotel purposes, which shall be defined as any rental if the occupants of the Lot are provided customary hotel services such as room service for food and beverage, maid service and furnishing of laundry and linen. For purposes of clarification, subsection (a) of the first sentence of this **Section 7.28** shall not be deemed to prohibit the Owner of a Lot from leasing its Lot for occupancy by a roommate or roommates and the Owner of the Lot. All leases of any Lot shall be in writing. All such leases shall provide that they are subject to all of the provisions of the Declaration and the Bylaws (including any rules or regulations adopted by the Association pursuant to this Declaration) and that any failure by the lessee to comply with any of such provisions shall constitute a default under the lease. A copy of each such lease shall be given to the Declarant and the President of the Association immediately after it is executed. The Owner of any Lot being leased will be responsible for any violations of this Declaration or the Bylaws (including any rules or regulations adopted by the Association pursuant to this Declaration) by its tenant.

ARTICLE VIII
INSURANCE

Section 8.1 Types of Insurance Required. The Board shall obtain and maintain at all times the following types of insurance if reasonably available, or if not reasonably available, the most nearly equivalent coverages as are reasonably available:

8.1.1 Fire and Casualty. The Board shall obtain and maintain blanket property insurance covering "risks of direct physical loss" for all insurable improvements on the Common Area. All property insurance policies obtained by the Association shall have policy limits sufficient to cover the full replacement cost of the insured improvements. All such policies shall provide that the Board and the insurance company shall approve adjustment of loss. In addition to the provisions and endorsements set forth in **Section 8.3** and **Section 8.4**, the fire and casualty insurance described herein shall contain the following provisions: (i) waiver of subrogation by the insurer as to any claims against the Association, any officer, Director, agent or employee of the Association, the Owners and their employees, agents, tenants and invitees; and (ii) provision that the coverage will not be prejudiced by act or neglect of one or more Owners when said act or neglect is not within the control of the Association or by any failure of the Association to comply with any warranty or condition regarding any portion of the Property over which the Association has no control.

8.1.2 Public Liability. The Board shall also be required to obtain and maintain to the extent obtainable, public liability insurance in such limits as the Board may, from time to time, determine to be customary for projects similar in construction, location and use to any Common Areas, and customary for the activities and obligations of property owners' associations for projects similar to the Subdivision, covering each member of the Board, the managing agent, if any, and each Owner with respect to his liability arising out of the ownership, maintenance, or repair of the Common Areas and out of the activities of the Association; provided, however, that in no event shall the amounts of such public liability insurance ever be less than $1,000,000 per occurrence against liability for bodily injury, including death resulting therefrom, and damage to property, including loss of use thereof, occurring upon, in or about, or arising from or relating to, the Property or any portion thereof. Such insurance shall include endorsements covering cross-liability claims of one insured against another, including the liability of the Association and/or the Owners as a group to a single Owner. The Board shall review such limits annually. Until the first meeting of the Board following the initial meeting of the Owners, such public liability insurance shall be in amounts of not less than $1,000,000 per occurrence for claims for bodily injury and property damage.

8.1.3 Fidelity Coverage. The Board shall also be required to obtain fidelity coverage against dishonest acts on the part of all persons, whether officers, Directors, trustees, employees, agents or independent contractors, responsible for handling funds belonging to or administered by the Association, in an amount determined by the Board in its discretion. An appropriate endorsement to the policy to cover any

persons who serve without compensation shall be added if the policy would not otherwise cover volunteers.

8.1.4 Such other insurance coverages, including flood insurance and worker's compensation, as the Board shall determine, from time to time, to be necessary or desirable.

Section 8.2 Premium Expense. Premiums upon insurance policies purchased by the Board shall be paid by the Board and charged as a common expense to be collected from the Owners pursuant to ARTICLE VI.

Section 8.3 Special Endorsements. The Board shall make diligent effort to secure insurance policies that will provide for the following:

8.3.1 recognition of any insurance trust agreement entered into by the Association;

8.3.2 coverage that may not be canceled or substantially modified (including cancellation for nonpayment of premium) without at least forty-five (45) days prior written notice to the named insured, any insurance trustee and all Mortgagees; and

8.3.3 coverage that cannot be canceled, invalidated or suspended on account of the conduct of any officer or employee of the Board without prior demand in writing that the Board cure the defect and the allowance of a reasonable time thereafter within which the defect may be cured by the Association, any Owner or any Mortgagee.

Section 8.4 General Guidelines. All insurance policies purchased by the Board shall be with a company or companies licensed to do business in the State of North Carolina and holding a rating of "A-VII" or better by the current issue of A.M. Best's Insurance Reports. All insurance policies shall be written for the benefit of the Association and shall be issued in the name of, and provide that all proceeds thereof shall be payable to, the Association. Notwithstanding any of the foregoing provisions and requirements relating to insurance, there may be named as an insured, on behalf of the Association, the Association's authorized representative, who shall have exclusive authority to negotiate losses under any policy providing such insurance. The property and public liability insurance policies shall not contain (and the insurance shall not be placed with companies whose charters or bylaws contain) provisions whereby: (1) contributions or assessments may be made against the Association, the Owners or the Mortgagees; (2) loss payments are contingent upon action by the carriers, Directors, policy holders or Members; or (3) there are limiting clauses (other than insurance conditions) which could prevent Owners or Mortgagees from collecting the proceeds.

ARTICLE IX
ARCHITECTURAL CONTROL COMMITTEE

Section 9.1 General. Notwithstanding anything contained in this Declaration to the contrary, no construction activity of any type, including, without limitation, grading or site preparation on any Lot, erection of Improvements or exterior additions, no structures or fences, alterations or painting of the exterior surface with a color or shade of color different than that

originally painted to any Improvement situated upon the Property, or any cutting of "mature trees" on any Lot, shall be commenced, erected or maintained, until all the following conditions have been satisfied: (a) an application for approval has been submitted to the ACC; (b) the ACC has given written approval for the plans and specifications for the Improvements, the location of such Improvements, and the commencement of construction, all in accordance with the terms and requirements in the Guidelines; and (c) the fees set forth in or contemplated by this ARTICLE IX have been paid in full by the Owner. The provisions of this ARTICLE IX shall not apply to the construction of any Improvements commenced, erected or maintained by Declarant on any Lot or upon any of the Common Areas. Declarant and/or the Association may delegate to the ACC any powers or authority reserved or granted to it under this ARTICLE IX.

Section 9.2 Composition of ACC. During the Declarant Control Period, Declarant shall appoint the members of the ACC. Upon the expiration or the termination by Declarant of the Declarant Control Period or at such earlier date as Declarant releases its right to appoint the members of the ACC, the Board shall thereafter appoint the members of the ACC. The three (3) members of the ACC shall be appointed annually. The members of the ACC need not be Owners and may be members of the Board. In the event of the death or resignation of any member of the ACC, the party or body then having the authority to appoint members to the ACC shall have full authority to designate and appoint a successor. Members of the ACC may be removed and replaced at any time, with or without cause, and without prior notice, by the party or body then having the authority to appoint such members. The ACC shall have the right, power and authority to employ and/or use the services of any architects, engineers or other professionals as it deems necessary or advisable, in its sole discretion, to carry out its duties and obligations as described in this ARTICLE IX.

Section 9.3 Architectural Guidelines.

9.3.1 The ACC may, from time to time, publish, promulgate and amend the Guidelines. The Guidelines shall be explanatory and illustrative of the general intent of the ACC with respect to the construction of certain Improvements on Lots and are intended as a guide to assist the ACC in reviewing plans and specifications for Improvements. The Guidelines shall also set out, among other things, the procedures for submission, review and approval of plans and specifications (for the construction of Improvements) to the ACC and the fees to be imposed by the ACC, as more specifically described in **Section 9.7**. In any event, the Guidelines shall not be binding upon the ACC, may be revised and amended at any time by the ACC, in its sole discretion, and shall not constitute, in every event, the basis for approval or disapproval of plans, specifications and other materials (for the construction of Improvements) submitted to the ACC for approval. The ACC may issue and amend the Guidelines, from time to time, and may publish and promulgate different Guidelines for different phases, sections or portions of the Property.

Section 9.4 Enforcement.

9.4.1 It is Declarant's intent that the architectural control provisions of this Declaration and any Supplemental Declarations are to permit control of the architectural design and to establish quality standards for construction in the Subdivision and to help

preserve values of properties in the Subdivision. All Owners, by purchasing property subject to this Declaration, acknowledge that a violation of any such provisions could result in irreparable harm and damage to other Owners in the Subdivision and to Declarant, and to the values of their respective properties in the Subdivision, a monetary measure of which harm and damage would be difficult to establish. Accordingly, the Association shall have the specific right (but not the obligation) to enforce and/or to prevent any violation of the provisions contained in this ARTICLE IX by a proceeding at law or in equity against the person or persons violating or attempting to violate any such provisions. Declarant hereby specifically reserves and grants to the ACC, the Board and any agent or member thereof, the right of entry and inspection upon any portion of the Property for the purpose of determining whether any construction of any Improvement violates any approval by the ACC, the Guidelines, this Declaration or any Supplemental Declaration, as amended.

9.4.2 The Association may require any Owner to remove or restore nonconforming or unapproved Improvements if such Improvements were commenced or constructed in violation of this ARTICLE IX. In addition, the Association may, but has no obligation to, cause such restoration, demolition and removal to be performed and/or to levy fines for such nonconforming or unapproved improvement to levy the cost and/or fine as a Special Individual Assessment against the Lot or portion of the Property upon which such Improvements were commenced or constructed. In the event that it becomes necessary to resort to litigation to determine whether any constructed Improvement was approved or conforms to the Guidelines, to remove any unapproved Improvement, or otherwise to remedy a violation of the Guidelines, the Association shall be entitled to recover court costs, reasonable attorneys' fees and expenses incurred by the Association and/or the ACC, which costs, fees and expenses may be levied as a Special Individual Assessment against the Lot upon which such Improvement was commenced or constructed.

Section 9.5 Failure of the ACC to Act. If the ACC fails to approve or disapprove any plans and specifications and other submittals which conform (and which relate to Improvements which will conform) with the requirements of the Guidelines and this Declaration or to reject them as being inadequate or unacceptable within thirty (30) business days after receipt thereof, and provided such submittal was a full and complete submittal, in accordance with the Guidelines, of all items that were to have been submitted to the ACC, the Owner shall give written notice to the ACC asking it to act on the submittal. If the ACC shall again fail to approve or disapprove of such plans, specifications and other submittals within ten (10) days after receipt of the Owner's written request, the ACC shall be deemed to have approved such conforming plans and specifications and other submittals; provided that the ACC has no right or power, either by action or failure to act, to waive or grant any variances relating to any mandatory requirements specified in this Declaration or any Supplemental Declaration. If plans and specifications or other submittals are not sufficiently complete or are otherwise inadequate, the ACC may reject them as being inadequate or may approve or disapprove part, conditionally or unconditionally, and reject or approve the balance.

Section 9.6 Variances. Upon submission of a written request, the ACC may, from time to time, in its sole discretion, permit Owners to construct, erect or install Improvements which are at variance with restrictions, requirements or provisions of this Declaration or any Supplemental Declaration from which a variance is permitted. In any case, however, such variances shall be in basic conformity with and shall blend effectively with the general architectural style and design of the community and shall not materially change the scheme of restrictions herein set forth. Written requests for variances shall be deemed to be disapproved in the event the ACC has not expressly approved such request in writing within thirty (30) days of the submission of such request. No member of the ACC shall be liable to any Owner for any claims, causes of action, or damages arising out of the grant or denial of any variance to any Owner. Each request for a variance shall be reviewed separately and apart from other such requests and the grant of a variance to any Owner shall not constitute a waiver of the ACC's right to strictly enforce the covenants, restrictions and architectural standards provided hereunder or under any Supplemental Declaration against any other Owner.

Section 9.7 Fees Required by the ACC. The ACC, in its sole discretion, may require that each Owner submitting plans and specifications for Improvements pay one or more fees to the ACC or to Declarant as a condition to commencement of construction of such Improvements. Such fee(s), including the amount(s), payee and purpose(s) thereof shall be established by, and may be increased, from time to time, by the ACC and shall be set forth in the Guidelines.

Section 9.8 No Construction Without Payment of Fees. Plans and specifications for Improvements to be constructed on a Lot or other portion of the Property shall not be deemed to have been properly submitted unless and until any and all fees required by the ACC to be paid in connection with such Improvements, as provided in **Section 9.7**, shall have been paid to the ACC or Declarant, as required by the Guidelines.

Section 9.9 Notices and Submittals. Notices and submittals to the ACC shall be in accordance with the notice provisions set forth, from time to time, in the Guidelines.

Section 9.10 Limitation of Liability. No member of the ACC shall be liable for claims, causes of action or damages (except where occasioned by willful misconduct of such member) arising out of services performed pursuant to this ARTICLE IX. Neither the ACC, the members thereof, the Association, Declarant, nor any officers, directors, members, employees, agents or affiliates of any of them, shall be liable for damages or otherwise to anyone submitting plans and specifications and other submittals for approval or to any Owner by reason of mistake of judgment, negligence or nonfeasance arising out of or in connection with the approval or disapproval of, or the failure to approve or disapprove of, any plans and specifications. The approval of plans and specifications by the ACC shall not be deemed or construed as a representation or warranty of the ACC, Declarant, or any officer, director, member, employee, agent or affiliate of any of them, (i) that Improvements constructed in accordance with such plans and specifications will comply with applicable zoning ordinances, building codes, or other governmental or quasi-governmental laws, ordinances, rules and regulations; (ii) as to the structural soundness, quality, durability, suitability, fitness or proper functioning of Improvements constructed in accordance with such plans and specifications; and/or (iii) any responsibility or liability therefor is expressly hereby disclaimed. Every Owner who submits plans and specifications agrees to not bring any action or suit against Declarant, the Association, the ACC, the Board, or the officers, directors, members, employees,

agents or affiliates of any of them, to recover any such damages and hereby releases, demises, and quitclaims all claims, demands and causes of action arising out of or in connection with any judgment, negligence or nonfeasance and hereby waives the provisions of any law which provides that a general release does not extend to claims, demands and causes of action not known at the time the release is given. Declarant shall be the sole party responsible for the performance of Declarant's obligations under this Declaration, and no other person, firm or entity, including, without limitation, any entity affiliated with Declarant, shall have any obligation or liability for Declarant's obligations under this Declaration.

Section 9.11 Miscellaneous. Members of the ACC may be compensated for their services, in the sole discretion of Declarant or the Board. The Association shall reimburse members of the ACC for reasonable out-of-pocket expenses associated with their services. All costs, expenses and reasonable attorneys' fees of the ACC, including those incurred in connection with the exercise of their enforcement powers, shall be borne by the Association; provided, however, nothing herein shall be deemed to negate the Association's right to an award of court costs, reasonable attorneys' fees and expenses in accordance with **Section 9.4**.

ARTICLE X
RIGHTS OF MORTGAGEES

Section 10.1 Approval of Mortgagees. Unless at least seventy-five percent (75%) of the Mortgagees holding Mortgages on Lots located within the Subdivision then subject to the full application of this Declaration have given their prior written approval, the Association shall not:

10.1.1 except as otherwise specifically provided herein, by act or omission, seek to abandon, partition, subdivide, encumber, sell or transfer any real estate or Improvements thereon which are owned, directly or indirectly, by the Association; provided, however, the granting of easements for utilities or other purposes shall not be deemed a transfer within the meaning of this provision;

10.1.2 except as otherwise specifically provided herein, change the method of determining the obligations, Assessments, dues or other charges which may be levied against an Owner;

10.1.3 fail to maintain fire and extended coverage insurance on insurable Improvements in any Common Areas in the Subdivision (with the exception of Public Roads) on a current replacement cost basis in an amount not less than 100% of the insurable value as set forth in ARTICLE VIII; or

10.1.4 use the proceeds of any hazard insurance policy covering losses to any part of any Common Area for a purpose other than the repair, replacement or reconstruction of the damaged Common Areas.

Section 10.2 Additional Rights. Provided that a Mortgagee has given written notice to the Association as hereafter provided, a Mortgagee shall have the following rights:

10.2.1 to be furnished at least one copy of the annual financial statement and report of the Association within ninety (90) days following the end of each fiscal year;

10.2.2 to be given notice by the Association of any meeting of the Association's membership, and to designate a representative to attend all such meetings;

10.2.3 to be given prompt written notice of default under the Declaration, the Bylaws or any rules and regulations promulgated by the Association by any Owner owning a Lot encumbered by a Mortgage held by the Mortgagee, such notice to be sent to the principal office of the Mortgagee or the place which it designates in writing;

10.2.4 to be given prompt written notice of any casualty loss to the Common Areas, or loss by eminent domain, condemnation or other taking of (i) the Common Areas or (ii) any Lot encumbered by a Mortgage held by the Mortgagee;

10.2.5 to be given prompt written notice of any lapse, cancellation or material modification of any insurance policy or fidelity bond maintained by the Association; and

10.2.6 to be given prompt written notice of any action which requires the consent of any or all of the Mortgagees as specified herein.

Whenever any Mortgagee desires the provisions of this **Section 10.2** to be applicable to it, it shall serve or cause to be served written notice of such fact upon the Association by certified mail, return receipt requested, addressed to the Association and sent to its address, identifying the Lot or Lots upon which any such Mortgagee holds any Mortgage or identifying any Lot owned by it, together with sufficient pertinent facts to identify any Mortgage which may be held by it and which notice shall designate the place to which notices are to be given by the Association to such Mortgagee. In the event a Mortgagee fails to give written notice, as provided in the immediately preceding sentence, the Mortgage shall not be entitled to the benefits of this **Section 10.2**.

Section 10.3 Failure to Respond Deemed Approval. The failure of any Mortgagee to respond within sixty (60) days to any written request of the Association, sent by registered or certified mail, return receipt requested, for approval of an addition or amendment to this Declaration wherever Mortgagee approval is required shall constitute an implied approval by that Mortgagee of the proposed addition or amendment.

Section 10.4 Books and Records. Any Mortgagee will have the right to examine the books and records of the Association during any reasonable business hours.

Section 10.5 Payment of Taxes and Insurance Premiums. The Mortgagees may, jointly or singly, pay taxes or other charges which are in default and which may or have become a charge or lien against the Common Areas and may pay overdue premiums on hazard insurance policies or secure new hazard insurance coverage upon the lapse of a policy for property owned by the Association and the persons, firms or corporations making such payments shall be promptly reimbursed by the Association.

ARTICLE XI
CONDEMNATION

Section 11.1 Partial Taking: Without Direct Effect on Lots. If part of the Property shall be taken or condemned by any authority having the power of eminent domain, such that no Lot is

taken, all compensation and damages for and on account of the taking of the Common Areas, exclusive of compensation for consequential damages to certain affected Lots, shall be paid to the Board in trust for all Owners and their Mortgagees according to the loss or damages to their respective interests in such Common Areas. The Association, acting through the Board, shall have the right to act on behalf of the Owners with respect to the negotiation and litigation of the issues with respect to the taking and compensation affecting the Common Areas, without limitation on the right of the Owners to represent their own interests. Each Owner, by acceptance of a deed to a Lot, hereby appoints the Board as attorney-in-fact to negotiate, litigate or settle on his behalf all claims arising from the condemnation of the Common Areas. Such proceeds shall be used to restore the Common Areas with the excess, if any, to be retained by the Association and applied to future operating expenses by the Board, in its sole discretion. Owners whose Lots are specifically affected by the taking or condemnation shall not be prevented from joining in the condemnation proceedings and petitioning on their own behalf for consequential damage relating to loss of value of the affected Lots or Improvements, fixtures or personal property thereon, exclusive of damages relating to the Common Areas. In the event that the condemnation award does not allocate consequential damages to specific Owners, but by its terms includes an award for reduction in value of Lots without such allocation, the award shall be divided between affected Owners and the Association, as their interests may appear, by the Board, in its sole discretion.

Section 11.2 Partial or Total Taking: Directly Affecting Lots. If part or all of the Property shall be taken or condemned by any authority having the power of eminent domain, such that any Lot or a part thereof (including specific easements assigned to any Lot) is taken, the Association shall have the right to act on behalf of the Owners with respect to Common Area as provided in **Section 11.1** and the proceeds shall be payable as outlined therein. The Owners directly affected by such taking shall represent and negotiate for themselves with respect to the damages affecting their respective Lots. All compensation and damages for and on account of the taking of anyone or more of the Lots or Improvements, fixtures or personal property thereon, shall be paid to the Owners of the affected Lots and their Mortgagees, as their interests may appear. If all of the Property shall be taken such that the Association no longer has reason to exist and shall thereafter be dissolved and/or liquidated, all compensation and damages for and on account of the taking of the Common Areas shall be distributed with the other assets of the Association in accordance with the Articles of Incorporation.

Section 11.3 Notice to Mortgagees. A notice of any eminent domain or condemnation proceeding shall be sent to all Mortgagees who have served written notice upon the Association in accordance with **Section 10.2**.

ARTICLE XII
GENERAL PROVISIONS

Section 12.1 Enforcement. By recording this Declaration, Declarant is confirming its desire to maintain a high standard in the appearance and quality of the Subdivision. Although damages would be difficult to measure, the failure of any of the Owners or the Association to abide by the terms, covenants and restrictions contained in this Declaration would result in irreparable damage to Declarant and its reputation. Accordingly, Declarant, during the term of this Declaration as set forth in **Section 12.4**, as well as the Association or any Owner or Owners, shall have the right, but not the obligation, to enforce any or all of the restrictions, conditions, covenants,

reservations, liens and charges now or hereafter imposed by the provisions of this Declaration by proceeding at law or in equity against any person or persons violating or attempting to violate any such restriction, condition, covenant, reservation, lien or charge, either to restrain violation thereof or to recover damages therefor. Declarant, the Association and each Owner shall have all appropriate remedies at law or in equity to enforce the provisions of this Declaration and the Bylaws and any duly authorized rules and regulations governing the Subdivision.

In addition, the Association and the Owners hereby mutually covenant and agree that they shall exercise their power of enforcement hereunder in order to maintain a first class subdivision in appearance and quality, and that they shall, upon the request of Declarant, enforce any restriction, condition, covenant or reservation contained in this Declaration deemed by Declarant, in its sole discretion, to have been violated, using all remedies available to them at law or in equity. Failure by Declarant, the Association or by any Owner to enforce any covenant or restriction herein contained shall not be deemed a waiver of the right to do so at any time thereafter. Declarant hereby reserves the right and easement, but not the obligation, to go upon any portion of the Common Areas at any time in order to repair and maintain such Common Areas where needed, in Declarant's sole discretion, to bring such Common Areas within the standards required by Declarant. If Declarant goes upon the Common Areas to perform maintenance and/or repairs for such purpose, the Association hereby agrees to reimburse Declarant in full for the cost of such maintenance and/or repairs, upon receipt of a statement for such costs from Declarant, for maintenance and/or repair of the Common Areas.

Section 12.2 Severability. Invalidation of any of these covenants or restrictions by judgment or court order shall not affect any other provisions of this Declaration, which shall remain in full force and effect.

Section 12.3 Amendment.

12.3.1 Amendment by Declarant. In addition to specific amendment rights granted elsewhere in this Declaration, until termination of the Declarant Control Period, Declarant unilaterally may amend this Declaration for any purpose.

12.3.2 Amendment by Owner. Except as otherwise specifically provided above and elsewhere in this Declaration, this Declaration may be amended only by the affirmative vote or written consent, or any combination thereof, of (a) Members entitled to cast at least 67% of the total votes in the Association and (b) during the Declarant Control Period, Declarant. Notwithstanding the above, the percentage of votes necessary to amend a specific clause shall not be less than the prescribed percentage of affirmative votes required for action to be taken under that clause.

12.3.3 Validity and Effective Date. No amendment may remove, revoke or modify any right or privilege of Declarant without the written consent of Declarant (or the assignee of such right or privilege). If an Owner consents to any amendment to this Declaration or the Bylaws, it will be conclusively presumed that such Owner has the authority to consent, and no contrary provision in any Mortgage or contract between the Owner and a third party will affect the validity of that amendment. Any amendment shall become effective upon recording, unless a later effective date

is specified in the amendment. Any procedural challenge to an amendment must be made within one year after its recordation, or such amendment shall be presumed to have been validly adopted. In no event shall a change of conditions or circumstances operate to amend any provisions of this Declaration.

Section 12.4 Term. The covenants and restrictions of this Declaration shall run with the land and shall be binding upon all parties and all persons claiming under them for a period of twenty (20) years from the date this Declaration is recorded; after which time, covenants and restrictions shall be automatically extended for successive periods of ten (10) years unless an instrument signed by a majority of the then current Owners of the Lots, plus Declarant, has been recorded, agreeing to terminate said covenants and restrictions in whole or in part. Provided, however, that the residential use restrictions set forth in **Section 7.1** shall run with the land and shall be binding upon all parties and all persons claiming under them in perpetuity.

Section 12.5 Declarant Rights. Declarant specifically reserves the right, in its sole discretion, at any time and from time to time, to temporarily or permanently assign some or all of its rights, privileges and powers under this Declaration or any Supplemental Declaration or under the Act (collectively, "Declarant Rights") to a third party in connection with the development of the Property, whether or not any, all, or part of the Property is conveyed to such party. Any such assignment shall specifically identify Declarant Rights being assigned, and no Declarant Rights assigned may be broader than the rights created in this Declaration. The assignment shall be recorded in the Registry and may be terminable at will by Declarant. Each assignee shall sign and expressly assume the assigned Declarant Rights in the recorded instrument. Declarant also may expressly and separately reserve some or all of its Declarant Rights in connection with the sale or conveyance of all or part of the Property to a third party, which reservation shall be expressly and separately stated in an instrument evidencing the conveyance of all or part of the Property to such party. Notwithstanding anything to the contrary in this Declaration or in the Act (to the extent allowed by law), unless Declarant expressly and separately conveys Declarant Rights, in whole or in part, to a third party in any instrument of conveyance or otherwise recorded in the Registry, Declarant shall be deemed not to have conveyed any Declarant Rights to such party.

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IN WITNESS WHEREOF, Declarant has caused this Declaration to be executed by its duly authorized officer as of the day and year first above written.

EHC HOMES LP,
a Delaware limited partnership

By: _____(SEAL)
Michael Shea
Regional Vice President

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

I, _____, a Notary Public of Mecklenburg County and State of North Carolina, do hereby certify that Michael Shea, Regional Vice President of **EHC HOMES LP**, a Delaware limited partnership, personally appeared before me this day and by authority duly given, acknowledged the due execution of the foregoing instrument on behalf of the limited partnership.

Witness my hand and official stamp or seal this _____ day of _____, 2023.

_____
Notary Public

My Commission Expires

[SEAL]

EXHIBIT A
TO
DECLARATION
FOR
XXXXXXX

ADDITIONAL PROPERTY

Parcel 1:

Lying and being situate in XXXXXXXXX and being more particularly described as follows:

BEING approximately XXXX acres shown as "XXXXXXXXXX" on the Plat entitled "XXXXXXXX" recorded in Plat Book XX Page XX, XXXXXX County Register of Deeds.

EXHIBIT B
TO
DECLARATION
FOR
XXXXXXXXXX

STATE OF NORTH CAROLINA

DEPARTMENT OF THE SECRETARY OF STATE

ARTICLES OF INCORPORATION

NONPROFIT CORPORATION

XXXXXXXXXXXXX HOMEOWNERS ASSOCIATION, INC.

The undersigned natural person of the age of eighteen (18) years or more does hereby make and acknowledge these Articles of Incorporation for the purpose of forming a nonprofit corporation under, and by virtue of, the laws of the State of North Carolina, as contained in Chapter 55A of the General Statutes of North Carolina, entitled "Non-Profit Corporation Act," and the several amendments thereto, and to that end does hereby set forth:

1. All capitalized terms not otherwise defined herein shall have the same meaning as set forth in the Declaration of Covenants, Conditions and Restrictions for XXXXXXXX together with all supplements or amendments thereto (the "Declaration"), which Declaration is recorded or shall be recorded in the XXXXX County Public Registry.

2. The name of the Corporation is **XXXXXXX HOMEOWNERS ASSOCIATION, INC.** (hereinafter referred to as the "Association").

3. The period of duration of the Association is: perpetual

4. The purposes for which the Association is organized are:

(a) to manage, maintain, operate, care for and administer the Common Areas, including but not limited to, any Entrance Monument Easement Area(s), Landscape Easement Area(s), Amenity Area(s), and to maintain the Public Roads in the Subdivision prior to acceptance for maintenance by governmental authorities, as more particularly set forth in the Declaration;

(b) to enforce the covenants, restrictions, easements, charges and liens as provided in the Declaration and to fix, levy, assess, collect, enforce and disburse the charges and assessments created under the Declaration, all in the manner set forth in and subject to the provisions of the Declaration;

(c) to exercise all powers and privileges and perform all duties and obligations of the Association as set forth in the Declaration;

(d) to do any and all other lawful things and acts that the Association from time to time, in its discretion, may deem to be for the benefit of the Subdivision and the Owners and inhabitants thereof or advisable, proper or convenient for the promotion of the peace, health, comfort, safety and general welfare of the Owners and inhabitants thereof; and

(e) to exercise all powers provided in Chapter 55A and 47F of the General Statutes of North Carolina in furtherance of the above-stated purposes.

5. The Association is not organized for pecuniary profit, nor shall it have any power to issue certificates of stock or pay dividends. No part of the net assets or earnings of the Association shall inure to the benefit of any private individual, firm or corporation.

6. The Association shall have Members which may be divided into such-classes as shall be provided in the Bylaws and/or Declaration.

All Members shall be accepted, appointed, elected or designated in the manner provided in the Bylaws and/or Declaration.

7. The address of the initial registered office is 8008 Corporate Center Drive, Suite 300, Charlotte, NC 28226, Mecklenburg County, and the initial registered agent of the Association at such address is **Michael P. Shea**.

8. The initial address of the principal office of the Association is 8008 Corporate Center Drive, Suite 300, Charlotte, NC 28226, Mecklenburg County,

9. The business and conduct of the Association shall be regulated by a Board of Directors who shall be elected in the manner and for the terms provided in the Bylaws. The number of directors constituting the initial Board of Directors shall be four and the names and addresses of the persons who are to serve as the initial Directors are:

NAME:	Address:
Michael P. Shea	8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226
Kevin Roth	8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226
Nathaniel Petrie	8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226
Susan Lamb	8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226

10. The incorporator of this Association is **Susan Lamb** and her address is 8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226, Mecklenburg County.

11. In the event of a dissolution and/or liquidation of the Association, all of the residual assets of the Association shall be distributed to such organizations that are exempt under §501(c)(3) of the Internal Revenue Code of 1986 or corresponding sections of any prior or future Internal

Revenue Code at the time of dissolution as shall, in the judgment of the Directors, be most likely to fulfill the purposes of the Association.

12. To the extent permitted by law, no director shall be personally liable for monetary damages arising out of an action whether by or in the right of the Corporation or otherwise for breach of any duty as a Director. Further, to the extent permitted by law, the Corporation shall indemnify a director against personal liability.

EXHIBIT C
TO
DECLARATION
FOR
XXXXXXXXXX

BYLAWS OF XXXXXXXXXXXXXXX HOMEOWNERS ASSOCIATION, INC.

ARTICLE 1

Section 1.1 Name. The name of the non-profit corporation is XXXXXXXX HOMEOWNERS ASSOCIATION, INC. (the "Association").

Section 1.2 Location. The principal office of the Association shall initially be located in Mecklenburg County, North Carolina at 8008 Corporate Center Drive, Suite 300, Charlotte, NC 28226. The registered office of the Association may be, but need not be, identical with the principal office.

ARTICLE 2

DEFINITIONS

All capitalized terms when used in these Bylaws, or any amendment hereto (unless the context shall otherwise require or unless otherwise specified herein or therein) shall have the meanings set forth in that certain Declaration of Covenants, Conditions and Restrictions for XXXXXXX executed by EHC Homes LP, and duly recorded in the XXXX County Public Registry (as supplemented and amended, from time to time, the "Declaration").

ARTICLE 3

MEETINGS OF MEMBERS

Section 3.1 Annual Meetings. The first annual meeting of the Members shall be held sometime during or before December, 2023, as determined by a vote of the Board of Directors, and each subsequent regular annual meeting of the Members shall be held on or about the anniversary date of the first annual meeting, at a time to be determined by the Board. If the day for the annual meeting of the Members is a legal holiday, the meeting will be held at the same hour on the first day following which is not a legal holiday.

Section 3.2 Special Meetings. Special meetings of the Members may be called at any time by the President of the Association, by the Board of Directors, or upon the written request of the Members who are entitled to vote at least ten percent (10%) of all of the votes appurtenant to the Lots.

Section 3.3 Place of Meetings. All meetings of the Members shall be held at such place within XXXXX County, North Carolina, as determined by the Board of Directors.

Section 3.4 Notice of Meetings. Written notice of each meeting of the Members shall be given by, or at the direction of the Secretary of the Association or other person authorized to call the meeting, by mailing a copy of such notice, postage prepaid, not less than ten (10) days nor more than sixty (60) days before the date of such meeting to each Member entitled to vote, addressed to the Member's address last appearing on the books of the Association, or supplied by such Member to the Association for the purpose of notice. The notice shall specify the place, day and hour of the meeting, and in the case of a special meeting, the purpose of the meeting.

Section 3.5 Classes of Membership and Voting Rights. The voting rights of the Members shall be appurtenant to the ownership of Lots. There shall be two (2) classes of Members with respect to voting rights:

(a) Class A Members. Each Owner of a Lot shall be Class A Member, except Class B Members (as defined below). Each Class A Member will be entitled to one (1) vote for each Lot owned by such Class A Member. When more than one person owns an interest (other than a leasehold, security interest or mortgage) in any Lot, all such persons shall be Class A Members and their appurtenant voting rights shall be exercised as they, among themselves, determine, but in no event shall more than one (1) vote be cast with respect to any Lot.

(b) Class B Members. The Class B Membership shall consist of Declarant and its successors and assigns. A Class B Member will be entitled to four (4) votes for each Lot owned by such Class B Member. Regardless of the foregoing and the voting power held by other Class A Members, Declarant shall retain all rights reserved and granted to Declarant under this Declaration during and after the expiration of the Declarant Control Period and Class B Membership period.

Section 3.6 Turnover Date. The Class B Membership shall cease and be converted to Class A Membership on the first to occur of the following events:

(a) upon the expiration of the Declarant Control Period; or

(b) upon the election of Declarant, in its sole discretion, to terminate its Class B Membership, at which point all Class B Membership rights shall be converted automatically to Class A Membership rights. Any such election, to be effective, must be in writing and recorded in the Registry.

Section 3.7 Quorum. The presence at any meeting of Members entitled to cast, or of proxies entitled to cast, twenty percent (20%) of the votes appurtenant to the Lots shall constitute a quorum for any action except as otherwise provided in the Articles of Incorporation, the Declaration, or these Bylaws or applicable law. If however, such quorum shall not be present or represented at any meeting, subsequent meetings may be called, subject to the same notice requirement, until the required quorum is present. No such subsequent meeting shall be held more than sixty (60) days following the preceding meeting.

Section 3.8 Proxies. At all meetings of Members, each Member may vote in person or by proxy. All proxies shall be in writing and filed with the Secretary of the Association. Every

proxy shall be revocable and shall automatically cease upon conveyance of the applicable Member's Lot.

Section 3.9 Action by Members. Except as provided otherwise in the Articles of Incorporation, the Declaration or these Bylaws, any act or decision approved by a vote of a majority of all votes entitled to be cast by all classes of Members, present or represented by legitimate proxy at a legally constituted meeting at which a quorum is present, shall be regarded as the act of the Members. Notwithstanding any term or provision herein, the affirmative vote of no less than two-thirds (2/3) of all votes entitled to be cast by all classes of Members shall be required in order for the Association to (1) file a complaint, on account of an act or omission of Declarant, with any governmental agency which has regulatory or judicial authority over the Subdivision or any part thereof, or (2) assert a claim against or sue Declarant.

Section 3.10 Waiver of Notice. Any Member may, at any time, waive notice of any meeting of the Members in writing and such waiver shall be deemed equivalent to the giving of such notice. Attendance by a Member at any meeting of the Members, shall constitute a waiver of notice by such Member of the time and place thereof except where such Member attends a meeting for the express purpose of objecting to the transaction of any business because the meeting was not lawfully called. If all of the Members are present at any meeting of the Members, no notice shall be required and any business may be transacted at such meeting.

Informal Action by Members. Any action which may be taken at a meeting of the Members may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the persons who would be entitled to vote upon such action at a meeting and filed with the Secretary of the Association to be kept in the Association's minute book.

ARTICLE 4

BOARD OF DIRECTORS

Section 4.1 Number. The business and affairs of the Association shall be managed by a Board of four (4) Directors, who shall be appointed by Declarant and who need not be Members of the Association. At the first annual meeting of the Members following the expiration or termination by Declarant of the Declarant Control Period, a Board of five (5) Directors shall be elected in accordance with Section 4.4.

Section 4.2 Initial Directors. The initial Board of Directors shall be appointed by Declarant. The Board of Directors shall serve at the election of the Declarant from the date upon which the Declaration is recorded in the Registry until such time as their successors are duly appointed in accordance with Section 4.1, or duly elected and qualified, as described in Section 4.4.

The names of the persons who shall serve on the initial Board of Directors are as follows:

Name	Address
Michael P. Shea	8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226
Kevin Roth	8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226
Nathaniel Petrie	8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226
Susan Lamb	8008 Corporate Center Drive, Suite 300 Charlotte, NC 28226

Section 4.3 Nomination. Subject to Section 4.1, nominations for the first election of the Board of Directors shall be made from the floor at a meeting of the Members. After such first election of Directors, nominations for election to the Board of Directors shall be made by a Nominating Committee or may be made from the floor at the annual meeting. Subject to Section 4.1, the Nominating Committee shall consist of a Chairman, who shall be a member of the Board of Directors, and two (2) or more Members of the Association. The Nominating Committee shall be appointed by the Board of Directors prior to the annual meeting following the first election of Directors and each annual meeting of the Members thereafter, to serve from the close of such annual meeting until the close of the next annual meeting and such appointment shall be announced at each such annual meeting. The Nominating Committee shall make as many nominations for election to the Board of Directors as it shall in its discretion determine, but not less than the number of vacancies that are to be filled.

Section 4.4 Election. Except as otherwise provided herein, the Board of Directors shall be elected at the annual meeting of the Members by written ballot. At such election, the Members or their proxies may cast, with respect to each vacancy, as many votes as they are entitled to exercise under the provisions of the Articles of Incorporation, these Bylaws and the Declaration. Subject to the terms of this Article 4, the persons receiving the largest number of votes shall be elected. Cumulative voting is not permitted.

Section 4.5 Term of Office. Each Director shall hold office for the term for which such Director was elected, or until his or her death, resignation, retirement, removal, disqualification or until his or her successor is elected and qualified. Subject to Section 4.1, at the first election of Directors, the Members shall elect two (2) Owners as members of the Board of Directors for terms of three (3) years, who shall be Owners receiving the largest number of votes. Members shall also elect two (2) Owners as members of the Board of Directors for terms of two (2) years, who shall be the Owners receiving the second largest number of votes. Finally, Members shall elect one (1) Owner as a member of the Board of Directors for a term of one (1) year, who shall be the Owner receiving the next largest number of votes. At all annual elections thereafter, Director(s) shall be elected for three (3) year terms to succeed any Director(s) whose term(s) then expire(s). Nothing herein contained shall be construed to prevent the election of a Director to succeed himself. Votes shall be tallied at the meeting where they are so cast and, in the event of a tie vote, a run-off election shall be conducted at the same meeting.

Section 4.6 Removal. Subject to Section 4.1, any Director may be removed from the Board, with or without cause, by a majority vote of the Members of the Association. In the event of death, resignation or removal of a Director, such Director's successor shall be selected by the remaining members of the Board and shall serve for the unexpired term of his predecessor. The Members may elect a Director at any time to fill any vacancy not filled by the remaining members of the Board.

Section 4.7 Compensation. No Director shall receive compensation for any service he or she may render to the Association. However, any Director may be reimbursed for his or her actual expenses incurred in performing duties as a Director.

ARTICLE 5

MEETINGS OF DIRECTORS

Section 5.1 Regular Meetings. Meetings of the Board of Directors shall be held on a regular basis as often as the Board sees fit, but no less often than annually, on such days and at such place and hour as may be fixed, from time to time, by resolution of the Board. If a scheduled meeting falls upon a legal holiday, then that meeting shall be held at the same time on the next business day which is not a legal holiday.

Section 5.2 Special Meetings. Special meetings of the Board of Directors shall be held when called by the President of the Association, or by any two (2) Directors, after not less than three (3) days' notice to each Director.

Section 5.3 Quorum. A majority of the number of Directors shall constitute a quorum for the transaction of business. Every act or decision done or made by a majority of the Directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the Board.

Section 5.4 Informal Action by Directors. Action taken by a majority of the Directors without a meeting constitutes Board action if written consent to the action in question is signed by all of the Directors and filed with the minutes of the proceedings of the Board, whether done before or after the action so taken.

Section 5.5 Chairman. A Chairman of the Board of Directors shall be elected by the Directors and shall preside over all Board meetings until the President of the Association is elected. Thereafter, the President shall serve as Chairman. In the event there is a vacancy in the office of the Presidency, a Chairman shall be elected by the Board of Directors and shall serve until a new President is elected.

Section 5.6 Liability of the Board. The members of the Board of Directors shall not be liable to the Owners for any mistake of judgment, negligence, or otherwise, except for their own individual willful misconduct or bad faith. The Members shall indemnify and hold harmless each of the Directors against all contractual liability to others arising out of contracts made by the Board on behalf of the Association, unless any such contract shall have been made in bad faith or contrary to the provisions of the Declaration or these Bylaws. It is intended that the Directors shall have

no personal liability with respect to any contract made by them on behalf of the Association, except to the extent that they are also Owners and Members.

ARTICLE 6

POWERS AND DUTIES OF THE BOARD OF DIRECTORS

Section 6.1 Powers. The Board of Directors, for the benefit of the Members, shall have the following specific powers and rights (without limitation of other powers and rights the Board may have):

(a) To adopt and publish rules and regulations applicable to all or any portion of the Property as permitted by applicable law and waive or modify application of those use restrictions that it is has authority to enforce with respect to any Lot(s) the Board deems appropriate;

(b) To suspend any Member's voting rights and right to use the Common Areas, during any period in which such Member shall be in default in the payment of any Assessment levied by the Association. Such rights may also be suspended (after notice and hearing) for a period not to exceed sixty (60) days for infraction of published rules and regulations;

(c) To exercise for the Association all powers, duties and authority vested in or delegated to the Association and not reserved to the Members by other provisions of these Bylaws, the Articles of Incorporation, or the Declaration;

(d) To declare the office of a member of the Board of Directors to be vacant in the event such Director shall be absent from three (3) consecutive regular meetings of the Board of Directors;

(e) To employ a manager, management company, an independent contractor, or such other employee(s) as the Board of Directors deems necessary, and prescribe their duties;

(f) To grant all necessary easements and rights-of-way upon, over, under and across the Common Areas when the Board of Directors deems such action to be necessary and appropriate, including, but not limited to, easements for the installation and maintenance of electrical, telephone, cablevision, water, sanitary sewer and other utilities or drainage facilities; provided, however, during the Declarant Control Period, the Board may not grant such an easement or right-of-way without the prior written approval of Declarant;

(g) To appoint and remove all officers, agents and employees of the Association, prescribe their duties, fix their compensation and require of them such security or fidelity bond as it may deem expedient;

(h) To enter into agreements or contracts with utility companies with respect to utility installation, consumption and service matters relating to the Common Areas and/or the Association;

(i) To retain the services of legal, accounting and other professional firms;

(j) To employ or retain the services of architects or other qualified persons to serve on or advise the Board on architectural, landscaping, or land use planning issues;

(k) To maintain contingency reserves for the purposes set forth in the Declaration;

(l) To enforce the provisions of the Declaration and any Additional or Supplemental Declaration and any rules or regulations made hereunder or thereunder;

(m) To levy Assessments as more particularly set forth in the Declaration; and

(n) To take any and all other actions, and to enter into any and all other agreements, as may be necessary for the fulfillment of its obligations under the Declaration or these Bylaws.

Section 6.2 Duties. The Board, for the benefit of the Members, shall have the following specific duties (without limitation of other duties the Board may have):

(a) To maintain current copies of the Declaration, these Bylaws and other rules concerning the Subdivision, as well as Association books, records and financial statements, available for inspection upon reasonable notice and during normal business hours by all Owners, Mortgagees and insurers and guarantors of Mortgages that are secured by Lots;

(b) To supervise all officers, agents and employees of the Association to ensure that their duties are properly performed;

(c) As more fully provided in the Declaration:

(1) To fix the amount of the Assessments;

(2) To send written notice of Assessments to every Owner before its due date; and

(3) To foreclose the lien against any Lot for which Assessments are not paid or to bring an action at law against the Owner personally obligated to pay the same;

(d) To issue, or to cause an appropriate officer to issue, upon demand by any person, a certificate setting forth whether or not any Assessment has been paid, which certificate shall be conclusive evidence of such payment;

(e) To procure and maintain adequate liability insurance covering the Association, the Directors and officers, and adequate hazard insurance on the property owned by the Association, all in accordance with the Declaration;

(f) To cause all officers or employees having fiscal responsibilities to be bonded, as it may deem appropriate, all in accordance with the Declaration;

(g) To maintain or cause to be maintained the Common Areas (including the upkeep and maintenance of associated improvements) in accordance with the Declaration;

(h) Until accepted for maintenance by the North Carolina Department of Transportation or other governmental authority, to own and maintain or cause to be maintained the Public Roads (including any swales and medians) to the standard of maintenance (if one is ascertainable) which would be required by the North Carolina Department of Transportation or other governmental authority, as the case may be, before it would accept such Public Roads for maintenance; and

(i) To maintain or cause to be maintained any sidewalks in the Subdivision to the extent not maintained by a governmental authority.

ARTICLE 7

OFFICERS AND THEIR DUTIES

Section 7.1 Officers. The officers of the Association shall be a President, a Vice President, a Secretary and a Treasurer, and such other officers as the Board may, from time to time, create by resolution.

Section 7.2 Election of Officers. The election of officers shall take place at the first meeting of the Board of Directors following each annual meeting of the Members.

Section 7.3 Term. Each officer of the Association shall be elected annually by the Board and each shall hold office for one (1) year or until his or her death, resignation, retirement, removal, disqualification, or his or her successor is elected and qualifies.

Section 7.4 Special Appointments. The Board may elect such other officers as the affairs of the Association may require, each of whom shall hold office for such period, have such authority and perform such duties as the Board may, from time to time, determine.

Section 7.5 Resignation and Removal. Any officer may be removed from office with or without cause by the Board. Any officer may resign at any time by giving written notice to the Board, the President or the Secretary. Such resignation shall take effect on the date of receipt of such notice or at any later time specified therein, and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective.

Section 7.6 Vacancies. A vacancy in any office may be filled by appointment by the Board. The officer appointed to such vacancy shall serve for the remainder of the term of the officer he or she replaces.

Section 7.7 Multiple Offices. The offices of Secretary and Treasurer may be held by the same person. No person shall simultaneously hold more than one of any of the other offices, except in the case of special offices created pursuant to Section 7.4.

Section 7.8 Compensation. No officer shall receive any compensation from the Association, but may be reimbursed for his or her actual expenses in performing his or her duties as an officer.

Section 7.9 Duties. The duties of the officers are as follows:

(a) President. The President shall be the principal executive officer of the Association, and subject to the control of the Board, shall supervise and control the management of the Association. The President shall preside at all meetings of the Board of Directors; shall see that orders and resolutions of the Board are carried out; shall sign all leases, mortgages, deeds and other written instruments; and shall co-sign all checks and promissory notes.

(b) Vice President. The Vice President shall act in the place and stead of the President in the event of his or her absence, inability or refusal to act, and shall exercise and discharge such other duties as may be required of him or her by the Board.

(c) Secretary. The Secretary shall record the votes and keep the minutes of all meetings and proceedings of the Board and of the Members; shall keep the corporate seal of the Association and affix it on all papers requiring a corporate seal; shall serve notice of meetings of the Board and of the Members; shall keep appropriate current records showing the members of the Association together with their addresses; and shall perform such other duties as required by the Board.

(d) Treasurer. The Treasurer shall receive and deposit in appropriate bank accounts all funds of the Association and shall disburse such funds as directed by resolution of the Board of Directors; shall sign all checks and promissory notes of the Association; shall keep proper books of account; shall prepare an annual budget and a statement of income and expenditures to be presented to the Members at each annual meeting.

ARTICLE 8

COMMITTEES

Subject to Section 4.1, the Board shall appoint a Nominating Committee. In addition, the Board shall appoint other committees as it deems appropriate in carrying out its purposes.

ARTICLE 9

BOOKS AND RECORDS

The books, records and papers of the Association shall at all times, upon reasonable notice and during reasonable business hours, be subject to inspection by any Member. The Declaration,

the Articles of Incorporation and these Bylaws shall be available for inspection by any Member at the principal office of the Association.

ARTICLE 10

ASSESSMENTS

As more particularly described in, and subject in all respects to, the Declaration, each Member is obligated to pay Assessments to the Association. Any Assessments which are not paid when due shall be delinquent. If an Assessment is not paid by its due date as set forth in the Declaration, the Assessment shall bear interest as provided therein. Any late charges, costs of collection and reasonable attorneys' fees related to any such delinquent Assessment may be added to the amount of such Assessment. No Member may waive or otherwise escape liability for the Assessments provided for herein by non-use of his or her Lot or the Property.

ARTICLE 11

CORPORATE SEAL

The Association shall have a seal in circular form having within its circumference the words, XXXXXXXXX HOMEOWNERS ASSOCIATION, INC.

ARTICLE 12

AMENDMENTS

Section 12.1 Procedures for Amendment. Subject to the limitations hereinafter contained, the Articles of Incorporation and these Bylaws may be amended or modified at any time by a vote of no less than sixty-seven percent (67%) or more of all votes entitled to be cast by the Members, which vote is taken at a duly held meeting of the Members at which a quorum is present, all in accordance with these Bylaws. Provided, however, if sixty-seven percent (67%) or more of all votes entitled to be cast by the Members cannot be obtained at such a meeting, then the Articles of Incorporation and these Bylaws may be amended by obtaining the vote of sixty-seven percent (67%) or more of all votes present at a duly held meeting of the Members at which a quorum is present and by, within ninety (90) days of such vote, obtaining written consent to such amendment by Members holding a sufficient number of votes to comprise, along with such voting Members, sixty-seven percent (67%) or more of all votes entitled to be cast by the Members. Further provided, that any amendment or modification to the Articles of Incorporation and these Bylaws must be consented to by Declarant during the Declarant Control Period, which consent Declarant may grant or withhold in its sole discretion. In addition, Declarant, without obtaining the approval of any other Member or any other Owner or Owners, may unilaterally make amendments or modifications to the Articles of Incorporation and these Bylaws during the Declarant Control Period.

Section 12.2 Conflicts. In the case of any conflict between the Articles of Incorporation and these Bylaws, the Articles shall control. In the case of any conflict between the Declaration and these Bylaws, the Declaration shall control.

ARTICLE 13

MISCELLANEOUS

The fiscal year of the Association shall be the calendar year and shall begin on the first day of January and end on the 31st day of December of every year, except that the first fiscal year shall begin on the date of incorporation.

ARTICLE 14

INDEMNIFICATION OF DIRECTORS AND OFFICERS

Neither Declarant, nor any Member, nor the Board of Directors, nor the Association, nor any officers, agents or employees of any of them shall be personally liable for debts contracted for or otherwise incurred by the Association or for a tort of another Member, whether or not such other Member was acting on behalf of the Association or otherwise. Neither Declarant, nor the Association, nor their Directors, officers, agents or employees shall be liable for any incidental or consequential damages for failure to inspect any premises, improvements or portions thereof or for failure to repair or maintain the same. Declarant, the Association or any other person, firm or association making such repairs or maintenance shall not be liable for any personal injury or other incidental or consequential damages occasioned by any act or omission in the repair or maintenance of any premises, improvements or portions thereof.

The Association shall to the extent permitted by applicable law, indemnify, defend and hold harmless all Directors from and against any and all loss, cost, expense, damage, liability, claim, action or cause of action arising from or relating to the performance by the Board of its duties and obligations, except for any such loss, cost, expense, damage, liability, claim, action or cause of action resulting from the gross negligence or willful misconduct of the person(s) to be indemnified.

The Association shall indemnify, defend and hold harmless any Director or officer or former Director or officer of the Association or any person who may have served at the request of the Association as a Director or officer of another corporation, whether for profit or not for profit, against expenses (including attorneys' fees) or liabilities actually and reasonably incurred by him in connection with the defense of or as a consequence of any threatened, pending or completed action, suit or proceeding (whether civil or criminal) in which he is made a party or was (or is threatened to be made) a party by reason of being or having been such Director or officer, except in relation to matters as to which he shall be adjudged in such action, suit or proceeding to be liable for gross negligence or willful misconduct in the performance of a duty.

The indemnifications provided herein shall not be deemed exclusive of any other rights to which those indemnified may be entitled under any statute, bylaw, agreement, vote of Members or any disinterested Directors or otherwise and shall continue as to a person who has ceased to be a Director, officer, employee or agent and shall inure to the benefit of the respective heirs, executors and administrators of such a person.

The Association may purchase and maintain insurance on behalf of any person who is or was a Director, officer, employee or agent of the Association, or is or was serving at the request of the Association as a Director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against him or her and incurred by him or her in such capacity, or arising out of his or her status as such, whether or not the Association would have the power to indemnify him or her against such liability.

The Association's indemnification of any person who is or was a Director, officer, employee or agent of the Association, or is or was serving at the request of the Association as a Director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall be reduced by any amounts such person may collect as indemnification (i) under any policy of insurance purchased and maintained on his or her behalf by the Association, or (ii) from such other corporation, partnership, joint venture, trust or other enterprise.

Nothing contained in this Article 14, or elsewhere in these Bylaws, shall operate to indemnify any Director or officer if such indemnification is for any reason contrary to any applicable state or federal law.

Agenda Item Summary

Ordinance # / Resolution #: SD-2022-2205 The Sands at Kershaw f/k/a Little Dude
Contact Person / Sponsor: A. Hardin
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider:
Originally presented September 2023.

TRC Review for revised plan not yet complete, will provide with 2/20/24 Agenda.

ATTACHMENTS:

Description	Upload Date	Type
Application	12/4/2023	Exhibit
Preliminary Plat revised	1/31/2024	Exhibit
TIA*	12/11/2023	Exhibit
TIA Review Memo from ICE*	12/11/2023	Exhibit
SMC Global- Letter in Opposition*	12/12/2023	Exhibit
SMC Global- Email in Opposition*	12/12/2023	Exhibit

Planning Department
P.O. Box 1809, 101 N. Main Street, Lancaster, SC 29721
Phone: 803.285.6005, planning@lancastercountysc.net
www.mylancastersc.org

MAJOR SUBDIVISION PRELIMINARY PLAT

WHEN TO USE THIS PROCESS:

Use the attached checklist for subdivisions that

- Create 6 or more lots for any type of development; or
- Create new streets or alleys; or
- Increase the number of lots in a major subdivision previously approved by Lancaster County

APPLICATION AND APPROVAL PROCESS

- **Sketch Plan Application**: Complete the Sketch Plan review process prior to submission of a Major Subdivision Preliminary Plat. Sketch Plans are usually a one−sheet conceptual drawing. Refer to the **Sketch Plan Checklist** for additional information.
- **Required Pre-Application Conference**: Please call to schedule a Pre−Application Conference prior to submitting a Preliminary Plat application.The conference will be used to provide an overview of applicable standards and the approval process, as well as additional feedback on your sketch.
- **Traffic Impact Analysis**: Submit a TIA to County and SCDOT for review and Approval. This process is initiated by submitting a scoping request to County and SCDOT for approval prior to TIA preparation. Please note TIAs are reviewed on behalf of the County by consulting traffic engineers. Applicants are responsible for payment of consultant's fees prior to TIA review, based on an estimate prepared by County Engineering staff.

Prepare the Preliminary Plat using the attached checklist (see below) and the current UDO available on our website. Project can be submitted online by creating an account at https://evolvepublic.infovisionsoftware.com/lancaster/?portal=project

SUBMIT THE FOLLOWING ITEMS FOR PLAN REVIEW:

- Application with contact and project information (see p. 2)
- Fees: After submitting documents, you will receive an email with fees due and forms of payment accepted, along with a link to online payment portal. Plans will not be routed for review until payment and hard copies are received (if needed- see below).
- Two (2) paper copies of Preliminary Plat and Supporting Data is required for all submittals over 10 pages.

Plans will be reviewed by County staff and a notice of revision, if required, will be sent to the designated contact person. Prior to the Planning Commission meeting, staff will review the plan with the Technical Review Committee. After Planning Commission approves the plat, you will receive a notification that you can print the stamped digital set from Evolve Project Portal. Upon the approval of a Preliminary Plat, detailed plans for street construction, utility line installations,and similar approvals shall be included in detailed **Civil Construction Plans**.

PROJECT INFORMATION

Project Address/Location: SE Corner of Fork Hill Road and Little Dude Ave

Tax Map ID/Parcel No.: 0141-00-024.00

Project Description: Proposed subdivision: 76 single family detached homes

Applicant Name: Earl Coulston

Address: 8332 Regent Parkway, Fort Mill, SC 29715

Phone: (704) 507-2175 Email: earl@coulstondev.com

Property Owner Name: Coulston Enterprises, Inc

Address: 8332 Regent Parkway, Fort Mill, SC 29715

Phone: (704) 507-2175 Email: earl@coulstondev.com

Other Project Contacts

Name: Barry M. Fay, PE (American Engineering)

Address: 8008 Corporate Center Drive, Charlotte, NC 28226

Phone: (704) 375-2438 Email: bfay@american-ea.com

Name: Andy Coulston

Address: 8332 Regent Parkway, Fort Mill, SC 29715

Phone: (704) 507-2177 Email: aecoulston@gmail.com

Applicant Signature: Earl Coulston Date: 8-2-23

Owner Signature: Earl Coulston Date: 8-2-23

Owner Signature: _____ Date: _____

(For additional owners, attach copies of this page with required signatures)

PRELIMINARY PLAT CHECKLIST

The following identifies information required on Preliminary Plat drawings; however, this checklist should not be used as a substitute to reviewing the UDO.

GENERAL PROJECT INFORMATION:

Please identify the following general information on the site plan drawing either within a notes section or on the plat drawing itself, as appropriate.

1. Proposed name of project.
2. Name, mailing address, email address, and phone number of the owner and/or developer and designer of the site plan.
3. Map scale using appropriate engineer's scale, north arrow, and date.
4. Vicinity map (1" = 1 mile min. scale).
5. Total acreage to be developed.
6. Boundaries of the tract to be developed with all bearings and distances. At least two points of the survey must be tied to SC geodetic control points [See State Plane Coordinate Checklist]
7. Proposed use of all lots to be used. See "zoning considerations" section above. Be sure to designate any lots proposed to be used for uses other than single−family residential.
8. Tax map number.
9. Zoning district classification and, if applicable, overlay zone(s).
10. Land use, zoning district classification, and tax map number of adjacent properties, names of adjacent developments, and owners of adjoining parcels.
11. Total number of lots and layout of all lots, including building setback lines, scaled dimensions, area in square feet, lot numbers (if multiple lots), and utility easements with width and use.
12. Location and dimensions of all proposed buildings including number of stories and total square footage by use.
13. Building setbacks and proposed impervious surface calculation.
14. In case of re−subdivision, submit a copy of existing plat.

EXISTING CONDITIONS:

Please identify the following existing conditions on the plan drawing that may be located on the subject property or adjacent areas.

1. Topography by contours at vertical intervals of not more than five feet. All elevations shall refer to Mean Sea Level Datum (if available).
2. Show location and right−of−way of existing streets, curb cuts, and driveways within 300 feet of the site.
3. Show location and footprint of existing buildings on adjacent parcels.
4. Show location of railroads and utility lines either on or adjacent to the property to be developed. Specify whether utility lines are in easements or rights−of−way and show location of poles/towers.
5. Size and location of existing sewers, water mains, storm drains, culverts or other underground facilities within the street or within the right−of−way of streets or roads

adjoining the tract. Show ditches, swales, and drainage easements adjacent to the proposed project.

6. Location, size, and use of any existing structures on the subject property that will remain on the site
7. Location of city limit lines, if adjacent to subject property.
8. Show location of nearest hydrant. Spacing should be 500 feet single−family residential (this distance is measured in the direction of fire truck travel).
9. The Fire Department will need access to within 150 feet of all points of the building.
10. Location of land subject to flooding and nearest 100−year flood zone and elevation.
11. Location of existing or planned public parks, schools, greenways, trails, or other major public amenity located within ½ mile of the development site.

ENVIRONMENTAL CONSIDERATIONS:

ENVIRONMENTALLY SENSITIVE LANDS

1. Depict any water resources subject to the UDO Chapter 8, Natural Resources Protection, and comply with all requirements laid out in the aforementioned section.
2. Depict any prohibitive/severe steep slope areas (greater than or equal to 3H:1V) and take into account the limitations on disturbance when designing the project.
3. Depict stormwater management areas.

TREE RETENTION

1. Identify tree canopy retention areas.
2. Show trees that require protection.

LANDSCAPING

- Show landscaping for required site landscaping areas.

OPEN SPACE

1. Indicate if all or a portion of the site has been designated as an Open Space.
2. Calculate required common open space acreage.
3. Show any trails and greenways on the Lancaster County Carolina Thread Trail Master Plan that developer is required to construct.
4. Show all existing or planned public parks, schools, greenways, existing trails, or other major public amenities within ½ mile of the site, and pedestrian connections provided by the developer to those areas.

INFRASTRUCTURE CONSIDERATIONS:

GRADING, STORMWATER, AND UTILITY SYSTEM

Please identify the following proposed grading, stormwater, and utility system improvements.

1. Preliminary plan for sanitary sewers showing the location of manholes and points of discharge. Indicate direction of flow.
2. Preliminary plan for storm sewer system showing the location of outlets and direction of flow.
3. Preliminary plan of water supply system
4. All proposed easements.
5. Submit written verification to serve from all non−county utility service providers (gas, telephone, cable, and water and sewer district).
6. Proposed major contour changes in areas where substantial cut and/or fill is to be done.

Roads, Bridges, and Public Ways (UDO 6.13, pg. 21)

General design criteria are explained in two primary places in the UDO—Chapter 6 and Appendix C. Please refer to both when designing the community. The below is a brief summary of some of the "big picture" points, but those two sections in the Zoning Ordinance have many other requirements to which you will need to refer.

1. Connectivity is required within the neighborhood, and between the neighborhood and adjacent neighborhoods or other lands. Additionally, a second entrance is required for more than 100 units.
2. Traffic calming measures such as minimum street widths, short block lengths, on−street parking, controlled intersections, and roundabouts should be used per the UDO.
3. Sidewalks are required both internally, and in some cases, externally to the development and must be at least five feet wide.
4. Street trees are required to be planted in accordance with the UDO.
5. See Chapter 6: Subdivision and Infrastructure Standards and Appendix C – Manual of Specifications and Standard Details (MSSD), generally for road specifications, cross sections, and other important information. For example:
    a. Cul−de−sacs should be avoided except as described in the UDO.
    b. Gated communities have additional requirements as laid out in the UDO.
    c. Curb and gutter requirements are applicable in some districts as designated in the UDO.
6. Traffic Impact Analysis, refer to Chapter 6, Subdivision and Infrastructure Standards.

LOT DESIGN

Identify a lot configuration that complies with the following standards.

1. Lot designed to comply with the UDO design requirements
    a. Lots cannot be divided by City limit lines or zoning districts.
    b. Through lots are prohibited.

c. Flag lots are prohibited except where they are necessary to eliminate access onto arterial or collector roadways.

d. Side lot lines must be at right angles to straight street lines and radial to curved sidewalk and street lines.

USE-SPECIFIC STANDARDS

The UDO has standards associated with specific uses in order to minimize negative impacts and/or to help shape the design of a specific use. Design the proposed site plan in compliance with any applicable use−specific standards.

OVERLAY DISTRICTS

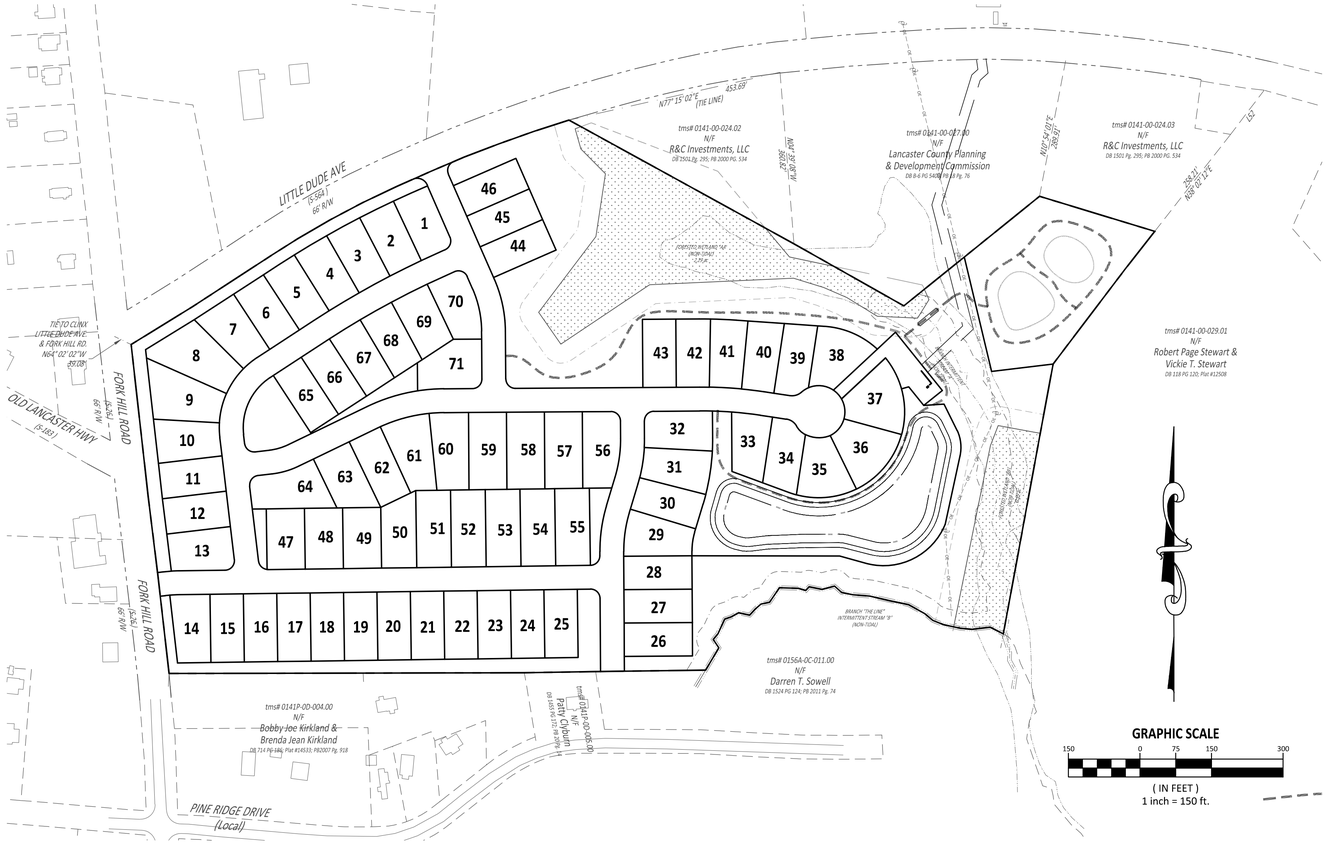
If an overlay district exists, be sure to address the applicable standards for it in the site design.

- ☐ **McWhirter Field Aviation Overlay** Please refer to the UDO for allowed uses and associated development criteria.
- ☐ **Carolina Heelsplitter Overlay**
- ☐ **Carolina Thread Trail Overlay**
- ☐ **Highway Corridor Overlay**
- ☐ **Equestrian Oriented Subdivision Overlay**

The Sands at Kershaw

Little Dude Avenue

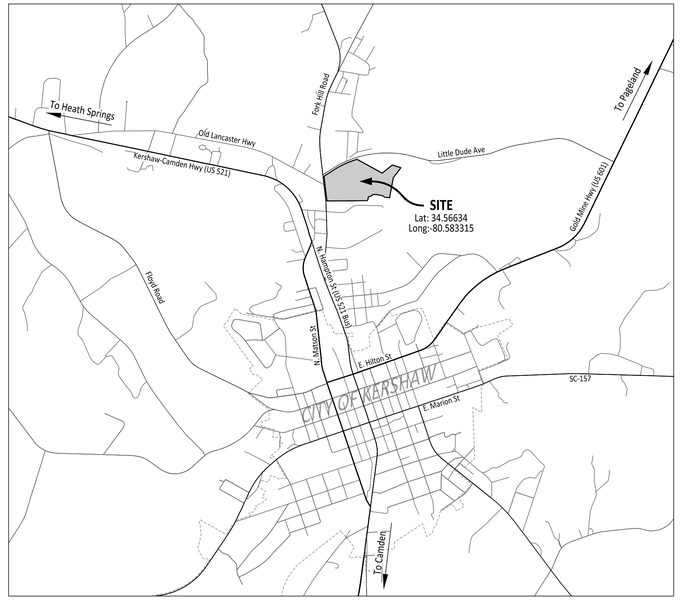
Lancaster County, SC



GRAPHIC SCALE

150 0 75 150 300

(IN FEET)
1 inch = 150 ft.



Location Map
Scale: 1" = 2000'

CONTACTS:

DEVELOPER:
EARL COULSTON
COULSTON ENTERPRISES INC.
8332 REGENT PARKWAY
FORT MILL, SC 29715
(704) 507-2175
earl@coulstondev.com

CIVIL ENGINEER:
BARRY M. FAY, SCPE #27695
AMERICAN ENGINEERING ASSOCIATES - SOUTHEAST, PA
8008 CORPORATE CENTER DRIVE
SUITE 110
CHARLOTTE, NC 28226
(704) 375-2438
bfay@american-ea.com

SURVEYOR:
CARL S. HOLLAND, SCPLS # 25434
HOLLAND SURVEYORS, LLC
170 PAYNE POND RD
WESTVILLE, SC 29175
(803) 427-9947

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
8008 Corporate Center Drive, Suite 110
Charlotte, NC 28226
704-375-2438

SOUTH CAROLINA
AMERICAN ENGINEERING ASSOCIATES - SOUTHEAST, PA
NO. 4729
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER
SEAL 27695
12-12-23
ENGINEER
BARRY M. FAY

NOT FOR CONSTRUCTION

NO.	DATE	REVISION:

South Carolina 811 Call 811 Before You Dig

3 DAYS BEFORE DIGGING
DIAL 811
OR CALL TOLL FREE
(888) 721-7877

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON THE SPECIFIC SITE, NAMED HEREON, CONTEMPORANEOUSLY WITH ITS ISSUE DATE AS LISTED, HEREON, AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

Preliminary Plat for
THE SANDS AT KERSHAW
LITTLE DUDE AVE
LANCASTER COUNTY, SC

JOB NUMBER:	C210093
DESIGN BY:	BMF
DATE:	8/1/2023

SHEET TITLE:

COVER SHEET

SHEET NO.: **C-101**

W:\2021\C210093 - Coulston - Kershaw Little Dude\Civil\Sheets\Prelim Plat\C210093 Prelim Plat.dwg

SITE DATA

PROPOSED PROJECT NAME: — THE SANDS AT KERSHAW
OWNER/ DEVELOPER INFO: — COULSTON ENTERPRISES, INC
8332 REGENT PARKWAY
FORT MILL, SC 29715
earl@coulstondev.com
704-507-2175

DESIGNER INFO: — BARRY M. FAY, PE
AMERICAN ENGINEERING
8008 CORPORATE CENTER DRIVE, SUITE 110
CHARLOTTE, NC 28226
bfay@american-ea.com
704-375-2438

PARCEL ID #: — 0141-00-024.00
ZONING DISTRICT: — MDR (MEDIUM DENSITY RESIDENTIAL)
NUMBER OF LOTS: — 71
NUMBER OF STORIES: — 2 MAX.
DENSITY: — 1.87 DUA
BUILDING SETBACKS:
FRONT: — 30'
SIDE: — 10' (INTERIOR)
15' (STREET)
REAR: — 25'

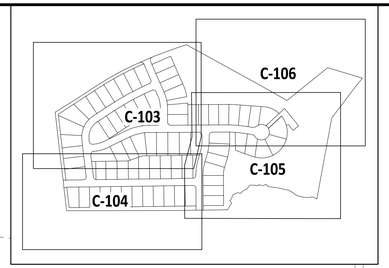
OVERALL PROPERTY AREA: — 38.02 AC
MIN. REQ'D OPEN SPACE: — 7.49 AC (20% MIN.)
MIN. REQ'D PARK SPACE: — 1.90 AC (5% MIN.)

TOTAL LOT AREA: — 17.85 AC
TOTAL R/W AREA: — 4.90 AC
PUMP STATION TRACT: — 0.26 AC
BMP TRACT: — 2.42 AC
100 YEAR FLOOD ZONE: — 2.33 AC
TOTAL OPEN SPACE AREA: — 9.72 AC
PRIVATE PARK TRACT: — 1.99 AC (5.2%)
PASSIVE OPEN SPACE: — 7.73 AC (20.3%)

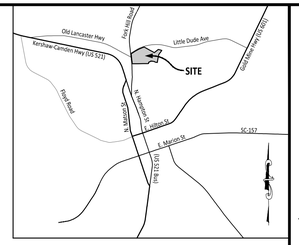
INTERNAL CONNECTIVITY: — 1.57 (SEGMENTS / NODES)
SEGMENTS: — 11
NODES: — 7

TOTAL IMPERVIOUS AREA: — 9.46 AC (24.9%)
ROADS : — 3.61 AC (PVMT. + CURB + SDWK.)
LOTS : — 5.85 AC (BLDG. + DRWY. + PATIO)

ROADWAY LENGTHS:
FOX HILL LANE: — 507 LF
BOONE COURT: — 970 LF
OAK FARM LANE: — 1,251 LF
CARPENTER LANE: — 950 LF
JACOBS LANE: — 575 LF



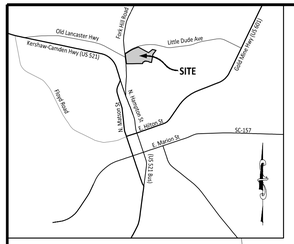
KEY MAP
N.T.S.



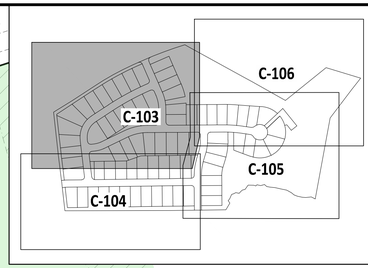
Vicinity Map
N.T.S.


450' SIGHT DISTANCE LINE (45 MPH POSTED SPEED)
PROP. DRIVEWAY FULL ACCESS
LITTLE DUDE AVE (S-564) 66' R/W
450' SIGHT DISTANCE LINE (45 MPH POSTED SPEED)
Fox Hill Lane
Boone Court
Oak Farm Lane
Jacobs Lane
Carpenter Lane
OLD LANCASTER HWY (S-185)
FOX HILL ROAD
PINE RIDGE DRIVE (Local)
TIE TO CLINE... LITTLE DUDE AVE. & FORK HILL RD. N64° 07' 07"W 39.08'
COS 0.71 AC
COS 0.45 AC
COS 0.06 AC
COS 0.10 AC
COS 0.78 AC
COS 5.12 AC
COS 0.02 AC
COS 0.44 AC
COS WETLANDS 76,147 SF
COS WETLANDS 138 SF
COS WETLANDS 4,165 SF
COS WETLANDS 1,639 SF
COS WETLANDS 57 SF
COS WETLANDS 6,311 SF
100 YEAR FLOOD ZONE 2.33 AC
PRIVATE PARK TRACT 1.99 AC
BMP-TRACT 2.42 AC
BMP / WET POND
Pump Station 11,289 SF
40' WETLAND BUFFER
30' STREAM BUFFER
Special Flood Hazard Zone A Limits Ferma Map # 45057D425D
FORESTED WETLAND "AA" (NON-TIDAL) 2.29 AC
BRANCH "THE LINE" INTERMITTENT STREAM "B" (NON-TIDAL)
EXISTING SEWER PUMP STATION SERVING PARCEL ID# 0141-00-026.00
EXISTING POND
tms# 0141-00-024.02 N/F R&C Investments, LLC DB 1501 Pg. 295; PB 2000 PG. 534
tms# 0141-00-027.00 N/F Lancaster County Planning & Development Commission DB 84-PG 5402; PB 84-Pg 84
tms# 0141-00-024.03 N/F R&C Investments, LLC DB 1501 Pg. 295; PB 2000 PG. 534
tms# 0141-00-029.01 N/F Robert Page Stewart & Vickie T. Stewart DB 118 PG 120; Plat #12508
tms# 0156A-0C-011.00 N/F Darren T. Sowell DB 1524 PG 124; PB 2011 Pg. 74
tms# 0141P-0D-004.00 N/F Bobby Joe Kirkland & Brenda Jean Kirkland DB 734 PG 186; Plat #14533; PB2007 Pg. 918
tms# 0141P-0D-005.00 N/F Patty Clyburn DB 1435 PG 215; PB 2016 Pg. 14
NO ASPHALT IN SCDOT R/W. INSTALL GRASS PAVERS MEETING FIRE DEPT. STANDARDS
PROP. DRIVEWAY EMERGENCY VEHICLE USE ONLY
PROP. FENCE/GATE WITH FIRE DEPARTMENT APPROVED KNOX BOX
UNPAVED DRIVE
N57° 15' 02"E (TIE LINE) 453.69'
N56° 56' 21"E 199.66'
N58° 21' 17"E 150.77'
N31° 04' 40"E 252.46'
S73° 05' 59"E 100.08'
S60° 02' 12"W 350.41'
S10° 26' 42"W 144.28'
N10° 26' 42"E 30.39'
S89° 52' 49"W 406.76'
S89° 52' 00"W 337.94'
S89° 05' 23"W 149.50'
S89° 13' 36"W 230.54'
S09° 35' 20"E 144.81'
N31° 12' 12"W 440.90'
S60° 53' 48"E 160.35'
N10° 26' 42"E 442.58'
N16° 08' 00"W 215.39'
N16° 16' 20"W 215.86'
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N54° 36' 27"W 249.34'
N53° 56' 50"W 249.40'
N53° 17' 13"W 249.47'
N52° 37' 36"W 249.53'
N51° 57' 59"W 249.60'
N51° 18' 22"W 249.66'
N50° 38' 45"W 249.73'
N49° 59' 08"W 249.79'
N49° 19' 31"W 249.86'
N48° 39' 54"W 249.92'
N47° 60' 17"W 249.99'
N47° 20' 40"W 250.05'
N46° 41' 03"W 250.12'
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N45° 21' 49"W 250.25'
N44° 42' 12"W 250.31'
N44° 02' 35"W 250.38'
N43° 22' 58"W 250.44'
N42° 43' 21"W 250.51'
N42° 03' 44"W 250.57'
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N31° 29' 52"W 251.61'
N30° 50' 15"W 251.68'
N30° 10' 38"W 251.74'
N29° 31' 01"W 251.81'
N28° 51' 24"W 251.87'
N28° 11' 47"W 251.94'
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S27° 54' 24"E 269.68'
S27° 14' 47"E 269.75'
S26° 35' 10"E

Vicinity Map
N.T.S.



KEY MAP
N.T.S.





GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40 ft.

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
8008 Corporate Center Drive, Suite 110
Charlotte, NC 28226
704-375-2438

SOUTH CAROLINA AMERICAN ENGINEERING ASSOCIATES - SOUTHEAST, PA NO. 4729 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL SEAL 27695 12-12-23 ENGINEER BARRY M. FAY

NOT FOR CONSTRUCTION

NO.	DATE	REVISION:

South Carolina 811 Call 811 Before You Dig.

3 DAYS BEFORE DIGGING
DIAL 811
OR CALL TOLL FREE
(888) 721-7877

STIPULATION FOR REUSE

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Preliminary Plat for
THE SANDS AT KERSHAW
LITTLE DUDE AVE
LANCASTER COUNTY, SC

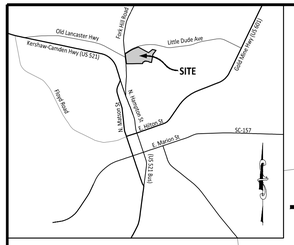
JOB NUMBER:	C210093
DESIGN BY:	BMF
DATE:	8/1/2023

SHEET TITLE:

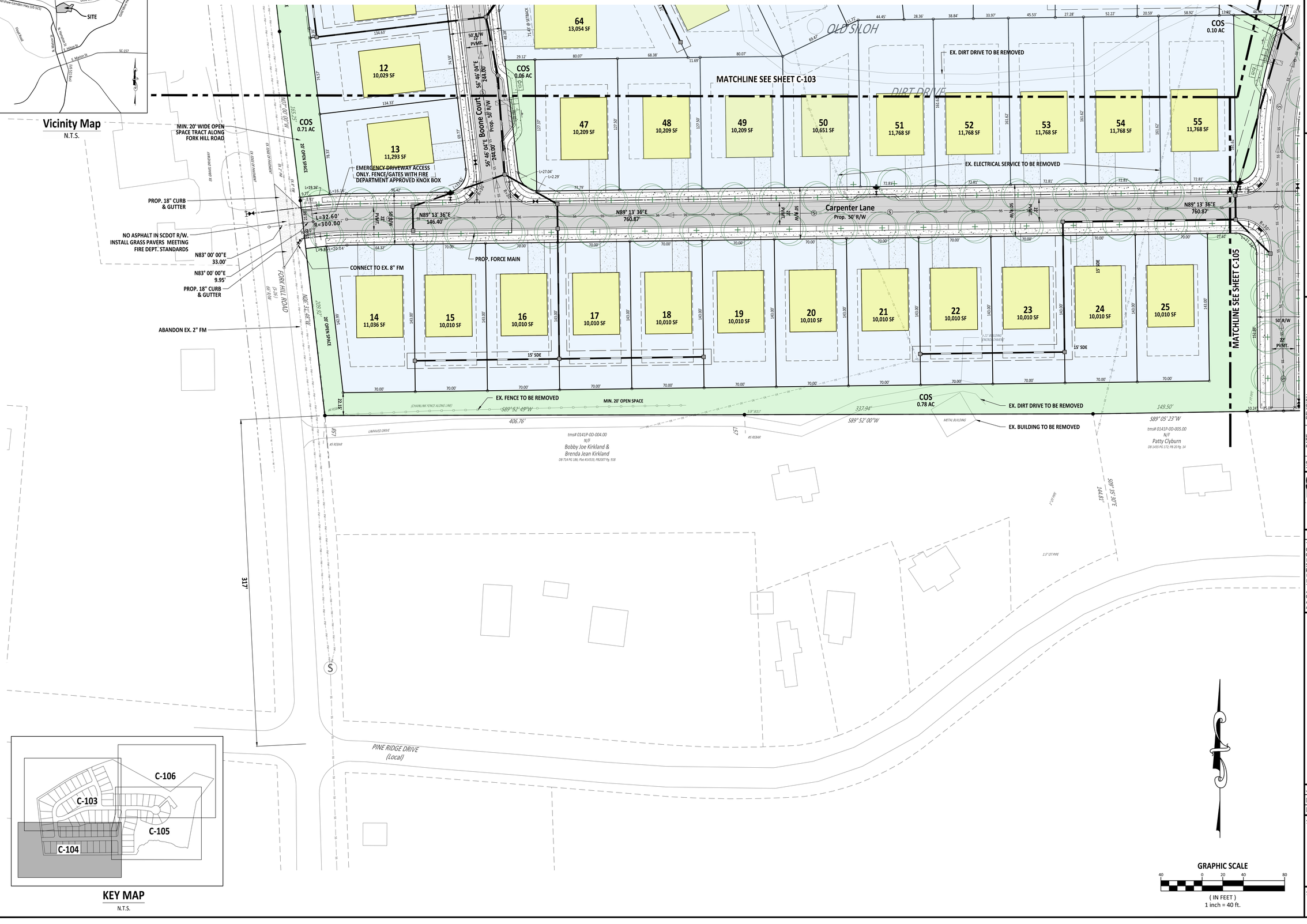
SITE PLAN

SHEET NO.: **C-103**

W:\2021\C210093- Coulston – Kershaw Little Dude\Cad\Sheets\Prelim Plat\C210093 Prelim Plat.dwg



Vicinity Map
N.T.S.



KEY MAP
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(IN FEET)
1 inch = 40 ft.

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THE SANDS AT KERSHAW
LITTLE DUDE AVE
LANCASTER COUNTY, SC

JOB NUMBER:	C210093
DESIGN BY:	BMF
DATE:	8/1/2023

SHEET TITLE:

SITE PLAN

SHEET NO.:
C-104

W:\2021\C210093- Coulston - Kershaw Little Dude\Cad\Sheets\Prelim Plat\C210093 Prelim Plat.dwg

COS WETLANDS 76,147 SF

40' WETLAND BUFFER

MATCHLINE SEE SHEET C-106

MATCHLINE SEE SHEET C-103

COS 5.12 AC

Special Flood Hazard Zone A Limits Fema Map # 45057C0425D

COS WETLANDS 138 SF

100 YEAR FLOOD ZONE 2.33 AC

PRIVATE PARK TRACT 1.99 AC

43 10,010 SF

42 10,147 SF

41 10,474 SF

40 10,497 SF

39 10,242 SF

38 11,947 SF

37 13,367 SF

36 12,466 SF

35 11,501 SF

34 10,317 SF

33 10,060 SF

32 11,330 SF

31 11,198 SF

30 10,268 SF

29 11,285 SF

28 10,010 SF

27 10,010 SF

26 10,010 SF

25 10,010 SF

56 12,043 SF

55 11,768 SF

Pump Station 11,289 SF

Oak Farm Lane Prop. 50' R/W

N89° 38' 20"E 141.45'

L=131.31' R=850.00'

S81° 30' 26"E 119.86'

N15° 16' 25"E 62.38'

L=89.70' R=300.00'

Jacobs Lane Prop. 50' R/W

N10° 21' 31"W 53.53'

N10° 21' 31"W 198.01'

N89° 13' 36"E 760.87'

S89° 13' 36"W 230.54'

170.30'

MAILBOX KIOSK (TYP.)

FIRE HYDRANT (TYP.)

STEET NAME SIGN (TYP.)

STOP SIGN (TYP.)

COS 0.10 AC

COS 0.78 AC

COS 0.44 AC

COS WETLANDS 4,165 SF

COS WETLANDS 57 SF

COS WETLANDS 1,639 SF

COS WETLANDS 6,311 SF

BMP-TRACT 2.42 AC

BMP - WET POND

EX. DIRT TRAIL TO BE REMOVED

EX. ELECTRICAL SERVICE TO BE REMOVED

DIRT TRAIL

BRANCH "THE LINE" INTERMITTENT STREAM "B" (NON-TIDAL)

tms# 0156A-0C-011.00 N/F Darren T. Sowell DB 1524 PG 124; PB 2011 Pg. 74

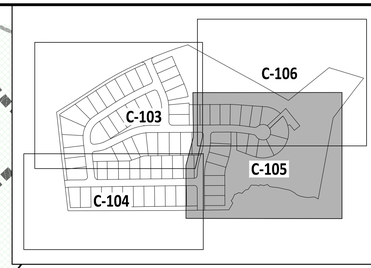
tms# 0141-00-029.01 N/F Robert Page Stewart & Vickie T. Stewart DB 118 PG 120; Plat #12508

N10° 28' 42"W 427.59'

N10° 28' 42"E 30.39'

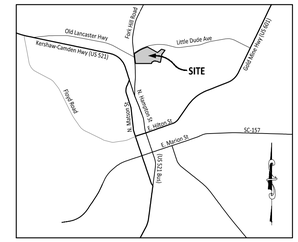
KEY MAP

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Vicinity Map

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Preliminary Plat for
THE SANDS AT KERSHAW
LITTLE DUDE AVE
LANCASTER COUNTY, SC

JOB NUMBER:	C210093
DESIGN BY:	BMF
DATE:	8/1/2023

SHEET TITLE:

SITE PLAN

SHEET NO.:

C-105

W:\2021\C210093- Coulston - Kershaw Little Dude\Cad\Sheets\Prelim Plat\C210093 Prelim Plat.dwg

LITTLE DUDE AVE
(S-564)
66' R/W

EX. GRAVEL DRIVEWAY

EX. EDGE OF PAVEMENT

EX. EDGE OF PAVEMENT

W29.49'

E 23.57'

N77° 15' 02"E

453.69'

(TIE LINE)

1" OT PIPE

EX. 2" FORCE MAIN TO BE ABANDONED

CONNECT TO EX. GRAVITY SEWER W/DOGHOUSE MH

3/4" OT PIPE

DISTURBED

NAIL @ BASE

EXISTING PUMP STATION TO BE ABANDONED AFTER INSTALLATION OF GRAVITY SEWER MAIN

tms# 0141-00-027.00
N/F
Lancaster County Planning & Development Commission
DB 0-PG 5400; PB 18 Pg. 74

PROP. 8" GRAVITY SEWER 20' SSWR EASEMENT

N10° 54' 01"E

289.91'

NAIL-.50' W

340.50'

tms# 0141-00-024.02
N/F
R&C Investments, LLC
DB 1501 Pg. 295; PB 2000 PG. 534

440.90'

N61° 11' 12"W

L39

COS
0.02 AC

1" OT PIPE DISTURBED

L40

FORESTED/WETLAND "AA" (NON-TIDAL)
2.29 ac

PROP. FOOT BRIDGE OVER EX. WETLAND/STREAM

S60°-33' 48"E

188.35'

L41

1" OT PIPE

COS
WETLANDS
76,147 SF

40' WETLAND BUFFER

Special Flood Hazard Zone A Limits
Fema Map # 45057C0425D

MATCHLINE SEE SHEET C-103

PROP. WALKING TRAIL

MATCHLINE SEE SHEET C-105

COS
5.12 AC

COS
WETLANDS
138 SF

100 YEAR FLOOD ZONE
2.33 AC

PRIVATE PARK TRACT
1.99 AC

PRIVATE PARK AMENITY TO INCLUDE WALKING TRAIL, OPEN LAWN AREA, AND BENCH SEATING AREAS

3/4" OT PIPE

252.46'

S73° 05' 59"E

310.28'

N51° 04' 40"E

100.00'

S38° 02' 14"W

#5 REBAR

#5 REBAR

252.41'

S37° 13' 03"W

246.45'

129.93'

S10° 25' 47"W

147.78'

COS
0.44 AC

30 STREAM BUFFER

30 STREAM BUFFER

COS
WETLANDS
4,165 SF

Special Flood Hazard Zone A Limits

43
10,010 SF

42
10,147 SF

41
10,474 SF

40
10,497 SF

39
10,242 SF

38
11,947 SF

37
13,367 SF

36
12,466 SF

34
10,317 SF

33
10,060 SF

32
11,330 SF

Pump Station
11,289 SF

15' SSE

70.00' @ SETBACK

70.02' @ SETBACK

70.01' @ SETBACK

73.86' @ SETBACK

72.15' @ SETBACK

81.81' @ SETBACK

73.68' @ SETBACK

72.15' @ SETBACK

Oak Farm Lane
Prop. 50' R/W

N89° 38' 29"E
141.45'

L=131.31'
R=850.00'

S81° 20' 26"E
119.86'

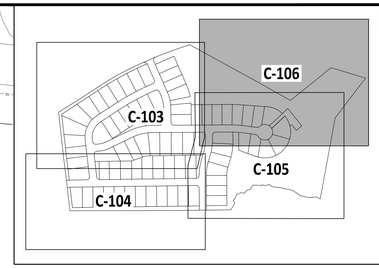
R55'

R41'

N89° 38' 29"W
81.78'

KEY MAP

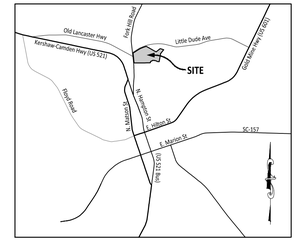
N.T.S.



tms# 0141-00-024.03
N/F
R&C Investments, LLC
DB 1501 Pg. 295; PB 2000 PG. 534

Vicinity Map

N.T.S.



GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

AMERICAN Engineering
American Engineering Associates - Southeast, P.A.
8008 Corporate Center Drive, Suite 110
Charlotte, NC 28226
704-375-2438

SOUTH CAROLINA
AMERICAN ENGINEERING ASSOCIATES - SOUTHEAST, PA
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CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
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SEAL
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ENGINEER
BARRY M. FAY

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Preliminary Plat for
THE SANDS AT KERSHAW
LITTLE DUDE AVE
LANCASTER COUNTY, SC

JOB NUMBER:	C210093
DESIGN BY:	BMF
DATE:	8/1/2023

SHEET TITLE:

SITE PLAN

SHEET NO.:

C-106

W:\2021\C210093 - Coulston - Kershaw Little Dude\Civil\Sheets\Prelim Plat\C210093 Prelim Plat.dwg

TRAFFIC IMPACT STUDY

Little Dude Avenue Single Family

Lancaster County, South Carolina

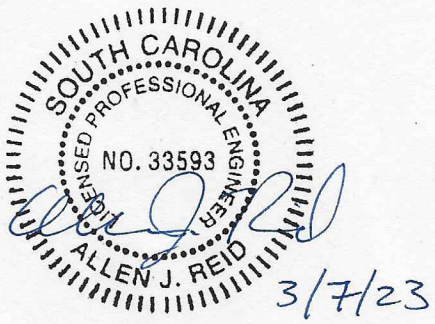
MARCH 7, 2023

IMPACT DESIGNS, INC.
Prepared by: Allen Reid, PE

TRAFFIC IMPACT STUDY

Little Dude Avenue Single Family

LANCASTER COUNTY, SOUTH CAROLINA



REPORT PREPARED FOR:
Coulston Enterprise
8332 Regent Parkway
Fort Mill, SC 29715

REPORT PREPARED BY
Impact Designs Inc.
172 Williamson Road, Unit 3728
Mooresville, NC 28117
nick@impactdesignsinc.com

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B) Turn Lane Analysis

C) Synchro Analysis Reports

D) SimTraffic Analysis Reports

EXECUTIVE SUMMARY

A traffic impact study was conducted for the proposed Little Dude Avenue single family development in accordance SCDOT guidelines. The proposed development is located on the south side of Little Dude Avenue, east of Fork Hill Road in Lancaster County, South Carolina. The development is expected to consist of 72 single family detached housing units and is anticipated to be constructed by the end of 2026.

A turn lane analysis was conducted utilizing the Build (2026) volumes. Based on build out volumes, no turn lanes are warranted at the site access. Refer to Appendix B for the turn lane warrants with volumes graphed.

The capacity analysis indicates that all approaches are expected to operate at LOS B or better. Operations under Build conditions are anticipated to be similar to the No-Build conditions. No mitigation is recommended.

Recommendations:

- None

1. INTRODUCTION

The purpose of this report is to summarize the traffic impact study that was completed for the Little Dude Avenue single family site in Lancaster County, South Carolina. The study was developed in accordance with SCDOT guidelines. This report summarizes the procedures and findings of the traffic impact study.

1.1. Project Summary

The proposed development is located on the south side of Little Dude Avenue, east of Fork Hill Road in Lancaster County, South Carolina. The development is expected to consist of 72 single family detached housing units and is anticipated to be constructed by the end of 2026. This traffic impact study analyzes the effects of the additional traffic associated with the proposed development during the weekday AM (7:00 AM - 9:00 AM) and the weekday PM (4:00 PM - 6:00 PM) peak periods. The study intersections for the purpose of the analysis includes:

- Fork Hill Road and Little Dude Avenue
- Little Dude Avenue and Savannah Lane/Site Access

The proposed development is expected to be built out by the end of 2026; therefore, 2026 was considered as the future year for the purpose of this analysis. Refer to Figures 1 and 2 for the site location and the conceptual site plan.

1.2. Existing Roadway Conditions

The primary roadways within the study area include Fork Hill Road and Little Dude Avenue. A summary of their existing characteristics is shown in Table 1.

Table 1 – Study Area Summary

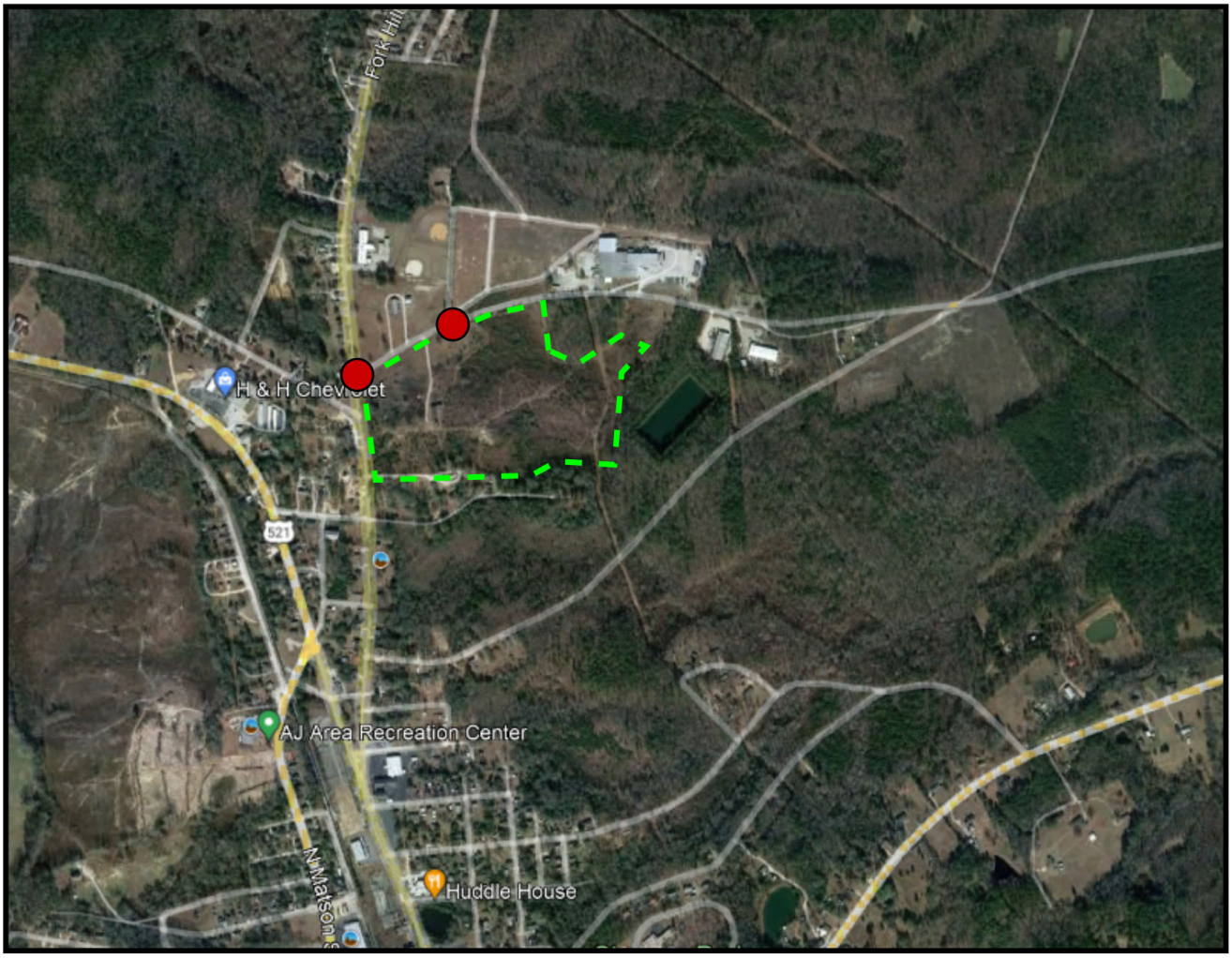
Facility Name	Route #	Typical Cross Section	Posted Speed Limit	Maintained By	2021 AADT
Fork Hill Road	S-26	2-lane undivided	45 MPH	SCDOT	2,700
Little Dude Avenue	S-564	2-lane undivided	45 MPH	SCDOT	No Data

Refer to Figure 3 for an illustration of the existing geometry and traffic control at the study intersections.

1.3. Driveway Locations

Direct access to the Little Dude Avenue single family development is proposed to be provided via one full movement access on Little Dude Avenue opposite Savannah Lane.

NORTH



LEGEND

Proposed Site Location

Study Intersection

IMPACT
Designs, Inc.

Little Dude Avenue Single Family
Lancaster County, SC

Site Location Map

Scale: Not to Scale	Figure	1

Typical 70' Lot Detail (NTS)

50' PUBLIC ROW (TYP.)

Setbacks:

Front:	30'
Side:	10' (15' on corner)
Rear:	25'

Development Notes:

1.) For all detention pond BMPs, a minimum of 10 feet wide access way will be provided to the bottom of the pond at a maximum of 4(H) to 1(V) slope.

2.) The Applicant is working with the adjacent property owner to adjust the property boundary along this area with required setbacks to allow this building to remain.

3.) Minimum pervious sruface shall be 45% (+/- 17.76 acres).

4.) The Applicant understands that they will be responsible for implementing the infrastructure improvements outlined in the section 6.3 Use Table of the Lancaster County UDO.

5.) Infrastructure Improvements Not Dedicated to the County: Property owners' association covenants shall be established and recorded that guarantee the association's responsibility for the ongoing liability, taxes, and maintenance of private streets, sidewalks, planting strips, storm drainage system, lighting, etc. constructed to serve the common development which are not dedicated to the County.

6.) Common Areas Not Dedicated to the County: Property owners' association covenants shall be established and recorded that guarantee the association's responsibility for the ongoing liability, taxes, and maintenance of recreational facilities and common open space, which are not dedicated to the County.



Vicinity Map

Not To Scale

Site Data:

Tax Parcels:	0141-00-024.00
Total Acreage:	+/- 39.47 Acres (per Survey)
Location:	Kershaw, SC (Lancaster County)
Zoning:	
Existing:	MDR (Vacant)
Proposed:	MDR (Single-Family Residential)
Total Potential Lots:	+/- 72 Lots (70' x 143')
Potential Density:	+/- 1.82 DU/AC
Open Space:	
Required:	+/- 7.89 Acres (20%) Min.
Proposed:	+/- 7.89 Acres (20%)
Park Space:	
Required:	+/- 1.97 Acres (5%) Min.
Proposed:	+/- 1.97 Acres (5%)
Connectivity:	
Required:	1.3
Proposed:	1.38 (11 Links / 8 Nodes)

General Notes
1. Base information provided by "BOUNDARY SURVEY OF TMS# 0141-00-024.00 FOR R&C INVESTMENTS, LLC" provided by Holland Surveyors, LLC, dated 02/22/2022 and Lancaster County GIS Data and should be verified for accuracy.
2. All site plan, zoning, and wetland information utilized in the preparation of this plan is considered to be preliminary in nature and subject to change and final verification.
3. Draft - Do not rely on this document.

Floodplain Information
Floodplain information obtained from FEMA FIRM Panel 45057C0425D effective date of study 06/16/2022.

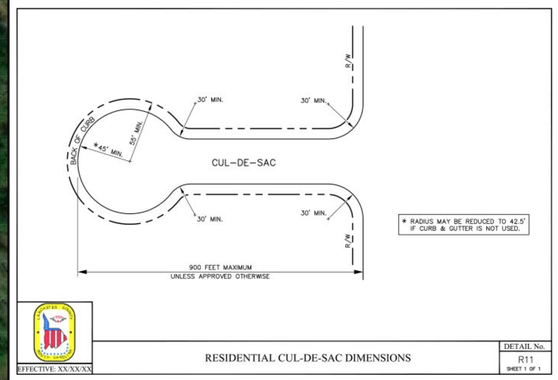
Stream/Wetland Information
Stream/Wetland information is based on a report titled "Flag Map" provided by Carolina Wetland Services, dated 09/21/2022 and preliminary information provided to ESP by Lancaster County GIS data. For purposes of preparation of this Base Map, any potential wetland areas and stream features depicted on the plan are considered to be preliminary in nature and approximate in location. The Base Map will need to be revised once all agencies approved on-site wetland/stream and appropriate jurisdictional boundaries are surveyed and verified with acceptable levels of accuracy-unit loss may occur.

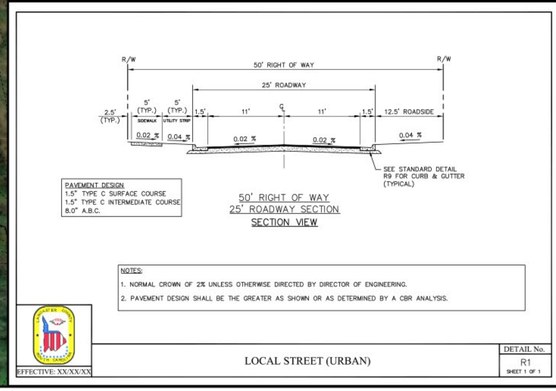
Access Points/Driveways/Streets
1. Proposed project site entrance locations are considered preliminary in nature and need to be verified for adequate sight distance.
2. All roadway and street systems are considered to be preliminary and will need to be verified for sufficiency to satisfy or exceed minimum requirements established in the Lancaster County UDO and applicable standards identified by SCDOT. Street connections are conceptual and may be subject to change based on agency input and review.

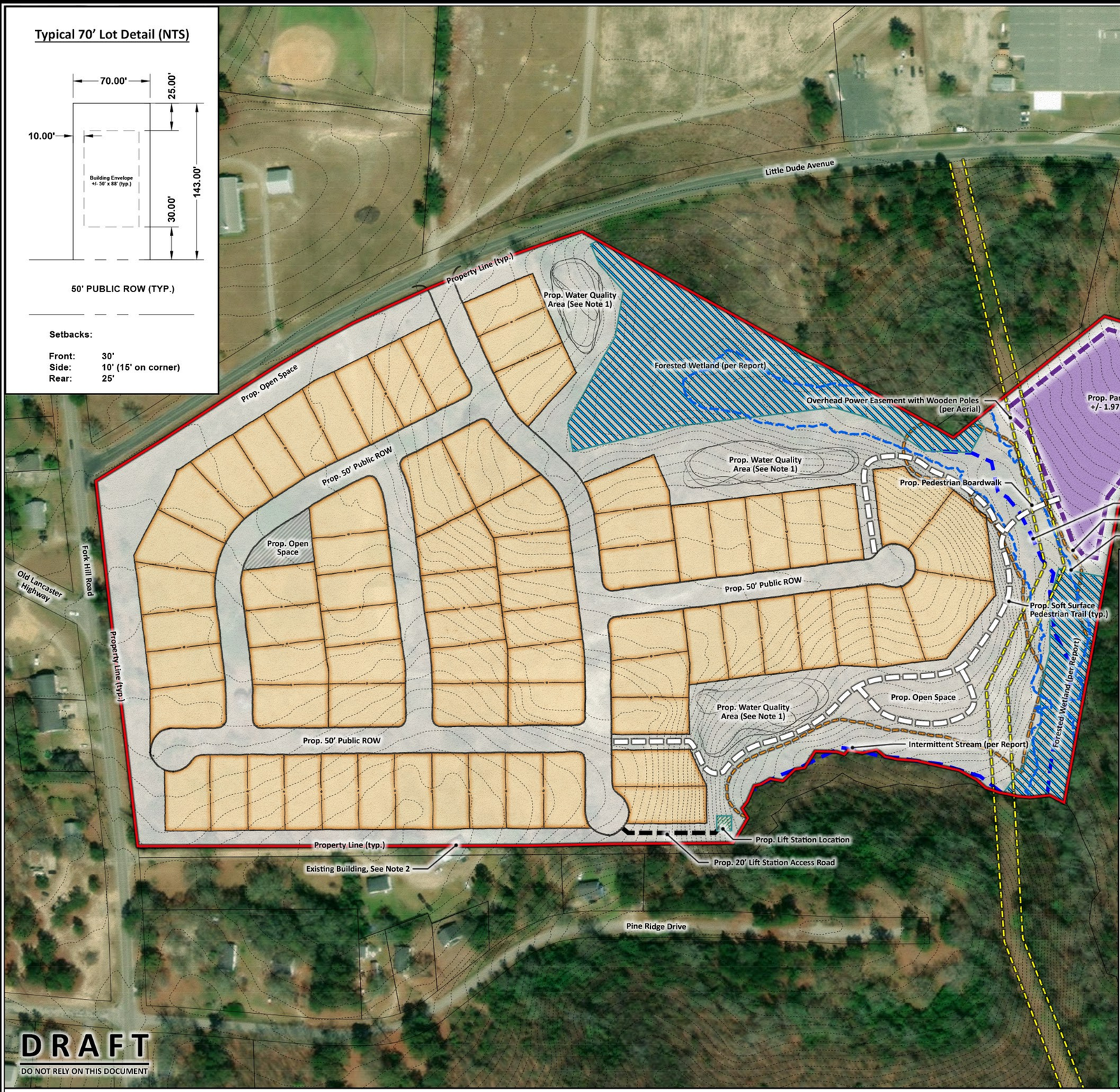
Open Space /Tree Save
Open Space and Tree Save areas are conceptual and preliminary. The exact location of these areas may change as the client finalizes decisions regarding final layout, product allocation, and as other spatially dependent project components such as stormwater areas, wetland areas, utility features, and buffers, (as applicable) for this project are better defined.

Potential Stormwater Quality Areas
Location of proposed stormwater areas are conceptual and preliminary and still need to be determined. The exact size and location of these areas will change as the client finalizes decisions regarding final layout, product allocation, and as other proposed changes to the project are better defined. Layout and unit count subject to change based on final design of stormwater areas.

Public Information
ESP Associates is not responsible for plan deficiencies created by incorrect, incomplete, missing or outdated information derived from public sources such as GIS, Planning and Zoning departments.







ESP Associates, Inc.
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803.802.2440
www.espassociates.com

NORTH

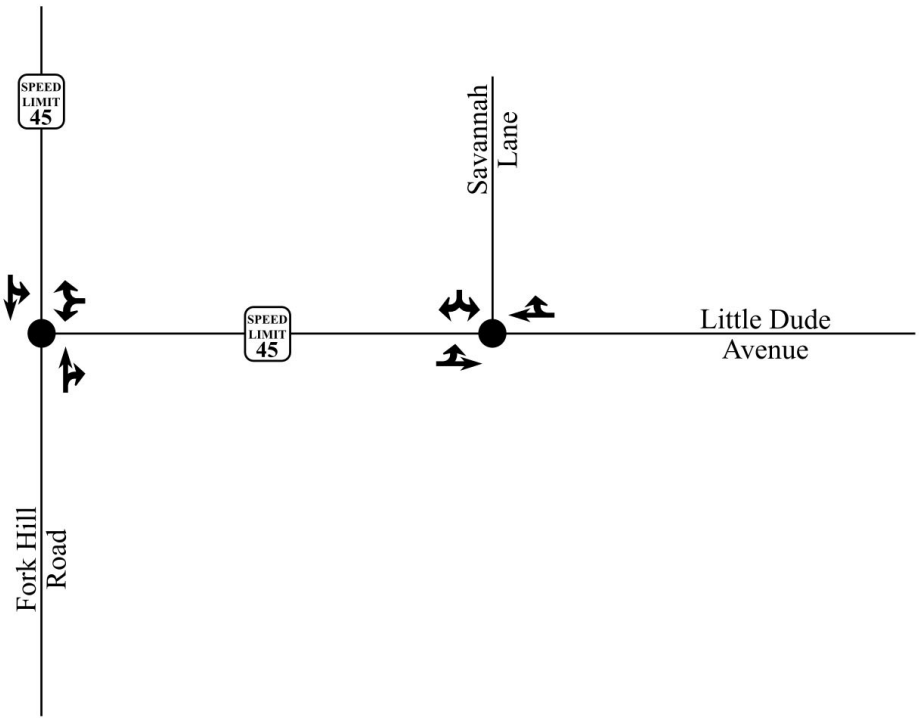
Little Dude Avenue Site

Sketch Plan

ESP Job #KT80 December 16, 2022

GRAPHIC SCALE
100 0 50 100 200
1 INCH = 100 FT.

Coulston Enterprise, Inc.
8332 Regent Parkway
Fort Mill, SC 29715



LEGEND

- Signalized Intersection
- Unsignalized Intersection
- Existing Lane
- SPEED LIMIT XX — Posted Speed Limit
- X' — Storage (In Feet)

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Little Dude Avenue Single Family
Lancaster County, SC

Existing Lane Configurations and Traffic Control

Scale: Not to Scale	Figure	3

2. TRAFFIC VOLUME DEVELOPMENT

2.1. Existing Traffic Volumes

Existing turning movement counts were conducted at the study intersections in January 2022, during the AM (7:00 AM to 9:00 AM) peak period and the PM (4:00 PM to 6:00 PM) peak period. The 2023 traffic volumes are illustrated in Figure 4.

2.2. Projected Traffic Volumes

Based on SCDOT Average Annual Daily Traffic (AADT) volumes, daily traffic volumes in the study area have grown at an annual rate of approximately 2% in recent years. To reflect that growth, a 2% annual growth was applied to the 2023 counts to develop the No-Build (2026) volumes. This growth rate was applied to account for all background growth in the area without any adjacent and/or the proposed developments. The calculations for this factor can be found in Appendix A. Refer to Figure 5 for an illustration of the No-Build (2026) traffic volumes at the study intersections.

2.3. Proposed Development Traffic Volumes

As mentioned previously, the proposed development is expected to consist of 72 single-family detached housing units. The trip generation potential for the proposed development was estimated utilizing methodology contained within the ITE's *Trip Generation Manual*, 11th Edition. Utilizing ITE data for ITE Code 210, traffic volumes were generated for the weekday daily, the weekday AM peak hour, and the weekday PM peak hour. Refer to Table 2 for a summary of the trip generation potential of the proposed development.

Table 2 – Trip Generation

ITE Land Use (Code)	Density	Independent Variable	Daily Traffic	AM Peak		PM Peak	
				Enter	Exit	Enter	Exit
Single-Family Detached Housing (ITE Code 210)	72	Dwelling Units	746	14	41	46	27

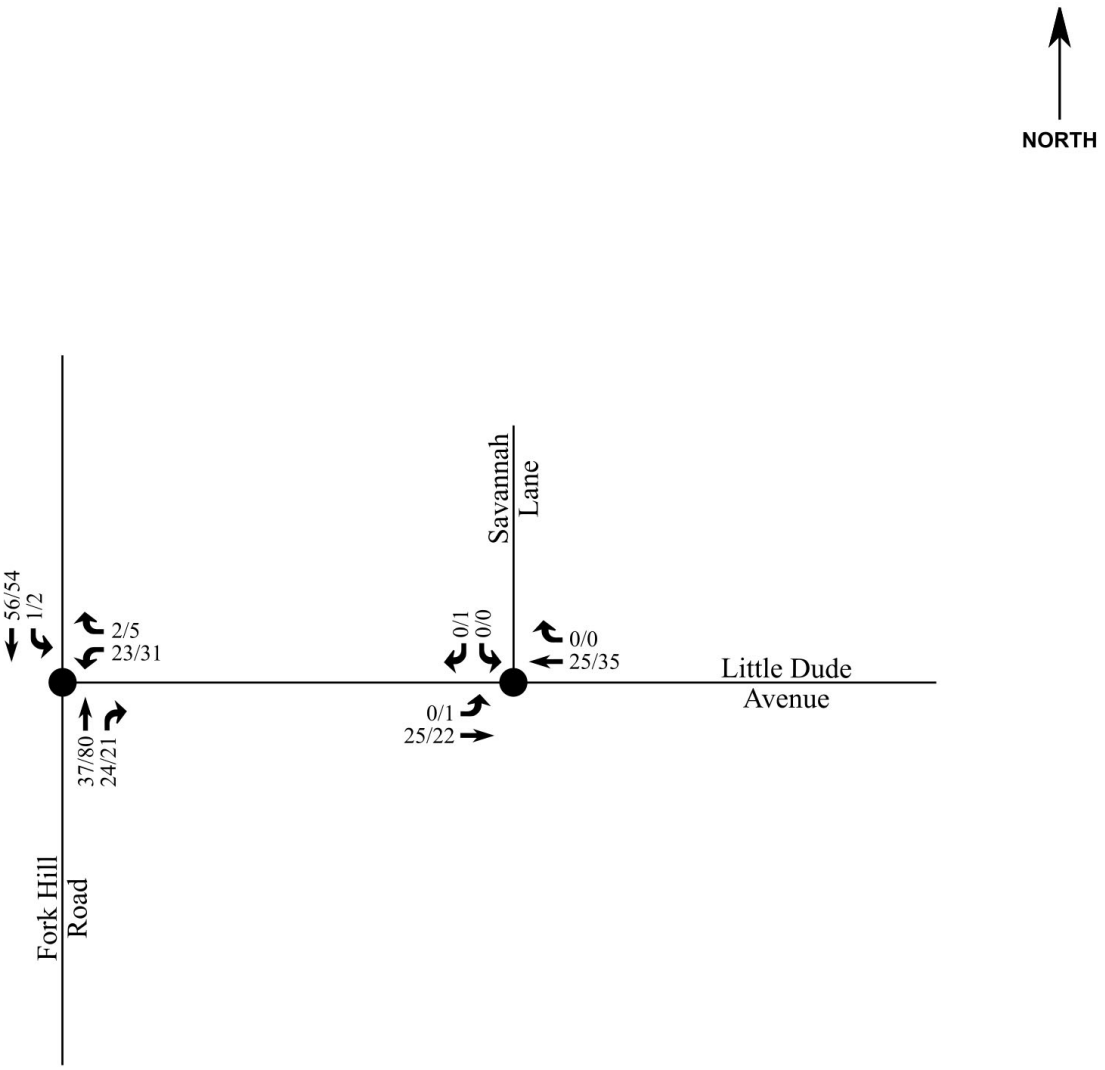
Site traffic associated with the proposed development was distributed and assigned to the roadway network based upon existing travel patterns and are summarized below:

- 30% to/from the north via Fork Hill Road
- 50% to/from the south via Fork Hill Road
- 20% to/from the east via Little Dude Avenue

Refer to Figures 6 and 7 for the site trip distribution and assignment, respectively.

2.4. Future Build Traffic Volumes

The site generated traffic volumes were added to the No-Build (2026) traffic volumes to determine the Build (2026) volumes. The Build (2026) volumes are illustrated in Figure 8.



LEGEND

Signalized Intersection

Unsignalized Intersection

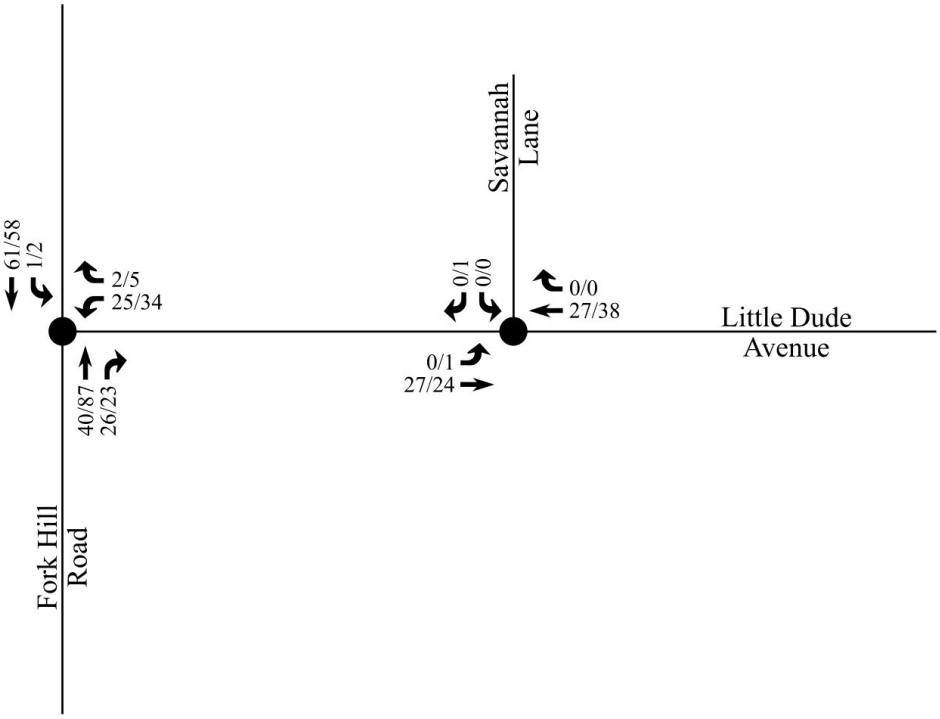
X / Y → AM / PM Peak Hour Traffic

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Little Dude Avenue Single Family
Lancaster County, SC

Existing (2023)
Traffic Volumes

Scale: Not to Scale	Figure	4



LEGEND

Signalized Intersection

Unsignalized Intersection

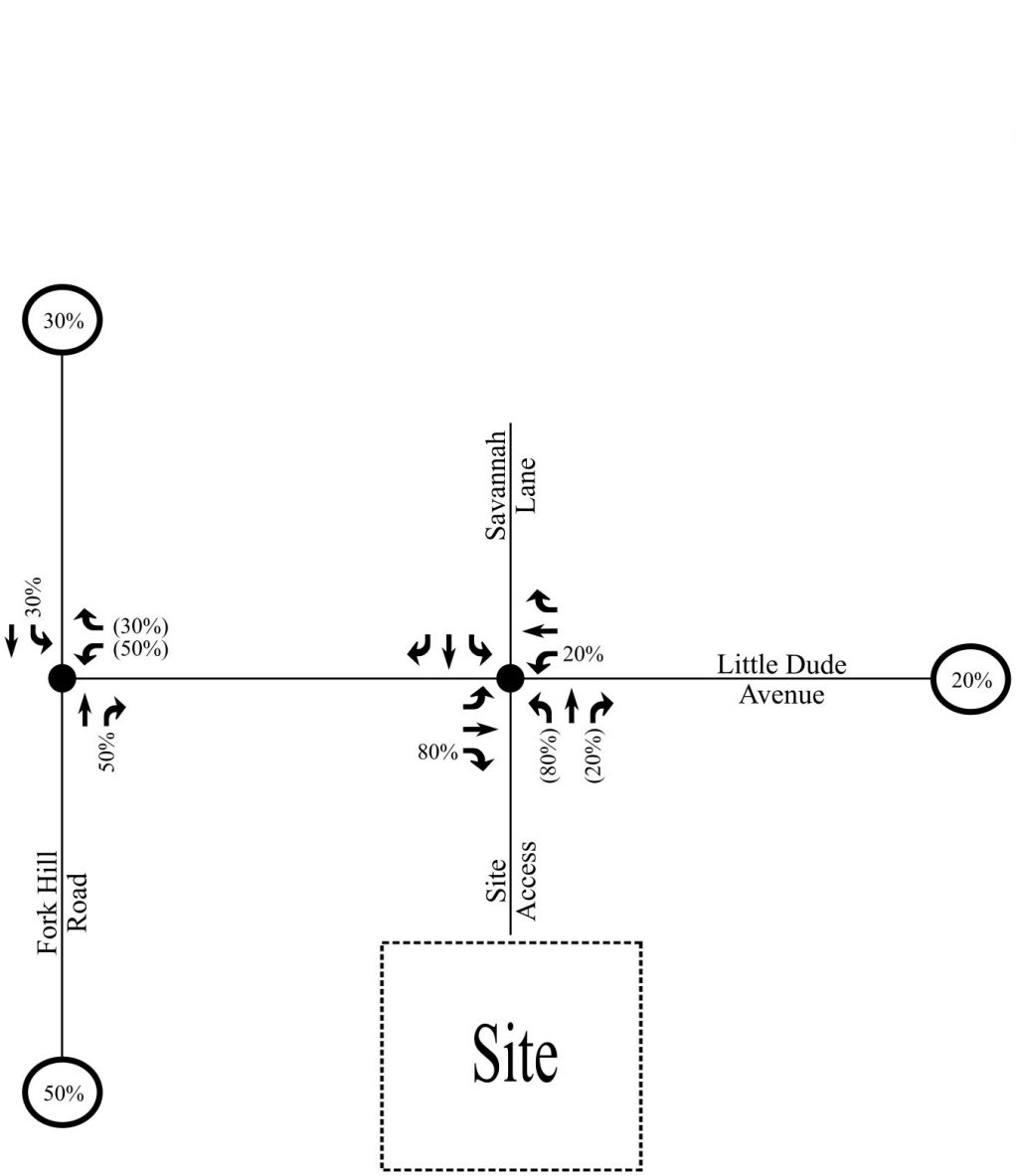
X / Y → AM / PM Peak Hour Traffic

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Little Dude Avenue Single Family
Lancaster County, SC

No-Build (2026)
Traffic Volumes

Scale: Not to Scale	Figure	5



LEGEND

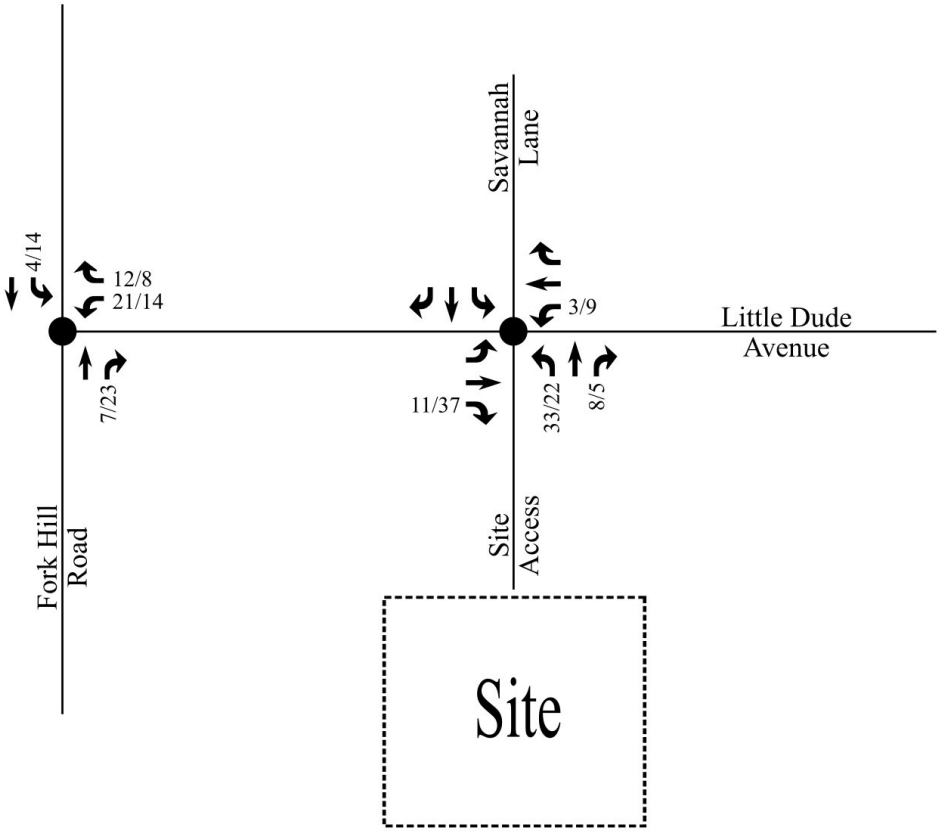
- Signalized Intersection
- Unsignalized Intersection
- XX% — Regional Trip Distribution
- X% → Entering Trip Distribution
- (Y%) → Exiting Trip Distribution

IMPACT
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Little Dude Avenue Single Family
Lancaster County, SC

Site Trip Distribution

Scale: Not to Scale	Figure	6



LEGEND

Signalized Intersection

Unsignalized Intersection

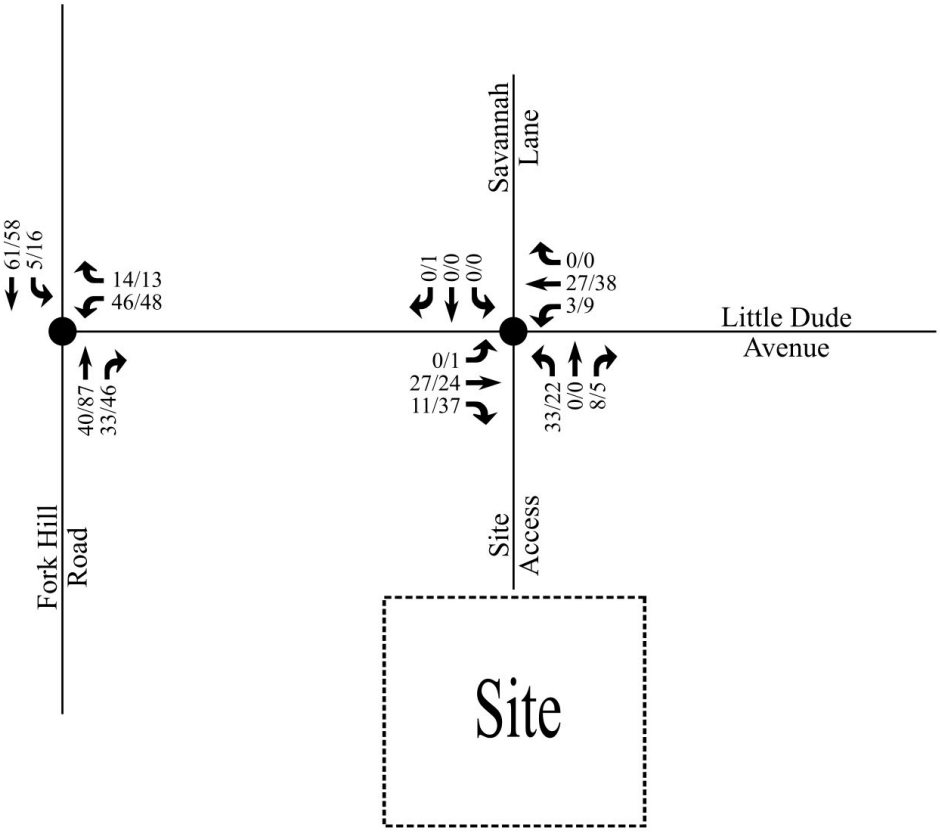
X / Y → AM / PM Peak Hour Traffic

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Little Dude Avenue Single Family
Lancaster County, SC

Site Trip Assignment

Scale: Not to Scale	Figure	7



LEGEND

Signalized Intersection

Unsignalized Intersection

X / Y → AM / PM Peak Hour Traffic

IMPACT
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Little Dude Avenue Single Family
Lancaster County, SC

Build (2026)
Traffic Volumes

Scale: Not to Scale	Figure	8

3. TRAFFIC IMPACT ANALYSIS

3.1. Turn Lane Analysis

A turn lane analysis was conducted utilizing the Build (2026) volumes. Based on build out volumes, no turn lanes are warranted at the site access. Refer to Appendix B for the turn lane warrants with volumes graphed.

3.2. Intersection LOS Analysis

Using the existing, no-build, and build traffic volumes, intersection analyses were conducted for the study intersections under Existing (2023) conditions, No-Build (2026) conditions, and Build (2026) conditions. This analysis was conducted using the Transportation Research Board's *Highway Capacity Manual (HCM 6th Edition)* methodologies of the *Synchro*, Version 11 software.

Intersection level of service (LOS) grades range from LOS A to LOS F, which are directly related to the level of control delay at the intersection and characterize the operational conditions of the intersection traffic flow. LOS A operations typically represent ideal, free-flow conditions where vehicles experience little to no delays, and LOS F operations typically represent poor, forced-flow (bumper-to-bumper) conditions with high vehicular delays, and are generally considered undesirable. Table 3 summarizes the *HCM 6th Edition* control delay thresholds associated with each LOS grade for signalized and unsignalized intersections.

Table 3 – *HCM 6th Edition* LOS Criteria for Signalized & Unsignalized Intersections

Signalized Intersections		Unsignalized Intersections	
LOS	**Control Delay per Vehicle (seconds)**	**LOS**	**Control Delay per Vehicle (seconds)**
A	≤ 10	A	≤ 10
B	> 10 and ≤ 20	B	> 10 and ≤ 15
C	> 20 and ≤ 35	C	> 15 and ≤ 25
D	> 35 and ≤ 55	D	> 25 and ≤ 35
E	> 55 and ≤ 80	E	> 35 and ≤ 50
F	> 85	F	> 50

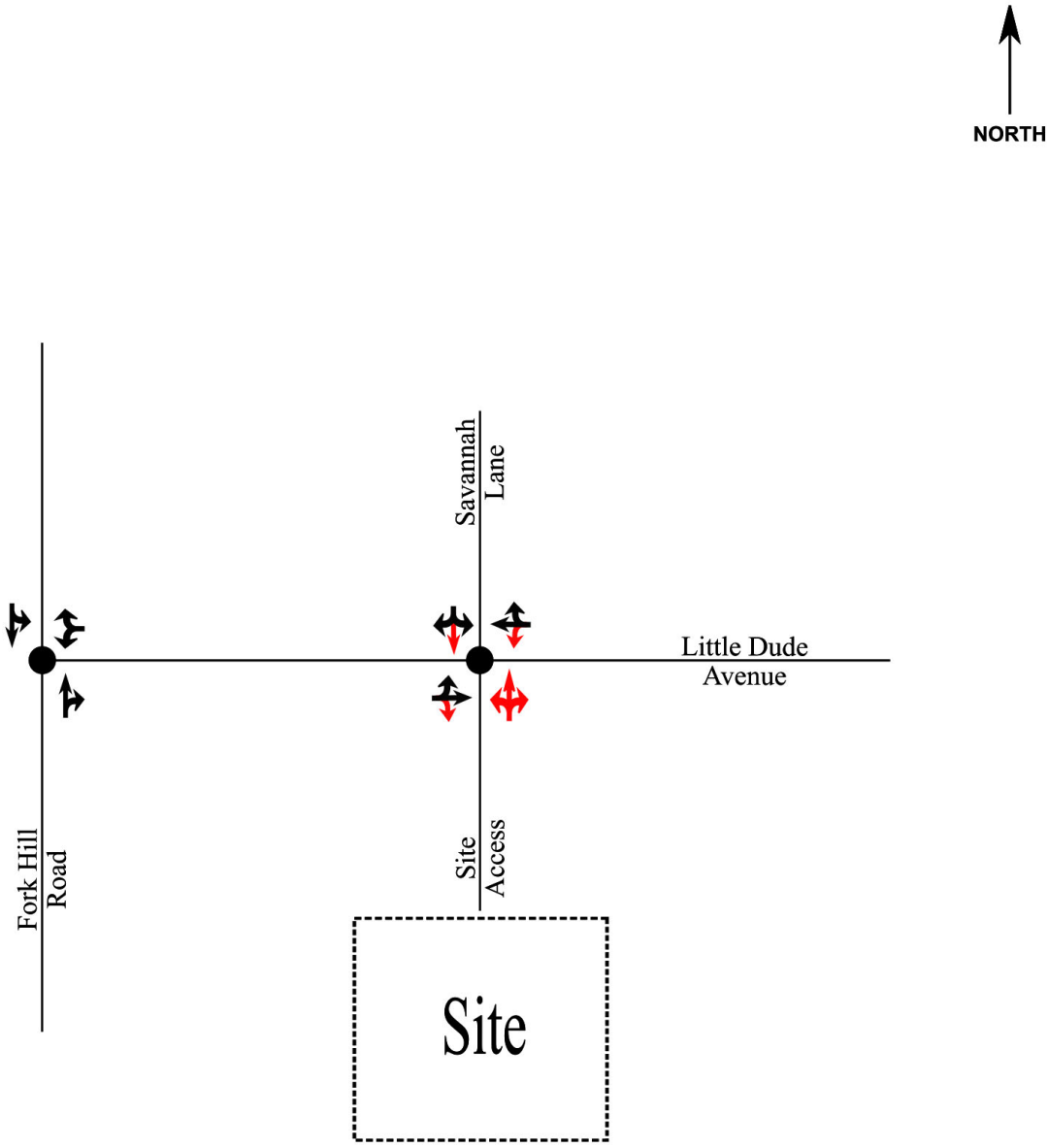
The results of the capacity analysis for the study intersections under existing traffic control are summarized in Table 4. Refer to Appendix C for the detailed capacity analysis reports and Appendix D for the queuing analysis results.

Table 4 – Intersection Capacity Analysis Results

Intersection	Approach	LOS (Delay in seconds per vehicle)					
		Existing (2023) Conditions		No-Build (2026) Conditions		Build (2026) Conditions	
		AM	PM	AM	PM	AM	PM
Fork Hill Road and Little Dude Avenue	WB	A (9.2)	A (9.5)	A (9.3)	A (9.6)	A (9.4)	B (10.0)
	NB	-	-	-	-	-	-
	SB	A (7.3)	A (7.4)	A (7.4)	A (7.5)	A (7.4)	A (7.5)
Little Dude Avenue and Savannah Lane/ Site Access	EB	A (0.0)	A (7.3)	A (0.0)	A (7.3)	A (0.0)	A (7.3)
	WB	-	-	-	-	A (7.3)	A (7.4)
	NB	*Analyzed under Build conditions ONLY*				A (9.0)	A (9.2)
	SB	A (0.0)	A (8.5)	A (0.0)	A (8.5)	A (0.0)	A (8.5)

The capacity analysis indicates that all approaches are expected to operate at LOS B or better. Operations under Build conditions are anticipated to be similar to the No-Build conditions. No mitigation is recommended.

Figure 9 shows the proposed lane configurations and traffic control for the Build (2026) conditions.



LEGEND

- Signalized Intersection
- Unsignalized Intersection
- Existing Lane (Proposed)
- X' Storage (In Feet)

IMPACT
Designs, Inc.

Little Dude Avenue Single Family
Lancaster County, SC

Proposed Lane Configurations and Traffic Control

Scale: Not to Scale	Figure	9

4. SUMMARY OF FINDINGS

A traffic impact study was conducted for the proposed Little Dude Avenue single family development in accordance SCDOT guidelines. The proposed development is located on the south side of Little Dude Avenue, east of Fork Hill Road in Lancaster County, South Carolina. The development is expected to consist of 72 single family detached housing units and is anticipated to be constructed by the end of 2026.

A turn lane analysis was conducted utilizing the Build (2026) volumes. Based on build out volumes, no turn lanes are warranted at the site access. Refer to Appendix B for the turn lane warrants with volumes graphed.

The capacity analysis indicates that all approaches are expected to operate at LOS B or better. Operations under Build conditions are anticipated to be similar to the No-Build conditions. No mitigation is recommended.

Recommendations:

- None

TECHNICAL APPENDIX

APPENDIX A

TRAFFIC COUNT DATA

TRAFFIC DATA COLLECTION

File Name : Kershaw(Little Dude and Rock Hill)
Site Code :
Start Date : 1/12/2023
Page No : 1

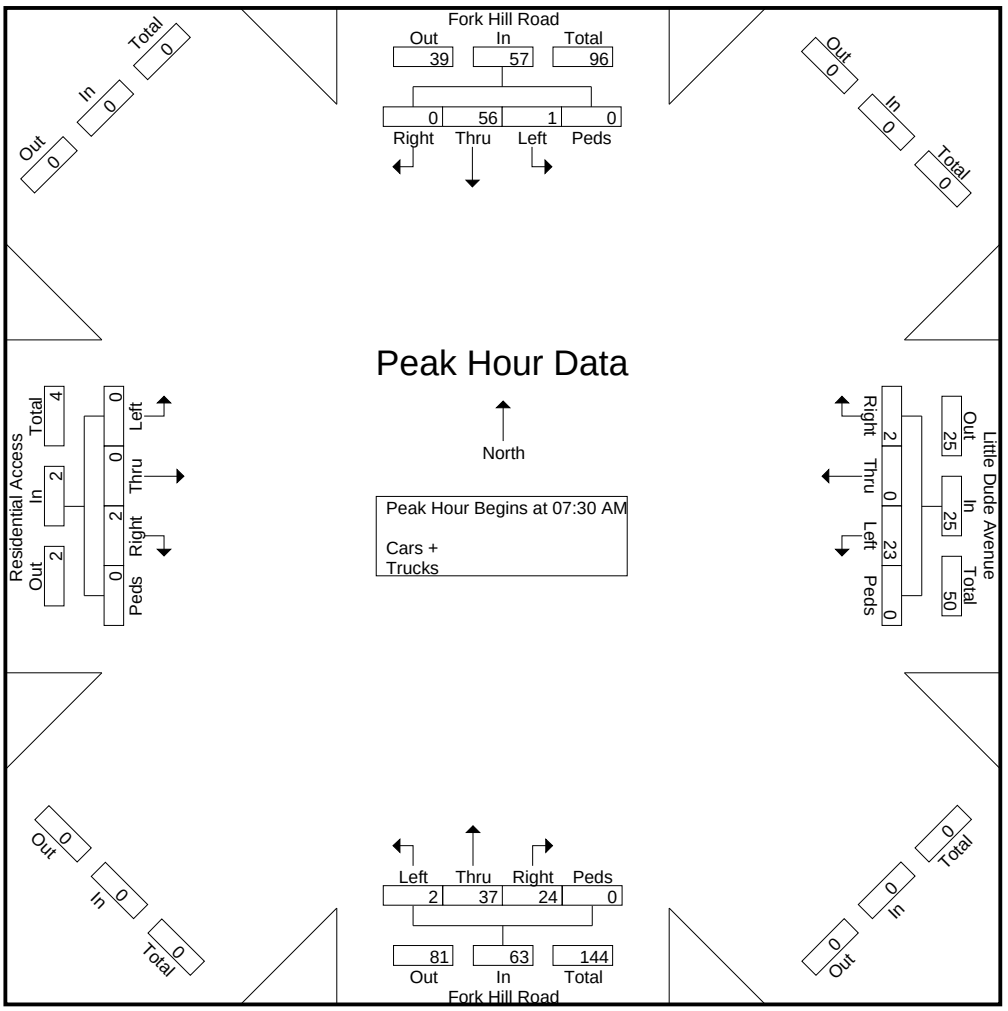
Groups Printed- Cars + - Trucks

	Fork Hill Road Southbound					Little Dude Avenue Westbound					Fork Hill Road Northbound					Residential Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	17	0	0	17	0	0	4	0	4	7	7	0	0	14	0	0	0	0	0	35
07:15 AM	0	20	1	0	21	0	0	5	0	5	5	4	0	0	9	0	0	0	0	0	35
07:30 AM	0	8	0	0	8	0	0	8	0	8	6	14	0	0	20	0	0	0	0	0	36
07:45 AM	0	16	1	0	17	1	0	2	0	3	7	7	1	0	15	1	0	0	0	1	36
Total	0	61	2	0	63	1	0	19	0	20	25	32	1	0	58	1	0	0	0	1	142
08:00 AM	0	9	0	0	9	0	0	5	0	5	5	9	0	0	14	0	0	0	0	0	28
08:15 AM	0	23	0	0	23	1	0	8	0	9	6	7	1	0	14	1	0	0	0	1	47
08:30 AM	0	11	1	0	12	0	0	7	0	7	4	11	0	0	15	0	0	0	0	0	34
08:45 AM	0	11	0	0	11	0	0	2	0	2	2	5	0	0	7	0	0	0	0	0	20
Total	0	54	1	0	55	1	0	22	0	23	17	32	1	0	50	1	0	0	0	1	129
Grand Total	0	115	3	0	118	2	0	41	0	43	42	64	2	0	108	2	0	0	0	2	271
Apprch %	0	97.5	2.5	0		4.7	0	95.3	0		38.9	59.3	1.9	0		100	0	0	0		
Total %	0	42.4	1.1	0	43.5	0.7	0	15.1	0	15.9	15.5	23.6	0.7	0	39.9	0.7	0	0	0	0.7	
Cars +	0	112	3	0	115	2	0	37	0	39	40	61	2	0	103	2	0	0	0	2	259
% Cars +	0	97.4	100	0	97.5	100	0	90.2	0	90.7	95.2	95.3	100	0	95.4	100	0	0	0	100	95.6
Trucks	0	3	0	0	3	0	0	4	0	4	2	3	0	0	5	0	0	0	0	0	12
% Trucks	0	2.6	0	0	2.5	0	0	9.8	0	9.3	4.8	4.7	0	0	4.6	0	0	0	0	0	4.4

TRAFFIC DATA COLLECTION

File Name : Kershaw(Little Dude and Rock Hill)
Site Code :
Start Date : 1/12/2023
Page No : 2

	Fork Hill Road Southbound					Little Dude Avenue Westbound					Fork Hill Road Northbound					Residential Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	8	0	0	8	0	0	**8**	0	8	6	**14**	0	0	**20**	0	0	0	0	0	36
07:45 AM	0	16	**1**	0	17	**1**	0	2	0	3	**7**	7	**1**	0	15	**1**	0	0	0	**1**	36
08:00 AM	0	9	0	0	9	0	0	5	0	5	5	9	0	0	14	0	0	0	0	0	28
08:15 AM	0	**23**	0	0	**23**	1	0	8	0	**9**	6	7	1	0	14	1	0	0	0	1	**47**
Total Volume	0	56	1	0	57	2	0	23	0	25	24	37	2	0	63	2	0	0	0	2	147
% App. Total	0	98.2	1.8	0		8	0	92	0		38.1	58.7	3.2	0		100	0	0	0		
PHF	.000	.609	.250	.000	.620	.500	.000	.719	.000	.694	.857	.661	.500	.000	.788	.500	.000	.000	.000	.500	.782



TRAFFIC DATA COLLECTION

File Name : Kershaw(Little Dude and Rock Hill)
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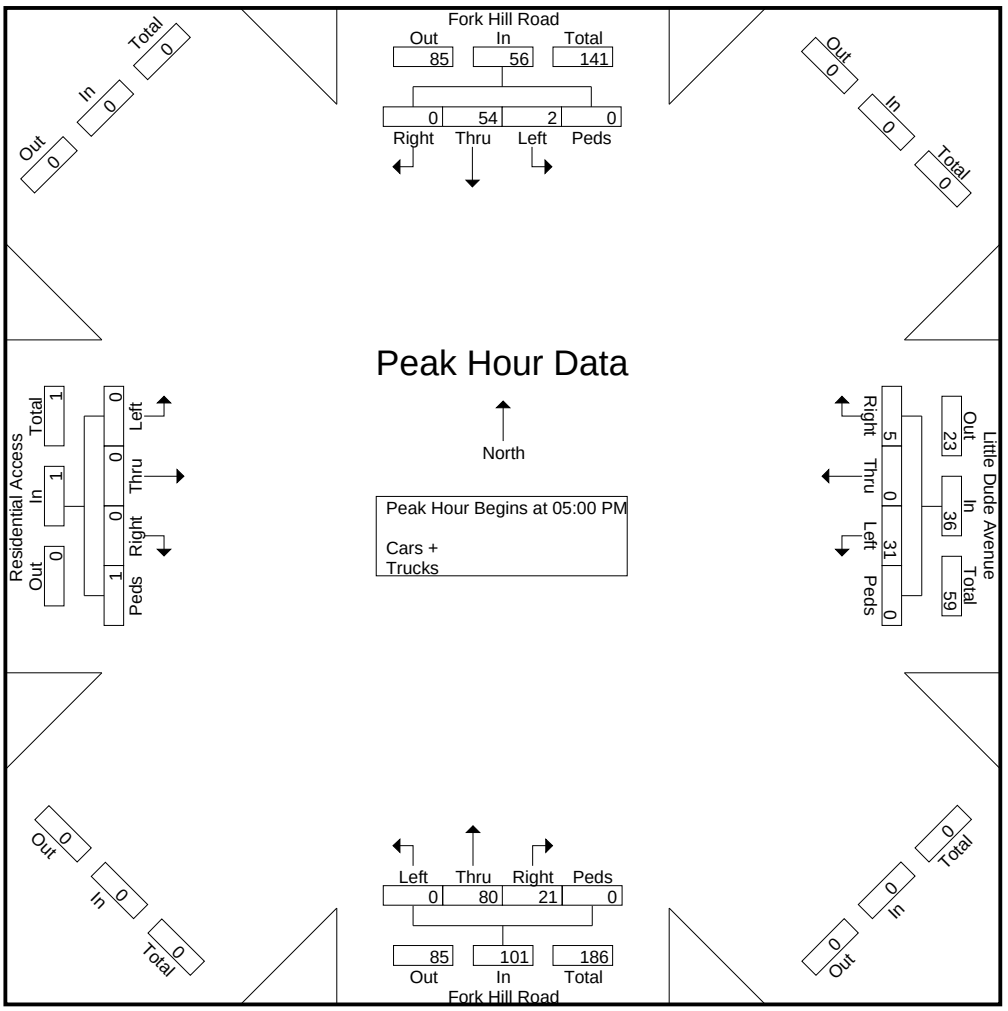
Groups Printed- Cars + - Trucks

	Fork Hill Road Southbound					Little Dude Avenue Westbound					Fork Hill Road Northbound					Residential Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	17	2	0	19	0	0	11	1	12	9	21	0	0	30	0	0	0	1	1	62
04:15 PM	0	25	0	0	25	1	0	7	0	8	2	14	0	0	16	0	0	0	0	0	49
04:30 PM	0	15	0	0	15	0	0	4	0	4	4	19	0	0	23	0	0	0	0	0	42
04:45 PM	0	12	1	0	13	0	0	5	1	6	4	17	0	0	21	0	0	0	0	0	40
Total	0	69	3	0	72	1	0	27	2	30	19	71	0	0	90	0	0	0	1	1	193
05:00 PM	0	18	0	0	18	1	0	8	0	9	4	26	0	0	30	0	0	0	0	0	57
05:15 PM	0	11	1	0	12	1	0	11	0	12	4	14	0	0	18	0	0	0	0	0	42
05:30 PM	0	13	1	0	14	2	0	5	0	7	8	24	0	0	32	0	0	0	0	0	53
05:45 PM	0	12	0	0	12	1	0	7	0	8	5	16	0	0	21	0	0	0	1	1	42
Total	0	54	2	0	56	5	0	31	0	36	21	80	0	0	101	0	0	0	1	1	194
Grand Total	0	123	5	0	128	6	0	58	2	66	40	151	0	0	191	0	0	0	2	2	387
Apprch %	0	96.1	3.9	0		9.1	0	87.9	3		20.9	79.1	0	0		0	0	0	100		
Total %	0	31.8	1.3	0	33.1	1.6	0	15	0.5	17.1	10.3	39	0	0	49.4	0	0	0	0.5	0.5	
Cars +	0	122	5	0	127	6	0	57	0	63	39	150	0	0	189	0	0	0	2	2	381
% Cars +	0	99.2	100	0	99.2	100	0	98.3	0	95.5	97.5	99.3	0	0	99	0	0	0	100	100	98.4
Trucks	0	1	0	0	1	0	0	1	2	3	1	1	0	0	2	0	0	0	0	0	6
% Trucks	0	0.8	0	0	0.8	0	0	1.7	100	4.5	2.5	0.7	0	0	1	0	0	0	0	0	1.6

TRAFFIC DATA COLLECTION

File Name : Kershaw(Little Dude and Rock Hill)
Site Code :
Start Date : 1/12/2023
Page No : 2

	Fork Hill Road Southbound					Little Dude Avenue Westbound					Fork Hill Road Northbound					Residential Access Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	**18**	0	0	**18**	1	0	8	0	9	4	**26**	0	0	30	0	0	0	0	0	**57**
05:15 PM	0	11	**1**	0	12	1	0	**11**	0	**12**	4	14	0	0	18	0	0	0	0	0	42
05:30 PM	0	13	1	0	14	**2**	0	5	0	7	**8**	24	0	0	**32**	0	0	0	0	0	53
05:45 PM	0	12	0	0	12	1	0	7	0	8	5	16	0	0	21	0	0	0	**1**	**1**	42
Total Volume	0	54	2	0	56	5	0	31	0	36	21	80	0	0	101	0	0	0	1	1	194
% App. Total	0	96.4	3.6	0		13.9	0	86.1	0		20.8	79.2	0	0		0	0	0	100		
PHF	.000	.750	.500	.000	.778	.625	.000	.705	.000	.750	.656	.769	.000	.000	.789	.000	.000	.000	.250	.250	.851



TRAFFIC DATA COLLECTION

File Name : Kershaw(Little Dude and Savannah)
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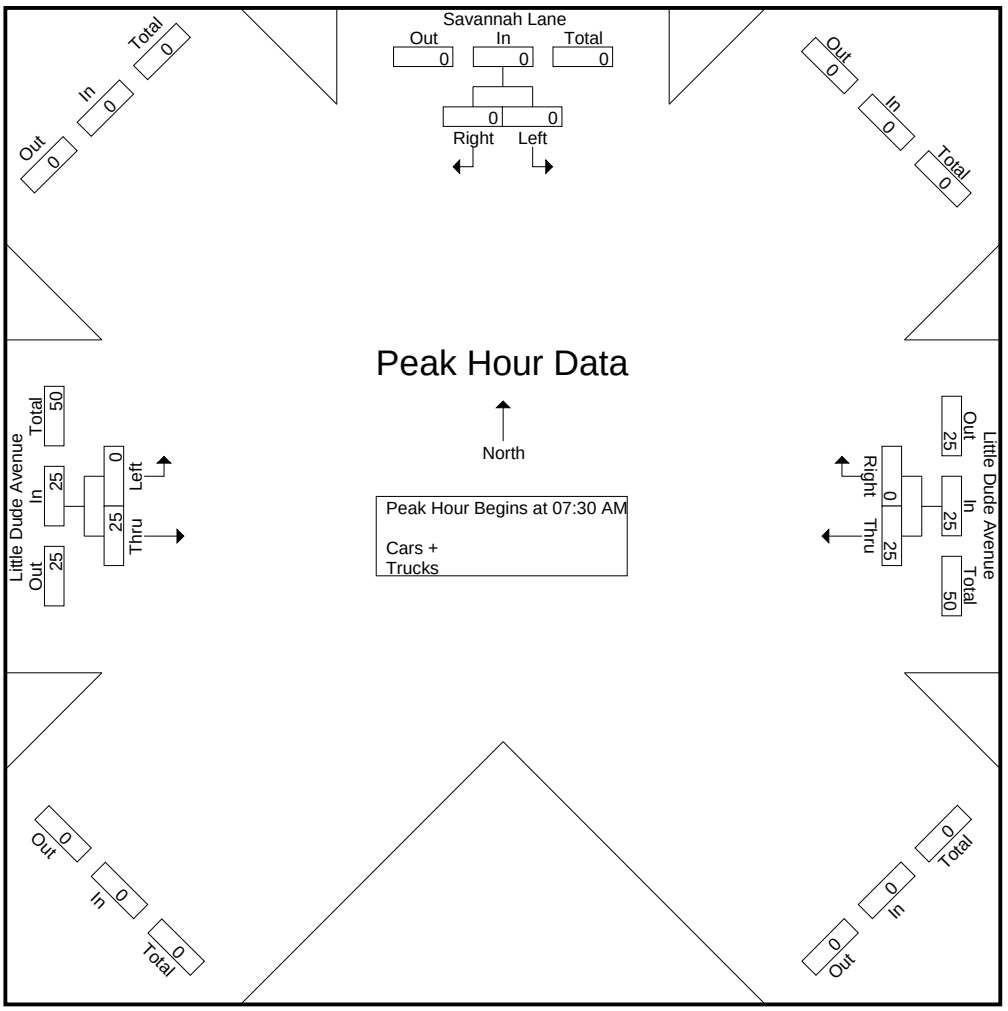
Groups Printed- Cars + - Trucks

	Savannah Lane Southbound			Little Dude Avenue Westbound			Little Dude Avenue Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
07:00 AM	0	0	0	0	4	4	7	0	7	11
07:15 AM	1	0	1	0	4	4	6	0	6	11
07:30 AM	0	0	0	0	8	8	6	0	6	14
07:45 AM	0	0	0	0	3	3	8	0	8	11
Total	1	0	1	0	19	19	27	0	27	47
08:00 AM	0	0	0	0	5	5	5	0	5	10
08:15 AM	0	0	0	0	9	9	6	0	6	15
08:30 AM	0	0	0	0	7	7	3	1	4	11
08:45 AM	1	0	1	0	1	1	3	0	3	5
Total	1	0	1	0	22	22	17	1	18	41
Grand Total	2	0	2	0	41	41	44	1	45	88
Apprch %	100	0		0	100		97.8	2.2		
Total %	2.3	0	2.3	0	46.6	46.6	50	1.1	51.1	
Cars +	2	0	2	0	37	37	42	1	43	82
% Cars +	100	0	100	0	90.2	90.2	95.5	100	95.6	93.2
Trucks	0	0	0	0	4	4	2	0	2	6
% Trucks	0	0	0	0	9.8	9.8	4.5	0	4.4	6.8

TRAFFIC DATA COLLECTION

File Name : Kershaw(Little Dude and Savannah)
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Start Date : 1/12/2023
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	Savannah Lane Southbound			Little Dude Avenue Westbound			Little Dude Avenue Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	0	0	0	8	8	6	0	6	14
07:45 AM	0	0	0	0	3	3	**8**	0	**8**	11
08:00 AM	0	0	0	0	5	5	5	0	5	10
08:15 AM	0	0	0	0	**9**	**9**	6	0	6	**15**
Total Volume	0	0	0	0	25	25	25	0	25	50
% App. Total	0	0		0	100		100	0		
PHF	.000	.000	.000	.000	.694	.694	.781	.000	.781	.833



TRAFFIC DATA COLLECTION

File Name : Kershaw(Little Dude and Savannah)
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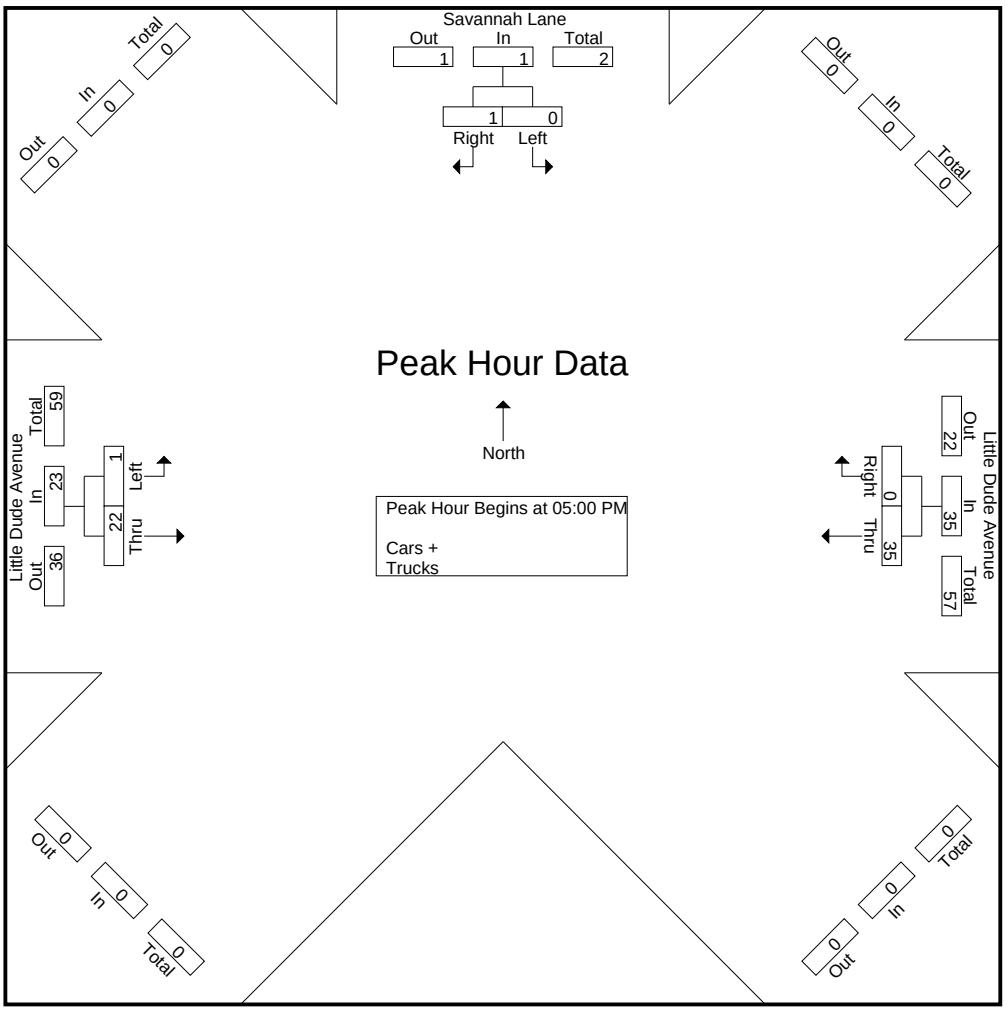
Groups Printed- Cars + - Trucks

	Savannah Lane Southbound			Little Dude Avenue Westbound			Little Dude Avenue Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
04:00 PM	2	0	2	0	9	9	10	1	11	22
04:15 PM	0	0	0	0	9	9	2	0	2	11
04:30 PM	0	0	0	0	3	3	4	0	4	7
04:45 PM	0	0	0	0	5	5	4	1	5	10
Total	2	0	2	0	26	26	20	2	22	50
05:00 PM	0	0	0	0	9	9	4	0	4	13
05:15 PM	0	0	0	0	12	12	4	0	4	16
05:30 PM	1	0	1	0	6	6	9	1	10	17
05:45 PM	0	0	0	0	8	8	5	0	5	13
Total	1	0	1	0	35	35	22	1	23	59
Grand Total	3	0	3	0	61	61	42	3	45	109
Apprch %	100	0		0	100		93.3	6.7		
Total %	2.8	0	2.8	0	56	56	38.5	2.8	41.3	
Cars +	3	0	3	0	60	60	41	3	44	107
% Cars +	100	0	100	0	98.4	98.4	97.6	100	97.8	98.2
Trucks	0	0	0	0	1	1	1	0	1	2
% Trucks	0	0	0	0	1.6	1.6	2.4	0	2.2	1.8

TRAFFIC DATA COLLECTION

File Name : Kershaw(Little Dude and Savannah)
Site Code :
Start Date : 1/12/2023
Page No : 2

	Savannah Lane Southbound			Little Dude Avenue Westbound			Little Dude Avenue Eastbound			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 05:00 PM										
05:00 PM	0	0	0	0	9	9	4	0	4	13
05:15 PM	0	0	0	0	**12**	**12**	4	0	4	16
05:30 PM	**1**	0	**1**	0	6	6	**9**	**1**	**10**	**17**
05:45 PM	0	0	0	0	8	8	5	0	5	13
Total Volume	1	0	1	0	35	35	22	1	23	59
% App. Total	100	0		0	100		95.7	4.3		
PHF	.250	.000	.250	.000	.729	.729	.611	.250	.575	.868

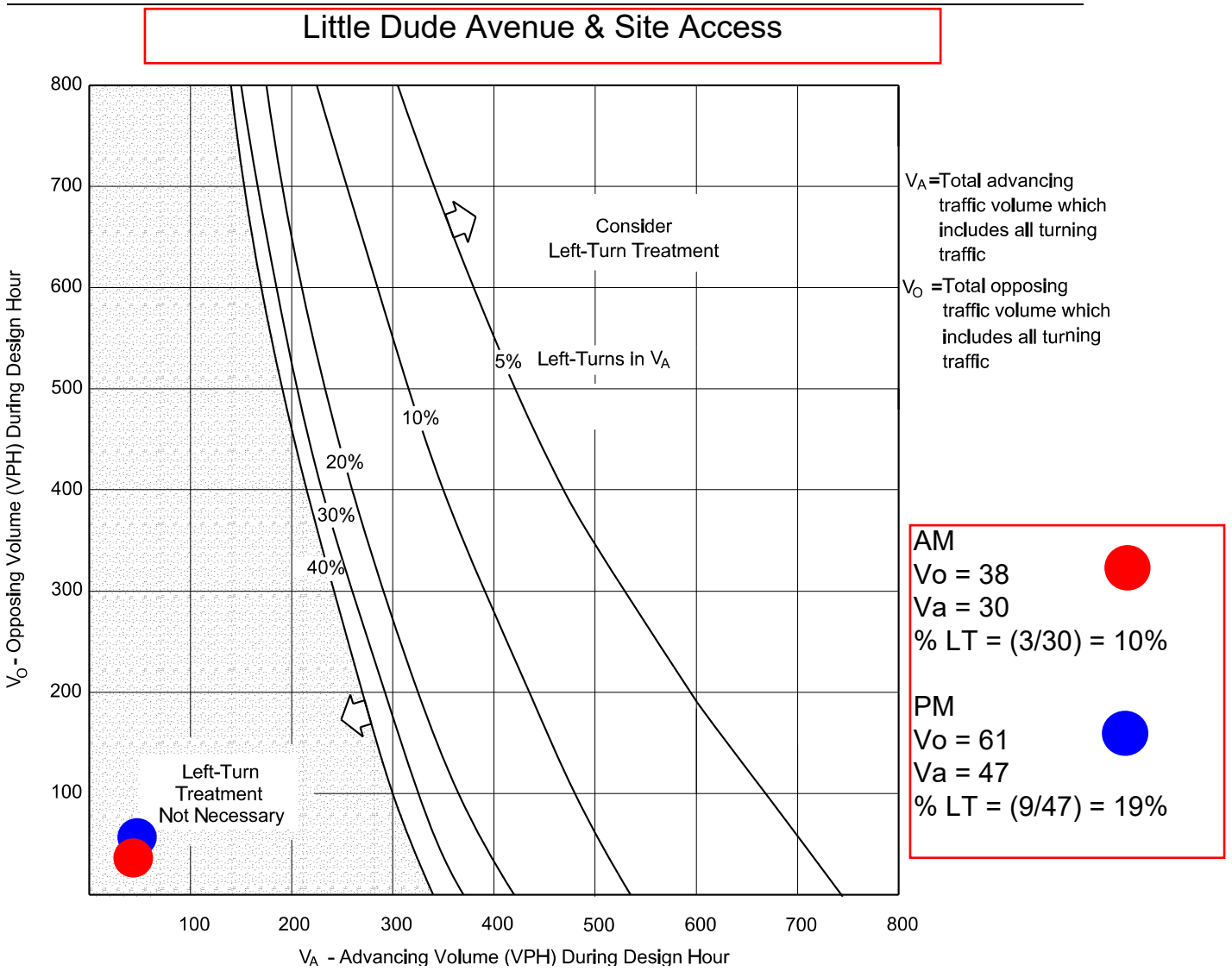


Historical Growth Calculation

Count Station	Location	ADTs					Avg. Annual % Change*
		2021	2020	2019	2018	2017	
29-0311	S-26	2,700	2,700	2,700	2,500	2,500	2%

APPENDIX B

TURN LANE ANALYSIS



Instructions:

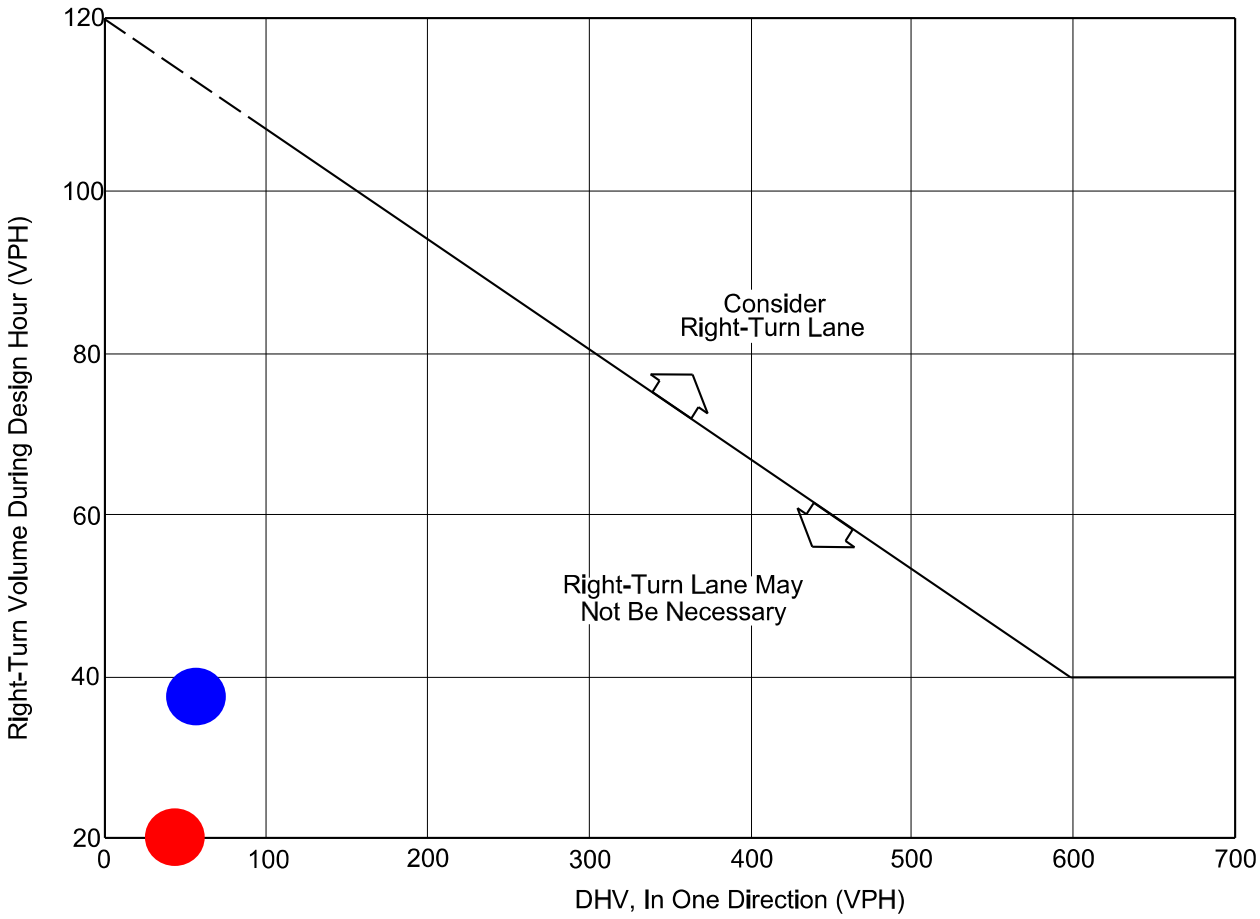
1. *The family of curves represents the percent of left turns in the advancing volume (V_A). The designer should locate the curve for the actual percentage of left turns. When this is not an even increment of 5, the designer should estimate where the curve lies.*

2. *Read V_A and V_O into the chart and locate the intersection of the two volumes.*

3. *Note the location of the point in #2 relative to the line in #1. If the point is to the right of the line, then a left-turn lane is warranted. If the point is to the left of the line, then a left-turn lane is not warranted based on traffic volumes.*

VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (45 mph)
Figure 9.5-F

Little Dude Avenue and Site Access



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

AM
DHV = 38
RT =11

PM
DHV = 62
RT = 37

Example

Given:

Design Speed	=	35 miles per hour
DHV	=	250 vehicles per hour
Right Turns	=	100 vehicles per hour

Problem: Determine if a right-turn lane is necessary.

Solution: To read the vertical axis, use 100 – 20 = 80 vehicles per hour. The figure indicates that a right-turn lane is not necessary, unless other factors (e.g., high crash rate) indicate a lane is needed.

GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS
Figure 9.5-A

APPENDIX C

SYNCHRO ANALYSIS REPORTS

EXISTING

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	2	37	24	1	56
Future Vol, veh/h	23	2	37	24	1	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	2	41	27	1	62

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	119	55	0	0	68	0
Stage 1	55	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	877	1012	-	-	1533	-
Stage 1	968	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	876	1012	-	-	1533	-
Mov Cap-2 Maneuver	876	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	886	1533	-
HCM Lane V/C Ratio	-	-	0.031	0.001	-
HCM Control Delay (s)	-	-	9.2	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	25	25	0	0	0
Future Vol, veh/h	0	25	25	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	28	28	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	28	0	-	0	56	28
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1585	-	-	-	952	1047
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	995	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	952	1047
Mov Cap-2 Maneuver	-	-	-	-	952	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	995	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1585	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	5	80	21	2	54
Future Vol, veh/h	31	5	80	21	2	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	6	89	23	2	60

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	165	101	0	0	112	0
Stage 1	101	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	826	954	-	-	1478	-
Stage 1	923	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	825	954	-	-	1478	-
Mov Cap-2 Maneuver	825	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	841	1478	-
HCM Lane V/C Ratio	-	-	0.048	0.002	-
HCM Control Delay (s)	-	-	9.5	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	22	35	0	0	1
Future Vol, veh/h	1	22	35	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	24	39	0	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	39	0	-	0	65	39
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	26	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1571	-	-	-	941	1033
Stage 1	-	-	-	-	983	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1571	-	-	-	940	1033
Mov Cap-2 Maneuver	-	-	-	-	940	-
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1571	-	-	-	1033
HCM Lane V/C Ratio	0.001	-	-	-	0.001
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

NO-BUILD

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	2	40	26	1	61
Future Vol, veh/h	25	2	40	26	1	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	2	44	29	1	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	129	59	0	0	73	0
Stage 1	59	-	-	-	-	-
Stage 2	70	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	865	1007	-	-	1527	-
Stage 1	964	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	864	1007	-	-	1527	-
Mov Cap-2 Maneuver	864	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	873	1527	-
HCM Lane V/C Ratio	-	-	0.034	0.001	-
HCM Control Delay (s)	-	-	9.3	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	27	27	0	0	0
Future Vol, veh/h	0	27	27	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	30	30	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	30	0	-	0	60	30
Stage 1	-	-	-	-	30	-
Stage 2	-	-	-	-	30	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1583	-	-	-	947	1044
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1583	-	-	-	947	1044
Mov Cap-2 Maneuver	-	-	-	-	947	-
Stage 1	-	-	-	-	993	-
Stage 2	-	-	-	-	993	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1583	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	5	87	23	2	58
Future Vol, veh/h	34	5	87	23	2	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	6	97	26	2	64

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	178	110	0	0	123	0
Stage 1	110	-	-	-	-	-
Stage 2	68	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	812	943	-	-	1464	-
Stage 1	915	-	-	-	-	-
Stage 2	955	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	811	943	-	-	1464	-
Mov Cap-2 Maneuver	811	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	954	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	826	1464	-
HCM Lane V/C Ratio	-	-	0.052	0.002	-
HCM Control Delay (s)	-	-	9.6	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	24	38	0	0	1
Future Vol, veh/h	1	24	38	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	27	42	0	0	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	42	0	-	0	71	42
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	29	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1567	-	-	-	933	1029
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	994	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1567	-	-	-	932	1029
Mov Cap-2 Maneuver	-	-	-	-	932	-
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	994	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1567	-	-	-	1029
HCM Lane V/C Ratio	0.001	-	-	-	0.001
HCM Control Delay (s)	7.3	0	-	-	8.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

BUILD

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	14	40	33	5	61
Future Vol, veh/h	46	14	40	33	5	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	16	44	37	6	68

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	143	63	0	0	81	0
Stage 1	63	-	-	-	-	-
Stage 2	80	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	850	1002	-	-	1517	-
Stage 1	960	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	847	1002	-	-	1517	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	960	-	-	-	-	-
Stage 2	939	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	879	1517	-
HCM Lane V/C Ratio	-	-	0.076	0.004	-
HCM Control Delay (s)	-	-	9.4	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	27	11	3	27	0	33	0	8	0	0	0
Future Vol, veh/h	0	27	11	3	27	0	33	0	8	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	30	12	3	30	0	37	0	9	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	30	0	0	42	0	0	72	72	36	77	78	30
Stage 1	-	-	-	-	-	-	36	36	-	36	36	-
Stage 2	-	-	-	-	-	-	36	36	-	41	42	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1583	-	-	1567	-	-	919	818	1037	912	812	1044
Stage 1	-	-	-	-	-	-	980	865	-	980	865	-
Stage 2	-	-	-	-	-	-	980	865	-	974	860	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1583	-	-	1567	-	-	917	816	1037	903	810	1044
Mov Cap-2 Maneuver	-	-	-	-	-	-	917	816	-	903	810	-
Stage 1	-	-	-	-	-	-	980	865	-	980	863	-
Stage 2	-	-	-	-	-	-	978	863	-	966	860	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.7	9	0
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	938	1583	-	-	1567	-	-	-
HCM Lane V/C Ratio	0.049	-	-	-	0.002	-	-	-
HCM Control Delay (s)	9	0	-	-	7.3	0	-	0
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	13	87	46	16	58
Future Vol, veh/h	48	13	87	46	16	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	53	14	97	51	18	64

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	223	123	0	0	148	0
Stage 1	123	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	765	928	-	-	1434	-
Stage 1	902	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	755	928	-	-	1434	-
Mov Cap-2 Maneuver	755	-	-	-	-	-
Stage 1	902	-	-	-	-	-
Stage 2	912	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	1.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	786	1434	-
HCM Lane V/C Ratio	-	-	0.086	0.012	-
HCM Control Delay (s)	-	-	10	7.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	24	37	9	38	0	22	0	5	0	0	1
Future Vol, veh/h	1	24	37	9	38	0	22	0	5	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	27	41	10	42	0	24	0	6	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	42	0	0	68	0	0	113	112	48	115	132	42
Stage 1	-	-	-	-	-	-	50	50	-	62	62	-
Stage 2	-	-	-	-	-	-	63	62	-	53	70	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1567	-	-	1533	-	-	864	778	1021	862	759	1029
Stage 1	-	-	-	-	-	-	963	853	-	949	843	-
Stage 2	-	-	-	-	-	-	948	843	-	960	837	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1567	-	-	1533	-	-	858	772	1021	852	753	1029
Mov Cap-2 Maneuver	-	-	-	-	-	-	858	772	-	852	753	-
Stage 1	-	-	-	-	-	-	962	852	-	948	837	-
Stage 2	-	-	-	-	-	-	940	837	-	954	836	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	9.2	8.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	884	1567	-	-	1533	-	-	1029
HCM Lane V/C Ratio	0.034	0.001	-	-	0.007	-	-	0.001
HCM Control Delay (s)	9.2	7.3	0	-	7.4	0	-	8.5
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

APPENDIX D

SIMTRAFFIC ANALYSIS REPORTS

Intersection: 3: Fork Hill Road & Little Dude Avenue

Movement	WB
Directions Served	LR
Maximum Queue (ft)	34
Average Queue (ft)	12
95th Queue (ft)	32
Link Distance (ft)	710
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Little Dude Avenue & Savannah Lane

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Intersection: 3: Fork Hill Road & Little Dude Avenue

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	37	3
Average Queue (ft)	17	0
95th Queue (ft)	35	3
Link Distance (ft)	710	938
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Little Dude Avenue & Savannah Lane

Movement	SB
Directions Served	LR
Maximum Queue (ft)	13
Average Queue (ft)	1
95th Queue (ft)	6
Link Distance (ft)	884
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Intersection: 3: Fork Hill Road & Little Dude Avenue

Movement	WB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	13
95th Queue (ft)	32
Link Distance (ft)	710
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Little Dude Avenue & Savannah Lane

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Intersection: 3: Fork Hill Road & Little Dude Avenue

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	32	3
Average Queue (ft)	17	0
95th Queue (ft)	34	3
Link Distance (ft)	710	938
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Little Dude Avenue & Savannah Lane

Movement	SB
Directions Served	LR
Maximum Queue (ft)	12
Average Queue (ft)	0
95th Queue (ft)	5
Link Distance (ft)	884
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Intersection: 3: Fork Hill Road & Little Dude Avenue

Movement	WB
Directions Served	LR
Maximum Queue (ft)	38
Average Queue (ft)	21
95th Queue (ft)	35
Link Distance (ft)	679
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Site Access/Savannah Lane & Little Dude Avenue

Movement	WB	NB
Directions Served	LTR	LTR
Maximum Queue (ft)	4	40
Average Queue (ft)	0	15
95th Queue (ft)	3	32
Link Distance (ft)	1350	724
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 3: Fork Hill Road & Little Dude Avenue

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	47	25
Average Queue (ft)	21	2
95th Queue (ft)	38	12
Link Distance (ft)	679	938
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 6: Site Access/Savannah Lane & Little Dude Avenue

Movement	WB	NB	SB
Directions Served	LTR	LTR	LTR
Maximum Queue (ft)	2	20	12
Average Queue (ft)	0	10	1
95th Queue (ft)	2	24	7
Link Distance (ft)	1350	724	886
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

1. Overview of Traffic Impact Analysis (TIA) Report

Impact Designs submitted a traffic impact analysis report for single family housing development that will access Little Dude Avenue just east of Fork Hill Road and west of US 601 near Kershaw. Allen Reid is the Engineer on Record (EOR) for producing the detailed traffic study. Two intersections were analyzed for impacts – Fork Hill Road (S-26) at Little Dude Avenue (S-564) and Little Dude Avenue at Savannah Lane/ Site Access. The site access is proposed to align with Savannah Lane onto Little Dude Avenue. The overall report contained existing, no-build, and build traffic volumes for all study locations and good breakdown of volumes and distribution among all study locations. The analysis period for build out year and not build out year +1 year (quick check on volumes to build + 1 will have no impacts on outcome of the report). Primary concern is the sight distance verification for the proposed access located on a horizontal curve and preservation of the sight line through the subdivision property and right to way.

2. Items of Interest in the TIA Report

The TIA document was redlined with marks highlighting interest items below (pages noted below reflect pdf pages and not report pages):

- Page 5 – Did not analyze per UDO Build + 1 year
- Page 6 – Did not analyze per UDO Build + 1 year
- Page 6 – Need to state that sight distance and spacing will be verified by site engineer or included in this report.
- Page 10 – Trip Generation used AM/PM Peak Hour Adjacent Street Traffic and not Peak Hour Generator. Peak Hour Generator does show an increase of traffic generator but does not change outcome of report.

3. Checklist Comments

Attached is a TIA checklist that reviews all submitted information for proper TIA submittal. The analysis period did not reflect UDO 6.8.2 D for analysis year after development which would be 2027 (Build plus 1 year). The TIA did not review driveway sight distance (usually covered under site plan permitting).

4. Recommendations

Verify sight distance for access point and preservation of sight lines through subdivision property and right of way (clear vegetation and no new landscaping in the sight line area).

a Different Kind of Chemistry

Wednesday, September 6, 2023

Federal Express Delivery (Airbill 7733 2398 7504)

Lancaster County
Planning Department
101 North Main Street, Suite 108
Lancaster, SC 29720

Dear Matthew Blaszyk:

Our neighbor Jerome Watts of Fab-Master Fabricators is joining SMC Global to express strong opposition to rezoning application SD 2022-2005, location 39.47 acres at southeast corner of Fork Hill Road and Little Dude Avenue in Kershaw (TM #0141-00-024.00).

Commercial drivers travel Little Dude Avenue twenty-four hours, Monday through Friday to carry 40' trailers from Fork Hill Road, both two lane roads. The entrance to Little Dude Avenue from Highway 601 is a ninety-degree turn and drivers avoid the intersection due to safety hazards from a bridge and ravine located at the entrance to Little Dude Avenue. SMC anticipates both supplier and customer shipping volumes of specialty chemicals to increase significantly soon.

Furthermore, we are concerned regarding the lack of ample water supply to Little Dude Avenue to support our industrial operations. While we support Kershaw's local community and additional housing, during two recent attempts to expand our manufacturing infrastructure at 369 Little Dude Ave, the Lancaster County Water and Sewer District declined to install an additional water line needed to supply our fire suppression equipment and future facility expansion requirements. An approval of the rezoning application to develop The Sands at Kershaw will be tantamount to supporting our tapping water lines to supply our current and future industrial needs. The water consumption from the planned seventy-six family houses may reduce the water pressure servicing our existing fire suppression systems to unacceptable levels. Minimally, we request verification from the county that our current water pressure will not be negatively impacted.

Both Jerome Watts and I look forward to attending Tuesday, September 19 to oppose.

Sincerely,

Heath J. Brewer
Sr. Site Manager
Kershaw, SC

70 West 40th Street, 2nd Floor • New York, NY 10018 USA • Tel: 646.366.0400 • Fax: 646.366.0595
info@smc-global.com
WWW.SMC-GLOBAL.COM

From: Sean Carter
To: Jennifer Bryan
Subject: RE: Kershaw, SC - Rezoning Application, Copy Request
Date: Wednesday, November 8, 2023 2:59:40 PM
Attachments: image001.png
image002.png
image003.png
image005.png

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—IT Helpdesk, lancastersc.supportsystem.com

Hi Jennifer. Our Sr. Site Manager Heath Brewer requests an update on the rezoning application submitted to develop the SE Corner of Fork Hill Rd and Little Dude Ave, Kershaw, SC. The project "The Sands" is a proposed subdivision containing 76 single family detached homes under application by Earl Coulston.

Although not approved by the Planning Commission, we continue to observe developer's land clearing and utility installations – however, no road or highway improvements.

Concerned, we renew our objection.

Thanks, and best,

Sean Carter
Asst Plant Controller

SMC GLOBAL
a Different Kind of Chemistry

A 369 Little Dude Ave
Kershaw, SC 29067
M 803-577-9183
O 803-903-4506
WWW.SMC-GLOBAL.COM

CTPAT

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From: Jennifer Bryan <jbryan@lancastersc.net>
Sent: Tuesday, August 29, 2023 2:47 PM
To: Sean Carter <SCarter@smc-global.com>
Subject: RE: Kershaw, SC - Rezoning Application, Copy Request

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Jennifer Bryan, *Admin. Assistant*
Planning

Lancaster County Government
P.O. Box 1809
Lancaster, SC 29720

P:(803) 285-6005 F: (877) 636-7963
jbryan@lancastersc.net

www.mylancastersc.org

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From: Sean Carter <SCarter@smc-global.com>
Sent: Tuesday, August 29, 2023 2:44 PM
To: Jennifer Bryan <jbryan@lancastersc.net>
Subject: Kershaw, SC - Rezoning Application, Copy Request

The System couldn't recognize this email as this is the first time you received an email from this sender SCarter@smc-global.com

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—IT Helpdesk, lancastersc.supportsystem.com

Hi Jennifer. Please be so kind to send me a copy of the rezoning application Proposed Public Hearing Notice Subdivision (SD 2022-2005) along Little Dude Ave.

Thanks, and best,

Sean Carter
Asst Plant Controller

a Different Kind of Chemistry

A 369 Little Dude Ave
Kershaw, SC 29067
M 803-577-9183
O 803-903-4506
WWW.SMC-GLOBAL.COM

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Agenda Item Summary

Ordinance # / Resolution #: SD-2023-0325 Jasmine Hills
Contact Person / Sponsor: M. Blaszyk
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider:
New TRC comments for revised plat have not yet been completed; they will be provided with the 2/20/24 meeting agenda.

ATTACHMENTS:

Description	Upload Date	Type
Application	12/4/2023	Exhibit
Location Map	12/4/2023	Exhibit
TRC Comments 12/5/23	1/31/2024	Exhibit
Revised Plat	1/31/2024	Exhibit
Applicant response to TRC Comments	1/31/2024	Exhibit
TIA	12/4/2023	Exhibit

Planning Department
P.O. Box 1809, 101 N. Main Street, Lancaster, SC 29721
Phone: 803.285.6005, planning@lancastercountysc.net
www.mylancastersc.org

MAJOR SUBDIVISION PRELIMINARY PLAT

WHEN TO USE THIS PROCESS:

Use the attached checklist for subdivisions that

- Create 6 or more lots for any type of development; or
- Create new streets or alleys; or
- Increase the number of lots in a major subdivision previously approved by Lancaster County

APPLICATION AND APPROVAL PROCESS

- **Sketch Plan Application**: Complete the Sketch Plan review process prior to submission of a Major Subdivision Preliminary Plat. Sketch Plans are usually a one−sheet conceptual drawing. Refer to the **Sketch Plan Checklist** for additional information.
- **Required Pre-Application Conference**: Please call to schedule a Pre−Application Conference prior to submitting a Preliminary Plat application.The conference will be used to provide an overview of applicable standards and the approval process, as well as additional feedback on your sketch.
- **Traffic Impact Analysis**: Submit a TIA to County and SCDOT for review and Approval. This process is initiated by submitting a scoping request to County and SCDOT for approval prior to TIA preparation. Please note TIAs are reviewed on behalf of the County by consulting traffic engineers. Applicants are responsible for payment of consultant's fees prior to TIA review, based on an estimate prepared by County Engineering staff.

Prepare the Preliminary Plat using the attached checklist (see below) and the current UDO available on our website. Project can be submitted online by creating an account at https://evolvepublic.infovisionsoftware.com/lancaster/?portal=project

SUBMIT THE FOLLOWING ITEMS FOR PLAN REVIEW:

- Application with contact and project information (see p. 2)
- Fees: After submitting documents, you will receive an email with fees due and forms of payment accepted, along with a link to online payment portal. Plans will not be routed for review until payment and hard copies are received (if needed- see below).
- Two (2) paper copies of Preliminary Plat and Supporting Data is required for all submittals over 10 pages.

Plans will be reviewed by County staff and a notice of revision, if required, will be sent to the designated contact person. Prior to the Planning Commission meeting, staff will review the plan with the Technical Review Committee. After Planning Commission approves the plat, you will receive a notification that you can print the stamped digital set from Evolve Project Portal. Upon the approval of a Preliminary Plat, detailed plans for street construction, utility line installations,and similar approvals shall be included in detailed **Civil Construction Plans**.

PROJECT INFORMATION

Project Address/Location: Barberville Rd. Both sides of Pettus Rd.

Tax Map ID/Parcel No.: 0003-00-058.00

Project Description: Residential subdivision

Applicant Name: Rass Investments, LLC.

Address: 2545 Kennedy Drive, Corona, CA 92879

Phone: (909) 379-3889 Email: m.altwairgi@gmail.com

Property Owner Name: Rass Investments, LLC.

Address: 2545 Kennedy Drive, Corona, CA 92879

Phone: (909) 379-3889 Email: Hakim@rassinvt.com

Other Project Contacts

Name: Mohammed Fahad Altwairgi

Address:

Phone: Email: m.altwairgi@gmail.com

Name:

Address:

Phone: Email:

Applicant Signature: Date: 10/25/2023

Owner Signature: Date: 10/25/2023

Owner Signature: Date:

(For additional owners, attach copies of this page with required signatures)

PRELIMINARY PLAT CHECKLIST

The following identifies information required on Preliminary Plat drawings; however, this checklist should not be used as a substitute to reviewing the UDO.

GENERAL PROJECT INFORMATION:

Please identify the following general information on the site plan drawing either within a notes section or on the plat drawing itself, as appropriate.

✓ **1.** Proposed name of project.

✓ **2.** Name, mailing address, email address, and phone number of the owner and/or developer and designer of the site plan.

✓ **3.** Map scale using appropriate engineer's scale, north arrow, and date.

✓ **4.** Vicinity map (1" = 1 mile min. scale).

✓ **5.** Total acreage to be developed.

✓ **6.** Boundaries of the tract to be developed with all bearings and distances. ~~At least two points of the survey must be tied to SC geodetic control points [See State Plane Coordinate Checklist]~~ Horizontal coordinates (NAD 83) based on SC VRS network.

✓ **7.** Proposed use of all lots to be used. See "zoning considerations" section above. Be sure to designate any lots proposed to be used for uses other than single−family residential.

✓ **8.** Tax map number.

✓ **9.** Zoning district classification and, if applicable, overlay zone(s).

✓ **10.** Land use, zoning district classification, and tax map number of adjacent properties, names of adjacent developments, and owners of adjoining parcels.

✓ **11.** Total number of lots and layout of all lots, including building setback lines, scaled dimensions, area in square feet, lot numbers (if multiple lots), and utility easements with width and use.

12. Location and dimensions of all proposed buildings including number of stories and total square footage by use.

✓ **13.** Building setbacks and proposed impervious surface calculation.

14. In case of re−subdivision, submit a copy of existing plat.

EXISTING CONDITIONS:

Please identify the following existing conditions on the plan drawing that may be located on the subject property or adjacent areas.

✓ **1.** Topography by contours at vertical intervals of not more than five feet. All elevations shall refer to Mean Sea Level Datum (if available).

✓ **2.** Show location and right−of−way of existing streets, curb cuts, and driveways within 300 feet of the site.

✓ **3.** Show location and footprint of existing buildings on adjacent parcels.

✓ **4.** Show location of railroads and utility lines either on or adjacent to the property to be developed. Specify whether utility lines are in easements or rights−of−way and show location of poles/towers.

✓ **5.** Size and location of existing sewers, water mains, storm drains, culverts or other underground facilities within the street or within the right−of−way of streets or roads

adjoining the tract. Show ditches, swales, and drainage easements adjacent to the proposed project.

✓ **6.** Location, size, and use of any existing structures on the subject property that will remain on the site

✓ **7.** Location of city limit lines, if adjacent to subject property.

8. Show location of nearest hydrant. Spacing should be 500 feet single−family residential (this distance is measured in the direction of fire truck travel).

✓ **9.** The Fire Department will need access to within 150 feet of all points of the building.

✓ **10.** Location of land subject to flooding and nearest 100−year flood zone and elevation.

✓ **11.** Location of existing or planned public parks, schools, greenways, trails, or other major public amenity located within ½ mile of the development site. See sheet PAA1.0

ENVIRONMENTAL CONSIDERATIONS:

ENVIRONMENTALLY SENSITIVE LANDS

✓ **1.** Depict any water resources subject to the UDO Chapter 8, Natural Resources Protection, and comply with all requirements laid out in the aforementioned section.

✓ **2.** Depict any prohibitive/severe steep slope areas (greater than or equal to 3H:1V) and take into account the limitations on disturbance when designing the project.

✓ **3.** Depict stormwater management areas.

TREE RETENTION

1. Identify tree canopy retention areas.

2. Show trees that require protection. All trees within limit of disturbance area to be removed.

LANDSCAPING

✓ • Show landscaping for required site landscaping areas. See sheet L1.0 and L1.1

OPEN SPACE

✓ **1.** Indicate if all or a portion of the site has been designated as an Open Space.

✓ **2.** Calculate required common open space acreage.

3. Show any trails and greenways on the Lancaster County Carolina Thread Trail Master Plan that developer is required to construct. N/A

✓ **4.** Show all existing or planned public parks, schools, greenways, existing trails, or other major public amenities within ½ mile of the site, and pedestrian connections provided by the developer to those areas. Park space shown on C2.0

INFRASTRUCTURE CONSIDERATIONS:

GRADING, STORMWATER, AND UTILITY SYSTEM

Please identify the following proposed grading, stormwater, and utility system improvements.

✓ **1.** Preliminary plan for sanitary sewers showing the location of manholes and points of discharge. Indicate direction of flow.

✓ **2.** Preliminary plan for storm sewer system showing the location of outlets and direction of flow.

✓ **3.** Preliminary plan of water supply system

✓ **4.** All proposed easements.

✓ **5.** Submit written verification to serve from all non−county utility service providers (gas, telephone, cable, and water and sewer district).

✓ **6.** Proposed major contour changes in areas where substantial cut and/or fill is to be done.

Roads, Bridges, and Public Ways (UDO 6.13, pg. 21)

General design criteria are explained in two primary places in the UDO—Chapter 6 and Appendix C. Please refer to both when designing the community. The below is a brief summary of some of the "big picture" points, but those two sections in the Zoning Ordinance have many other requirements to which you will need to refer.

✓ **1.** Connectivity is required within the neighborhood, and between the neighborhood and adjacent neighborhoods or other lands. Additionally, a second entrance is required for more than 100 units.

✓ **2.** Traffic calming measures such as minimum street widths, short block lengths, on−street parking, controlled intersections, and roundabouts should be used per the UDO.

✓ **3.** Sidewalks are required both internally, and in some cases, externally to the development and must be at least five feet wide.

4. Street trees are required to be planted in accordance with the UDO.

5. See Chapter 6: Subdivision and Infrastructure Standards and Appendix C – Manual of Specifications and Standard Details (MSSD), generally for road specifications, cross sections, and other important information. For example:

✓ **a.** Cul−de−sacs should be avoided except as described in the UDO.

✓ **b.** Gated communities have additional requirements as laid out in the UDO.

c. Curb and gutter requirements are applicable in some districts as designated in the UDO.

✓ **6.** Traffic Impact Analysis, refer to Chapter 6, Subdivision and Infrastructure Standards.

LOT DESIGN

Identify a lot configuration that complies with the following standards.

✓ **1.** Lot designed to comply with the UDO design requirements

✓ **a.** Lots cannot be divided by City limit lines or zoning districts.

✓ **b.** Through lots are prohibited.

✓ **c.** Flag lots are prohibited except where they are necessary to eliminate access onto arterial or collector roadways.

✓ **d.** Side lot lines must be at right angles to straight street lines and radial to curved sidewalk and street lines.

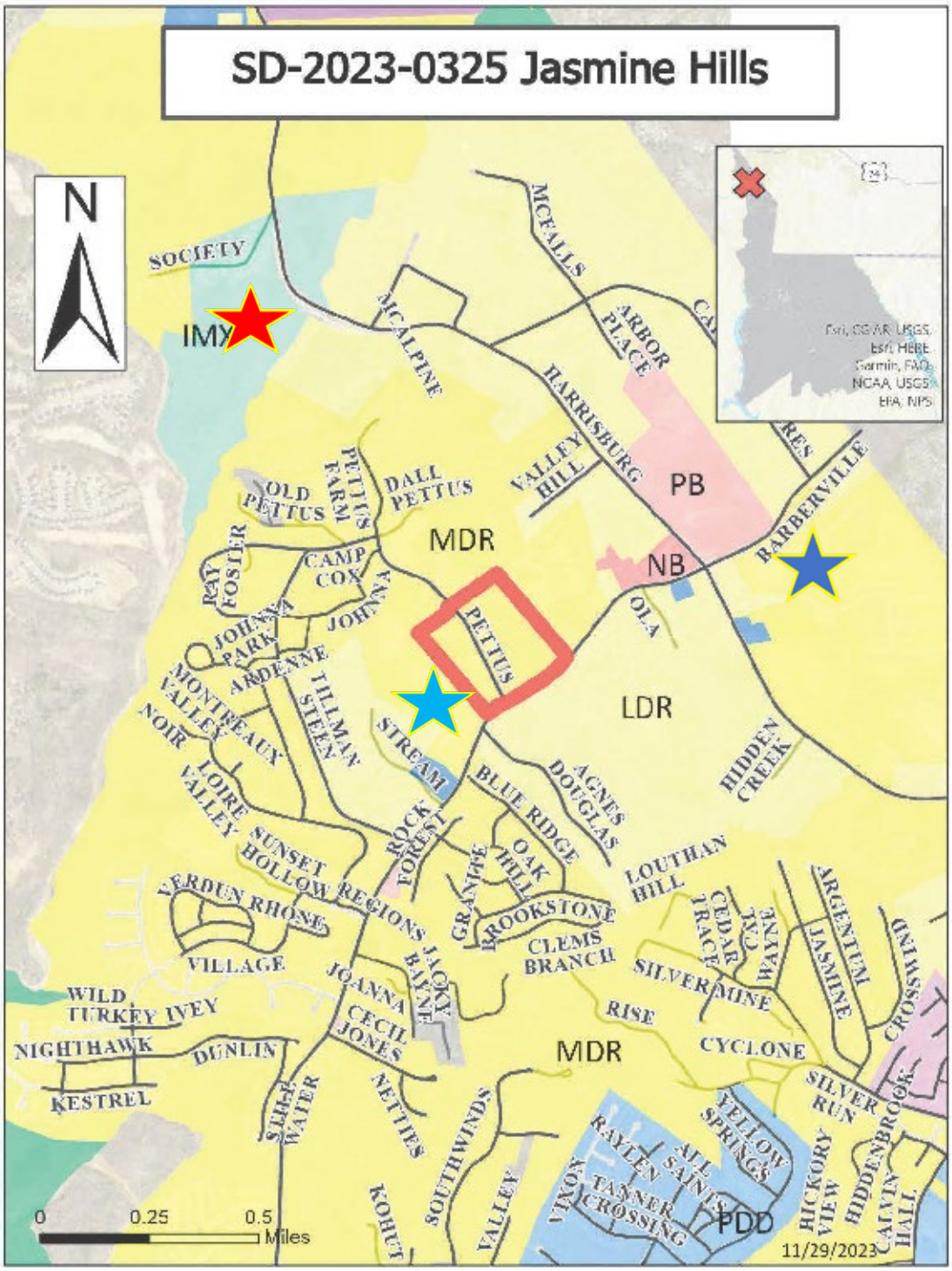
USE-SPECIFIC STANDARDS

The UDO has standards associated with specific uses in order to minimize negative impacts and/or to help shape the design of a specific use. Design the proposed site plan in compliance with any applicable use−specific standards.

OVERLAY DISTRICTS

If an overlay district exists, be sure to address the applicable standards for it in the site design.

- ☐ **McWhorter Field Aviation Overlay** Please refer to the UDO for allowed uses and associated development criteria.
- ☐ **Carolina Tree Splitter Overlay**
- ☐ **Carolina Thread Trail Overlay**
- ☐ **Highway Corridor Overlay**
- ☐ **Equestrian Oriented Subdivision Overlay**



Lancaster County
South Carolina

Proposal:
Preliminary Plat: 75 lots

Subject Property

Covington North

Sugar Creek Development

Preserve at Barber Rock

Lancaster County
Planning Department
P. O. Box 1809
Lancaster, SC 29721
803.285.6005
planning@lancastercountysc.net

December 05, 2023

Hao-Ming Chen
Chao & Associates, Inc.
7 Clusters Court
Columbia, SC 29210

Project Number	20230325
Project Name	Jasmine Hills Subdivision
Location	Barberville Road
Stage	Preliminary Plat
Parcel(s)	
Status	Conditional

Dear: Hao-Ming Chen

This letter is to confirm CONDITIONAL APPROVAL of your Preliminary Plat plans by the Lancaster County Technical Review Committee (TRC).

Sincerely,

Chanda Kirkland

Chanda Kirkland, Development Service Coordinator
Lancaster County Government
101 N Main St
Lancaster, SC 29720
P: (803) 416-9390

Plan Review Comments

County Engineer - Stephen Blackwelder - 8035482406 — Approved
sblackwelder@lancastersc.net

Review Comments:

General Comments:
1. More detailed comments can be provided once the construction documents are developed. The preliminary nature of this plan does not provide adequate detail to formally comment, but the following are items of note from the information given and a visit to the site to determine existing conditions.
2. A Traffic Impact Analysis (TIA) is in Evolve. We will begin the process for the review by our third party traffic engineer (ICE). Stephen will get a price for their review and forward that amount through Evolve to the development team. Once the review fee is paid, ICE will conduct the review. This typically takes 3 weeks, but may be a bit delayed if this occurs over the holidays.
a. Any improvements agreed upon as a result of the final TIA will need to be included in the civil plan set. Coordination of these improvements with the Pettus Pond development may be needed as the two projects develop.
3. There appears to be one stream crossing in the latest proposed plan. Any impacts to wetlands and/or stream crossings will need to be permitted through the US Army Corp of Engineers. This can be a lengthy process.
4. A survey to determine the stream and wetlands will need to be conducted to locate and categorize the potential stream on this parcel.
5. Per Lancaster County Water and Sewer District policy- this subdivision cannot be approved for construction until downstream sewer infrastructure is in place and the notice of capability and capacity from the LCWSD is obtained. It is our understanding that significant upgrades to a sewer pump station are needed to gain the sewer capacity needed for this proposed project. If you have a letter from LCSWD stating there is capability and capacity, please upload to Evolve.
6. Sheet PAA1.0- we have never seen this type of sheet before- what is its purpose?

E911 Address - Sandra Burton - (803) 416-9325 — Conditional
sburton@lanc911.com

Review Comments:

Please note location of mail Kiosk(s)
Submit road names for consideration to addresser@lanc911.com
Will road 1B be named Juneberry Pl if it is connecting into the Preserve at Barber Rock?
Jasmine Hill is acceptable as a subdivision name
A CAD file, in a 2010 version, showing lot lines and roadways, will need to be sent to addresser@lanc911.com at Civil Phase.

Fire Marshal - John Magette - 8032838888 — Approved
jmagette@lancastersc.net

Review Comments:

1. The locations of the fire hydrants in the cul de sacs are not typical. Generally they are in the beginning of the bulb, not the end of the cul de sac. If changes are made to the water plans we will need to look at the plan again.

LC Water & Sewer District - Erin Evans - 8032856919 — Conditional
eevans@lcwasd.org

Review Comments:

LCWSD is a separate entity from the County. We have our own submittal requirements. Please check our website, www.lcwasd.org, under the Developers tab for our policies and procedures.

The developer must submit 2 sets of hard copy water and sewer plans directly to LCWSD, adhering to the LCWSD Water & Wastewater Extension Policy.

*Waterlines not allowed outside the road RoW.

Planning - Matthew Blaszyk - 803-285-6005 **Conditional**
mblaszyk@lancastersc.net

Review Comments:

- The internal landscaping plan is missing. UDO section 7.1.3 requires- 1 Canopy Tree for every 40 feet of street frontage. Spacing: Maximum of 50 feet on-center. Location: In Planting Strip (5-foot minimum width)*

o * Understory Trees may be substituted for Canopy Trees in existing development with planting strips less than 5 feet wide or tree wells less than 25 square feet.

- Please clarify what the “Public Amenity Area” is entailing on page PAA1.0 of the submitted plans.

o This is more commonly seen in public parks, attractions, not developments.

- Add a block length diagram to the provided plans. One was provided on the recent sketch plan submittals but not included in the preliminary plat.

- Label the lot area for the proposed lots on the plan.

- Please show the existing overhead electrical easements on the existing conditions portion of the plan.

LC School District - David Small - (803) 286-6972 **No Review Done**
David.Small@lcsd.k12.sc.us

Review Comments:

The school district did not input any comments. -Chanda

SCDOT - David Gamble - (803) 385-4280 **Conditional**
GambleDD@scdot.org

Review Comments:

Widen Pettus Farm Road to include 10’ lanes and 2’ paved shoulders.

A TIA will be required to determine if any turn lanes are needed for this subdivision.

Coordination with the adjacent developer should be made so construction only has to be done one time on Pettus and Barberville.

Impact Fee - Chanda Kirkland - 803-416-9390 **Approved**
ckirkland@lancastersc.net

Review Comments:

This project is located in the Indian Land Fire District service area and Lancaster County School District, the following impact fees apply:

The Lancaster County Service Impact fee for each housing unit is $2,109.00.

Fees will be collected at the time of building permit issuance. Should you wish to arrange prepayment that can be coordinated after you receive final plat approval. This is only an estimate and not an invoice for payment.

Development Impact fees increase July 1. If you have any questions or would like further information on the Development Impact fee you can contact me.

Major Subdivision Preliminary Plat

For

Jasmine Hills Subdivision

Near Indian Land, in Lancaster County, SC 29707

Rass Investments, LLC.

2545 Kennedy Drive, Corona, CA 92879

Tel: (909) 379-3889

Email: m.altwairgi@gmail.com

Contact: Mr. Abdulhakim BenSufia

by:

Chao Engineering, Inc.

Consulting Engineers

C & A #: 707909B-22

Utility Provider

Water and sewer Provider:
Lancaster County Water and Sewer District (LCWSD)
PO Box 1009
Lancaster, SC 29721
(803) 285-6919

Storm Drainage Provider:
Lancaster County
8451 Charlotte Highway
Indian Land, SC 29707
(803) 286-3607

Electric Provider:
Duck Energy
P.O. Box 1090
Charlotte, NC 28201
(800) 653-5307

Gas Provider:
Lancaster County Natural Gas
1010 Kershaw Camden Highway
Lancaster, SC 29720
(803) 285-2045

Communication Provider:
Charter Communications
3140 W. Arrowood Rd
Charlotte, NC 28273
(704) 378-2267

Comporium
P.O. BOX 470
Rock Hill, SC 29731
(888) 403-2667

Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CHAO ENGINEERING, INC. No. C06325

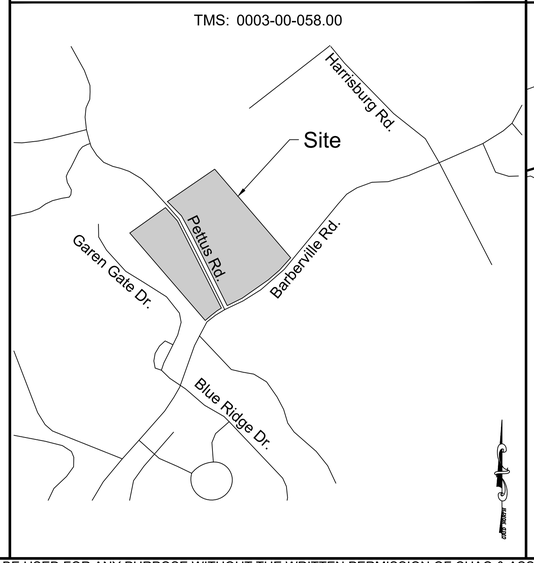
REGISTERED PROFESSIONAL ENGINEER SOUTH CAROLINA No. 21629 DONALD A. LEGGETT

Drawing Index

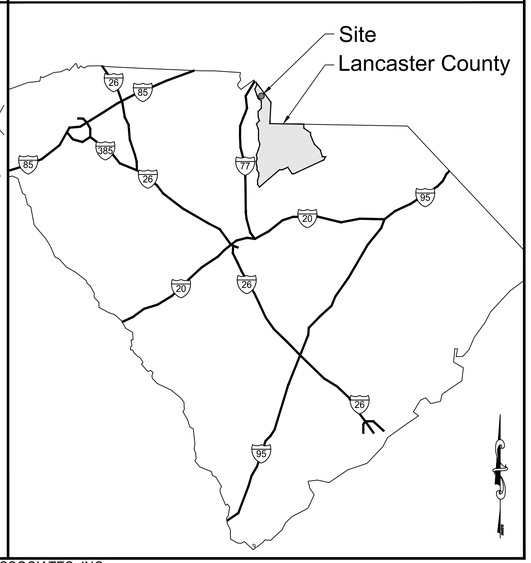
C1.0	- Overall Existing Site Plan
C1.1	- Tree Removal & Demolition Plan
C2.0	- Overall Site Layout Plan
C2.3	- Block Length & Typical Lot Diagram
C2.4	- Easement Plan
C3.0	- Overall Grading and Drainage Plan
C5.0	- Overall Water Connection Plan
C6.0	- Overall Sanitary Sewer Connection Plan
C6.3, C6.4, C6.5	- Sanitary Sewer Profiles
PAA1.0	- Public Amenity Area
L1.0, L1.1	- Landscaping Plan

Location Map

Counties of Lancaster
Scale: Not to Scale



State of South Carolina
Scale: 1" = 30 miles



Drawing file: 707909C.dwg Plotted: Jan 15, 2024 - 11:22am

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N/F
MARY C. GLACE, ETAL, TRUSTEES
PARCEL ID#0003-00-049.17
DB 502 PG 102
PLAT 2731

N/F
MELINDA K. MARTIN, TRUSTEE
PARCEL ID#0003-00-057.00
DB 1384 PG 272
PB 2019 PG 174

N/F
ANITA COLLINS
PARCEL ID#0003-00-069.00
DB 1285 PG 49
PLAT 3225

N/F
PROVIDENCE WEST, LLC
PARCEL ID#0003-00-049.00
DB 785 PG 169
PLAT 2731

N/F
PATTERSON HENRY N JR ETA
PARCEL ID#0003-00-058.00
TRACT "A"
11.41 ACRES

N/F
PATTERSON HENRY N JR ETA
PARCEL ID#0003-00-058.00
TRACT "B"
23.77 ACRES

N/F
BONTERRA BUILDERS, LLC
PARCEL ID#0003-00-062.00
DB 894 PG 258

PETTUS ROAD / S-411
(50' R/W - SCDOT FILE: 29.398)

BARBERVILLE ROAD / S-42
(66' R/W - SCDOT FILE: 29.253)

Water Quality Buffer
Wetland
Non-Jurisdictional Stormwater Drainage
Existing fire hydrant
CONTROL POINT ½" REBAR
N:1162632.30
E:2034365.49
SC STATE PLANE COORDINATES

Line Table		
LINE #	LENGTH	DIRECTION
L1	22.56	S38° 19' 17"W
L2	74.87	N40° 57' 50"W
L3	11.33	S54° 55' 08"W
L4	66.58	N54° 42' 44"E
L5	229.50	N55° 15' 31"E
L6	142.69	N55° 09' 33"E
L7	236.31	N55° 15' 04"E
L8	71.74	N43° 04' 58"W
L9	77.93	N42° 34' 57"W

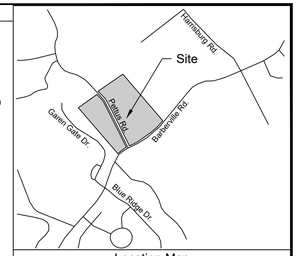
Curve Table			
CURVE #	RADIUS	CHORD BEARING	CHORD LENGTH
C1	1034.11	S44° 23' 26"W	225.41
C2	1337.09	S59° 13' 20"W	331.36
C3	957.47	S66° 21' 16"W	51.73
C4	957.47	N59° 49' 19"E	66.56
C5	581.98	N51° 10' 58"E	143.89
C6	1157.98	N35° 52' 20"W	241.24
C7	1207.98	N35° 50' 55"W	253.30

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

NORTH GRID

Legend

Fire hydrant	Rolled curb and gutter
Water valve	Junction box (JB)
Water meter	Drop inlet (DI)
Gas valve	Drop inlet w/ hood(DI&H)
Sanitary sewer manhole	Yard inlet (YI)
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Natural gas line	Concrete driveway
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Water line	Light pole
Fenceline	Electrical box
Overhead electric	Sign
Underground telephone	
Underground fiber optic	
Underground cable TV	
Telephone pedestal	



Location Map
1 inch = Not to Scale

Notes:
1. Boundary & topographic information furnished by Chao and Associates, Inc., dated 6/17/2022.
2. Benchmark is based on mean sea level datum.
3. Horizontal coordinates (NAD 83) based on SC VRS network.
4. The utilities are shown for the contractor's convenience only. There may be other utilities not shown on these Plans. The Engineer assumes no responsibility to verify the locations shown and it shall be the contractor's responsibility to verify the locations of all utilities within the limits of the work. All damage made to existing utilities by the contractor shall be the sole responsibility of the contractor.

References:
1. Boundary survey prepared for Henry N. Patterson by WM. D. Enfinger & Asso. dated August 2, 1978
2. recorded on plat 4040.
3. Deed prepared for Henry N. Patterson, JR. dated March 19, 1979. Recorded in Deed book D006 Page 2481.
4. SCDOT File 29.253 & 29.398.

CHAO ENGINEERING
CONSULTING ENGINEERS & LAND SURVEYORS

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 Gail A. Lefevre
11/1/2023

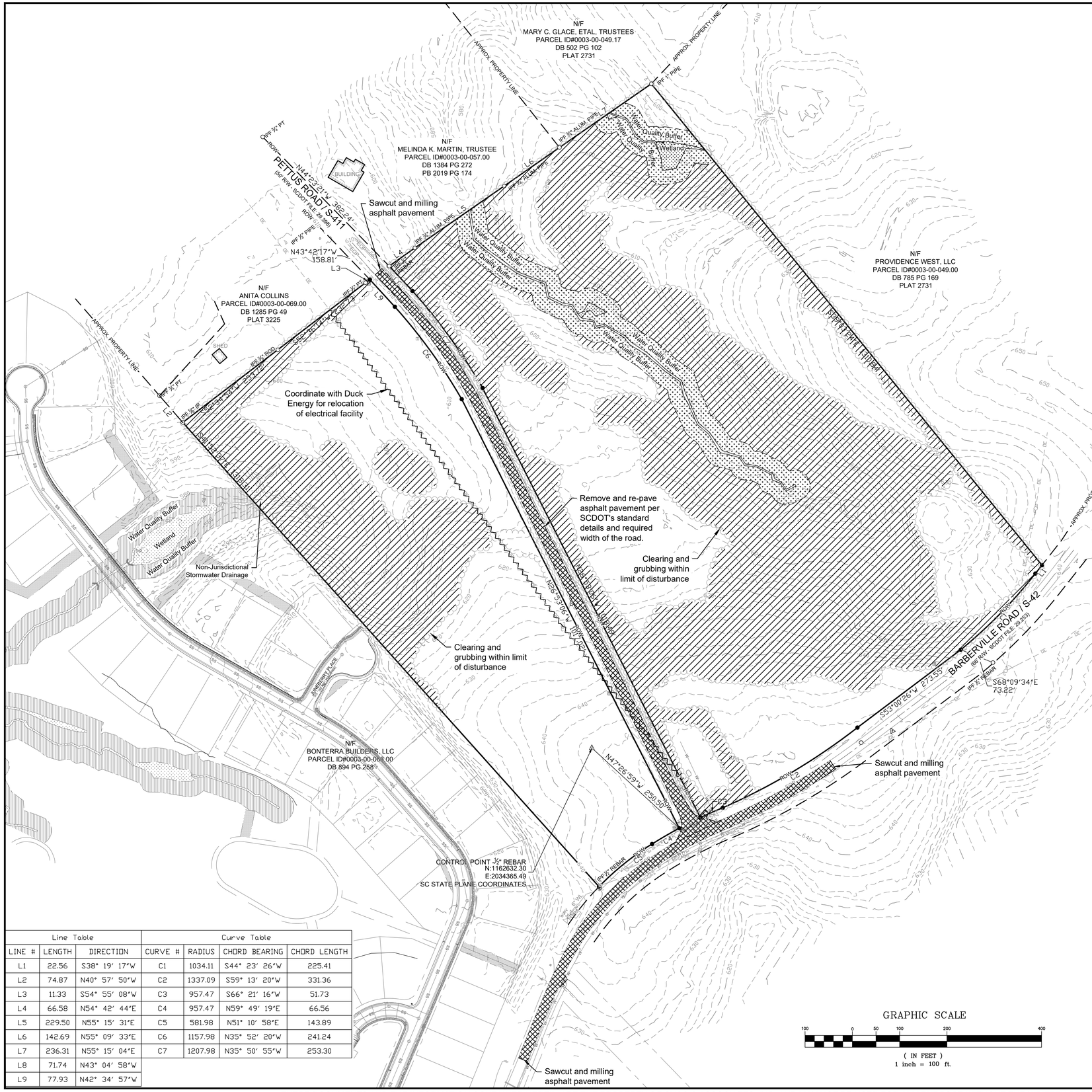
SOUTH CAROLINA CHAO ENGINEERING, INC. No. C06325 CERTIFICATE OF AUTHORIZATION

Overall Existing Site Plan
Jasmine Hills Subdivision
Prepared For:
Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL
Revised:
⚠ 7/26/2023 Revised wetlands based on wetlands survey
File: 707909C.dwg Project No.: 707909B

C1.0
Sheet Number
November 1, 2023
Date

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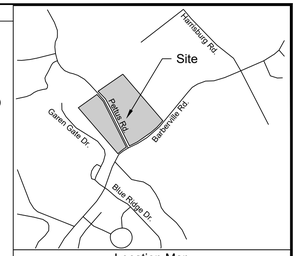


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Legend

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Underground telephone	
Underground fiber optic	
Underground cable TV	
Telephone pedestal	



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4. SCDOT File 29.253 & 29.398.

Construction Notes:
1. Proposed contours & proposed spot elevations represent finished grade. Contractor shall establish all finished grades.
2. All elevations are referenced to mean sea level (MSL) datum.
3. All pavement dimensions are referenced to the face of curb where applicable.
4. Contractor is cautioned that the location and/or elevation of existing utilities shown herein are based on records provided by the utility company and information obtained from the field. Contractor shall verify all existing field conditions and utilities prior to beginning work and notify the engineer if any differing site conditions are noted.
5. Contractor is required to contact Utility Protection Service (811) three days prior to any digging or commencing construction.
6. The construction of all streets and drainage facilities within the right-of-way shall be governed by SCDOT standard specifications.
7. All work within public right of way shall be constructed in accordance with the approved encroachment permit, as applicable.
8. The contractor shall maintain copies of all approved encroachment permits on site during all work within public right-of-ways.
9. Provide silt fence and other erosion control devices, as may be required, to control soil erosion during construction. All disturbed areas shall be cleaned, graded and stabilized with grassing immediately after completion of construction in the area.
10. Hydroseed shall be installed in all areas disturbed by construction that are not intended to be covered by impervious material, unless otherwise indicated.
11. All areas to be seeded, sodded, or landscaped shall be brought to finish grade using minimum of 4" of topsoil. Contractor shall furnish additional topsoil as required to achieve minimum depth.
12. Contractor shall take necessary action to minimize the tracking of mud onto the paved roadway from construction areas. Contractor to daily remove mud/soil from pavement as required.
13. All erosion control devices shall be properly maintained during all phases of construction until the completion of all construction activities and all disturbed areas have been stabilized. Additional control devices may be required during construction in order to control erosion and/or offsite sedimentation. All temporary control devices shall be removed only after construction is complete and the site is stabilized to the satisfaction of Lancaster County and SCDHEC.
14. Contractor shall abide by all provisions of the applicable county storm drainage and erosion control ordinances as well as the South Carolina Sediment Reduction Act.
15. All construction staking shall be provided at the contractor's expense.
16. Contractor to clear existing culverts/pipes, catch basins and ditches along frontage and downstream as necessary to achieve positive drainage.
17. Contractor to saw cut existing asphalt for smooth joint not aligned with wheel path.

Certification Statement

I have placed my signature and seal on the design documents submitted signifying that I accept responsibility for the design of the system. Further, I certify to the best of my knowledge and belief that the design is consistent with the requirements of Title 48, Chapter 14 of the Code of Laws of SC, 1976 as amended, pursuant to Regulation 72-300 et seq. (if applicable), and in accordance with the terms and conditions of SCR100000.

Flood Certification

I hereby certify that I have consulted the national Flood Insurance Program, "Flood Insurance Rate Map", Map Number 45057C0017L and 45057C0020L, Panel Numbers 17 and 20 of 650, Effective Date: 05/16/2017. I have determine that the above site lies within an unshaded zone "X".

Gerald A. Lee, P.E.
SC Reg. Professional Engineer #21629

CHAO ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA PROFESSIONAL ENGINEER REGISTERED No. 21629 GERALD A. LEE
11/1/2023

SOUTH CAROLINA CHAO ENGINEERING, INC. No. C06325 CERTIFICATE OF AUTHORIZATION

Tree Removal & Demolition Plan
Jasmine Hills Subdivision
Prepared For:
Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL
Revised:
1 7/26/2023 Revised wetlands based on wetlands survey
File: 707909C.dwg Project No.: 707909B

C1.1
Sheet Number
November 1, 2023
Date

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Legend

Fire hydrant	Rolled curb and gutter
Water valve	Junction box (JB)
Water meter	Drop inlet (DI)
Gas valve	Drop inlet w/ hood(DI&H)
Sanitary sewer manhole	Yard inlet (YI)
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Natural gas line	Concrete driveway
Sanitary sewer line	Power pole & guy
Water line	Light pole
Fenceline	Electrical box
Overhead electric	Sign
Underground telephone	
Underground fiber optic	
Underground cable TV	
Telephone pedestal	

Location Map
1 inch = Not to scale

Project Summary

Size of project site: 35.18 acres
Tax map reference: Lancaster County, TMS no. 0003-00-058.00
Current zoning: MDR (Medium Density Residential District)
Required buffer yard (7.1.5.A.1): N/A
Open Space(2.4):
- Space required: 7.04 acre (35.18 x 20%)
- Space provided: 8.36 acre including water quality buffer

Park Space(2.4):
- Space required: 1.76 acre (35.18 x 5%)
- Space provided: 1.76 acre

Setback for each residential lot (2.4):
30 ft: Principal Front
15 ft: Secondary Front
10 ft: Side (from adjacent lot)
25 ft: Rear

Street Tree Planting Requirements: (7.1.3)
Rate: Rate: 1 Canopy Tree for every 40 feet of street frontage
Spacing: Maximum of 50 feet on-center
Location: In Planting Strip (5-foot minimum width)*

Parking: 1 per unit required.
Impervious surface:
45% Minimum pervious surface = 15.83 acre (35.18 x 45%)
Pervious surface provided: 24.29 acre
Project Density: 2.1 units per acre

Min. lot size = 10,000 s.f.
Typical Lot Layout
1 inch = 30 ft

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

NORTH GRID

CHAO ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 CHAO
11/1/2023

SOUTH CAROLINA CHAO ENGINEERING, INC. No. C06325 CERTIFICATE OF AUTHORIZATION

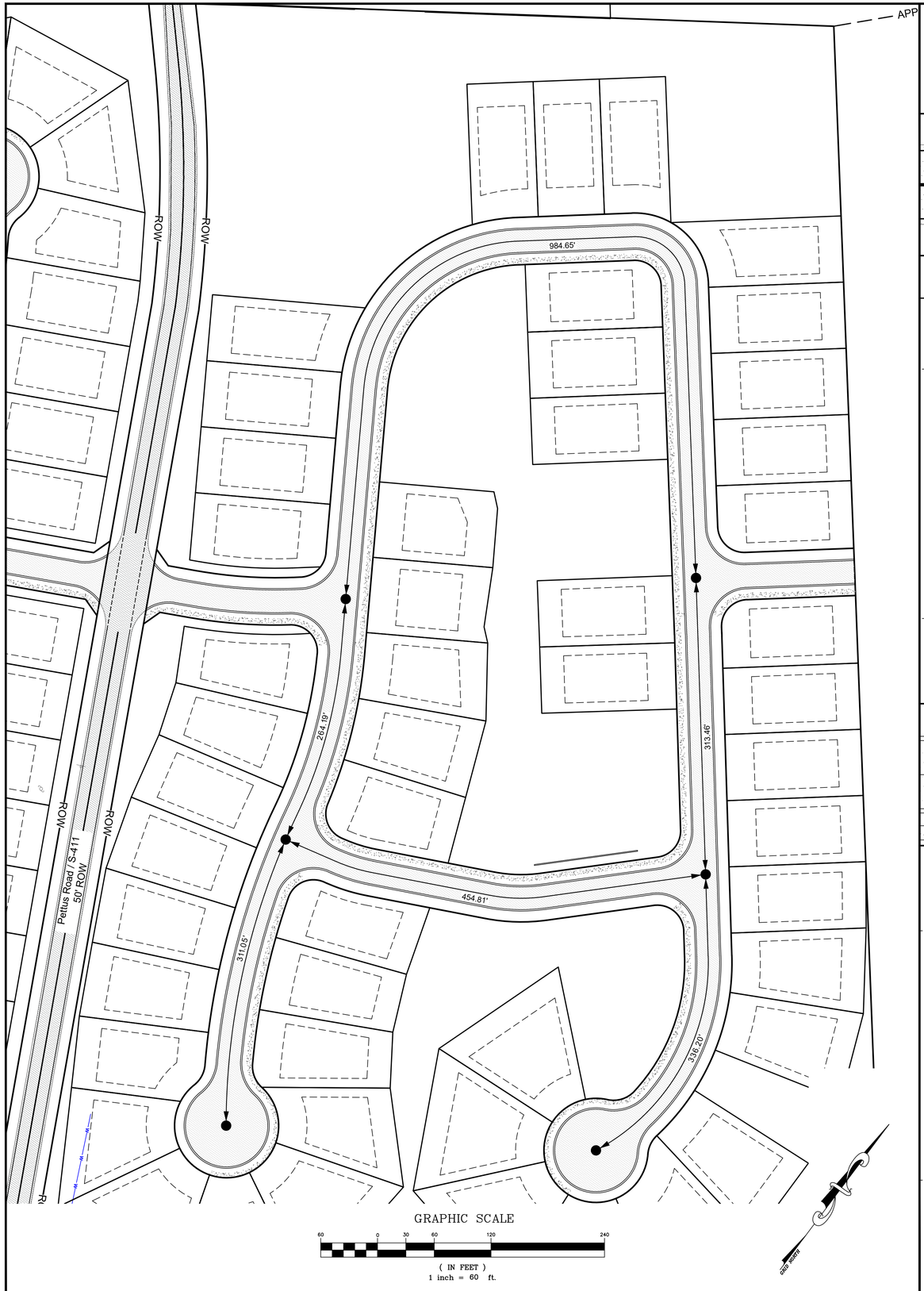
Schematic Site Layout Plan
Jasmine Hills Subdivision

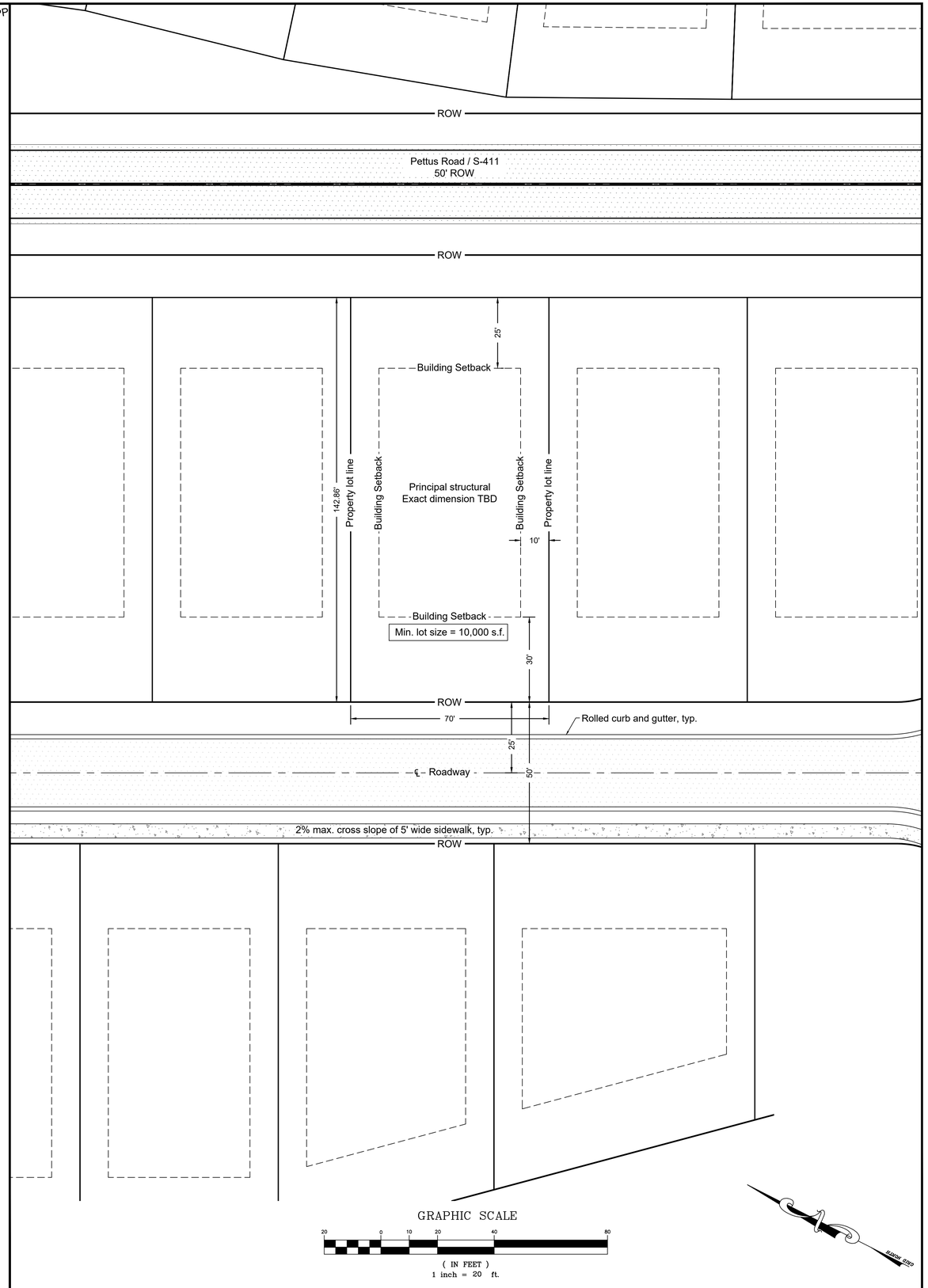
Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC
Checked: GAL
Revised:
07/26/2023 Revised per County's comments
11/01/2023 Revised per County's comments
12/19/2023 Revised per County's comments
File: 707909C.dwg
Project No.: 707909B

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Sheet Number
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7 Clusters Court
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SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 — 11/1/2023

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION — CHAO ENGINEERING, INC. No. C06325

Block Length & Typical Lot Diagram

Jasmine Hills Subdivision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

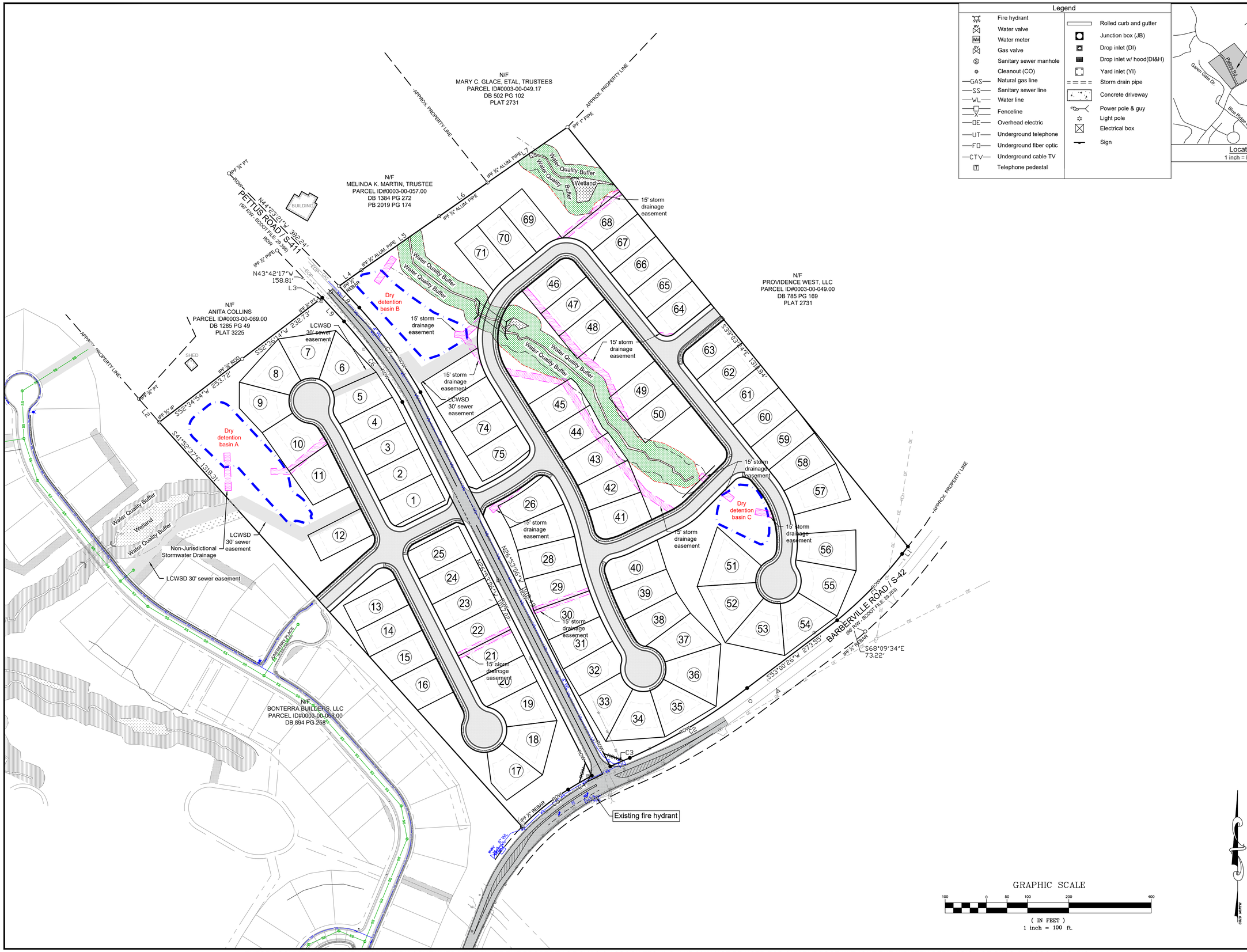
Drawn: HMC Checked: GAL

Revised:
1. 07/26/2023 Revised per County's comments
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File: 707909C.dwg Project No.: 707909B

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11/1/2023

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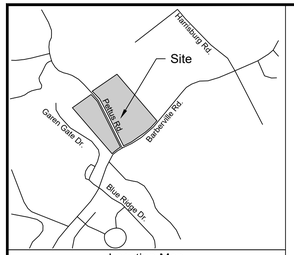
Easement Plan
Jasmine Hills Subdivision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC
Checked: GAL
Revised:
File: 707909C.dwg
Project No.: 707909B

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Location Map
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PETTUS ROAD / S-411
(50' R/W - SCDOT FILE # 29.38R)

BARBERVILLE ROAD / S-42
(66' R/W - SCDOT FILE # 29.25S)

McMURPHY PLACE
(50' R/W)

Dry detention basin A
Dry detention basin B
Dry detention basin C

HW-OB1
HW-OB2
OS-OA1
HW-A1
HW-OA2
HW-B1
HW-OC1
OS-OC2
HW-C1

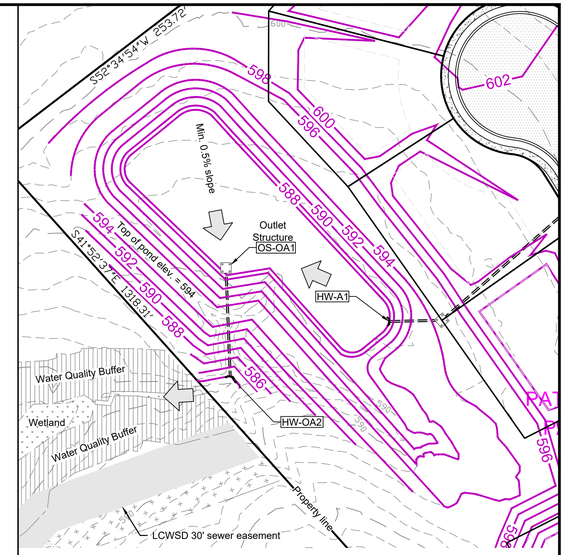
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Non-Jurisdictional Stormwater Drainage
Bridge
15' storm drainage easement
Existing fire hydrant

Legend

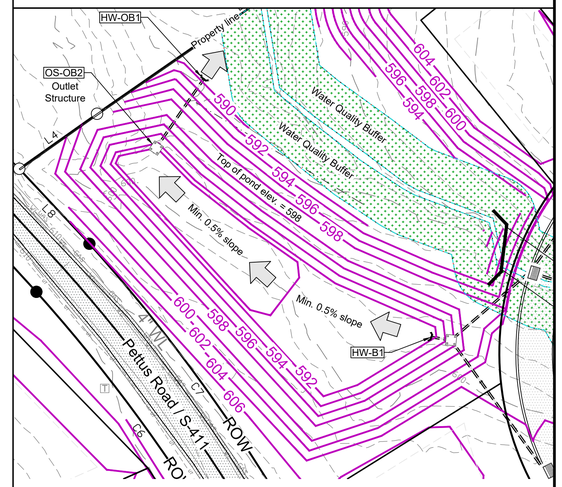
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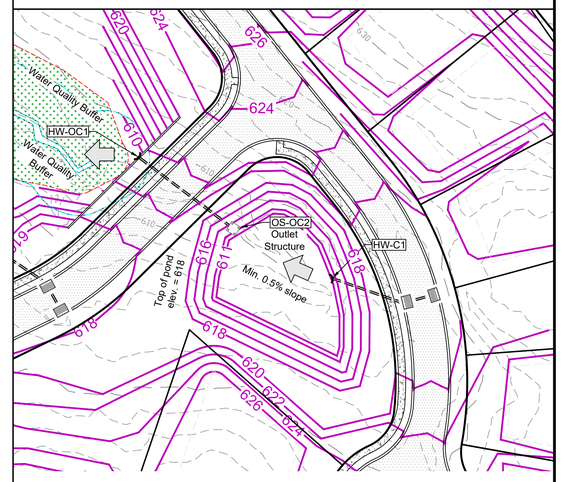
GRID NORTH



Dry Detention Basin A
(Scale: 1"=50')



Dry Detention Basin B
(Scale: 1"=50')



Dry Detention Basin C
(Scale: 1"=50')

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SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 GREGORY A. LETSINGER
11/1/2023

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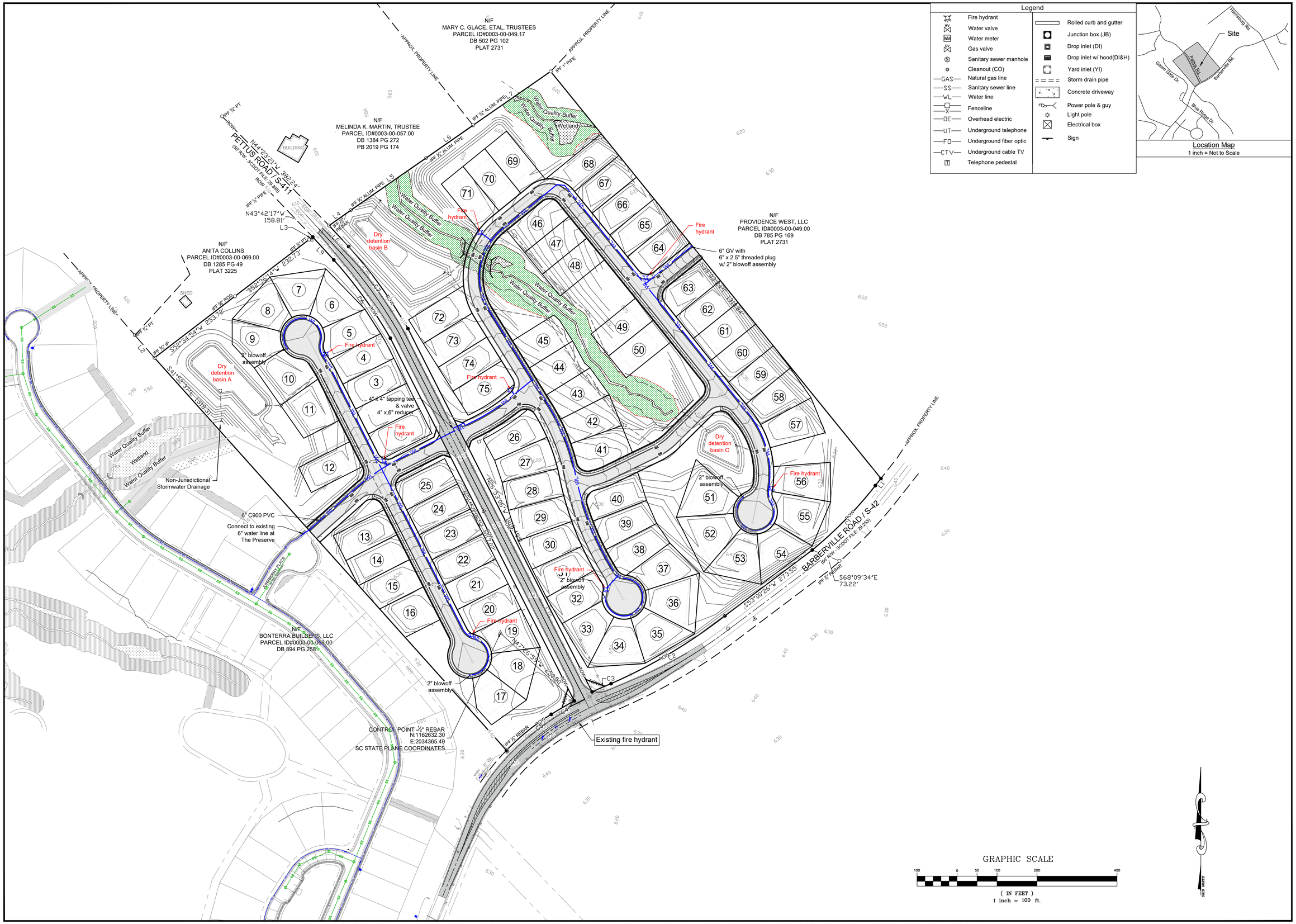
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Gas valve	Drop inlet w/ hood(DI&H)
Sanitary sewer manhole	Yard inlet (YI)
Cleanout (CO)	Storm drain pipe
Natural gas line	Concrete driveway
Sanitary sewer line	Power pole & guy
Water line	Light pole
Fenceline	Electrical box
Overhead electric	Sign
Underground telephone	
Underground fiber optic	
Underground cable TV	
Telephone pedestal	

Location Map
1 inch = Not to Scale

GRAPHIC SCALE
100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.

GRID NORTH

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 CHAO
11/1/2023

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CHAO ENGINEERING, INC. No. C06325

Overall Water Connection Plan
Jasmine Hills Subdivision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL

Revised:
1 07/26/2023 Revised per County's comments
2 11/01/2023 Revised per County's comments
3 12/19/2023 Revised per County's comments

File: 707909C.dwg Project No.: 707909B

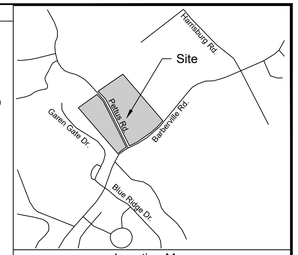
C5.0
Sheet Number
November 1, 2023
Date

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Legend

Fire hydrant	Rolled curb and gutter
Water valve	Junction box (JB)
Water meter	Drop inlet (DI)
Gas valve	Drop inlet w/ hood(DI&H)
Sanitary sewer manhole	Yard inlet (YI)
Cleanout (CO)	Storm drain pipe
Natural gas line	Concrete driveway
Sanitary sewer line	Power pole & guy
Water line	Light pole
Fenceline	Electrical box
Overhead electric	Sign
Underground telephone	
Underground fiber optic	
Underground cable TV	
Telephone pedestal	



Location Map
1 inch = Not to Scale

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 CHRISTOPHER A. LEVEILLE
11/1/2023

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CHAO ENGINEERING, INC. No. C06325

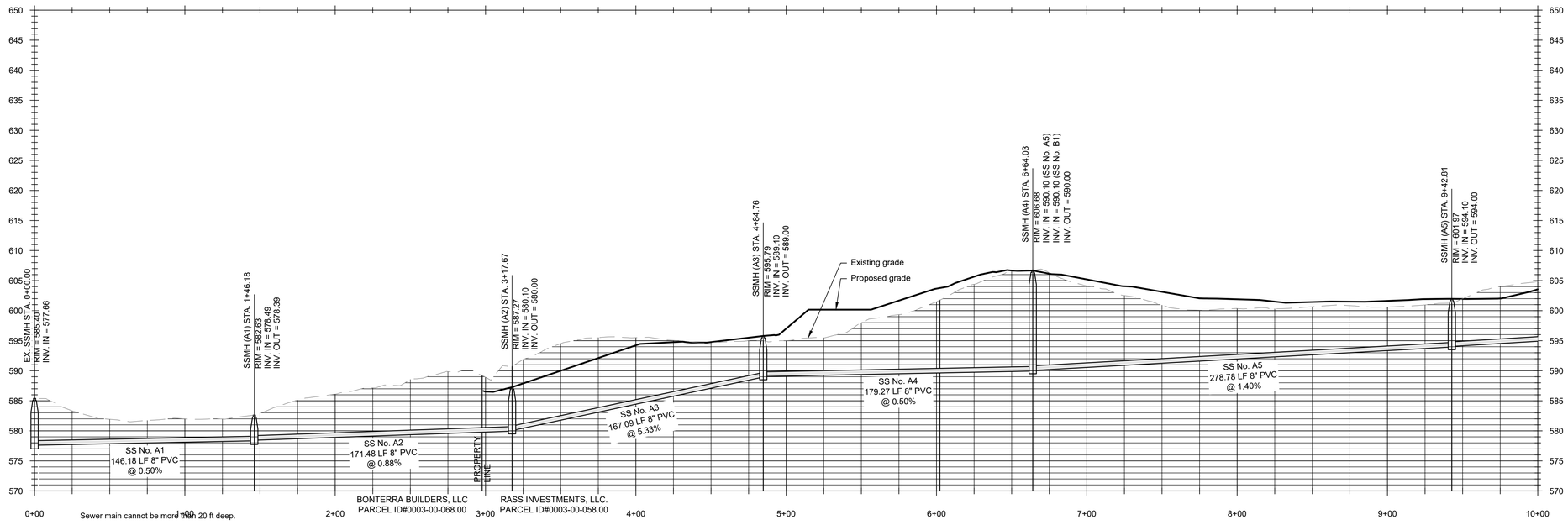
Overall Sanitary Sewer Connection Plan
Jasmine Hills Subdivision - Revision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

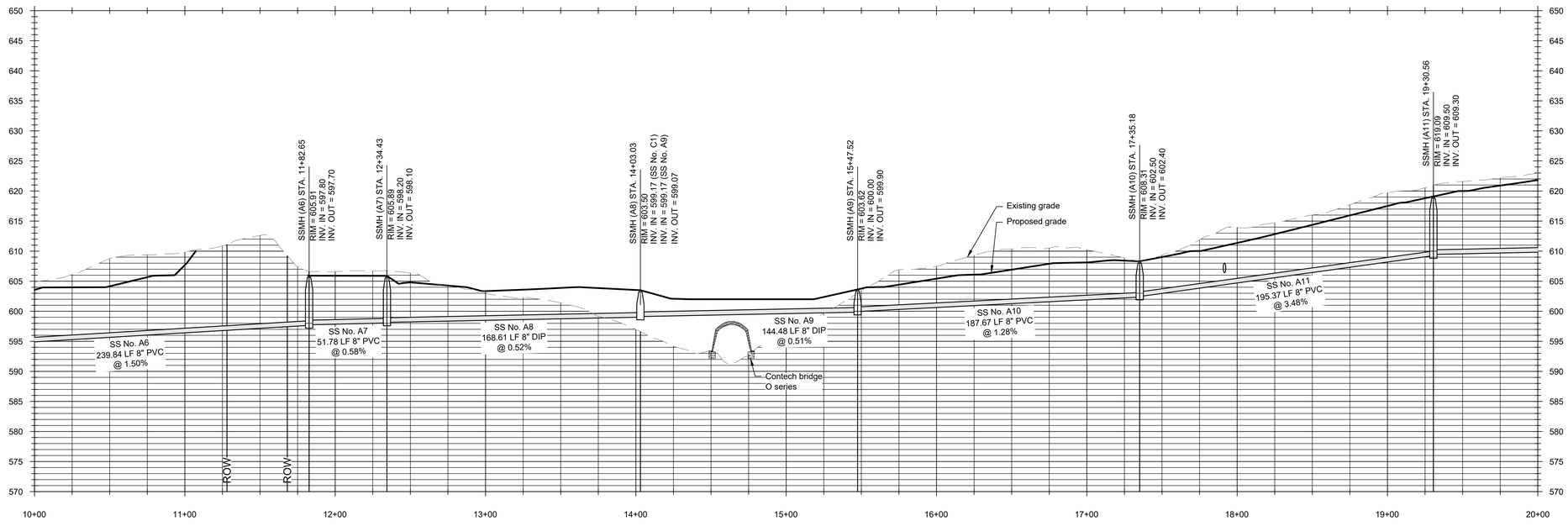
Drawn: HMC Checked: GAL
Revised:
File: 707909C.dwg Project No.: 707909B

C6.0
Sheet Number
November 1, 2023
Date

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Profile View of SS LINE A



Profile View of SS LINE A

VERTICAL SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

HORIZONTAL SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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CHAO ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 RONALD A. CHAO

11/1/2023

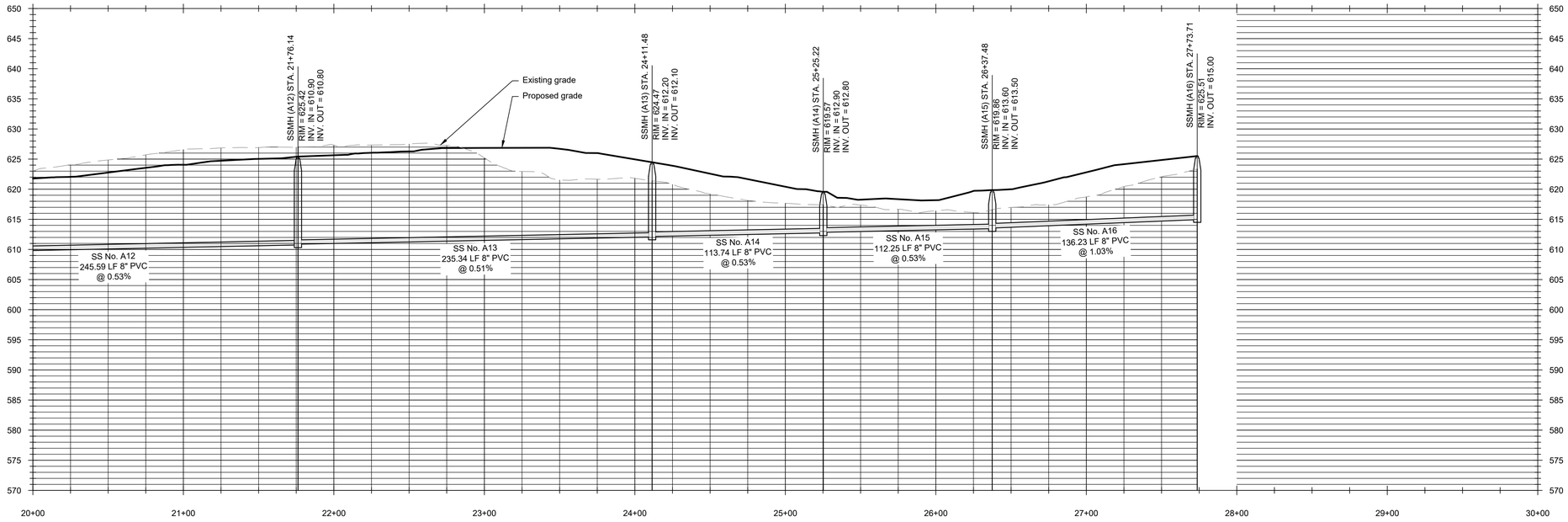
SOUTH CAROLINA CHAO ENGINEERING, INC. No. C06325 CERTIFICATE OF AUTHORIZATION

Sanitary Sewer Profiles
Jasmine Hills Subdivision

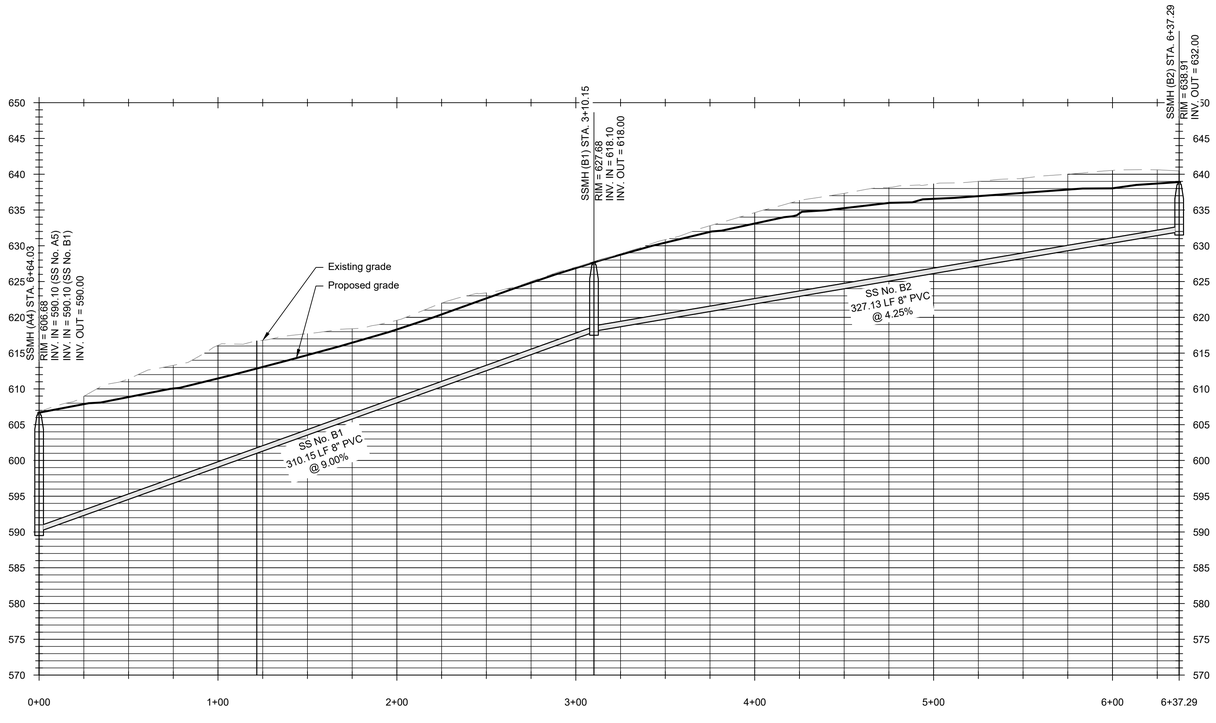
Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL
Revised:
File: 707909C.dwg Project No.: 707909B

C6.3
Sheet Number
November 1, 2023
Date



Profile View of SS LINE A



Profile View of SS LINE B

VERTICAL SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

HORIZONTAL SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

CHAO ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 GARRETT A. LETHEM

11/1/2023

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CHAO ENGINEERING, INC. No. C06325

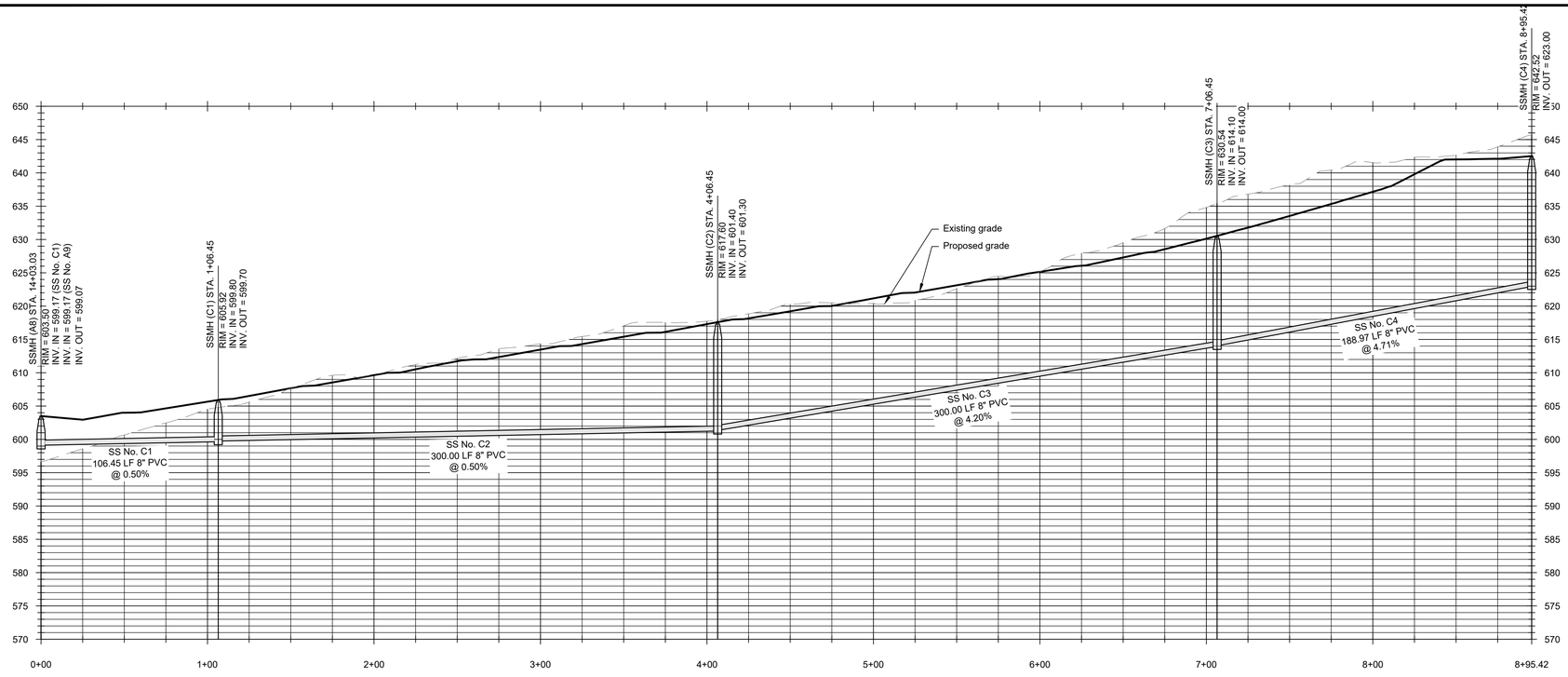
Sanitary Sewer Profiles
Jasmine Hills Subdivision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL
Revised:
File: 707909C.dwg Project No.: 707909B

C6.4
Sheet Number
November 1, 2023
Date

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Profile View of SS LINE C

VERTICAL SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

HORIZONTAL SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

CHAO & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 GARRETT A. LETNER

11/1/2023

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CHAO ENGINEERING, INC. No. C06325

Sanitary Sewer Profiles
Jasmine Hills Subdivision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL
Revised:

File: 707909C.dwg Project No.: 707909B

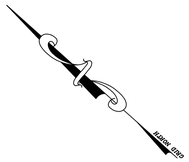
C6.5
Sheet Number
November 1, 2023
Date

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GRAPHIC SCALE

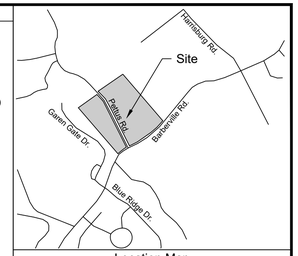
60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.



LEGEND

Fire hydrant	Curb & gutter
Water valve	Junction box (JB)
Water meter	Drop inlet (DI)
Gas valve	Hood & grate inlet (H&G)
Sanitary sewer manhole	Yard inlet (YI)
Cleanout (CO)	Storm drain pipe
Natural gas line	Concrete sidewalk
Sanitary sewer line	Power pole & guy
Water line	Light pole
Fenceline	Electrical box
Overhead electric	Sign
Underground telephone	Limits of disturbance
Underground fiber optic	
Underground cable TV	
Telephone pedestal	



JASMINE HILLS SUBDIVISION / PLANT LIST

ABBR.	BOTANICAL NAME	COMMON NAME	MINIMUM CALIPER	SPREAD	HEIGHT	BALL DIA.	NO. CANES	COMMENTS	QTY.	BUFFER TYPE A
TREES										
QUER P	QUERCUS PHELLOS	WILLOW OAK	2"	6'	10'	32"	1	MATCHING, SPECIMEN	45	
QUER S	QUERCUS SHUMARDII	SHUMARD OAK	2"	6'	10'	32"	1	MATCHING, SPECIMEN	244	
PLAT	PLATANUS OCCIDENTALIS	SYCAMORE	2"	6'	10'	32"	1	MATCHING, SPECIMEN	46	
SOD	EREMOCHLOA OPHIUROIDES	CENTIPEDE GRASS						WELL ROOTED		
SEED	SEE GRASSING SCHEDULE									

NOTE: PROPOSED PLANTING REQUIRES INSTALLATION OF MECHANICAL IRRIGATION SYSTEM.
AREA TAKE OFFS AND QUANTITIES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY AND ALERT LANDSCAPE ARCHITECT TO ALL DISCREPANCIES.
PROPOSED PLANTING HEIGHT TAKES PRECEDENT OVER CONTAINER SIZE.

MATCH LINE SHEET L1.1

PETTUS ROAD / S-411
(50' R/W - SCDOT FILE: 29.398)
ROW
EOP
EOP
ROW

PLAT, TYP.

N/F
ANITA COLLINS
PARCEL ID#0003-00-069.00
DB 1285 PG 49
PLAT 3225

QUER P TYP.

MATCH LINE SHEET L1.1

QUER S TYP.
MAX. 50' ON-CENTER

QUER P TYP.

PLAT, TYP.

Park space

Park space

MATCH LINE SHEET L1.1

APPROX. PROPERTY LINE

N/F
BONTERRA BUILDERS, LLC
PARCEL ID#0003-00-068.00
DB 894 PG 258

JUNEBERRY PLACE
(50' R/W - PUBLIC R/W)

ROW
EOP
EOP
ROW
ROW
EOP
EOP
ROW

CHAO ENGINEERING, INC
CONSULTING ENGINEERS & LAND SURVEYORS

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
No. 21629
11/1/2023

SOUTH CAROLINA
CHAO ENGINEERING, INC.
No. C06325
CERTIFICATE OF AUTHORIZATION

Landscaping Plan
Jasmine Hills Subdivision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL
Revised:
1 12/19/2023 Revised per County's comments

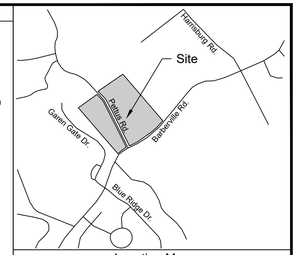
File: Landscaping and Public Amenity Plan.dwg

L1.0
Sheet Number
November 1, 2023
Date

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LEGEND

Fire hydrant	Curb & gutter
Water valve	Junction box (JB)
Water meter	Drop inlet (DI)
Gas valve	Hood & grate inlet (H&G)
Sanitary sewer manhole	Yard inlet (YI)
Cleanout (CO)	Storm drain pipe
Natural gas line	Concrete sidewalk
Sanitary sewer line	Power pole & guy
Water line	Light pole
Fenceline	Electrical box
Overhead electric	Sign
Underground telephone	Limits of disturbance
Underground fiber optic	
Underground cable TV	
Telephone pedestal	



Location Map
1 inch = Not to Scale

N/F
PROVIDENCE WEST, LLC
PARCEL ID#0003-00-049.00
DB 785 PG 169
PLAT 2731

N/F
MARY C. GLACE, ETAL, TRUSTEES
PARCEL ID#0003-00-049.17
DB 502 PG 102
PLAT 2731

N/F
MELINDA K. MARTIN, TRUSTEE
PARCEL ID#0003-00-057.00
DB 1384 PG 272
PB 2019 PG 174

APPROX. PROPERTY LINE

APPROX. PROPERTY LINE

BARBERVILLE ROAD / S-42
(66' R/W - SCDOT FILE: 29,253)

PETTUS ROAD / S-411
(50' R/W - SCDOT FILE: 29,398)

Park space

QUER P TYP.

PLAT, TYP.

QUER S TYP.
MAX. 50' ON-CENTER

ROW

EOP

MATCH LINE SHEET L1.0

MATCH LINE SHEET L1.0

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

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CHAO ENGINEERING, INC.
CONSULTING ENGINEERS & LAND SURVEYORS

Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629 CHARLES A. LEE, JR.
11/1/2023

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CHAO ENGINEERING, INC. No. C06325

Landscaping Plan
Jasmine Hills Subdivision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL
Revised:
⚠ 12/19/2023 Revised per County's comments
File: Landscaping and Public Improvements.dwg

L1.1
Sheet Number
November 1, 2023
Date



Prepared By:
Chao Engineering, Inc.
Civil - Structural - Survey
7 Clusters Court
Columbia, SC 29210
Voice: (803) 772-8420
Fax: (803) 772-9120
Email: consult@chaoinc.com

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 21629
11/1/2023

SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION CHAO ENGINEERING, INC. No. C06325

Public Amenity Area
Jasmine Hills Subdivision

Prepared For: Rass Investments, LLC
Near Indian Land, in Lancaster County, SC

Drawn: HMC Checked: GAL
Revised:
File: Landscaping and Public Amenity Area.dwg

PAA1.0
Sheet Number
November 1, 2023
Date

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CHAO
AND ASSOCIATES, INC.
CONSULTING ENGINEERS

LETTER OF TRANSMITTAL

ATTN: Mr. Matthew Blaszyk
Planner Planning

Lancaster County Planning Department
101 N. Main Street
Lancaster, SC 29720
TO: mblaszyk@lancastersc.net
803-285-6005

DATE: January 16, 2024

C&A Project No.: 707909B-22
County Project No.: 20230325

RE: Jasmine Hills Subdivision in Lancaster County, SC
Preliminary Plat Resubmittal

WE ARE SENDING YOU [X] Attached [ ] Under Separate Cover Via: _____

The Following Items: [ ] Shop Drawing [ ] Prints [ ] Samples [ ] Copy of Letter
[ ] Specifications [X] Plans [X] Other: Response letters

COPIES	DESCRIPTION
1	Responses for Conditional Approval Letter, dated 12/5/2023
1	Responses for Staff Report to Planning Commission Letter, dated 12/19/2023
1	Supplemental Jurisdictional Determination Report
1	Major Subdivision Preliminary Plat

THESE ARE TRANSMITTED AS CHECKED BELOW:

[ ] For Distribution [ ] For Your Use [ ] As Requested [X] For Review & Comment

Matthew,

The responses are provided on Conditional Approval Letter and Staff Report to Planning Commission Letter to address each individual item.

Attached Supplemental Jurisdictional Determination Report was submitted to U.S. Army Corps of Engineers and is currently under review.

Thank you,

Hao-Ming Chen
haoming@chaoinc.com

Hao-Ming Chen

Copy of Letter to:

Signed:_____

Lancaster County
Planning Department
P. O. Box 1809
Lancaster, SC 29721
803.285.6005
planning@lancastercountysc.net

December 05, 2023

Hao-Ming Chen
Chao & Associates, Inc.
7 Clusters Court
Columbia, SC 29210

Project Number	20230325
Project Name	Jasmine Hills Subdivision
Location	Barberville Road
Stage	Preliminary Plat
Parcel(s)	
Status	Conditional

Dear: Hao-Ming Chen

This letter is to confirm CONDITIONAL APPROVAL of your Preliminary Plat plans by the Lancaster County Technical Review Committee (TRC).

Sincerely,

Chanda Kirkland

Chanda Kirkland, Development Service Coordinator
Lancaster County Government
101 N Main St
Lancaster, SC 29720
P: (803) 416-9390

Plan Review Comments

County Engineer - Stephen Blackwelder - 8035482406 — Approved
sblackwelder@lancastersc.net

Review Comments:

General Comments:
1. More detailed comments can be provided once the construction documents are developed. The preliminary nature of this plan does not provide adequate detail to formally comment, but the following are items of note from the information given and a visit to the site to determine existing conditions. Knowledged.
2. A Traffic Impact Analysis (TIA) is in Evolve. We will begin the process for the review by our third party traffic engineer (ICE). Stephen will get a price for their review and forward that amount through Evolve to the development team. Once the review fee is paid, ICE will conduct the review. This typically takes 3 weeks, but may be a bit delayed if this occurs over the holidays. Knowledged.
   a. Any improvements agreed upon as a result of the final TIA will need to be included in the civil plan set. Coordination of these improvements with the Pettus Pond development may be needed as the two projects develop. Knowledged.
3. There appears to be one stream crossing in the latest proposed plan. Any impacts to wetlands and/or stream crossings will need to be permitted through the US Army Corp of Engineers. This can be a lengthy process. A proposed bridge will cross the wetland to avoid Nationwide permit.
4. A survey to determine the stream and wetlands will need to be conducted to locate and categorize the potential stream on this parcel. The stream and wetland delineation were provided by S&ME. The documents submitted to US Army Corp of Engineers is provided.
5. Per Lancaster County Water and Sewer District policy- this subdivision cannot be approved for construction until downstream sewer infrastructure is in place and the notice of capability and capacity from the LCWSD is obtained. It is our understanding that significant upgrades to a sewer pump station are needed to gain the sewer capacity needed for this proposed project. If you have a letter from LCSWD stating there is capability and capacity, please upload to Evolve. Will provide.
6. Sheet PAA1.0- we have never seen this type of sheet before- what is its purpose?
   For Location of existing or planned public parks, schools, greenways, trails, or other major public amenity located within ½ mile of the development site.

E911 Address - Sandra Burton - (803) 416-9325 — Conditional
sburton@lanc911.com

Review Comments:

Please note location of mail Kiosk(s) Pending. Currently verifying with USPS.
Submit road names for consideration to addresser@lanc911.com Submitted and under review.
Will road 1B be named Juneberry Pl if it is connecting into the Preserve at Barber Rock? Yes. road 1A will be named Juneberry Pl.
Jasmine Hill is acceptable as a subdivision name Knowledged.
A CAD file, in a 2010 version, showing lot lines and roadways, will need to be sent to addresser@lanc911.com at Civil Phase. Provided

Fire Marshal - John Magette - 8032838888 — Approved
jmagette@lancastersc.net

Review Comments:

1. The locations of the fire hydrants in the cul de sacs are not typical. Generally they are in the beginning of the bulb, not the end of the cul de sac. If changes are made to the water plans we will need to look at the plan again. Locations of the fire hydrant updated.

LC Water & Sewer District - Erin Evans - 8032856919 — Conditional
eevans@lcwasd.org

Review Comments:

LCWSD is a separate entity from the County. We have our own submittal requirements. Please check our website, www.lcwasd.org, under the Developers tab for our policies and procedures.

The developer must submit 2 sets of hard copy water and sewer plans directly to LCWSD, adhering to the LCWSD Water & Wastewater Extension Policy.

*Waterlines not allowed outside the road RoW. Waterlines updated. All waterlines are within road ROW.

Planning - Matthew Blaszyk - 803-285-6005 — Conditional
mblaszyk@lancastersc.net

Review Comments:

- The internal landscaping plan is missing. UDO section 7.1.3 requires- 1 Canopy Tree for every 40 feet of street frontage. Spacing: Maximum of 50 feet on-center. Location: In Planting Strip (5-foot minimum width)* Internal landscaping plans are provided. See L1.0 and L2.0.

o * Understory Trees may be substituted for Canopy Trees in existing development with planting strips less than 5 feet wide or tree wells less than 25 square feet.

- Please clarify what the "Public Amenity Area" is entailing on page PAA1.0 of the submitted plans.
  This sheet is for Location of existing or planned public parks, schools, greenways, trails, or other major public amenity located within ½ mile of the development site per checklist.
- o This is more commonly seen in public parks, attractions, not developments.
  No public parks, attractions within ½ mile of the development site.
- Add a block length diagram to the provided plans. One was provided on the recent sketch plan submittals but not included in the preliminary plat. A block length diagram is provided.

- Label the lot area for the proposed lots on the plan.
  Lables are provided on C2.0.
- Please show the existing overhead electrical easements on the existing conditions portion of the plan. Pending. Currently verifying with Duke Energy.

LC School District - David Small - (803) 286-6972 — No Review Done
David.Small@lcsd.k12.sc.us

Review Comments:

The school district did not input any comments. -Chanda N/A

SCDOT - David Gamble - (803) 385-4280 — Conditional
GambleDD@scdot.org

Review Comments:

Widen Pettus ~~Farm~~ Road to include 10' lanes and 2' paved shoulders.
Pettus Road (S-411) and Barberville Road (S-42) will be widened per SCDOT requirement.
A TIA will be required to determine if any turn lanes are needed for this subdivision.
The SCDOT has recommended to widen Pettus Rd to 10-ft lanes and two ft shoulders in each direction, no turning lanes. The report identifies no turning lanes needed anywhere.
Coordination with the adjacent developer should be made so construction only has to be done one time on Pettus and Barberville. Per email from SCDOT, David Gamble, this comment can be ignored for now.

Impact Fee - Chanda Kirkland - 803-416-9390 — Approved
ckirkland@lancastersc.net

Review Comments:

This project is located in the Indian Land Fire District service area and Lancaster County School District, the following impact fees apply:

The Lancaster County Service Impact fee for each housing unit is $2,109.00. Knowledged.

Fees will be collected at the time of building permit issuance. Should you wish to arrange prepayment that can be coordinated after you receive final plat approval. This is only an estimate and not an invoice for payment. Knowledged.

Development Impact fees increase July 1. If you have any questions or would like further information on the Development Impact fee you can contact me. Knowledged.

TRC Comments Include:

Traffic Impact Analysis (TIA)

A Traffic Impact Analysis has been submitted to review for the County. Currently, the TIA has not been reviewed by the County's on-call traffic consultant due to the TIA not being paid by the applicant. The fee was paid on 12/9/2023.

The submitted TIA does not call for any improvements to occur due to this proposed development. For more information, please reference the attached TIA summary. Knowledged and TIA is under review.

The development is expected to generate 57 AM peak hour trips (14 in and 43 out) and 76 PM peak hour trips (48 in and 28out). It would generate 774 weekday daily (24-hour) trips. Knowledged.

There appears to be one stream crossing in the latest proposed plan. Any impacts to wetlands and/or stream crossings will need to be permitted through the US Army Corp of Engineers.
A proposed bridge will cross the wetland to avoid Nationwide permit.

Water and Sewer (LCWSD): At this time the downstream infrastructure required for this project has not been completed. Pursuant to a LCWSD policy update issued on March 9, 2021, LCWSD will not formally review plans or issue willingness and capability letters until downstream infrastructure is operational. *"The District is hereby ensuring that there are adequate downstream facilities in operation (rather than planned) before the District accepts any submittals from a Developer that could lead to an availability letter or a capacity commitment from the District in accordance with this policy."* Knowledged.

School District Input:
The Lancaster County School District (LCSD) has not provided any comments regarding the proposed development at this time. The schools that would be impacted by this development include Harrisburg Elementary, Indian Land Middle, and Indian Land High School. With that said, it is important to remember that this development is not requesting a rezoning to a higher density and that this request is consistent with the zoning which is currently in place on these parcels. Should the Planning Commission feel the need to take action on the information provided by LCSD, the Planning Commission may make a recommendation to County Council to consider assessing a moratorium within the relevant attendance zones. N/A

Planning Input: Internal landscaping plan is missing; UDO section 7.1.3 A requires the rate of "1 Canopy Tree for every 40 feet of street frontage Spacing: Maximum of 50 feet on-center Location: In Planting Strip (5-foot minimum width)". Internal landscaping plans are provided. See L1.0 and L2.0.
Per Allison Hardin's email, dated 1/8/2024. The number of trees is counted based on 1 per every 40 ft. The spacing is not required to be every 40 ft, so we also have the rule that you must have a maximum of 50 ft separation. This keeps designs from putting two trees 10 ft apart then 70 ft of no trees.

SCDOT Input:

Widen Pettus Farm Rd to include 10' lanes and 2' paved shoulders.
Pettus Road (S-411) and Barberville Road (S-42) will be widened per SCDOT requirement.

Coordination with adjacent developers should be made so construction only has to be done one time on Pettus and Barberville. Per email from SCDOT, David Gamble, this comment can be ignored for now.

June 21, 2023

U.S. Army Corps of Engineers
Northwest Branch/Columbia Office
Charleston District Regulatory Division
1835 Assembly Street, Rm 865 B-1
Columbia, SC 29201

submitted via email to:
Rebecca.m.Downey@usace.army.mil

Attention: Rebecca Downey
Project Manager - Biologist

Reference: **Supplemental Jurisdictional Determination Report**
37.57-Acre Barberville Road Site
Indian Land, Lancaster County, South Carolina
S&ME Project No. 218989
Action IDs: SAC-2021-01871 and SAC-2021-01872

Dear Ms. Downey:

On behalf of Rass Investments, LLC, S&ME, Inc. (S&ME) is submitting this Supplemental Jurisdictional Determination report for the above-referenced project; a proposed 37.57-acre residential subdivision generally located north of Barberville Road and east and west of Pettus Road in Indian Land, Lancaster County, South Carolina. This report supplements our Approved Jurisdictional Determination (AJD) Package submitted to United States Army Corps of Engineers (USACE) on November 3, 2021 as well as the results of our subsequent March 8, 2023 site visit. The USACE assigned the portion of the subject property east of Pettus Road to Action Identification (ID) Number SAC-2021-01872 and the portion of the subject property west of Pettus Road to Action ID Number SAC-2021-01871.

A site visit of the subject property was initially conducted by S&ME on October 11, 2021. The subject property is currently undeveloped former agricultural fields and is illustrated on Vicinity Map (**Figure 1**), United States Geological Survey (USGS) Topographic Map (**Figure 2**) a Site Map/Approximate Waters Map (**Figure 3**), and a United States Department of Agriculture (USDA) Soil Survey (**Figure 4**) as well as Site Photographs included in **Attachment I**.

Ms. Suzanne Knudsen with S&ME met Ms. Rebecca Downey and Ms. Laura Boos with the USACE on March 8, 2023 to assess aquatic and non-aquatic resources at the subject property. The following jurisdictional aquatic and non-aquatic resources were assessed by S&ME on May 23, 2023 and are illustrated on **Figure 3**. Stream Identification Forms and representative Wetland/Upland Data Forms are included in **Attachment II**.

Action ID Number SAC-2021-01872

The following aquatic resources were delineated within the eastern portion of the subject property:

Aquatic Resources

- Stream S1 is an intermittently flowing channel that extends approximately 143 linear feet (LF) within the northeastern portion of the subject property.
- Stream S2 is an intermittently flowing tributary of Stream S1 that extends approximately 18 LF before its confluence with Stream S1
- Stream S3 is a perennially flowing channel that extends approximately 990 LF within the central portion of the subject property.
- Wetland WA is an approximately 0.003-acre riparian, sparsely vegetated wetland abutting Stream S1.
- Wetland WB is an approximately 0.065-acre emergent wetland abutting the headwaters of Stream S1 and Stream S2.
- Wetland WC is an approximately 0.017-acre riparian wetland abutting Stream S3.

Non-Aquatic Resources

The following non-aquatic resources were assessed within the eastern portion of the subject property:

- Data Point UP-P is a non-aquatic resource lacking in hydric soils. The feature was a pond dug in Appling sandy clay loam, 10 to 15 percent slopes, severely eroded soils (**Figure 4**) which, according to the Natural Resources Conversation Service (NRCS) Hydric Soils List, are non-hydric soils. During the initial October 2021 site visit, it was observed that the dam was breached, and was a non-aquatic feature. However, during the March 8, 2023 site visit with the USACE, the pond was holding water and was determined to be an isolated aquatic resource. It was discussed that the dam could be further breached to drain the pond. This activity occurred in April 2023 and it was discovered that the pond had two malfunctioning outlet drains installed from previous draining attempts. One outlet drain was clogged with debris and the other was situated above the waterline. During a June 16, 2023 site visit, it was observed that the pond successfully drained, is not subject to ponding and now exhibits early successional upland vegetation growth. This feature meets the characteristics of a non-aquatic resource (**Photo 1**).
- Data Point Non-J3 is a stormwater ephemeral channel at the headwaters of Stream S3 and did not exhibit an Ordinary High-Water Mark (OHWM) or base flow (**Photo 8**).

Action ID Number SAC-2021-01871

No aquatic resources were delineated within the western portion of the subject property. The following non-aquatic resources were assessed within the western portion of the subject property:

Non-Aquatic Resources

- Data Points Non-J1 Upstream and Downstream is a stormwater channel located within the northwestern corner of the subject property. It lacked an OHWM, base flow and exhibited upland vegetation within the channel bed.
- Data Point DP-1 is located east of Data Point Non-J1 and was saturated during the March 8, 2023 site visit with the USACE, however during the initial site visit on October 11, 2021 and again on May 23, 2023, this area lacked wetland hydrology, hydrophytic vegetation and hydric soils.

Impacts to aquatic resources associated with site development are not anticipated. Thank you for your assistance regarding this project. If you have questions or require additional information, please contact Suzanne Knudsen, contact information below, at your convenience.

Sincerely,

S&ME, Inc.

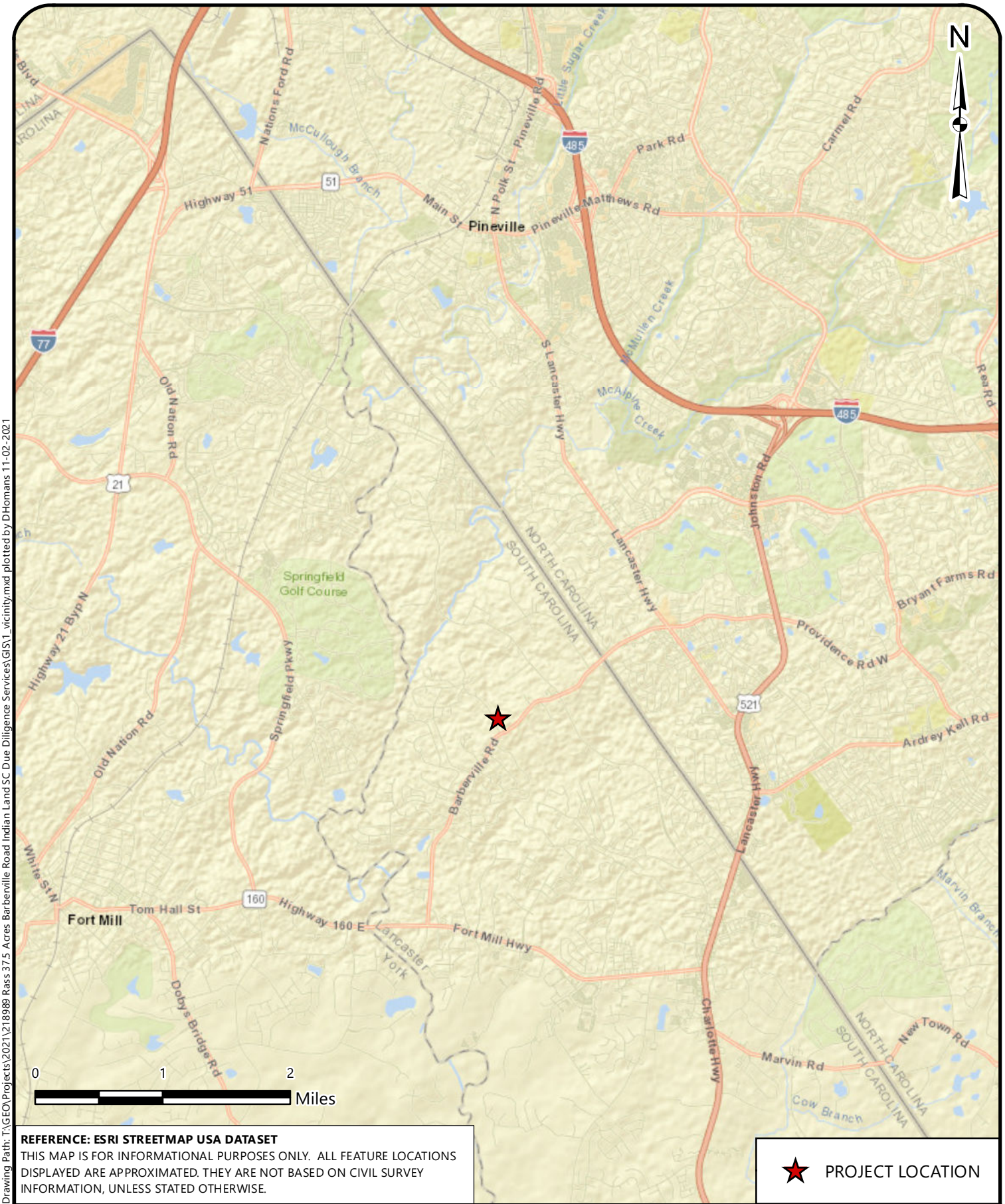
Suzanne L. Knudsen
Natural Resources Project Manager
sknudsen@smeinc.com
704-231-3800 (c)

Kristen Hill, P.G., P.E.
Vice President/Senior Reviewer
khill@smeinc.com
803-561-9024 (c)

Attachments

cc Laura Boos, USACE
Mr. Mohammed Fahed Altwairgi

Attachment I – Figures and Site Photographs



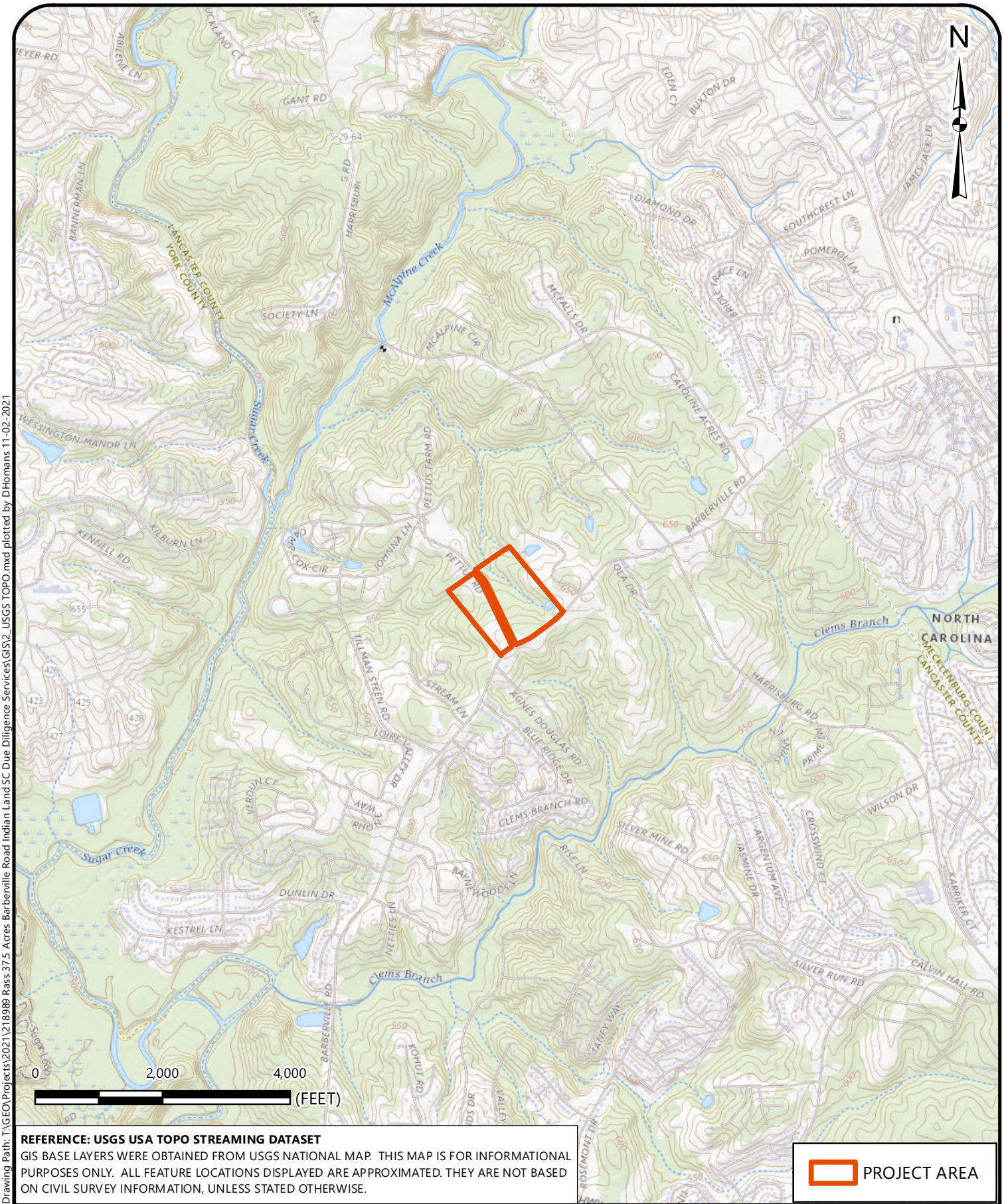
REFERENCE: ESRI STREETMAP USA DATASET
THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. ALL FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.

Drawing Path: T:\GEO\Projects\2021\218989 Rass 37.5 Acres Barberville Road Indian Land SC Due Diligence Services\GIS\1_vicinity.mxd plotted by DHomans 11-02-2021

VICINITY MAP

BARBERVILLE ROAD SITE
BARBERVILLE ROAD AND PETTUS ROAD
INDIAN LAND, LANCASTER COUNTY, SOUTH CAROLINA

SCALE:	1 " = 1.0 miles
DATE:	11-2-21
PROJECT NUMBER	218989
FIGURE NO.	1



REFERENCE: USGS USA TOPO STREAMING DATASET
GIS BASE LAYERS WERE OBTAINED FROM USGS NATIONAL MAP. THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. ALL FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.

Drawing Path: T:\GEO\Projects\2021\218989 Rass 37.5 Acres Barberville Road Indian Land SC Due Diligence Services\GIS\2_USGS TOPO.mxd plotted by DHomans 11-02-2021

USGS TOPOGRAPHIC MAP

BARBERVILLE ROAD SITE
BARBERVILLE ROAD AND PETTUS ROAD
INDIAN LAND, LANCASTER COUNTY, SOUTH CAROLINA

SCALE:	FIGURE NO.
1 " = 2,000 '	2
DATE: 11-2-21	
PROJECT NUMBER 218989	

Non-Wetland Water Stream S2
Approx. 18 LF

Wetland B
Approx. 0.065 Acres

Wetland A
Approx. 0.003 Acres

Breached Dam

S2

Wetland B

UP-B

S1

Wetland A

UP-A

UP-P

Non-Wetland Water Stream S1
Approx. 143 LF

Non-J3

Wetland C
Approx. 0.017 Acres

S3 (upstream)

Non-Wetland Water Stream S3
Approx. 990 LF

S3 (downstream)

PETTUS RD

UP-1

Gullies

Non-J1
upstream

Non-J1
downstream

UPLAND
Approx. 37.50 Acres

GARDEN GATE DR

LEGEND

- PROJECT AREA (~37.57 AC.)
- WETLANDS
- NON-WETLAND WATERS (TRIBUTARIES)
- STREAM DATA FORMS
- UPLAND DATA FORMS
- WETLAND DATA FORMS
- PHOTO LOCATION

REFERENCE: OCTOBER 2022 AERIAL PHOTOGRAPH
GIS BASE LAYERS WERE OBTAINED FROM LANCASTER COUNTY AND DURHAM COUNTY / NEARMAP. ALL FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.

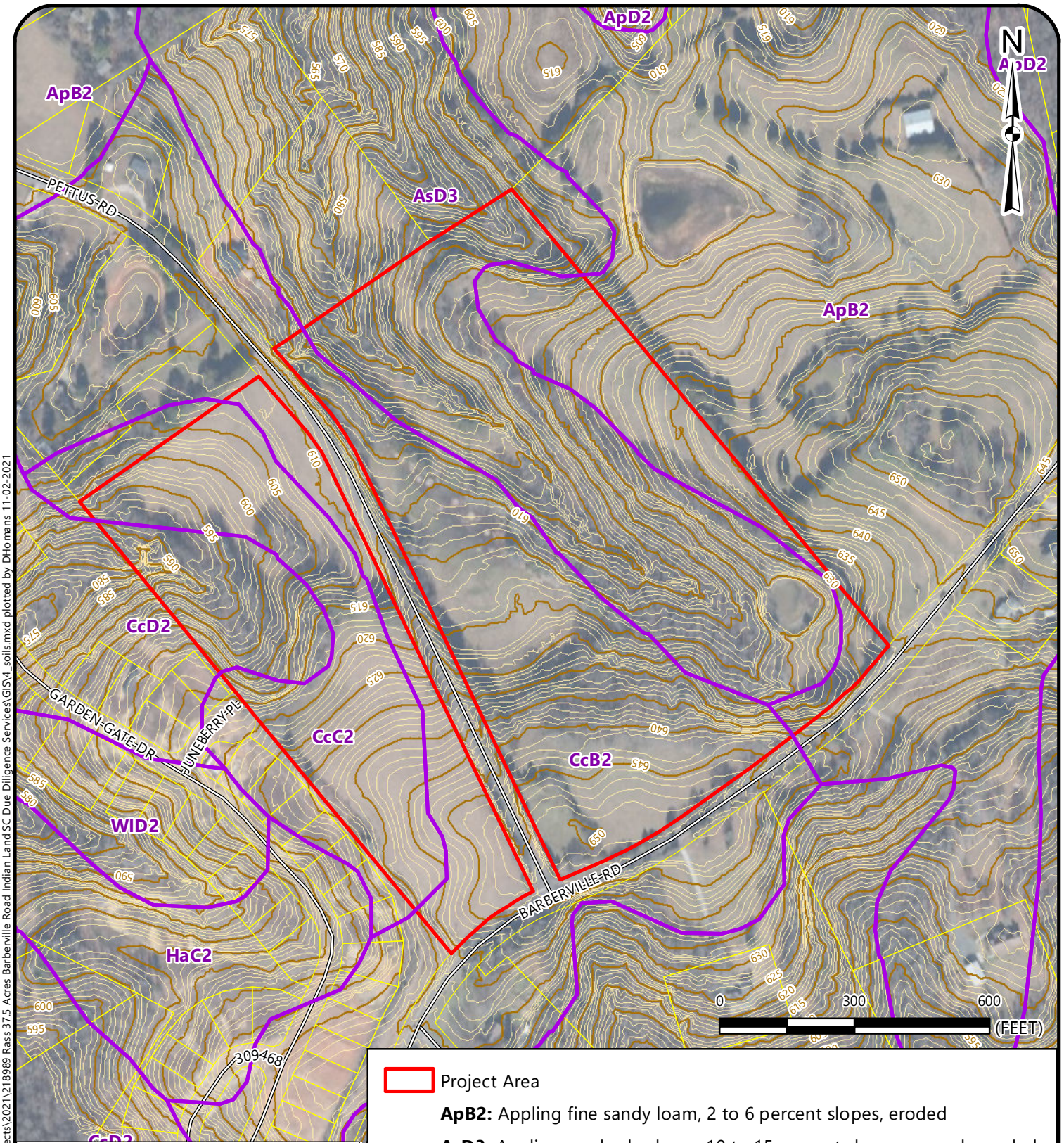
0 150 300 (FEET)

Drawing Path: T:\Charlotte-1350\Projects\2021\218989_Rass 37.5 Acres Barberville Road Indian Land SC Due Diligence Services\GIS\3_waters.mxd plotted by DHomans 06-20-2023

SITE MAP / APPROXIMATE WATERS OF THE U.S. MAP

BARBERVILLE ROAD SITE
BARBERVILLE ROAD AND PETTUS ROAD
INDIAN LAND, LANCASTER COUNTY, SOUTH CAROLINA

SCALE: 1 " = 150 '
DATE: 6-20-23
PROJECT NUMBER 218989
FIGURE NO. 3



Drawing Path: T:\GEO\Projects\2021\218989 Rass 37.5 Acres Barberville Road Indian Land SC Due Diligence Services\GIS\4_soils.mxd plotted by DHomans 11-02-2021

REFERENCE: USDA SOIL SURVEY GEOGRAPHIC (SSURGO) DATASET
SOIL MAPPING OBTAINED FROM USDA WEB SOIL SURVEY ON 10/7/2021. ALL FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED

Project Area

ApB2: Appling fine sandy loam, 2 to 6 percent slopes, eroded

AsD3: Appling sandy clay loam, 10 to 15 percent slopes, severely eroded

CcB2: Cecil fine sandy loam, 2 to 6 percent slopes, eroded

CcC2: Cecil fine sandy loam, 6 to 10 percent slopes, eroded

CcD2: Cecil fine sandy loam, 10 to 15 percent slopes, eroded

USDA SOIL SURVEY

BARBERVILLE ROAD SITE
BARBERVILLE ROAD AND PETTUS ROAD
INDIAN LAND, LANCASTER COUNTY, SOUTH CAROLINA

SCALE: 1 " = 300 '
DATE: 11-2-21
PROJECT NUMBER 218989

FIGURE NO. 4



Date: 6/16/2023

Photographer: Suzanne Knudsen

1	**Location / Orientation**	Facing south
	Remarks	Early sucessional growth at Data Point UP-P.



Date: 5/23/2023

Photographer: Suzanne Knudsen

2	**Location / Orientation**	Facing north
	Remarks	South of Data Point UP-P.



Date: 5/23/2023

Photographer: Suzanne Knudsen

no

3	**Location / Orientation**	Facing southeast
	Remarks	Upstream of Stream S1.



Date: 5/23/2023

Photographer: Suzanne Knudsen

4	**Location / Orientation**	Facing east
	Remarks	Wetland WA.



Date: 5/23/2023

Photographer: Suzanne Knudsen

5	**Location / Orientation**	Facing south
	Remarks	Wetland WB.



Date: 5/23/2023

Photographer: Suzanne Knudsen

6	**Location / Orientation**	Facing north
	Remarks	Downstream of Stream S3.



Date: 5/23/2023

Photographer: Suzanne Knudsen

7	**Location / Orientation**	Facing south
	Remarks	Upstream of Stream S3.



Date: 5/23/2023

Photographer: Suzanne Knudsen

8	**Location / Orientation**	Facing north
	Remarks	Data Point Non J-3.



Date: 5/23/2023

Photographer: Suzanne Knudsen

9	**Location / Orientation**	Facing northwest
	Remarks	Upland Data Point UP-1.



Date: 5/23/2023

Photographer: Suzanne Knudsen

10	**Location / Orientation**	Facing northwest
	Remarks	Data Point Non J-1 downstream.



Date: 5/23/2023

Photographer: Suzanne Knudsen

11	**Location / Orientation**	Facing southeast
	Remarks	Data Point Non J-1 upstream

Attachment II – Data Forms

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region
See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 37.5-Acre Barberville Road Site City/County: Indian Land/Lancaster Sampling Date: 5/23/2023

Applicant/Owner: Rass Investments, LLC State: SC Sampling Point: WA

Investigator(s): Suzanne Knudsen - S&ME, Inc. Section, Township, Range:

Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): flat Slope (%):

Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.032211 Long: -80.885078 Datum:

Soil Map Unit Name: Appling sandy clay loam, 10 to 15 percent slopes, severely eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No	**within a Wetland?** **Yes** X **No**
Wetland Hydrology Present?	Yes X	No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- X Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes X	No	Depth (inches): 5
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WA

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Ligustrum sinense*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	5 =Total Cover		
50% of total cover: 3	20% of total cover: 1		
Herb Stratum (Plot size: 5)			
1. *Microstegium vimineum*	30	Yes	FAC
2. *Campsis radicans*	20	Yes	FAC
3. *Parthenocissus quinquefolia*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	60 =Total Cover		
50% of total cover: 30	20% of total cover: 12		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	50	x 3 =	150
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	65 (A)		210 (B)

Prevalence Index = B/A = 3.23

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WA

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	70	7.5YR 3/4	30	C	PL	Loamy/Clayey	Prominent redox concentrations
10-12	7.5YR 3/4	90	10YR 4/1	10	D	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Mucky Mineral (F1) **(MLRA 136)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- X Umbric Surface (F13) **(MLRA 122, 136)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147, 148)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (F21) **(outside MLRA 127, 147, 148)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region
See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 37.5-Acre Barberville Road Site City/County: Indian Land/Lancaster Sampling Date: 5/23/2023

Applicant/Owner: Rass Investments, LLC State: SC Sampling Point: UP-A

Investigator(s): Suzanne Knudsen - S&ME, Inc. Section, Township, Range:

Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): flat Slope (%):

Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.032814 Long: -80.885140 Datum:

Soil Map Unit Name: Appling sandy clay loam, 10 to 15 percent slopes, severely eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: UP-A

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Liquidambar styraciflua*	5	Yes	FAC
2. *Juniperus virginiana*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	10 =Total Cover		
50% of total cover: 5	20% of total cover: 2		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Ligustrum sinense*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	5 =Total Cover		
50% of total cover: 3	20% of total cover: 1		
Herb Stratum (Plot size: 5)			
1. *Microstegium vimineum*	10	Yes	FAC
2. *Lonicera japonica*	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	20 =Total Cover		
50% of total cover: 10	20% of total cover: 4		
Woody Vine Stratum (Plot size: 30)			
1. *Vitis rotundifolia*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5 =Total Cover		
50% of total cover: 3	20% of total cover: 1		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	40 (A)		140 (B)

Prevalence Index = B/A = 3.50

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: UP-A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					Loamy/Clayey	
2-12	10YR 4/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Mucky Mineral (F1) **(MLRA 136)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 122, 136)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147, 148)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (F21) **(outside MLRA 127, 147, 148)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region
See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 37.5-Acre Barberville Road Site City/County: Indian Land/Lancaster Sampling Date: 5/23/2023

Applicant/Owner: Rass Investments, LLC State: SC Sampling Point: WB

Investigator(s): Suzanne Knudsen - S&ME, Inc. Section, Township, Range:

Landform (hillside, terrace, etc.): terrce Local relief (concave, convex, none): flat Slope (%):

Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.031968 Long: -80.884665 Datum:

Soil Map Unit Name: Appling sandy clay loam, 10 to 15 percent slopes, severely eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No	**within a Wetland?** **Yes** X **No**
Wetland Hydrology Present?	Yes X	No	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes X	No ____	Depth (inches): 12
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: WB

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Liquidambar styraciflua*	10	Yes	FAC
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	10 =Total Cover		
50% of total cover: 5	20% of total cover:	2	
Herb Stratum (Plot size: 5)			
1. *Ranunculus bulbosus*	10	Yes	FAC
2. *Carex lurida*	10	Yes	OBL
3. *Carex vulpinoidea*	10	Yes	OBL
4. *Juncus effusus*	10	Yes	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	40 =Total Cover		
50% of total cover: 20	20% of total cover:	8	
Woody Vine Stratum (Plot size: 30)			
1. *Vitis rotundifolia*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5 =Total Cover		
50% of total cover: 3	20% of total cover:	1	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	10	x 2 =	20
FAC species	25	x 3 =	75
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	55 (A)		115 (B)

Prevalence Index = B/A = 2.09

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WB

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/2	100					Loamy/Clayey	
2-12	10YR 5/1	95	7.5YR 4/6	5	C	PL	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Mucky Mineral (F1) **(MLRA 136)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 122, 136)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147, 148)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (F21) **(outside MLRA 127, 147, 148)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region
See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 37.5-Acre Barberville Road Site City/County: Indian Land/Lancaster Sampling Date: 5/23/2023

Applicant/Owner: Rass Investments, LLC State: SC Sampling Point: UP-B

Investigator(s): Suzanne Knudsen - S&ME, Inc. Section, Township, Range:

Landform (hillside, terrace, etc.): terrce Local relief (concave, convex, none): flat Slope (%):

Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.031821 Long: -80.884616 Datum:

Soil Map Unit Name: Appling sandy clay loam, 10 to 15 percent slopes, severely eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes	No X	**Is the Sampled Area within a Wetland?** **Yes** **No** X
Hydric Soil Present?	Yes	No X	
Wetland Hydrology Present?	Yes	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No X	Depth (inches):
Water Table Present?	Yes	No X	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes	No X	Depth (inches):

Wetland Hydrology Present? **Yes** **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: UP-B

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus virginiana*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	5 =Total Cover		
50% of total cover: 3	20% of total cover: 1		
Sapling/Shrub Stratum (Plot size: 15)			
1. *Ligustrum sinense*	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	5 =Total Cover		
50% of total cover: 3	20% of total cover: 1		
Herb Stratum (Plot size: 5)			
1. *Lonicera japonica*	10	Yes	FACU
2. *Parthenocissus quinquefolia*	10	Yes	FACU
3. *Elephantopus tomentosus*	10	Yes	UPL
4. *Asplenium platyneuron*	10	Yes	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	40 =Total Cover		
50% of total cover: 20	20% of total cover: 8		
Woody Vine Stratum (Plot size: 30)			
1. *Vitis rotundifolia*	5	Yes	FAC
2.			
3.			
4.			
5.			
	5 =Total Cover		
50% of total cover: 3	20% of total cover: 1		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 14.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	5	x 3 =	15
FACU species	40	x 4 =	160
UPL species	10	x 5 =	50
Column Totals:	55 (A)		225 (B)

Prevalence Index = B/A = 4.09

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: UP-B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/3	100					Loamy/Clayey	
6-12	10YR 5/4	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Mucky Mineral (F1) **(MLRA 136)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 122, 136)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147, 148)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (F21) **(outside MLRA 127, 147, 148)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region
See ERDC/EL TR-12-9; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp:11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: 37.5-Acre Barberville Road Site City/County: Indian Land/Lancaster Sampling Date: 5/23/2023

Applicant/Owner: Rass Investments, LLC State: SC Sampling Point: UP-1

Investigator(s): Suzanne Knudsen - S&ME, Inc. Section, Township, Range:

Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): flat Slope (%):

Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.030178 Long: -80.886651 Datum:

Soil Map Unit Name: Cecil fine sandy loam, 6 to 10 percent slopes, eroded NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Saturation at 14+ inches

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: UP-1

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Quercus falcata*	10	Yes	FACU
2. *Quercus rubra*	5	Yes	FACU
3. *Quercus nigra*	5	Yes	FAC
4. *Acer rubrum*	5	Yes	FAC
5. *Juniperus virginiana*	5	Yes	FACU
6. *Platanus occidentalis*	5	Yes	FACW
7. *Liquidambar styraciflua*	5	Yes	FAC
	40	=Total Cover	
50% of total cover: 20		20% of total cover:	8

Sapling/Shrub Stratum (Plot size: 15)			
1. *Ligustrum sinense*	10	Yes	FACU
2. *Juniperus virginiana*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	15	=Total Cover	
50% of total cover: 8		20% of total cover:	3

Herb Stratum (Plot size: 5)			
1. *Toxicodendron radicans*	5	Yes	FAC
2. *Parthenocissus quinquefolia*	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	10	=Total Cover	
50% of total cover: 5		20% of total cover:	2

Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	
50% of total cover:		20% of total cover:	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 11 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 45.5% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	20	x 3 =	60
FACU species	40	x 4 =	160
UPL species	0	x 5 =	0
Column Totals:	65 (A)		230 (B)

Prevalence Index = B/A = 3.54

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: UP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Loamy/Clayey	
4-12	10YR 5/3	95	10YR 4/6	5	C	M	Sandy	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Mucky Mineral (F1) **(MLRA 136)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 122, 136)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147, 148)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (F21) **(outside MLRA 127, 147, 148)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

U.S. Army Corps of Engineers **WETLAND DETERMINATION DATA SHEET – Eastern Mountains and Piedmont Region** See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R	***Requirement Control Symbol EXEMPT (Authority: AR 335-15, paragraph 5-2a)***

Project/Site: 37.57-Acre Barberville Road City/County: Indian Land/Lancaster Sampling Date: 6/16/2023

Applicant/Owner: Rass Investments, LLC State: SC Sampling Point: UP-P

Investigator(s): Suzanne L. Knudsen - S&ME, Inc. Section, Township, Range:

Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%):

Subregion (LRR or MLRA): LRR P, MLRA 136 Lat: 35.029861 Long: -80.882900 Datum:

Soil Map Unit Name: Appling sandy clay loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No (If no, explain in Remarks.)

Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No x

Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area**
Hydric Soil Present?	Yes	No X	**within a Wetland?** **Yes** **No** X
Wetland Hydrology Present?	Yes X	No	

Remarks:
Drained pond, dam breached

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- True Aquatic Plants (B14)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Sparsely Vegetated Concave Surface (B8)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes	No x	Depth (inches):
Water Table Present?	Yes	No x	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No**

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
no hydrology

VEGETATION (Four Strata) – Use scientific names of plants. Sampling Point: UP-P

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
	=Total Cover		
50% of total cover:	20% of total cover:		
Herb Stratum (Plot size: 5)			
1. *Ludwigia alternifolia*	5	Yes	FACW
2. *Polygonum pensylvanicum*	5	Yes	FACW
3. *Juncus effusus*	5	Yes	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	15 =Total Cover		
50% of total cover: 8	20% of total cover: 3		
Woody Vine Stratum (Plot size: 30)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
50% of total cover:	20% of total cover:		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	15	x 2 =	30
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	15 (A)		30 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody Vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)
early successional growth of common turf grasses (see Picture 1)

SOIL

Sampling Point: UP-P

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 3/4	70	2.5YR 3/1	30	D	M	Loamy/Clayey	
2-12	10YR 5/3	60	10YR 4/6	40	C	PL	Sandy	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ___ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ___ Loamy Mucky Mineral (F1) **(MLRA 136)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ___ Umbric Surface (F13) **(MLRA 122, 136)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 148)**
- ___ Red Parent Material (F21) **(MLRA 127, 147, 148)**

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(MLRA 147)**
- ___ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ___ Red Parent Material (F21) **(outside MLRA 127, 147, 148)**
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

NC DWQ Stream Identification Form Version 4.11

Date: 5/23/2023	**Project/Site**: 37.5-Acre Barberville Road	**Latitude:** 35.029999
Evaluator: Suzanne Knudsen - SM&E	**County:** Lancaster	**Longitude:** -80.887386
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 13.5	**Stream Determination (circle one)** **Ephemeral**	**Other** *e.g. Quad Name*: Non-J1 downstream

A. Geomorphology (Subtotal = 4.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0 ○	1 ○	2 ◉	3 ○
2. Sinuosity of channel along thalweg	0 ◉	1 ○	2 ○	3 ○
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ◉	1 ○	2 ○	3 ○
4. Particle size of stream substrate	0 ◉	1 ○	2 ○	3 ○
5. Active/relict floodplain	0 ○	1 ◉	2 ○	3 ○
6. Depositional bars or benches	0 ◉	1 ○	2 ○	3 ○
7. Recent alluvial deposits	0 ○	1 ◉	2 ○	3 ○
8. Headcuts	0 ◉	1 ○	2 ○	3 ○
9. Grade control	0 ◉	0.5 ○	1 ○	1.5 ○
10. Natural valley	0 ○	0.5 ◉	1 ○	1.5 ○
11. Second or greater order channel	No = 0 ◉		Yes = 3 ○	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5)				
12. Presence of Baseflow	0 ◉	1 ○	2 ○	3 ○
13. Iron oxidizing bacteria	0 ◉	1 ○	2 ○	3 ○
14. Leaf litter	1.5 ○	1 ◉	0.5 ○	0 ○
15. Sediment on plants or debris	0 ◉	0.5 ○	1 ○	1.5 ○
16. Organic debris lines or piles	0 ○	0.5 ○	1 ◉	1.5 ○
17. Soil-based evidence of high water table?	No = 0 ○		Yes = 3 ◉	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3 ○	2 ◉	1 ○	0 ○
19. Rooted upland plants in streambed	3 ○	2 ◉	1 ○	0 ○
20. Macrobenthos (note diversity and abundance)	0 ◉	1 ○	2 ○	3 ○
21. Aquatic Mollusks	0 ◉	1 ○	2 ○	3 ○
22. Fish	0 ◉	0.5 ○	1 ○	1.5 ○
23. Crayfish	0 ◉	0.5 ○	1 ○	1.5 ○
24. Amphibians	0 ◉	0.5 ○	1 ○	1.5 ○
25. Algae	0 ◉	0.5 ○	1 ○	1.5 ○
26. Wetland plants in streambed	○ FACW = 0.75 ○ OBL = 1.5 ○ Other = 0 ◉			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: See attached figures. Sweet gum (Liquidambar styraciflua) and muscadine (Vitis rotundifolia) in stream bed.

NC DWQ Stream Identification Form Version 4.11

Date: 5/23/2023	**Project/Site**: 37.5-Acre Barberville Road	**Latitude:** 35.029912
Evaluator: Suzanne Knudsen - SM&E	**County:** Lancaster	**Longitude:** -80.887192
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 17	**Stream Determination (circle one)** **Ephemeral**	**Other** *e.g. Quad Name*: Non-J1 upstream

A. Geomorphology (Subtotal = 7.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0 ○	1 ○	2 ○	3 ◉
2. Sinuosity of channel along thalweg	0 ○	1 ◉	2 ○	3 ○
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ◉	1 ○	2 ○	3 ○
4. Particle size of stream substrate	0 ◉	1 ○	2 ○	3 ○
5. Active/relict floodplain	0 ○	1 ◉	2 ○	3 ○
6. Depositional bars or benches	0 ○	1 ◉	2 ○	3 ○
7. Recent alluvial deposits	0 ○	1 ◉	2 ○	3 ○
8. Headcuts	0 ◉	1 ○	2 ○	3 ○
9. Grade control	0 ◉	0.5 ○	1 ○	1.5 ○
10. Natural valley	0 ○	0.5 ◉	1 ○	1.5 ○
11. Second or greater order channel	No = 0 ◉		Yes = 3 ○	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5.5)				
12. Presence of Baseflow	0 ◉	1 ○	2 ○	3 ○
13. Iron oxidizing bacteria	0 ◉	1 ○	2 ○	3 ○
14. Leaf litter	1.5 ○	1 ◉	0.5 ○	0 ○
15. Sediment on plants or debris	0 ○	0.5 ◉	1 ○	1.5 ○
16. Organic debris lines or piles	0 ○	0.5 ○	1 ◉	1.5 ○
17. Soil-based evidence of high water table?	No = 0 ○		Yes = 3 ◉	

C. Biology (Subtotal = 4)				
18. Fibrous roots in streambed	3 ○	2 ◉	1 ○	0 ○
19. Rooted upland plants in streambed	3 ○	2 ◉	1 ○	0 ○
20. Macrobenthos (note diversity and abundance)	0 ◉	1 ○	2 ○	3 ○
21. Aquatic Mollusks	0 ◉	1 ○	2 ○	3 ○
22. Fish	0 ◉	0.5 ○	1 ○	1.5 ○
23. Crayfish	0 ◉	0.5 ○	1 ○	1.5 ○
24. Amphibians	0 ◉	0.5 ○	1 ○	1.5 ○
25. Algae	0 ◉	0.5 ○	1 ○	1.5 ○
26. Wetland plants in streambed	○ FACW = 0.75 ○ OBL = 1.5 ○ Other = 0 ◉			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: See attached figures. Surface water flow. Eastern red cedar saplings (Juniperus virginiana), greenbrier (Smilax rotundifolia), muscadine (Vitis rotundifolia), and Virginia creeper (Parthenocissus quinquefolia) in stream bed.

NC DWQ Stream Identification Form Version 4.11

Date: 5/23/2023	**Project/Site**: 37.5-Acre Barberville Road	**Latitude:** 35.029903
Evaluator: Suzanne L Knudsen	**County:** Lancaster	**Longitude:** -80.883523
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 16	**Stream Determination (circle one)** **Ephemeral**	**Other** *e.g. Quad Name*: Non-J3

A. Geomorphology (Subtotal = 9)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0 ○	1 ○	2 ○	3 ◉
2. Sinuosity of channel along thalweg	0 ○	1 ○	2 ◉	3 ○
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ◉	1 ○	2 ○	3 ○
4. Particle size of stream substrate	0 ◉	1 ○	2 ○	3 ○
5. Active/relict floodplain	0 ○	1 ◉	2 ○	3 ○
6. Depositional bars or benches	0 ◉	1 ○	2 ○	3 ○
7. Recent alluvial deposits	0 ◉	1 ○	2 ○	3 ○
8. Headcuts	0 ○	1 ○	2 ◉	3 ○
9. Grade control	0 ◉	0.5 ○	1 ○	1.5 ○
10. Natural valley	0 ○	0.5 ○	1 ◉	1.5 ○
11. Second or greater order channel	No = 0 ◉		Yes = 3 ○	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 1)				
12. Presence of Baseflow	0 ◉	1 ○	2 ○	3 ○
13. Iron oxidizing bacteria	0 ◉	1 ○	2 ○	3 ○
14. Leaf litter	1.5 ○	1 ○	0.5 ◉	0 ○
15. Sediment on plants or debris	0 ○	0.5 ◉	1 ○	1.5 ○
16. Organic debris lines or piles	0 ◉	0.5 ○	1 ○	1.5 ○
17. Soil-based evidence of high water table?	No = 0 ◉		Yes = 3 ○	

C. Biology (Subtotal = 6)				
18. Fibrous roots in streambed	3 ◉	2 ○	1 ○	0 ○
19. Rooted upland plants in streambed	3 ◉	2 ○	1 ○	0 ○
20. Macrobenthos (note diversity and abundance)	0 ◉	1 ○	2 ○	3 ○
21. Aquatic Mollusks	0 ◉	1 ○	2 ○	3 ○
22. Fish	0 ◉	0.5 ○	1 ○	1.5 ○
23. Crayfish	0 ◉	0.5 ○	1 ○	1.5 ○
24. Amphibians	0 ◉	0.5 ○	1 ○	1.5 ○
25. Algae	0 ◉	0.5 ○	1 ○	1.5 ○
26. Wetland plants in streambed	◉ FACW = 0.75 ○ OBL = 1.5 ○ Other = 0 ○			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes: downstream of breached dam

Sketch: See attached figures

NC DWQ Stream Identification Form Version 4.11

Date: 5/23/2023	**Project/Site**: 37.5-Acre Barberville Road	**Latitude:** 35.032234
Evaluator: Suzanne Knudsen - SM&E	**County:** Lancaster	**Longitude:** -80.885085
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 28.5	**Stream Determination (circle one)** **Intermittent**	**Other** *e.g. Quad Name*: Stream S1

A. Geomorphology (Subtotal = 15.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0 ○	1 ○	2 ○	3 ◉
2. Sinuosity of channel along thalweg	0 ○	1 ◉	2 ○	3 ○
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ○	1 ◉	2 ○	3 ○
4. Particle size of stream substrate	0 ○	1 ○	2 ◉	3 ○
5. Active/relict floodplain	0 ○	1 ◉	2 ○	3 ○
6. Depositional bars or benches	0 ○	1 ◉	2 ○	3 ○
7. Recent alluvial deposits	0 ○	1 ◉	2 ○	3 ○
8. Headcuts	0 ○	1 ◉	2 ○	3 ○
9. Grade control	0 ○	0.5 ◉	1 ○	1.5 ○
10. Natural valley	0 ○	0.5 ○	1 ◉	1.5 ○
11. Second or greater order channel	No = 0 ○		Yes = 3 ◉	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 8)				
12. Presence of Baseflow	0 ○	1 ◉	2 ○	3 ○
13. Iron oxidizing bacteria	0 ○	1 ○	2 ◉	3 ○
14. Leaf litter	1.5 ◉	1 ○	0.5 ○	0 ○
15. Sediment on plants or debris	0 ○	0.5 ◉	1 ○	1.5 ○
16. Organic debris lines or piles	0 ◉	0.5 ○	1 ○	1.5 ○
17. Soil-based evidence of high water table?	No = 0 ○		Yes = 3 ◉	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3 ○	2 ◉	1 ○	0 ○
19. Rooted upland plants in streambed	3 ◉	2 ○	1 ○	0 ○
20. Macrobenthos (note diversity and abundance)	0 ◉	1 ○	2 ○	3 ○
21. Aquatic Mollusks	0 ◉	1 ○	2 ○	3 ○
22. Fish	0 ◉	0.5 ○	1 ○	1.5 ○
23. Crayfish	0 ◉	0.5 ○	1 ○	1.5 ○
24. Amphibians	0 ◉	0.5 ○	1 ○	1.5 ○
25. Algae	0 ◉	0.5 ○	1 ○	1.5 ○
26. Wetland plants in streambed	◉	FACW = 0.75 ○ OBL = 1.5 ○ Other = 0 ○		

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: See attached figures

NC DWQ Stream Identification Form Version 4.11

Date: 5/23/2023	**Project/Site**: 37.5-Acre Barberville Road	**Latitude:** 35.032072
Evaluator: Suzanne Knudsen - SM&E	**County:** Lancaster	**Longitude:** -80.884733
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 19	**Stream Determination (circle one)** **Intermittent**	**Other** *e.g. Quad Name*: Stream S2

A. Geomorphology (Subtotal = 8.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0 ○	1 ○	2 ○	3 ◉
2. Sinuosity of channel along thalweg	0 ◉	1 ○	2 ○	3 ○
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ○	1 ◉	2 ○	3 ○
4. Particle size of stream substrate	0 ○	1 ○	2 ◉	3 ○
5. Active/relict floodplain	0 ○	1 ◉	2 ○	3 ○
6. Depositional bars or benches	0 ◉	1 ○	2 ○	3 ○
7. Recent alluvial deposits	0 ◉	1 ○	2 ○	3 ○
8. Headcuts	0 ◉	1 ○	2 ○	3 ○
9. Grade control	0 ○	0.5 ◉	1 ○	1.5 ○
10. Natural valley	0 ○	0.5 ○	1 ◉	1.5 ○
11. Second or greater order channel	No = 0 ◉		Yes = 3 ○	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5.5)				
12. Presence of Baseflow	0 ○	1 ◉	2 ○	3 ○
13. Iron oxidizing bacteria	0 ◉	1 ○	2 ○	3 ○
14. Leaf litter	1.5 ◉	1 ○	0.5 ○	0 ○
15. Sediment on plants or debris	0 ◉	0.5 ○	1 ○	1.5 ○
16. Organic debris lines or piles	0 ◉	0.5 ○	1 ○	1.5 ○
17. Soil-based evidence of high water table?	No = 0 ○		Yes = 3 ◉	

C. Biology (Subtotal = 5)				
18. Fibrous roots in streambed	3 ○	2 ◉	1 ○	0 ○
19. Rooted upland plants in streambed	3 ◉	2 ○	1 ○	0 ○
20. Macrobenthos (note diversity and abundance)	0 ◉	1 ○	2 ○	3 ○
21. Aquatic Mollusks	0 ◉	1 ○	2 ○	3 ○
22. Fish	0 ◉	0.5 ○	1 ○	1.5 ○
23. Crayfish	0 ◉	0.5 ○	1 ○	1.5 ○
24. Amphibians	0 ◉	0.5 ○	1 ○	1.5 ○
25. Algae	0 ◉	0.5 ○	1 ○	1.5 ○
26. Wetland plants in streambed	◉ FACW = 0.75 ○ OBL = 1.5 ○ Other = 0 ○			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: See attached figures

NC DWQ Stream Identification Form Version 4.11

Date: 5/23/2023	**Project/Site**: 37.5-Acre Barberville Road	**Latitude:** 35.031425
Evaluator: Suzanne Knudsen - S&ME, Inc. Charlotte, NC	**County:** Lancaster	**Longitude:** -80.885943
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 33	**Stream Determination (circle one)** **Perennial**	**Other** *e.g. Quad Name*: Stream S3 DS

A. Geomorphology (Subtotal = 18)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0 ○	1 ○	2 ○	3 ◉
2. Sinuosity of channel along thalweg	0 ○	1 ◉	2 ○	3 ○
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ○	1 ◉	2 ○	3 ○
4. Particle size of stream substrate	0 ○	1 ○	2 ○	3 ◉
5. Active/relict floodplain	0 ○	1 ◉	2 ○	3 ○
6. Depositional bars or benches	0 ○	1 ○	2 ○	3 ◉
7. Recent alluvial deposits	0 ○	1 ○	2 ○	3 ◉
8. Headcuts	0 ○	1 ◉	2 ○	3 ○
9. Grade control	0 ○	0.5 ◉	1 ○	1.5 ○
10. Natural valley	0 ○	0.5 ○	1 ○	1.5 ◉
11. Second or greater order channel	No = 0 ◉		Yes = 3 ○	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 9)				
12. Presence of Baseflow	0 ○	1 ◉	2 ○	3 ○
13. Iron oxidizing bacteria	0 ○	1 ○	2 ○	3 ◉
14. Leaf litter	1.5 ◉	1 ○	0.5 ○	0 ○
15. Sediment on plants or debris	0 ◉	0.5 ○	1 ○	1.5 ○
16. Organic debris lines or piles	0 ○	0.5 ◉	1 ○	1.5 ○
17. Soil-based evidence of high water table?	No = 0 ○		Yes = 3 ◉	

C. Biology (Subtotal = 6)				
18. Fibrous roots in streambed	3 ◉	2 ○	1 ○	0 ○
19. Rooted upland plants in streambed	3 ◉	2 ○	1 ○	0 ○
20. Macrobenthos (note diversity and abundance)	0 ◉	1 ○	2 ○	3 ○
21. Aquatic Mollusks	0 ◉	1 ○	2 ○	3 ○
22. Fish	0 ◉	0.5 ○	1 ○	1.5 ○
23. Crayfish	0 ◉	0.5 ○	1 ○	1.5 ○
24. Amphibians	0 ◉	0.5 ○	1 ○	1.5 ○
25. Algae	0 ◉	0.5 ○	1 ○	1.5 ○
26. Wetland plants in streambed	◉ FACW = 0.75 ○	OBL = 1.5 ○	Other = 0 ○	

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes: Boulders and bedrock

Sketch: See attached figures

NC DWQ Stream Identification Form Version 4.11

Date: 5/23/2023	**Project/Site**: 37.5-Acre Barberville Road	**Latitude:** 35.030809
Evaluator: Suzanne Knudsen - S&ME, Inc. Charlotte, NC	**County:** Lancaster	**Longitude:** -80.884805
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 31	**Stream Determination (circle one)** **Perennial**	**Other** *e.g. Quad Name*: Stream S3 US

A. Geomorphology (Subtotal = 17)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0 ○	1 ○	2 ○	3 ◉
2. Sinuosity of channel along thalweg	0 ○	1 ◉	2 ○	3 ○
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0 ○	1 ○	2 ◉	3 ○
4. Particle size of stream substrate	0 ○	1 ○	2 ◉	3 ○
5. Active/relict floodplain	0 ○	1 ◉	2 ○	3 ○
6. Depositional bars or benches	0 ○	1 ○	2 ○	3 ◉
7. Recent alluvial deposits	0 ○	1 ○	2 ◉	3 ○
8. Headcuts	0 ○	1 ◉	2 ○	3 ○
9. Grade control	0 ○	0.5 ◉	1 ○	1.5 ○
10. Natural valley	0 ○	0.5 ○	1 ○	1.5 ◉
11. Second or greater order channel	No = 0 ◉		Yes = 3 ○	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 8.5)				
12. Presence of Baseflow	0 ○	1 ◉	2 ○	3 ○
13. Iron oxidizing bacteria	0 ○	1 ○	2 ◉	3 ○
14. Leaf litter	1.5 ◉	1 ○	0.5 ○	0 ○
15. Sediment on plants or debris	0 ◉	0.5 ○	1 ○	1.5 ○
16. Organic debris lines or piles	0 ○	0.5 ○	1 ◉	1.5 ○
17. Soil-based evidence of high water table?	No = 0 ○		Yes = 3 ◉	

C. Biology (Subtotal = 5.5)				
18. Fibrous roots in streambed	3 ○	2 ◉	1 ○	0 ○
19. Rooted upland plants in streambed	3 ◉	2 ○	1 ○	0 ○
20. Macrobenthos (note diversity and abundance)	0 ◉	1 ○	2 ○	3 ○
21. Aquatic Mollusks	0 ◉	1 ○	2 ○	3 ○
22. Fish	0 ◉	0.5 ○	1 ○	1.5 ○
23. Crayfish	0 ◉	0.5 ○	1 ○	1.5 ○
24. Amphibians	0 ○	0.5 ◉	1 ○	1.5 ○
25. Algae	0 ◉	0.5 ○	1 ○	1.5 ○
26. Wetland plants in streambed	◉ FACW = 0.75 ○ OBL = 1.5 ○ Other = 0 ○			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch: See attached figures

EPC, LLC
1144 Woodtrail Drive
Gaston, SC 29053

September 20, 2023

Mr. Abdulhakim BenSufia
Rass Investments, LLC
2545 Kennedy Drive
Corona, CA 92879

Email: Hakim@rassinvt.com

RE: Traffic Impact and Access Study
Jasmine Hills Residential
Lancaster County, SC

Dear Mr. BenSufia:

As requested, Encroachment Permit Clearinghouse (EPC) has completed this assessment of the traffic impacts associated with the development of a new sub-division which is located on both sides of Pettus Road near Barberville Road in Lancaster County, SC. The following provides a summary of this study's findings.

PROJECT DESCRIPTION

The project site is generally located north of Barberville Road (S-42) on both sides of Pettus Road (S-411). The project site(s) total approximately 35.18-acres and is identified as Tax ID #0003-00-058.00. The section to the west of Pettus Road has 25 lots, with the remaining 50 lots on the east of Pettus. As planned, the total 75 single-family detached units are to have access to/from Pettus Road at a single point each, creating a cross-type/four-legged intersection approximately 750-feet to the north of Barberville Road.

As scheduled, this development is planned to be constructed and occupied by 2025. **Figure 1** depicts the site location in relation to the regional roadway system. **Figure 2** depicts the proposed development plan.

EXISTING CONDITIONS

A comprehensive field inventory of the project study area was conducted in September 2023 while schools were in session. The field inventory included a collection of geometric data, traffic volumes and traffic control within the study area. The following sections detail the current traffic conditions and include a description of roadways/intersections serving the site and traffic flow in close proximity to the project.

Study Area Intersection/Roadway

As identified by Lancaster County staff, the unsignalized intersection of Barberville Road and Pettus Road and the planned site access drive to/from Pettus Road are to be analyzed in order to determine project impact on the surrounding roadway network.

Barberville Road is a two-lane facility with one lane in each direction, with directional flow separated by a double-yellow centerline. There are white edge lines with a 1-foot paved shoulder and a grass clear zone. The speed limit is posted for 40 mph.

Figure 3 illustrates the existing geometrics and traffic control for the study area intersection and surrounding roadways.

Traffic Volumes

In order to determine the existing traffic volume flow patterns within the study area, manual turning movement counts were performed. Weekday morning (7:00-9:00 AM) and evening (4:00-6:00 PM) peak period turning movement specific counts were conducted for the above referenced intersection.

Summarized count sheets for the study area intersection are included in the Appendix of this report. **Figure 4** graphically depicts the respective 2023 Existing AM and PM peak-hour traffic volumes at the study area intersections to be used for analytical purposes.

FUTURE CONDITIONS

Traffic analyses for future conditions have been conducted for two separate scenarios: first, 2025 No-Build conditions, which include an annual normal growth in traffic, all pertinent background development traffic, and any pertinent planned roadway/intersection improvements; and secondly, 2025 Build conditions, which account for all No-Build conditions PLUS traffic generated by the proposed development.

Future No-Build Traffic Conditions

Background Development/Planned Roadway Improvements

At this time there appear to be no scheduled roadway improvements nor development by others in the study area prior to the development year of this project.

Annual Growth Rate

Review of SCDOT count information, station #29-0195 located on Barberville Road just west of Pettus Road has been reviewed resulting in a 2-percent annual growth rate. This 2-percent annual growth, which will account for all unspecified traffic growth, was applied to the Existing peak-hour traffic volumes.

The anticipated 2025 No-Build AM and PM peak-hour traffic volumes, which reflect the 2-percent annual growth rate are shown in **Figure 5**.

Site-Generated Traffic

Traffic volumes expected to be generated by the proposed project were forecasted using the Eleventh Edition of the ITE *Trip Generation* manual, as published by the Institute of Transportation Engineers. As planned, 75 new single-family units are being developed. **Table 1** depicts the anticipated site-generated traffic.

Table 1
TRIP GENERATION SUMMARY[1]
Jasmine Hills Sub-Division

Time Period	75 Single-Family Units
Weekday Daily	774
AM Peak-Hour	
Enter	14
Exit	43
Total	57
PM Peak-Hour	
Enter	48
Exit	28
Total	76

1. ITE *TRIP GENERATION* 11th Ed. LUC 210.

As shown, the proposed development can be expected to generate 774 two-way daily trips of which a total of 57 trips (714 entering and 43 exiting) are expected during the AM peak-hour. During the PM peak-hour, a total of 76 trips (48 entering, 28 exiting) are expected.

Distribution Pattern

The directional distribution of site-generated traffic on the study area roadways has been based on an evaluation of existing travel patterns in the study area. The anticipated pattern is shown in **Table 2**. This distribution pattern has been applied to the site-generated traffic volumes from Table 1 to develop the site-generated specific volumes for the study area intersections illustrated in **Figure 6**.

Table 2
TRIP DISTRIBUTION PATTERN
Jasmine Hills Sub-Division

Roadway	Direction To/From	Percent of Trips Enter/Exit
S-42 Barberville Road	East	65
	West	35
	Total	**100**

Note: Based on the existing traffic patterns during both peak hours

Future Build Traffic Conditions

The site-generated traffic, as depicted in Figure 6 has been added to the respective 2025 No-Build traffic volumes shown in Figure 5. This results in the peak-hour 2025 Build traffic volumes, which are graphically depicted in **Figure 7.** These volumes were used as the basis to determine potential improvement measures necessary to mitigate traffic impacts caused by the project.

TRAFFIC OPERATIONS

Analysis Methodology

A primary result of capacity analysis is the assignment of Level-of-Service (LOS) to traffic facilities under various traffic flow conditions. The concept of Level-of-Service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A Level-of-Service designation provides an index to the quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six Levels-of-Service are defined for each type of facility (signalized and unsignalized intersections). They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst.

Since the Level-of-Service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of Levels-of-Service depending on the time of day, day of week, or period of a year.

Analysis Results

As part of this TIAS, capacity analyses have been performed at the study area intersections under both Existing and Future (No-Build & Build) conditions. The results of these analyses are summarized in **Table 3**.

Table 3
LEVEL-OF-SERVICE SUMMARY[1]
Jasmine Hills Sub-Division

Unsignalized Intersection	Time Period	Critical Movement	2023 EXISTING Delay	2023 EXISTING LOS	2025 NO-BUILD Delay	2025 NO-BUILD LOS	2025 BUILD Delay	2025 BUILD LOS
Barberville Road (S-42) at Pettus Road (S-411)	A	EB Major Left-Turn	8.0	A	8.0	A	8.0	A
	M	SB Minor Left-Turn	15.1	C	15.6	C	20.1	C
	P	EB Major Left-Turn	9.2	A	9.3	A	9.5	A
	M	SB Minor Left-Turn	20.7	C	21.7	C	25.9	D

GENERAL NOTES:

1. Calculations completed using the HCM 6th Ed methodology.
2. Delay in seconds-per-vehicle.
3. LOS = Level-of-Service.

As shown in Table 3, under Existing conditions, the unsignalized study area intersection of Barberville Road at Pettus Road operates with over-all acceptable service levels during the AM and PM peak hours. Detailed review of the individual approaches also indicates acceptable service levels during both time periods.

Under future 2025 No-Build conditions, which assumes the annual regional growth, again all operations for the approaches and the over-all intersection are acceptable during both the AM and PM peak hours.

Build 2025 conditions which reflect the addition of project generated traffic continues to result in good service levels during both peak hours, with a small increase (4.2 sec/veh) in the side-street delay.

Operations for the site access drive on Pettus Road were not analyzed in detail as the existing traffic on Pettus Road is minimal during both peak-hours.

Barberville Road (S-42)

The existing two-lane cross-section of Barberville Road provides a theoretical daily capacity of 11,524 two-way vehicle trips (vpd) which defines a level-of service (LOS) E. *Ref. Maximum ADT by Level of Service for Urban Facilities for SCDOT Travel Demand Models: Collector: 2-Lane*. A LOS D has a threshold of 9,890 vpd and a LOS A threshold of 4,214 vpd.

A review of SCDOT Count Station #29-0195, located on Barberville Road approximately 0.8 mile west of Pettus Road, indicates a 2022 average daily traffic (ADT) of 7,900 vehicles, with 12 percent (K-factor) occurring during the afternoon peak hour. The 2023 peak hour volume recorded was 1122 vehicles, corresponding to an adjusted 2025 peak hour of 1169 vehicles with the 4% growth factor. Using the 12 percent K-factor, this results in a 2025 projected ADT of 9,742 vehicles.

In comparing the daily traffic volumes currently utilizing Barberville Road, adding in the daily site-generated traffic volumes and comparing this to the SCDOT capacities, you obtain the results depicted in **Table 4**.

Table 4
LEVEL-OF-SERVICE SUMMARY[1]
Jasmine Hills Residential
Barberville Road
Lancaster County, SC

Roadway Segment	Existing Daily Vol. (vpd)[1] (a)	Daily Volume (vpd)[2] (b)	Total Volume (a+b)	SCDOT Roadway Capacity (vpd) (LOS E)	Resultant Service Level
Barberville Road (S-29-42)	9,742	774	10,516	9,890	E

Reference: Maximum ADT by Level of Service for Urban Facilities for SCDOT Travel Demand Models: Collector: 2-Lane.

1. vpd= Vehicles-per-day.

2. Site-generated traffic (project residential) ref. Table 1 daily two-way volume.

As shown by Table 4, the expected daily volumes on Barberville Road under the Build condition are anticipated to be in the magnitude of 10,516 two-way daily vehicles which result in a LOS E when compared to the available roadway capacity.

MITIGATION

The final phase of the analysis process is to identify mitigating measures which may either minimize the impact of the project on the transportation system or tend to alleviate poor service levels not caused by the project. The following describes measures necessary to mitigate the project's impact.

Site Access Drive

This new access will be located on Pettus Road approximately 750-feet north of Barberville Road. The following geometrics are recommended for this access:

- ***Eastbound (Site Access) Approach:*** Construct site access to provide a two-lane approach with one lane entering the site and one lane exiting designated as a shared left/right-turn;

- ***Westbound (Site Access) Approach:*** Construct site access to provide a two-lane approach with one lane entering the site and one lane exiting designated as a shared left/right-turn;

- ***Northbound (Pettus Road) Approach:*** Based on projected peak-hour volumes, a right-turn lane entering the site access is not required based on *Fig. 9.5-A of the SCDOT Design Manual*;

- ***Southbound (Pettus Road) Approach:*** Based on projected peak-hour volumes, a left-turn lane entering the site access is not required based on *Fig. 9.5-G of the SCDOT Design Manual;* and

- ***Traffic Control:*** Place intersection under STOP sign control where traffic exiting the respective sides of the site (eastbound and westbound) must stop prior to entering the intersection.

Sight Distance Considerations

The access drive intersection should be designed/constructed to meet current applicable SCDOT standards and/or guidelines in terms of sight distance. It is assumed that this will be the responsibility of the project's civil engineer and will be depicted by the site plan/submittal information. Based on *SCDOT ARMs Manual, Table 7-12*, a sight distance of 335-feet is required for a 30-mph roadway.

Off-Site Study Area Intersection

As shown in Table 3, the off-site study area intersection of Barberville Road at Pettus Road will operate with good service levels under Build conditions during both the AM and PM peak hours. All individual approach service levels are also acceptable during both peak hours. Based on the results of these analyses and a review of the need for separate turning lanes, the project causes a very minimal increase in intersection delays, as such no improvements are recommended at this time.

The following geometrics are recommended for this intersection:

- ***Eastbound (Barberville Road) Approach:*** Based on projected peak-hour volumes, a left-turn lane entering the site access is not required based on *Fig. 9.5-G of the SCDOT Design Manual;*

- ***Westbound (Barberville Road) Approach:*** Based on projected peak-hour volumes, a right-turn lane entering the site access is not required based on *Fig. 9.5-A of the SCDOT Design Manual*;

- ***Southbound (Pettus Road) Approach:*** Based on projected peak-hour volumes, the existing single lane approach is sufficient*;* and

- ***Traffic Control:*** Intersection to remain under STOP sign control where traffic exiting Pettus Road must stop prior to entering the intersection.

SUMMARY

EPC has completed a Traffic Impact and Access Study relative to the Jasmine Hills residential sub-division which is located along Pettus Road, just to the north of Barberville Road in Lancaster County, SC. This site is expected to be developed as a 75 single-family unit subdivision with a completion date of 2025. Access for this over-all project will be provided via one access to/from Pettus Road approximately 750-feet north of Barberville Road.

Detailed analyses have been conducted for the adjacent off-site unsignalized intersection of Barberville Road at Pettus Road. These analyses indicated that the intersection will continue to operate at acceptable service levels during all conditions and time periods studied.

Recommendations have been made for the proposed site access drives along Pettus Road which include cross-section of the access approach, traffic control and required sight distance.

If you have any questions, please contact me at 803 361 3265.

Todd E. Salvagin
EPC, LLC

SOUTH CAROLINA ENCROACHMENT PERMIT CLEARINGHOUSE, LLC No. 5755 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER No. 15225 DAVID D. BREWER

Attachments

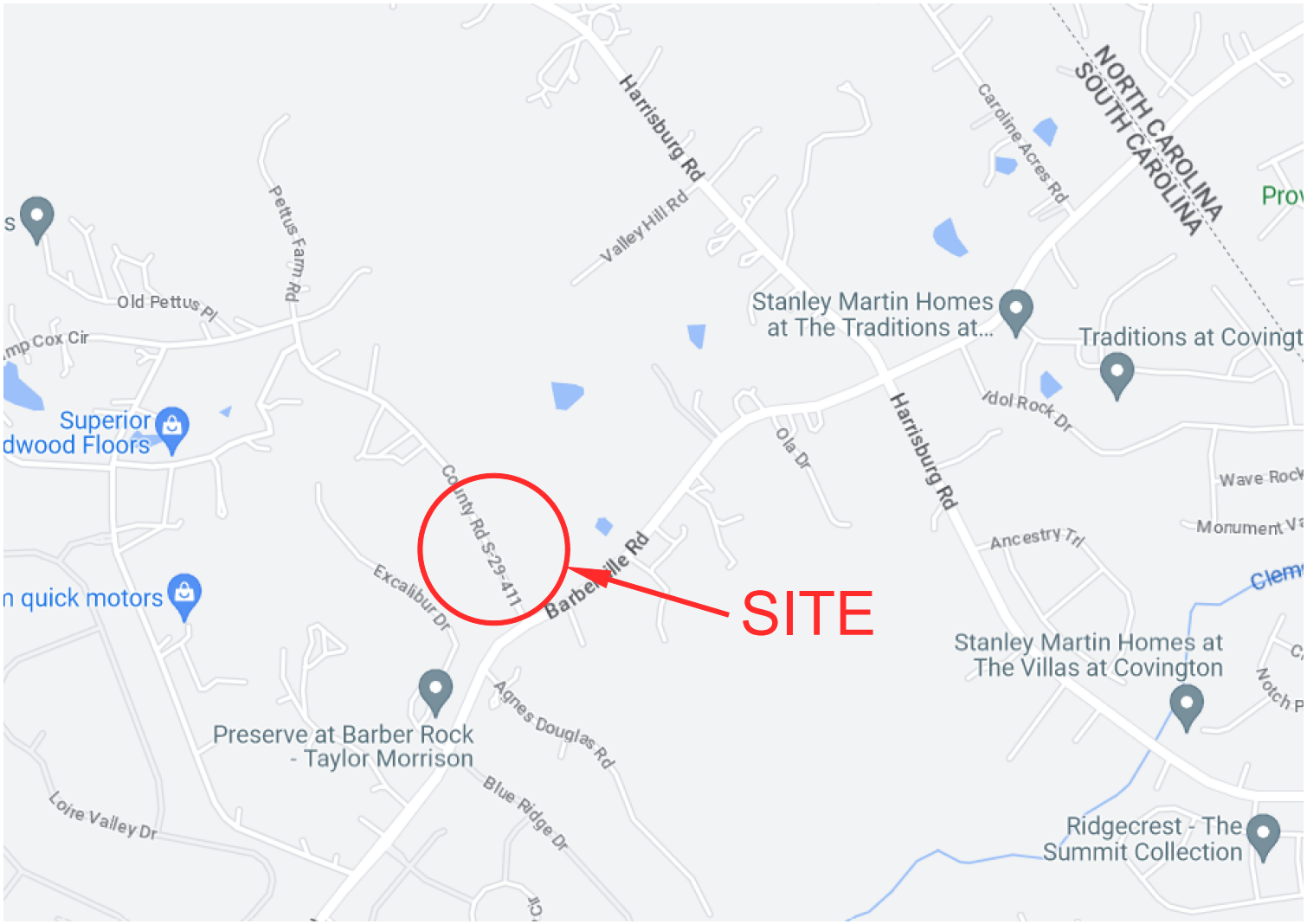


Figure 1

SITE LOCATION MAP

Jasmine Hills Subdivision

Lancaster County, S.C.

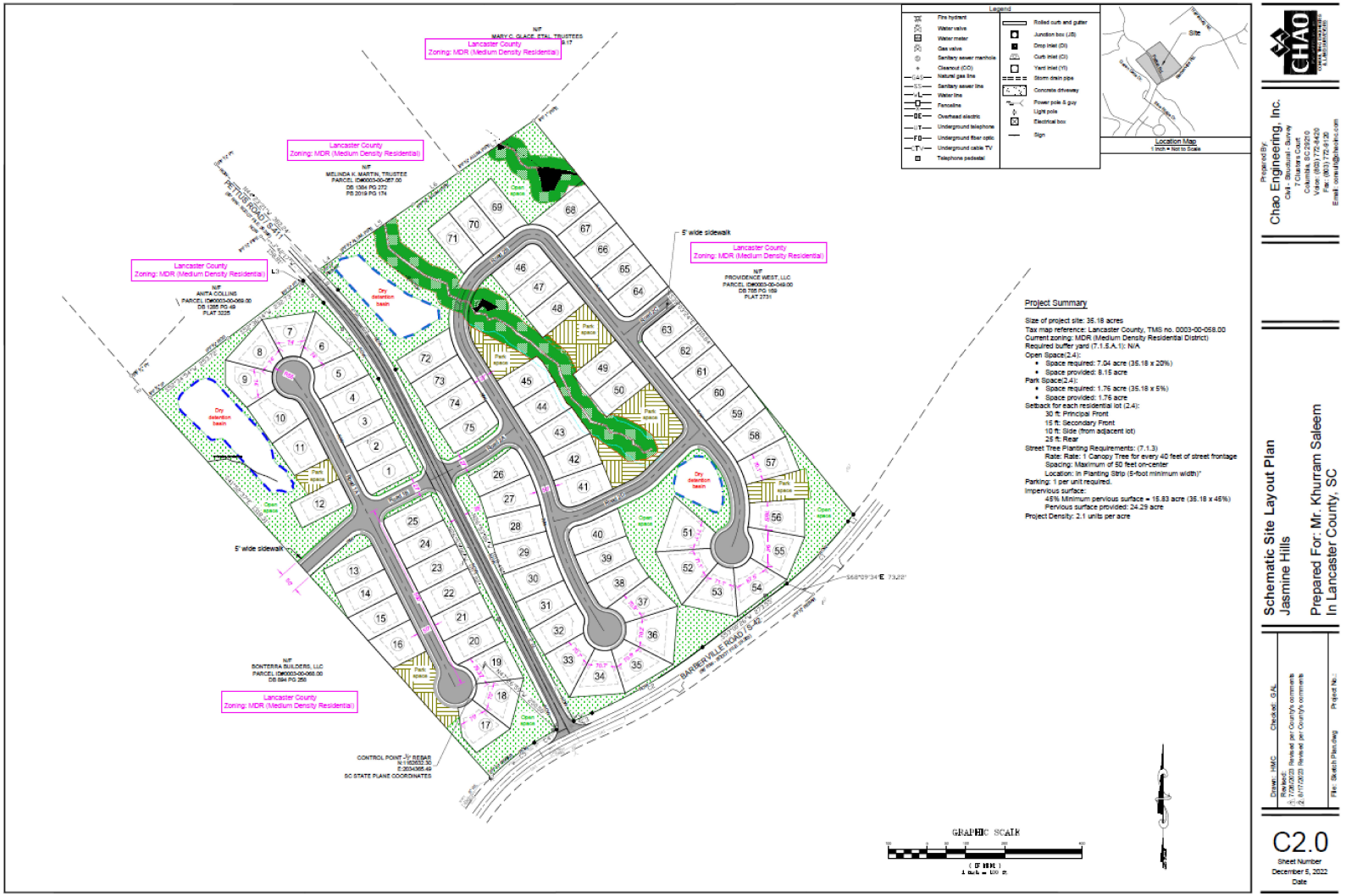


Figure 2

SITE PLAN

Jasmine Hills Subdivision

Lancaster County, S.C.

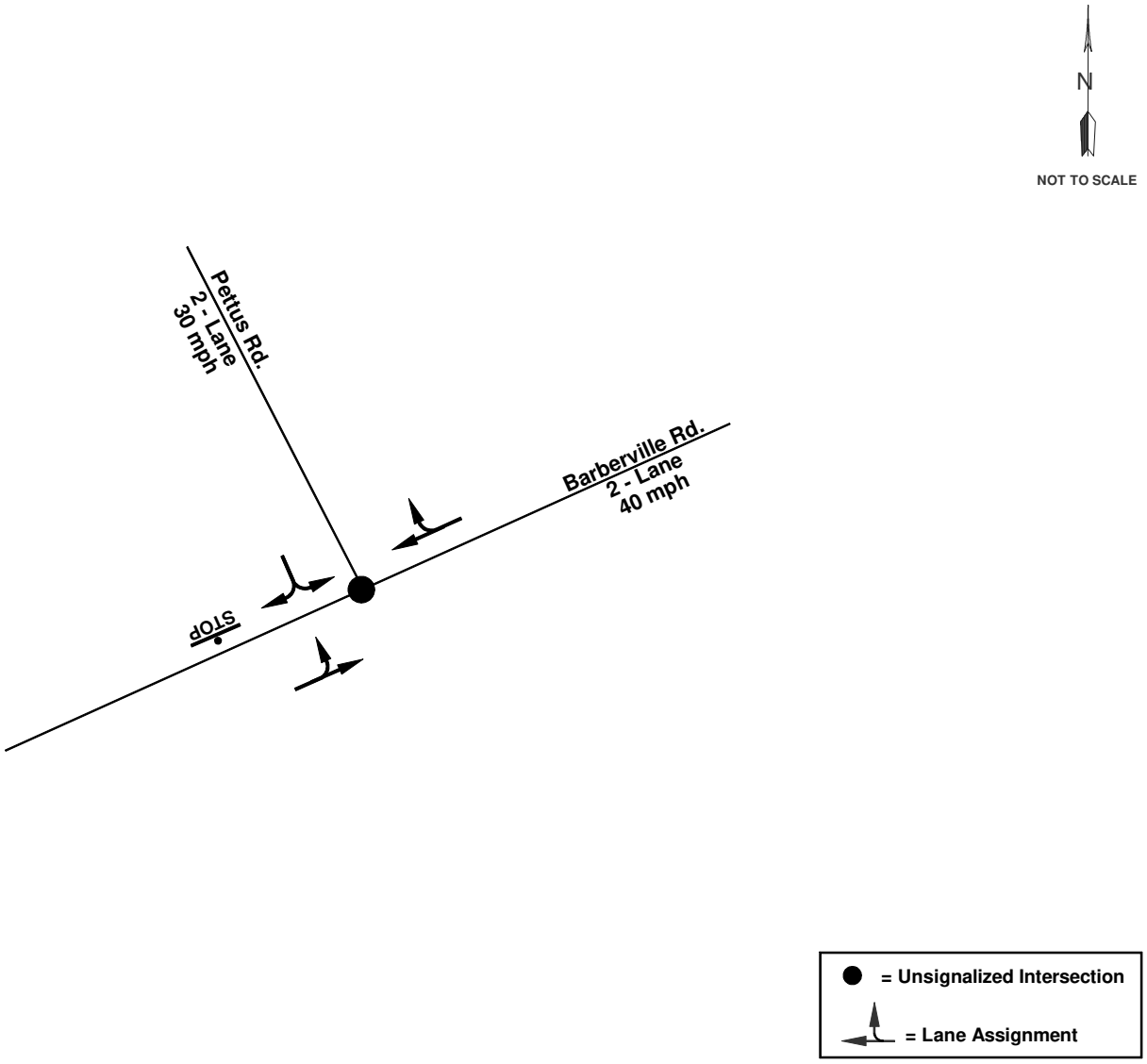


Figure 3

EXISTING GEOMETRICS & TRAFFIC CONTROL

Jasmine Hills Subdivision

Lancaster County, S.C.

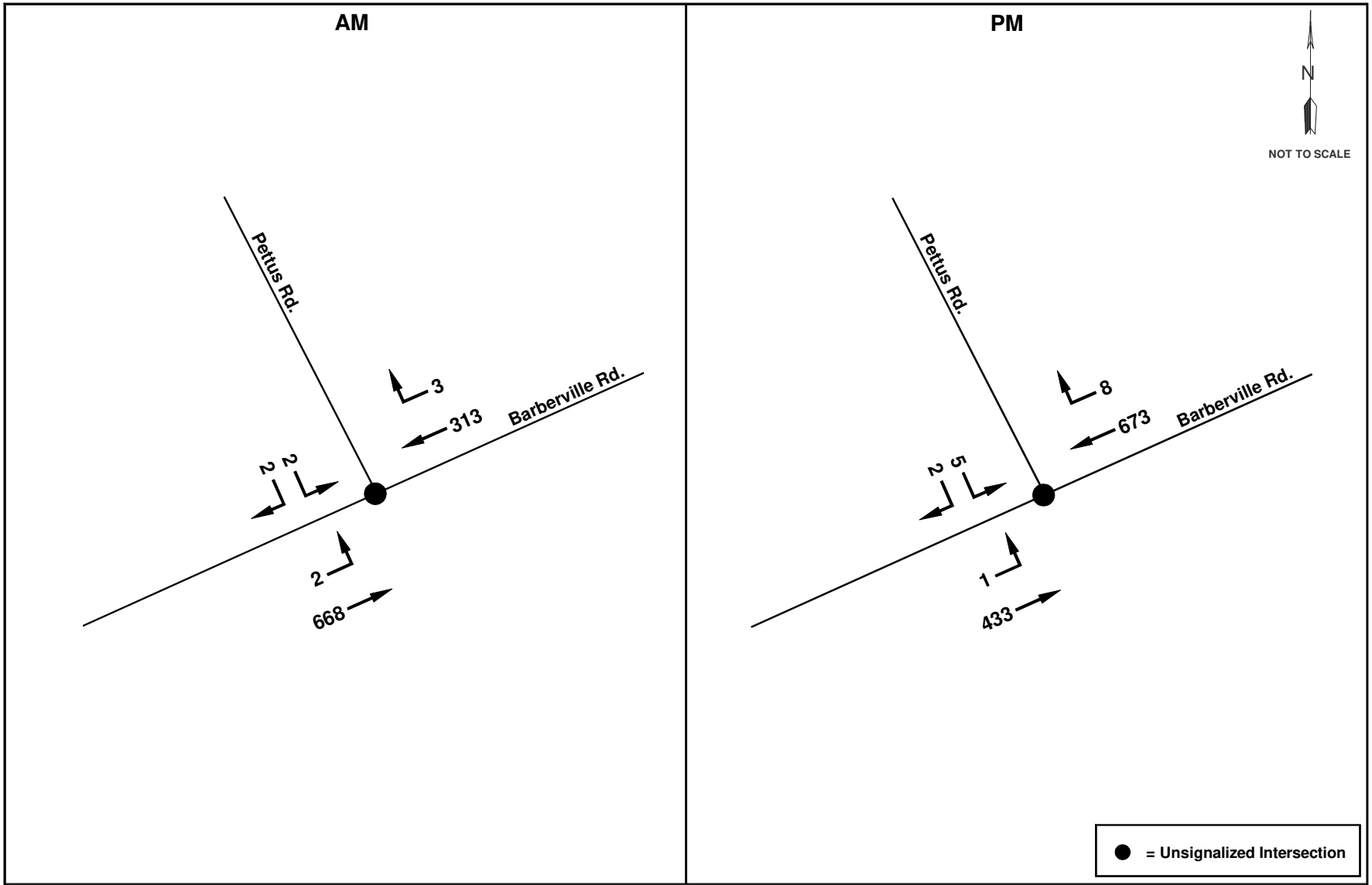


Figure 4

2023 EXISTING TRAFFIC VOLUMES
AM & PM PEAK HOUR

Jasmine Hills Subdivision
Lancaster County, S.C.

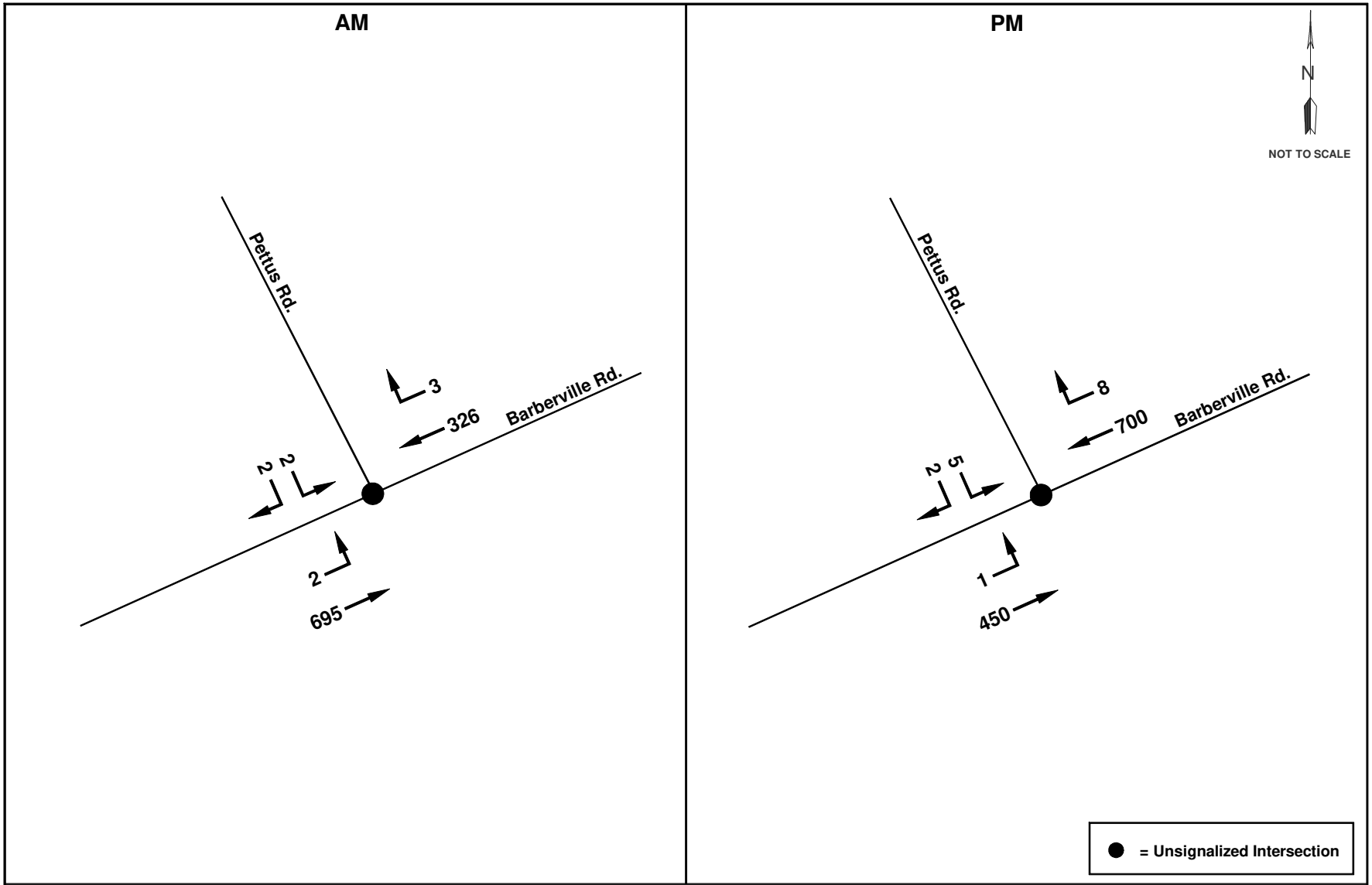


Figure 5

2025 NO BUILD TRAFFIC VOLUMES
AM & PM PEAK HOUR

Jasmine Hills Subdivision
Lancaster County, S.C.

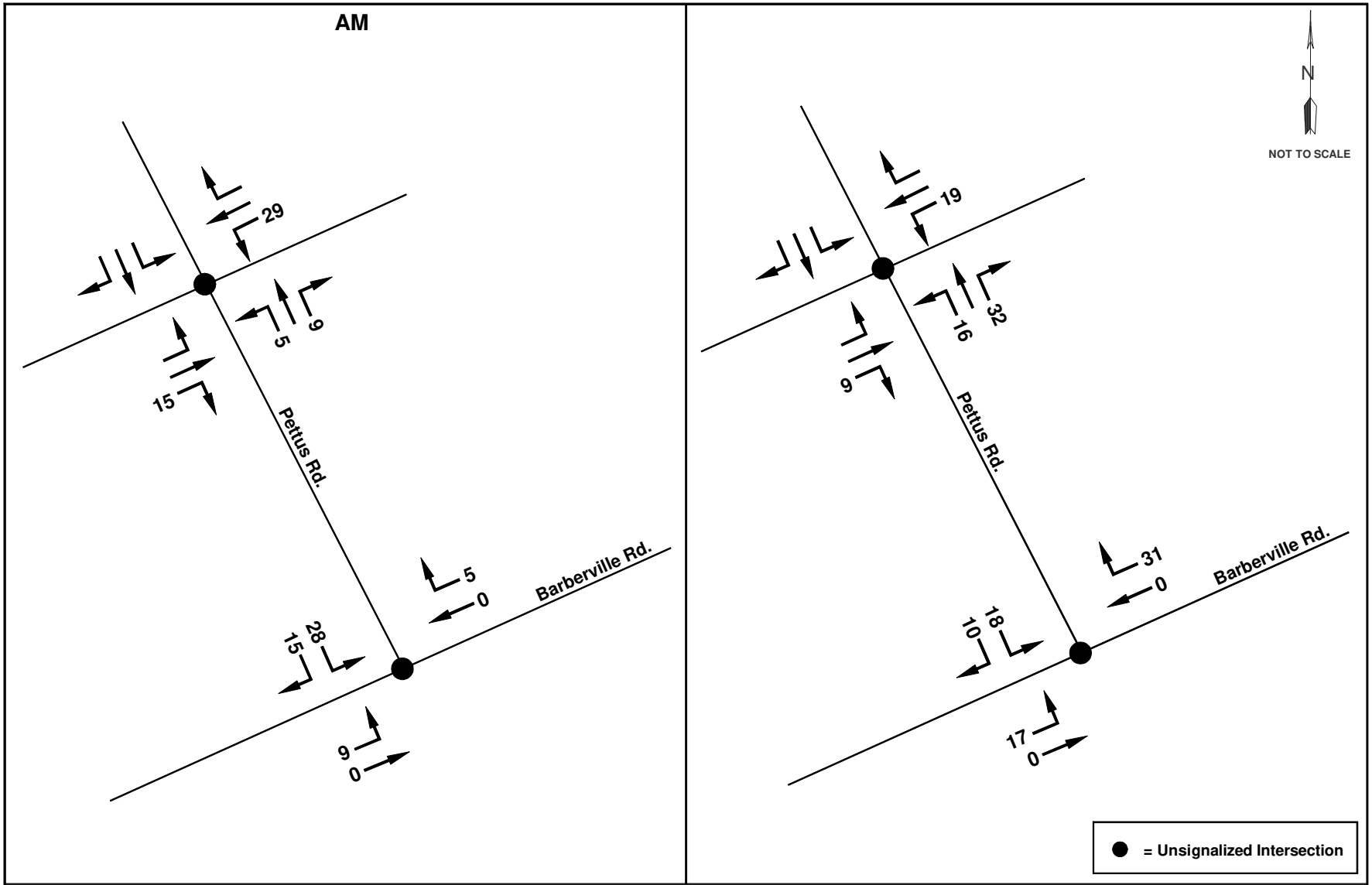


Figure 6

2025 SITE GENERATED TRAFFIC VOLUMES
AM & PM PEAK HOUR

Jasmine Hills Subdivision
Lancaster County, S.C.

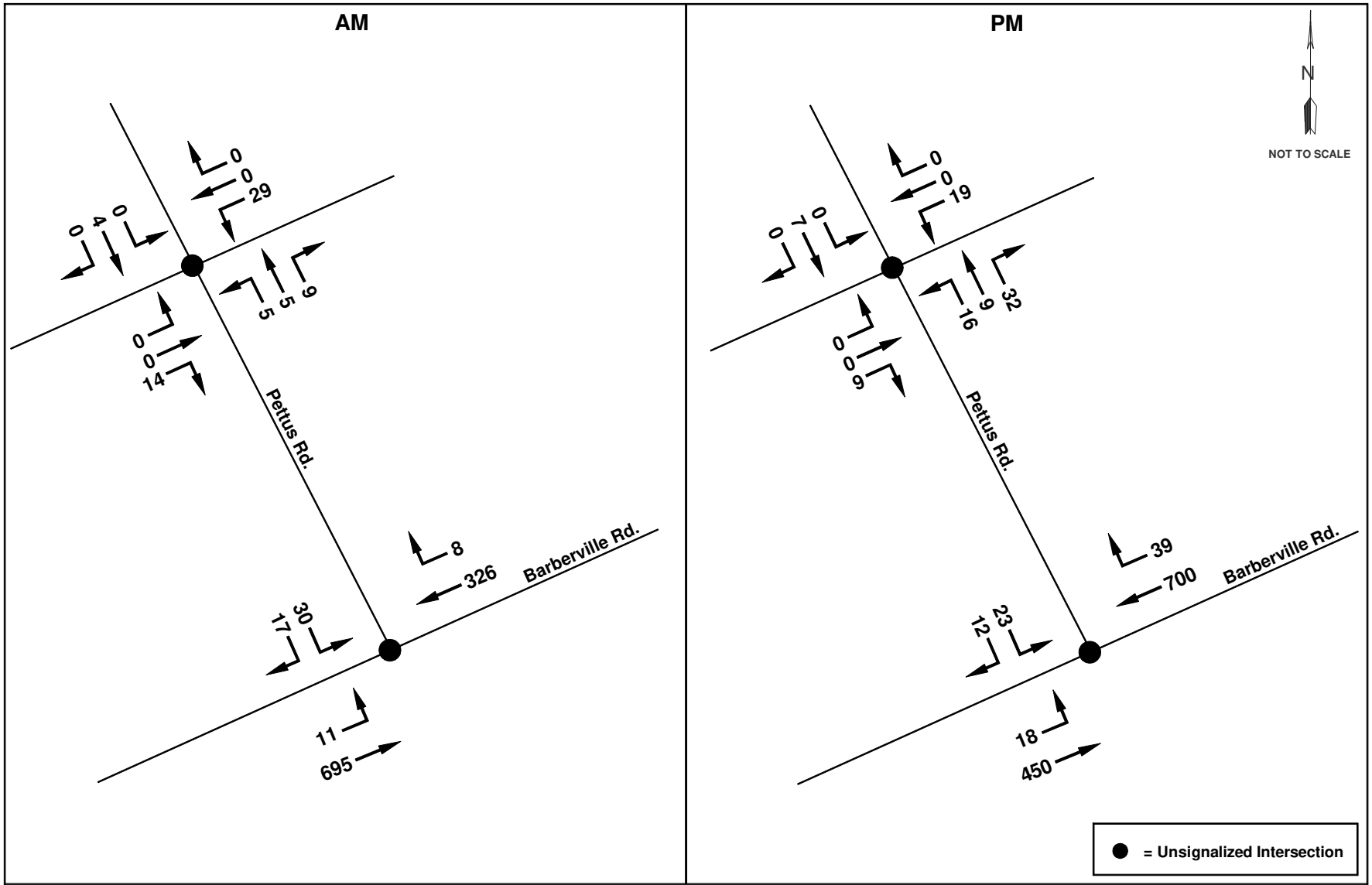


Figure 7

2024 BUILD TRAFFIC VOLUMES
AM & PM PEAK HOUR

Jasmine Hills Subdivision
Lancaster County, S.C.

COUNT DATA

Turning Movement Count Report

Report Generated Using Turning Movement Count for Android by PortableStudies.com

Study Information

Study Summary

Count Name
Barberville Rd at Pettus St AM Peak
Location
Lancaster County, SC
Performed By
NK
Date
Thursday, September 7, 2023

Notes

U = U Turn L = Left Turn T = Thru R = Right Turn
P1 = Pedestrian Direction 1 P2 = Pedestrian Direction 2
Veh = Total Vehicles for Approach

Peak Hour Volume	
990	
% Bank 1	**% Bank 2**
98.0%	2.0%
% Bank 3	**% Bank 4**
0.0%	0.0%
Pedestrians Volume	
0	

Peak Hour Data

Time Period	WB Barberville Rd							EB Barberville Rd							SB Pettis St													Total Vehicles	Total Pedestrians
	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh		
7:15 AM	0	0	109	0	0	0	109	0	0	177	0	0	0	177	0	1	0	1	0	0	2	0	0	0	0	0	0	0	288	0
7:30 AM	0	0	66	1	0	0	67	0	1	160	0	0	0	161	0	1	0	1	0	0	2	0	0	0	0	0	0	0	230	0
7:45 AM	0	0	69	0	0	0	69	0	1	159	0	0	0	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	229	0
8:00 AM	0	0	69	2	0	0	71	0	0	172	0	0	0	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	243	0

Vehicle Movement Summary

Movement / Details	WB Barberville Rd							EB Barberville Rd							SB Pettis St													Entire Intersection	
	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	Vehicles	Pedestrians
Movement Volume	0	0	313	3	0	0	316	0	2	668	0	0	0	670	0	2	0	2	0	0	4	0	0	0	0	0	0	0	990	0
PHF	-	-	0.72	0.38	-	-	0.72	-	0.50	0.94	-	-	-	0.95	-	0.50	-	0.50	-	-	0.50	-	-	-	-	-	-	-	0.86	-
% Bank 1	0.0%	0.0%	96.8%	100.0%				0.0%	100.0%	98.5%	0.0%				0.0%	100.0%	0.0%	100.0%				0.0%	0.0%	0.0%	0.0%					
% Bank 2	0.0%	0.0%	3.2%	0.0%				0.0%	0.0%	1.5%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				**Need a custom report?**	
% Bank 3	0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				**Contact: support@portablestudies.com**	
% Bank 4	0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%					

Turning Movement Count Report

Report Generated Using Turning Movement Count for Android by PortableStudies.com

Study Information

Study Summary

Count Name
Barberville Rd at Pettus St PM Peak
Location
Lancaster County, SC
Performed By
NK
Date
Thursday, September 7, 2023

Notes

U = U Turn L = Left Turn T = Thru R = Right Turn
P1 = Pedestrian Direction 1 P2 = Pedestrian Direction 2
Veh = Total Vehicles for Approach

Peak Hour Volume	
1122	
% Bank 1	**% Bank 2**
99.6%	0.4%
% Bank 3	**% Bank 4**
0.0%	0.0%
Pedestrians Volume	
0	

Peak Hour Data

Time Period	SB Pettus St							EB Barberville Rd							WB Barberville Rd							Total Vehicles	Total Pedestrians
	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh		
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0	0	145	2	0	0	147	247	0
5:15 PM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	106	0	0	0	106	0	0	168	2	0	0	170	278	0
5:30 PM	0	2	0	2	0	0	4	0	0	0	0	0	0	0	0	0	122	0	0	0	122	0	0	194	0	0	0	194	320	0
5:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	105	0	0	0	106	0	0	166	4	0	0	170	277	0

Vehicle Movement Summary

Movement / Details	SB Pettus St							EB Barberville Rd							WB Barberville Rd							Entire Intersection	
	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	U	L	T	R	P1	P2	Veh	Vehicles	Pedestrians
Movement Volume	0	5	0	2	0	0	7	0	0	0	0	0	0	0	0	1	433	0	0	0	434	0	0	673	8	0	0	681	1122	0
PHF	-	0.63	-	0.25	-	-	0.44	-	-	-	-	-	-	-	-	0.25	0.89	-	-	-	0.89	-	-	0.87	0.50	-	-	0.88	0.88	-
% Bank 1	0.0%	100.0%	0.0%	100.0%				0.0%	0.0%	0.0%	0.0%				0.0%	100.0%	99.3%	0.0%				0.0%	0.0%	99.9%	87.5%					
% Bank 2	0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.7%	0.0%				0.0%	0.0%	0.1%	12.5%					
% Bank 3	0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%					
% Bank 4	0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%				0.0%	0.0%	0.0%	0.0%					

Need a custom report?

Contact:
support@portablestudies.com

CAPACITY ANALYSIS

- **2023 Existing**
- **2025 No-Build**
- **2025 Build**

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	668	313	3	2	2
Future Vol, veh/h	2	668	313	3	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	726	340	3	2	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	343	0	-	0	1072	342
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	730	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1216	-	-	-	244	701
Stage 1	-	-	-	-	719	-
Stage 2	-	-	-	-	477	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1216	-	-	-	243	701
Mov Cap-2 Maneuver	-	-	-	-	243	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	477	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1216	-	-	-	361
HCM Lane V/C Ratio	0.002	-	-	-	0.012
HCM Control Delay (s)	8	0	-	-	15.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	433	673	8	5	2
Future Vol, veh/h	1	433	673	8	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	471	732	9	5	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	741	0	-	0	1210	737
Stage 1	-	-	-	-	737	-
Stage 2	-	-	-	-	473	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	866	-	-	-	202	418
Stage 1	-	-	-	-	473	-
Stage 2	-	-	-	-	627	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	866	-	-	-	202	418
Mov Cap-2 Maneuver	-	-	-	-	202	-
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	627	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	20.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	866	-	-	-	237
HCM Lane V/C Ratio	0.001	-	-	-	0.032
HCM Control Delay (s)	9.2	0	-	-	20.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	695	326	3	2	2
Future Vol, veh/h	2	695	326	3	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	755	354	3	2	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	357	0	-	0	1115	356
Stage 1	-	-	-	-	356	-
Stage 2	-	-	-	-	759	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1202	-	-	-	230	688
Stage 1	-	-	-	-	709	-
Stage 2	-	-	-	-	462	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1202	-	-	-	229	688
Mov Cap-2 Maneuver	-	-	-	-	229	-
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	462	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	15.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1202	-	-	-	344
HCM Lane V/C Ratio	0.002	-	-	-	0.013
HCM Control Delay (s)	8	0	-	-	15.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	450	700	8	5	2
Future Vol, veh/h	1	450	700	8	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	489	761	9	5	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	770	0	-	0	1257	766
Stage 1	-	-	-	-	766	-
Stage 2	-	-	-	-	491	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	844	-	-	-	189	403
Stage 1	-	-	-	-	459	-
Stage 2	-	-	-	-	615	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	844	-	-	-	189	403
Mov Cap-2 Maneuver	-	-	-	-	189	-
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	615	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	21.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	844	-	-	-	223
HCM Lane V/C Ratio	0.001	-	-	-	0.034
HCM Control Delay (s)	9.3	0	-	-	21.7
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	11	695	326	8	30	17
Future Vol, veh/h	11	695	326	8	30	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	755	354	9	33	18

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	363	0	-	0	1138	359
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	779	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1196	-	-	-	223	685
Stage 1	-	-	-	-	707	-
Stage 2	-	-	-	-	452	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1196	-	-	-	219	685
Mov Cap-2 Maneuver	-	-	-	-	219	-
Stage 1	-	-	-	-	695	-
Stage 2	-	-	-	-	452	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	20.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1196	-	-	-	290
HCM Lane V/C Ratio	0.01	-	-	-	0.176
HCM Control Delay (s)	8	0	-	-	20.1
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	0.6

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	18	450	700	39	23	12
Future Vol, veh/h	18	450	700	39	23	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	489	761	42	25	13

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	803	0	-	0	1311	782
Stage 1	-	-	-	-	782	-
Stage 2	-	-	-	-	529	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	821	-	-	-	175	394
Stage 1	-	-	-	-	451	-
Stage 2	-	-	-	-	591	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	821	-	-	-	169	394
Mov Cap-2 Maneuver	-	-	-	-	169	-
Stage 1	-	-	-	-	436	-
Stage 2	-	-	-	-	591	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	25.9
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	821	-	-	-	210
HCM Lane V/C Ratio	0.024	-	-	-	0.181
HCM Control Delay (s)	9.5	0	-	-	25.9
HCM Lane LOS	A	A	-	-	D
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Agenda Item Summary

Ordinance # / Resolution #: NRN-2024-0155 Group Submittal- Site Plans
Contact Person / Sponsor: J. Bryan
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider:

ATTACHMENTS:

Description	Upload Date	Type
Application	1/25/2024	Exhibit

20240155

Lancaster County
South Carolina

PLANNING DEPARTMENT
PO BOX 1809
Lancaster, SC 29721
Phone: (803) 285-6005

******NEW ROAD NAME/CHANGE APPLICATION******

Please note: A fee of $250.00 must be submitted with this application before it will be processed. Incomplete applications will be returned. The $250.00 fee includes the cost of one road sign. New roads requiring more than one sign will require the $250.00 fee plus $50.00 for each additional sign.

Please provide the following **applicant** information as completely and accurately as possible.

Date of Application: 1/24/2024

Name: Planning Dept. **Address:** 101 N. Main Street

City, State, Zip Code: Lancaster SC 29720

Telephone (H): 803-285-6005 **Telephone (W) or (Cell):** _____

Please provide the following **new road name** information as completely and accurately as possible.

Location of new road: See attached list from Preliminary Plat submittals

Road name as it exists now (if applicable): N/A (new subdivision plats)

Proposed new road name (1st choice): (see attached list)

Proposed new road name (2nd choice): _____

Will this be a private road? **Yes** X **NO** _____

If applicable, do you plan on deeding this new road to the county in the future?
Yes_____**NO**_____

Please attach the following items to this application:

*A map to approximate scale depicting the location of the new road.
*A petition signed by at least 75% of the property owners with parcels having **frontage** on the affected road.

Signature of Applicant: _____

ROAD NAME APPROVALS FOR FEBRUARY 2024

Subdivision Plat	Evolve Project	Road Name
Edgewater: Pinnacle at Sunset Pointe	20231409	Pinnacle Way
Edgewater: Pinnacle at Sunset Pointe	20231409	Aspire Lane

Jasmine Hills	20230325	Allamanda Way
Jasmine Hills	20230325	Fuchsia Terrace
Jasmine Hills	20230325	Pansy Lane
Jasmine Hills	20230325	Angel Wing Circle
Jasmine Hills	20230325	Gerbera Daisy Place

Lengers Way Lots 3 and 4	20231504	Trinity School Lane

Agenda Item Summary

Ordinance # / Resolution #: UDO Update
Contact Person / Sponsor: A. Hardin
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider:

Agenda Item Summary

Ordinance # / Resolution #: Comprehensive Plan Update
Contact Person / Sponsor: A. Hardin
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider:

Agenda Item Summary

Ordinance # / Resolution #: Staffing Update
Contact Person / Sponsor: A. Hardin
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider:

Agenda Item Summary

Ordinance # / Resolution #: Review of UDO Administrative Processes: Areas of Responsibility
Contact Person / Sponsor: A. Hardin
Department: Planning
Date Requested to be on Agenda: 2/1/2024

Points to Consider: