# Moore County
## Board of Commissioners

October 15, 2024 | 5:30 PM
Historic Courthouse
1 Courthouse Square
Carthage, NC 28327

## MINUTES

**COMMISSIONERS PRESENT**
Chairman Nick Picerno, Vice Chairman Kurt Cook, Frank Quis, John Ritter, Jim Von Canon

**CALL TO ORDER**
Chairman Picerno called the meeting to order.

**INVOCATION**
Pastor Kevin Medlin offered the invocation.

**PLEDGE OF ALLEGIANCE**
County Manager Wayne Vest led the Pledge of Allegiance.

Chairman Picerno offered welcoming remarks and commented regarding procedures for the public comment period and public hearings.

1. **PUBLIC COMMENT PERIOD**
The following offered comments: Michael Parker.

2. **ADDITIONAL AGENDA**
There were no additional agenda items.

**CHAIRMAN**
Chairman Picerno asked whether any commissioner had a conflict of interest concerning agenda items the Board would address in the meeting and there was none.

3. **CONSENT AGENDA**
**Upon motion made by Commissioner Quis, seconded by Commissioner Von Canon, the Board voted 5-0 to approve the following consent agenda items**, and the opioid funds resolution, budget amendments, bonds revision 30, tax releases/refunds resolutions, tax electronic listing resolution, fee schedule revision, and review officers resolution are hereby incorporated as a part of these minutes by attachment as Appendices A, B, C, D, E, F, and G, respectively.

A. Board of Commissioners - October 1, 2024, Regular Meeting Minutes and Closed Session Minutes

B. Board of Commissioners - October 8, 2024, Special Meeting Minutes and Closed Session Minutes

C. Board of Commissioners - October 10, 2024, Special Meeting Minutes and Closed Session Minutes

D. Board of Commissioners - Authorization to Conduct Background Checks on Nursing and Adult Care Home Community Advisory Committee Applicants

E. Administration - Opioid Settlement Funds Contract and Resolution

F. Finance - Budget Amendments

G. Finance - Local Educational Bonds - 2018 Bond Referendum – Revision 30

H. Tax - Tax Releases/Refunds for Month of September 2024

I. Tax - Resolution Authorizing Electronic Listing of Personal Property

J. Public Works - Deed of Dedication and Easement for Golf House Pinehurst

K. Transportation - FY25 5311 CTP Grant Agreement

L. Central Permitting - Fee Schedule Changes Central Permitting

M. Planning - Appointment of Review Officers for Moore County

## 4. RECOGNITIONS

A. Veteran Services - Resolution Supporting Operation Green Light

Veteran Services Director Kelly Greene presented and read a proposed resolution regarding Operation Green Light. **Upon motion made by Commissioner Von Canon, seconded by Commissioner Ritter, the Board voted 5-0 to adopt the Resolution Supporting Operation Green Light for Veterans**. The resolution is hereby incorporated as a part of these minutes by attachment as Appendix H. Chairman Picerno noted he would like to see a light in every window in the courthouse, and he encouraged citizens to shine green lights as well.

## 5. PRESENTATIONS

There were no presentations.

## 6. OLD BUSINESS

There was no old business.

## 7. NEW BUSINESS

A. Information Technology - Laptop Purchase Contract

Information Technology Director Kay Ingram presented a request for approval of a contract for purchase of laptops for the Department of Social Services. Chairman Picerno asked what was done with the old laptops and Ms. Ingram

explained that they were donated to be repurposed for those in need, and they were evaluating for use in western NC counties (affected by Hurricane Helene). Chairman Picerno inquired about Medicaid expansion funding availability for the devices and Ms. Ingram said she believed there was funding, and she agreed to provide that information to the Board. **Upon motion made by Commissioner Von Canon, seconded by Commissioner Cook, the Board voted 5-0 to approve and authorize the Chairman to sign a purchase contract with The Davenport Group, Inc. in the amount of $176,990.00, excluding tax, for the purchase of 110 Dell laptops, docks, and Dell ProSupport Plus.**

B. Human Resources - Request to Use Evaluation Criterion as the Award Standard for the Medical Coverage Request for Proposal

Assistant County Manager / Human Resources Director Dawn Gilbert requested the Board's approval to allow the award standard for medical coverage services to be based on evaluation criterion. **Upon motion made by Commissioner Von Canon, seconded by Commissioner Ritter, the Board voted 5-0 to allow the award standard for the medical coverage services to be based on evaluation criterion in the best interest of the County.**

C. Board of Commissioners - Adopt-a-County Proposal for Western North Carolina Counties Impacted by Tropical Storm Helene

Chairman Picerno shared information regarding his idea for counties to adopt other counties affected by Tropical Storm Helene to aid in their recovery process and proposed submitting this idea to the NC Association of County Commissioners. **Upon motion made by Commissioner Ritter, seconded by Commissioner Cook, the Board voted 5-0 to send the proposal to the NC Association of County Commissioners.**

## 8. APPOINTMENTS

A. Board of Commissioners - Appointments to the Juvenile Crime Prevention Council

**Upon motion made by Commissioner Ritter, seconded by Commissioner Quis, the Board voted 5-0 to reappoint Miriam King and Annette McGraw to the Juvenile Crime Prevention Council for two-year terms expiring October 31, 2026.**

## 9. QUASI-JUDICIAL HEARINGS

A. Planning - Quasi-Judicial Hearing for an Amendment to a Special Use Permit: Conservation Subdivision – Gretchen Pines Phase 5 – PID 20220346, part of 10000166

Chairman Picerno announced that the next item on the agenda was a request by Steve Harris, member of TKCSJM Harris, for an amendment to a Special Use Permit for a Major Conservation Subdivision Preliminary Plat approval, "Gretchen Pines Subdivision Phase 5 Preliminary Plat" for an additional phase containing 27 lots on one parcel containing approximately 42.04 acres, located off NC Hwy 73, West End, NC. Chairman Picerno explained that the hearing was judicial in nature and called forth those who wished to testify to be sworn by the Clerk. Debra Ensminger, Tom Johnson, Martha Bright, and Steve Harris

were sworn by the Clerk. Chairman Picerno provided opportunity for Board members to describe prior exposure to evidence and/or reveal any possible conflicts and there was none. Chairman Picerno explained the proceedings and opened the quasi-judicial hearing.
Planning Director Debra Ensminger provided staff's presentation of the request. Mr. Tom Johnson, attorney for the applicant, noted that Ms. Ensminger did an excellent job summarizing, and he asked that the application and other documents be submitted into evidence. Mr. Johnson shared that there was an additional condition recommended by the Subdivision Review Board that fences put within drainage easements be flow-through fences. He said they would put that on the plat and in the restrictive covenants as they were agreeable. He shared that there were originally 166 lots approved, and this request would bring it back to that original 166 number. He said it was consistent with the area and did not create any public health or safety issues. He said it met all conditions and specifications and would not injure the value of adjoining or abutting property. He said it was in harmony with surrounding uses and in conformity with the Land Use Plan. Mr. Johnson offered that Martha Bright, engineer of record, and Steve Harris, applicant, were present for any questions.
Commissioner Ritter asked if the original 166 lots were going to be in the first four phases and Mr. Johnson said yes, and it was a low-density development. Commissioner Ritter asked what the typical lot size was, and Mr. Johnson said around an acre. There were no further questions.
**Upon motion made by Commissioner Ritter, seconded by Commissioner Von Canon, the Board voted 5-0 to approve the amendment to the Special Use Permit and preliminary plat for "Gretchen Pines Subdivision Phase 5 Preliminary Plat" for an additional phase containing 27 lots on one parcel containing 42.04 acres, located off NC Hwy 73, West End, NC (PID 20220346 and partial of 10000166) owned by TKCSJM Harris, LLC per Deed Book 5870, Page 1 and Deed Book 6183, Page 374, and to also include the condition from the Subdivision Review Board that if fences are installed within any drainage easements area, they must be installed to allow water to flow through the fencing and this requirement shall be incorporated as a note placed on the final plat and included in the restrictive covenants.**
Chairman Picerno closed the quasi-judicial hearing. The hearing record is hereby incorporated as a part of these minutes by attachment as Appendix I.

## 10. PUBLIC HEARINGS

A. Moore County Economic Development Partnership - Call to Public Hearing for a Proposed Economic Incentive Agreement

Moore County EDP President Natalie Hawkins presented a request for the Board to hold a public hearing regarding a proposed economic incentive agreement with Reliance Packaging. **Upon motion made by Chairman Picerno, seconded by Commissioner Quis, the Board voted 5-0 to call for a public hearing on Tuesday, November 19, 2024, at 5:30pm to invite public comment on the proposed economic development incentive agreement.**

B. Planning - Conventional Rezoning Request: Neighborhood Business (B-1) to Rural Agricultural (RA) Doby Rd.

Planning Director Debra Ensminger presented a request for a conventional rezoning from Neighborhood Business to Rural Agricultural at 129 Doby Road. Chairman Picerno opened the duly advertised public hearing regarding this request. Ms. Lori Howell, daughter of the applicant, noted her presence to answer any questions. There being no further speakers, Chairman Picerno closed the public hearing. **Upon motion made by Chairman Picerno, seconded by Commissioner Von Canon, the Board voted 5-0 to adopt the Board of Commissioners Land Use Plan Consistency Statement – Consistent and authorize the Chairman to execute the document as required by North Carolina General Statute 160D-605. Upon motion made by Chairman Picerno, seconded by Commissioner Von Canon, the Board voted 5-0 to approve the conventional rezoning of one parcel of approximately 2.59 acres, located at 129 Doby Road, and further described as Parcel ID 00990314 in Moore County tax records, from Neighborhood Business (B-1) to Rural Agricultural (RA), owned by Ruby C. Howard Revocable Trust of 2024 per Deed Book 6169, Page 254.** The consistency statement and Ms. Ensminger's staff report are hereby incorporated as a part of these minutes by attachment as Appendix J.

*Chairman Picerno called for a five-minute recess, and the Board reconvened at approximately 6:35pm.*

C. Planning - Planned Development Conditional Rezoning Request: Rural Agricultural (RA) to Planned Development Conditional Zoning (PD-CZ)

Chairman Picerno offered comments regarding being respectful to one another and the Board listening to both sides of this request to make a decision.

Planning Director Debra Ensminger presented the staff report on the request for a conditional rezoning for an automotive entertainment facility. Following Ms. Ensminger's request, Ms. Kristy Maluchnik, the CEO of Autoport, thanked the commissioners for their public service and for their consideration of the project, the Uwharrie Motorsports Park and Resort. She shared information about the project and herself. Mr. Bob Koontz with Koontz Jones Design provided a presentation regarding the project. Mr. Chris Petree with Timmons Group (utilities), Mr. Howard Lindeman (sound), Mr. Jeff Hochanadel with Timmons Group (traffic), and Mr. Rick Baker with Timmons Group (environmental) also contributed to the presentation regarding their respective subject matter expertise. There were questions from and discussion with the commissioners regarding a cemetery on the property, the conceptual site plan, the proposed cart track, the noise level, and public safety services.

Chairman Picerno opened the duly advertised public hearing regarding this matter, and the following spoke: Nick LaSala (against), John Misiaszek (for), Jeff Stapleton (against), Karen Jordan (against), Gene Shutt (against), Barry Lamonds (against), Cameron Dockery (for), Dorothy Shutt (against), Haley Davis (against). During the course of the hearing, the commissioners asked questions of and offered comments to the speakers. They also inquired with the applicant regarding the financial status of the project.

Chairman Picerno announced that they were on speaker 12 on the list of 47 and he asked those in attendance their preference between continuing the hearing where it left off at another meeting or limiting those remaining on the list to three minutes each to speak, and the majority expressed preference for reconvening

later. It was requested that one more speaker, however, be allowed to speak this evening, an NC State student, Ms. Haley Davis. Chairman Picerno allowed her to speak, and she offered comments (against). Chairman Picerno asked those in attendance if they preferred to continue the hearing in the morning or night and the majority expressed preference for night.
**Upon motion made by Commissioner Von Canon, seconded by Commissioner Ritter, the Board voted 5-0 to recess the hearing to Tuesday, November 19, 2024, at 5:30pm.** Chairman Picerno thanked everyone for being cordial and responsible and said it was a hard decision. The staff report and the applicant's presentation are hereby incorporated as a part of these minutes by attachment as Appendix K.

**11. ADDITIONAL AGENDA**
There were no additional agenda items.

**12. MANAGER'S REPORT**
County Manager Wayne Vest had no further report.

**13. COMMISSIONERS' COMMENTS**
There were no further comments.

**14. CLOSED SESSION**
There was no closed session business.

**ADJOURNMENT**
There being no further business, upon motion made by Commissioner Von Canon, seconded by Commissioner Quis, the Board voted 5-0 to adjourn the October 15, 2024, Regular Meeting of the Moore County Board of Commissioners at 10:29pm.

Nick Picerno, Chairman

Laura M. Williams, Clerk to the Board

COUNTY OF MOORE CORPORATE SEAL NORTH CAROLINA

APPENDIX A

## Fiscal Year 2024/2025

| | Budget Line Item Number | | Budgeted Amount | Increase/ (Decrease) | Revised Budget |
|---|---|---|---|---|---|
| Administration / Opioid Settlement Funds | | | | | |
| Revenue | 29019000 32950 | Appropriated Fund Balance | 240,000 | 97,358 | 337,358 |
| Expense | 29012000 56333 FIRSH | Recovery Support Services | 34,731 | 83,986 | 118,717 |
| Expense | 29012000 56335 FIRSH | Naloxone Distribution | 12,035 | 27,772 | 39,807 |
| Expense | 29012000 56334 FIRSH | Early Intervention | 14,400 | (14,400) | - |

Approved this 15 day of October, 2024

Nick Picerno
Moore County Board of Commissioners

Laura Williams
Clerk to the Board

# RESOLUTION BY THE COUNTY OF MOORE
# TO DIRECT THE EXPENDITURE OF OPIOID SETTLEMENT FUNDS

**WHEREAS** Moore County has joined national settlement agreements with companies engaged in the manufacturing, distribution, and dispensing of opioids, including settlements with drug distributors Cardinal, McKesson, and AmerisourceBergen, and the drug maker Johnson & Johnson and its subsidiary Janssen Pharmaceuticals;

**WHEREAS** the allocation, use, and reporting of funds stemming from these national settlement agreements and certain bankruptcy resolutions ("Opioid Settlement Funds") are governed by the Memorandum of Agreement Between the State of North Carolina and Local Governments on Proceeds Relating to the Settlement of Opioid Litigation ("MOA");

**WHEREAS** Moore County has received Opioid Settlement Funds pursuant to these national settlement agreements and deposited the Opioid Settlement Funds in a separate special revenue fund as required by section D of the MOA;

**WHEREAS** section E.6 of the MOA states:

E.6. Process for drawing from special revenue funds.

a. Budget item or resolution required. Opioid Settlement Funds can be used for a purpose when the Governing Body includes in its budget or passes a separate resolution authorizing the expenditure of a stated amount of Opioid Settlement Funds for that purpose or those purposes during a specified period of time.

b. Budget item or resolution details. The budget or resolution should (i) indicate that it is an authorization for expenditure of opioid settlement funds; (ii) state the specific strategy or strategies the county or municipality intends to fund pursuant to Option A or Option B, using the item letter and/or number in Exhibit A or Exhibit B to identify each funded strategy, and (iii) state the amount dedicated to each strategy for a stated period of time.

**NOW, THEREFORE BE IT RESOLVED,** in alignment with the NC MOA, Moore County authorizes the expenditure of opioid settlement funds as follows:

1. First strategy authorized
   a. Name of strategy: **Recovery Support Services**
   b. Strategy is included in Exhibit **A**
   c. Item letter and/or number in Exhibit A to the MOA: **3**
   d. Amounted authorized for this strategy: **$106,228**
   e. Period of time during which expenditure may take place:
      Start date: **October 16, 2024** through End date: **June 30, 2025**
   f. Description of the program, project, or activity:
      **Sandhills Opioid Response Consortium Peer Support, Harm Reduction, and Prevention Program**
   g. Provider: **FirstHealth of the Carolinas $106,228**

2. Second strategy authorized
    a. Name of strategy: **Naloxone Distribution**
    b. Strategy is included in Exhibit **A**
    c. Item letter and/or number in Exhibit A to the MOA: **7**
    d. Amounted authorized for this strategy: **$28,400**
    e. Period of time during which expenditure may take place:
        Start date: **October 16, 2024** through End date: **June 30, 2025**
    f. Description of the program, project, or activity:
        **Sandhills Opioid Response Consortium Peer Support, Harm Reduction, and Prevention Program**
    g. Provider: **FirstHealth of the Carolinas $28,400**

The total dollar amount of Opioid Settlement Funds appropriated across the above named and authorized strategies is **$134,628**

Adopted this the 15 day of October 2024.

Nick Picerno, Chair
Moore County Board of Commissioners

ATTEST:

Laura Williams, Clerk to the Board

COUNTY OF MOORE CORPORATE SEAL NORTH CAROLINA

APPENDIX B

## Fiscal Year 2024/2025

| | Budget Line Item Number | | Budgeted Amount | Increase/ (Decrease) | Revised Budget |
|---|---|---|---|---|---|
| Department of Social Services - Adoption Promotions Program Fund Grant | | | | | |
| Revenue | 24033044 33042 | Special Child Adoption | 313,884 | 75,583 | 389,467 |
| Expense | 24038044 53892 | Special Child Adoption Fund | 323,776 | 75,583 | 399,359 |

Approved this 15 day of October, 2024

Nick Picerno
Moore County Board of Commissioners

COUNTY OF MOORE CORPORATE SEAL NORTH CAROLINA

Laura Williams
Clerk to the Board

**County of Moore** APPENDIX C

**Local Educational Bonds – 2018 Bond Referendum (Fund 482)**

**Project Ordinance – Revision #30**

Journal 40004

BE IT ORDAINED by the Board of Commissioners, County of Moore, North Carolina, pursuant to North Carolina General Statute § 159-13.2, the following project ordinance is hereby adopted as follows:

Section 1. The capital project authorized is to provide funds for acquiring and constructing New Elementary Schools and improving, expanding and renovating other public school facilities; also will provide funds, for acquiring, constructing, improving, expanding, renovating and equipping community college facilities, including Nursing Education Facilities.

Section 2. The officers and staff of this unit are hereby directed to proceed with the project within the budget contained herein.

Section 3. The following amounts are appropriated for the Local Educational Bonds – 2018 Bond Referendum Capital Project Ordinance:

New Southern Pines Elementary School:

| | GL Account | Budget | Incr./Decr. | Revised Budget |
|---|---|---|---|---|
| Architect | 48263396 55805 | $ 1,770,000 | $ - | $ 1,770,000 |
| Construction | 48263396 55806 | $ 31,183,483 | $ - | $ 31,183,483 |
| FF&E | 48263396 56292 | $ 2,306,540 | $ - | $ 2,306,540 |
| Cost of Issuance | 48263396 57559 | $ 300,185 | $ - | $ 300,185 |
| Transfer to Capital Res for Govt Project | 48263356 59935 | $ 2,901,361 | $ - | $ 2,901,361 |
| 2019 SP GO BD Premium | 48263396 57561 | $ - | $ - | $ - |
| Modernization EL Gym Project MEGYM | 48263396 57561 MEGYM | $ 3,474,273 | $ - | $ 3,474,273 |
| Transfer to General Fund Digital Equip | 48263356 59911 DIGIT | $ 243,215 | $ - | $ 243,215 |
| Transfer to General Fund - Interest Debt | 48263356 59911 INTDE | $ 150,000 | $ - | $ 150,000 |
| Arbitrage Rebate | 48263396 55876 | $ 100,319 | $ - | $ 100,319 |
| **Total** | | **$ 42,429,376** | $ - | **$ 42,429,376** |

New Pinehurst Elementary School:

| | GL Account | Budget | Incr./Decr. | Revised Budget |
|---|---|---|---|---|
| Architect | 48263596 55805 | $ 2,453,000 | $ - | $ 2,453,000 |
| Pinehurst Modular Classrooms | 48263596 55813 | $ 2,400,000 | $ - | $ 2,400,000 |
| Construction | 48263596 55806 | $ 29,636,186 | $ - | $ 29,636,186 |
| FF&E | 48263596 56292 | $ 2,306,540 | $ - | $ 2,306,540 |
| Cost of Issuance | 48263596 57559 | $ 259,210 | $ - | $ 259,210 |
| Contingency | 48263596 55807 | $ 945,064 | $ - | $ 945,064 |
| GO Bond Premium | 48263596 57562 | $ - | $ - | $ - |
| Modernization EL Gym Project MEGYM | 48263596 57562 MEGYM | $ 3,151,648 | $ (725,250) | $ 2,426,398 |
| District Wide Projects | 48263596 57562 DWP | $ 1,561,340 | $ 725,250 | $ 2,286,590 |
| Transfer to Capital Res for Govt Project | 48263596 59935 | $ 4,853,000 | $ - | $ 4,853,000 |
| PHST Transfer to GF Digital Equip | 48263596 59911 DIGIT | $ 132,078 | $ - | $ 132,078 |
| Arbitrage Rebate | 48263596 55876 | $ - | $ 310,501 | $ 310,501 |
| **Total** | | **$ 47,698,066** | **$ 310,501** | **$ 48,008,567** |

New Aberdeen Elementary School:

| | GL Account | Budget | Incr./Decr. | Revised Budget |
|---|---|---|---|---|
| Construction | 48263696 55806 | $ 27,009,980 | $ - | $ 27,009,980 |
| Contingency | 48263696 55807 | $ - | $ - | $ - |
| Off-Site Sewer | 48263696 56291 | $ 450,000 | $ - | $ 450,000 |
| FF&E/Tech | 48263696 56292 | $ 1,860,550 | $ - | $ 1,860,550 |
| Testing & Inspection | 48263696 56293 | $ 93,270 | $ - | $ 93,270 |
| Cost of Issuance | 48263696 57559 | $ 274,042 | $ - | $ 274,042 |
| 2018 Aberdeen GO BD Prem | 48263696 57558 | $ - | $ - | $ - |
| Modernization EL Gym Project MEGYM | 48263696 57558 MEGYM | $ 353,726 | $ - | $ 353,726 |
| Carthage EL-HVAC Bld 7 | 48263696 57558 CHVAC | $ 47,582 | $ - | $ 47,582 |
| Elise MS-Buried boiler | 48263696 57558 EBOIL | $ 32,000 | $ - | $ 32,000 |
| Vass LE-HVA Bld 5 | 48263696 57558 VHVAC | $ 28,500 | $ - | $ 28,500 |
| Carthage EL-Return piping | 48263696 57558 CPIPE | $ 216,000 | $ - | $ 216,000 |
| Community L-Air handlers | 48263696 57558 CLAIR | $ 326,322 | $ - | $ 326,322 |
| Sandhills FL-Heat pumps | 48263696 57558 SHEPU | $ 120,225 | $ - | $ 120,225 |
| Carthage EL-Gym | 48263696 57558 CEGYM | $ 27,105 | $ - | $ 27,105 |
| Carthage EL-Fire alarm | 48263696 57558 CFALM | $ 87,000 | $ - | $ 87,000 |
| All schools-Classroom display syst | 48263696 57558 ACLDI | $ 387,400 | $ - | $ 387,400 |
| Elise MS-Gym | 48263696 57558 EMGYM | $ 68,917 | $ - | $ 68,917 |
| Union Pines-Furnace ROTC Bld | 48263696 57558 UPFUR | $ 6,975 | $ - | $ 6,975 |
| Sandhills FL-Install foundation | 48263696 57558 SFINS | $ 33,124 | $ - | $ 33,124 |
| Highfalls ES-sanitary lift station | 48263696 57558 HFSLS | $ - | $ - | $ - |
| NMHS-sanitary lift station | 48263696 57558 NMSLS | $ 252,538 | $ - | $ 252,538 |
| Union Pines-Water main pipes | 48263696 57558 UPWAT | $ 236,817 | $ - | $ 236,817 |
| Transfer to General Fund Digital Equip | 48263656 59911 DIGIT | $ 1,124,707 | $ - | $ 1,124,707 |
| Transfer to Southern Pines Construction | N/A | $ 1,560,208 | $ - | $ 1,560,208 |
| Transfer to General Fund - Interest Debt | 48263656 59911 INTDE | $ 300,000 | $ - | $ 300,000 |
| | | | | |
| **Total** | | **$ 34,896,988** | **$ -** | **$ 34,896,988** |

SCC Nursing Education Facilities:

| | GL Account | Budget | Incr./Decr. | Revised Budget |
|---|---|---|---|---|
| Architect | 48263797 55805 | $ 1,510,050 | $ - | $ 1,510,050 |
| SCC Construction | 48263797 55806 | $ 15,142,635 | $ - | $ 15,142,635 |
| Cost of Issuance | 48263797 57559 | $ 353,500 | $ - | $ 353,500 |
| SCC Contingency | 48263797 55807 | $ 560,424 | $ - | $ 560,424 |
| SCC FF&E | 48263797 56292 | $ 2,104,382 | $ - | $ 2,104,382 |
| SSC Planning & Design | 48263797 56318 | $ 329,009 | $ - | $ 329,009 |
| SCC GO Bond Premium | 48263797 57566 | $ - | $ - | $ - |
| Phase I & II - Water Utility Improvements | 48263797 57566 WUIMP | $ - | $ - | $ - |
| Meyer Hall Science Lab Renovations | 48263797 57566 MEYER | $ 1,009,310 | $ - | $ 1,009,310 |
| Fire & Construction Education Center | 48263797 57566 FIRCO | $ 1,100,000 | $ - | $ 1,100,000 |
| SCC Transfer to CR for GOV PROJ | 48263756 59909 | $ 1,600,000 | $ - | $ 1,600,000 |
| | | | | |
| **Total** | | **$ 23,709,310** | $ - | **$ 23,709,310** |

Section 4. The following revenues are anticipated to be available to complete the Local Educational Bonds – 2018 Bond Referendum Project Ordinance:

New Southern Pines Elementary School:

| | GL Account | Budget | Incr./Decr. | Revised Budget |
|---|---|---|---|---|
| Transfer fr Capital Res for Govt Project | 48219056 32995 | $ 2,901,361 | $ - | $ 2,901,361 |
| 2019 SP GO BD Proceeds | 48219000 36931 | $ 34,000,000 | $ - | $ 34,000,000 |
| 2019 SP GO BD Premium | 48218000 36932 | $ 3,474,273 | | $ 3,474,273 |
| SP Sales Tax Refund | 48218000 32351 | $ 243,215 | $ - | $ 243,215 |
| 2019 SP GO BD Interest | 48218000 36933 | $ 250,319 | $ - | $ 250,319 |
| Transfer from New Aberdeen Elementary | N/A | $ 1,560,208 | $ - | $ 1,560,208 |
| **Total** | | **$ 42,429,376** | $ - | **$ 42,429,376** |

New Pinehurst Elementary School:

| | GL Account | Budget | Incr./Decr. | Revised Budget |
|---|---|---|---|---|
| Transfer from Capital Res for Govt Project | 48219056 32995 | $ 4,853,000 | $ - | $ 4,853,000 |
| 2019 PHST GO BD Proceeds | 48219000 36934 | $ 38,000,000 | $ - | $ 38,000,000 |
| 2019 PHST GO BD Premium | 48218000 36935 | $ 4,712,988 | $ - | $ 4,712,988 |
| PHST Sales Tax Refund | 48218000 32352 | $ 132,078 | $ - | $ 132,078 |
| 2019 PHST GO BD Interest | 48218000 36936 | $ - | $ 310,501 | $ 310,501 |
| | | | | |
| **Total** | | **$ 47,698,066** | **$ 310,501** | **$ 48,008,567** |

New Aberdeen Elementary School:

| | GL Account | Budget | Incr./Decr. | Revised Budget |
|---|---|---|---|---|
| 2018 Aberdeen GO BD Proceeds | 48219000 36927 | $ 31,000,000 | $ - | $ 31,000,000 |
| 2018 Aberdeen GO BD Prem | 48218000 36928 | $ 2,472,281 | $ - | $ 2,472,281 |
| 2018 Aberdeen GO Bond Int | 48218000 36929 | $ 880,837 | $ - | $ 880,837 |
| Aberdeen Elem Sales Tax Refund | 48218000 32350 | $ 543,870 | $ - | $ 543,870 |
| | | | | |
| | | | | |
| **Total** | | **$ 34,896,988** | $ - | **$ 34,896,988** |

SCC Nursing Education Facilities:

| | GL Account | Budget | Incr./Decr. | Revised Budget |
|---|---|---|---|---|
| Transfer fr Capital Res for Govt Project | 48219056 32995 | $ 1,600,000 | $ - | $ 1,600,000 |
| SCC GO BD Proceeds | 48218000 36937 | $ 20,000,000 | $ - | $ 20,000,000 |
| SCC GO BD Premium | 48218000 36938 | $ 2,109,310 | $ - | $ 2,109,310 |
| | | | | |
| **Total** | | **$ 23,709,310** | $ - | **$ 23,709,310** |

Section 5. The Finance Officer is hereby directed to maintain within the Project Fund sufficient specific detailed accounting records to satisfy the requirements of North Carolina General Statutes. federal regulations and any other applicable laws.

Section 6. Funds may be advanced from the General Fund for the purpose of making payments as due.

Section 7. The Finance Officer is directed to report the financial status of the project, as requested by the Board of Commissioners.

Section 8. This Project Ordinance shall be entered in the minutes by the Clerk to the Board of Commissioners and within five days after adoption of this Ordinance, copies shall be filed with the finance officer, budget officer and Clerk to the Board of Commissioners.

Adopted this 15th day of October 2024.

Nick Picerno, Chairman
Moore County Board of Commissioners

Laura M. Williams
Clerk to the Board

COUNTY OF MOORE CORPORATE SEAL NORTH CAROLINA

APPENDIX D

**RESOLUTION AUTHORIZING AND APPROVING**

**(CURRENT) RELEASES AND REFUNDS BY THE**

**TAX ADMINISTRATOR**

**WHEREAS,** Gary E. Briggs, Moore County Tax Administrator, has certified a list comprised of various county taxes illegally levied and assessed, the amount certified as being in excess of the amount legally due by the taxpayer and therefore should be released or refunded in accordance with General Statute 105-381.

**BE IT RESOLVED** by the Board of Commissioners of Moore County that the taxpayers shown on said list of releases and refunds submitted by Gary E. Briggs, Tax Administrator, are hereby granted such tax release or refund of the county taxes shown and the County Finance Director is directed to make said refunds.

Adopted this the 15 day of October, 2024.

Nick Picerno, Chairman

ATTEST:

Laura M. Williams
Clerk to the Board

COUNTY OF MOORE CORPORATE SEAL NORTH CAROLINA

**RESOLUTION AUTHORIZING AND APPROVING**

**(DELINQUENT) RELEASES AND REFUNDS BY THE**

**TAX ADMINISTRATOR**

**WHEREAS,** Gary E. Briggs, Moore County Tax Administrator, has certified a list comprised of delinquent taxes illegally due by the taxpayer and therefore should be released or refunded in accordance with General Statute 105-381.

**BE IT RESOLVED** by the Board of Commissioners of Moore County that the taxpayers shown on said list of releases and refunds submitted by Gary E. Briggs, Tax Administrator, are hereby granted such tax release or refund of the county taxes shown and the County Finance Director is directed to make said refunds.

Adopted this the 15 day of October, 2024.

Nick Picerno, Chairman

ATTEST:

Laura M. Williams
Clerk to the Board

COUNTY OF MOORE CORPORATE SEAL NORTH CAROLINA

# REAL ESTATE / PERSONAL PROPERTY
## RELEASES
## OVER - $100
## September-24

| BILL YEAR | BILL NUMBER | NAME | REASON | AMOUNT |
|---|---|---|---|---|
| 2024 | 91956 | ALTEC CAPITAL TRUST | REMOVING LATE LIST - EXTENSION GRANTED | $3,546.96 |
| 2024 | 86909 | BODDIE NOELL ENTERPRISES INC | REMOVING LATE LIST - EXTENSION GRANTED | $110.14 |
| 2024 | 1000591 | FAIRCLOTH, CYRUS JAMES II | GAP - VEHICLE REGISTERED IN ANOTHER STATE | $197.96 |
| 2024 | 1000919 | FRALEY, KENNETH LEE | GAP - VEHICLE REGISTERED IN ANOTHER STATE | $343.08 |
| 2024 | 1002027 | HAM, THOMAS BLAINE | GAP - VEHICLE REGISTERED IN ANOTHER STATE | $199.59 |
| 2024 | 90069 | ISR PLATFORMS LLC | PERSONAL PROPERTY LOCATED IN ANOTHER STATE | $278.40 |
| 2024 | 1000373 | JAGGER, ALLAN FOREST | GAP - VEHICLE REGISTERED IN ANOTHER STATE | $459.11 |
| 2024 | 93424 | LONG, REGGIE BRANSON | PERSONAL PROPERTY LOCATED IN ANOTHER COUNTY | $226.73 |
| 2024 | 90772 | MARTINS, VICTOR | MILITARY | $168.36 |
| 2024 | 81416 | MERIDIAN ZERO DEGREES LLC | PERSONAL PROPERTY VALUED INCORRECTLY - WILL REBILL | $9,529.55 |
| 2024 | 1000275 | OLDROYD, LINDA GENE | GAP - VEHICLE REGISTERED IN ANOTHER STATE | $331.46 |
| 2024 | 1000274 | OLDROYD, LINDA GENE | GAP - VEHICLE REGISTERED IN ANOTHER STATE | $351.39 |
| 2024 | 91426 | OTR LEASING LLC | PERSONAL PROPERTY BILLE IN ERROR | $200.20 |
| 2024 | 1001635 | PRISELER, MICHAEL BOWEN | GAP - VEHICLE REGISTERED IN ANOTHER STATE | $183.76 |
| 2024 | 1000045 | SCHRICK, ROBERT ALAN | GAP - VEHICLE REGISTERED IN ANOTHER STATE | $394.64 |
| 2023 | 83269 | SMITH, RICHARD J | PERSONAL PROPERTY LOCATED IN ANOTHER COUNTY | $365.38 |
| | | | **TOTAL** | **$16,886.71** |

# VTS/REAL ESTATE/PERSONAL PROPERTY
## RELIEF - REFUNDS
## OVER - $100
## September-24

| Bill Year | Bill Number | Customer Name | Reason | Refund Amount |
|---|---|---|---|---|
| 2023 | VTS - 0061489706 | BERGE, KOURTNEY WILLIAM DALE | TAG SURRENDER | $107.35 |
| 2023 | VTS - 0060167276 | BOWNESS CONSTRUCTION COMPANY | TAG SURRENDER | $185.60 |
| 2022 | VTS - 0072846900 | BURLAZZI, VINCENT FREDRICK | MILITARY | $401.83 |
| 2023 | VTS - 0074864138 | BURLAZZI, VINCENT FREDRICK | MILITARY | $194.93 |
| 2023 | VTS - 0070043440 | CORMACK, RUSSELL CLAUD | TAG SURRENDER | $174.38 |
| 2023 | VTS - 0042394631 | DAY, REBEKAH NUTTING | TAG SURRENDER | $115.52 |
| 2023 | VTS - 0064851493 | EBBS, PATRICIA WILKINSON | TAG SURRENDER | $108.20 |
| 2023 | VTS - 0070308965 | GAY, JOHN GARY | TAG SURRENDER | $142.01 |
| 2024 | VTS - 0079162723 | GIRONDA, FRANCESCO | TAG SURRENDER | $163.37 |
| 2023 | VTS - 0078335737 | GUTHRIE, BARRY & ELEANOR | TAG SURRENDER | $122.76 |
| 2023 | VTS - 0072152245 | HERTWIG, RONALD WALTER JR | TAG SURRENDER | $148.38 |
| 2023 | VTS - 0036996383 | HOPKINS, JOHN & CONNIE | TAG SURRENDER | $131.45 |
| 2023 | VTS - 0066369574 | KATZ, MICHAEL EDWARD | INCORRECT VALUE | $155.92 |
| 2023 | VTS - 0058602280 | KEGLEY, ANDREW THOMAS | TAG SURRENDER | $167.67 |
| 2023 | VTS - 0077477243 | KENNEDY, VENDER MAURICE | TAG SURRENDER | $128.76 |
| 2023 | VTS - 0077209023 | KOVACH, BARRY JR & MARTHA | TAG SURRENDER | $111.50 |
| 2023 | VTS - 0077908318 | LUPTON, MATTHEW ANDREW | TAG SURRENDER | $608.07 |
| 2023 | VTS - 0078256778 | MANNO, MARIA LYNN | TAG SURRENDER | $113.20 |
| 2023 | VTS - 0080093849 | MARTIN, MICHAEL DAVID | INCORRECT COUNTY | $100.48 |
| 2024 | VTS - 0079767812 | MATTHEWS, DONALD RICHARD | TAG SURRENDER | $188.42 |
| 2023 | VTS - 0065684522 | MCPHAUL, JOHN ARCH | TAG SURRENDER | $186.23 |
| 2023 | VTS - 0058963394 | NAPPI, PATRICK & JUDITH | TAG SURRENDER | $130.17 |
| 2023 | VTS - 0074571821 | NEWCOMB, RANDI LYNN | TAG SURRENDER | $105.91 |
| 2023 | VTS - 0078487692 | NORRIS, SUTTON BROWNSEY | MILITARY | $169.97 |
| 2023 | VTS - 0070339359 | OCONNOR, HELEN PISHINICK | TAG SURRENDER | $106.59 |

# VTS/REAL ESTATE/PERSONAL PROPERTY
# RELIEF - REFUNDS
# OVER - $100
# September-24

| Bill Year | Bill Number | Customer Name | Reason | Refund Amount |
|---|---|---|---|---|
| 2023 | VTS - 0073080618 | PITTS, LARRY MICHAEL | TAG SURRENDER | $166.70 |
| 2023 | VTS - 0076995153 | RHODES, TIMOTHY PAUL | TAG SURRENDER | $127.71 |
| 2023 | VTS - 0073185577 | RICHARDSON, JOSHUA LEE | TAG SURRENDER | $192.82 |
| 2023 | VTS - 0076724869 | RODRIGUEZ, HECTOR JR | TAG SURRENDER | $122.99 |
| 2023 | VTS - 0073609769 | THOMAS, JASON MICHAEL | TAG SURRENDER | $110.86 |
| | | | **TOTAL** | **$4,989.75** |

**RESOLUTION**
**REGARDING THE LISTING OF PERSONAL PROPERTY**
**MOORE COUNTY**
**BOARD OF COMMISSIONERS**
**COUNTY OF MOORE, NORTH CAROLINA**

**WHEREAS,** N.C.G.S. 105-310.1 authorizes Counties to permit electronic listing of personal property, and

**WHEREAS,** N.C.G.S. 105-307 permits the Board of County Commissioners to extend the deadline for filing electronic listings of personal property under N.C.G.S. 105-304 to June 1, as long as the Notice requirements of N.C.G.S 105-296 are published; and

**WHEREAS,** N.C.G.S 105-311(b) authorizes electronic signature of personal property listings which are submitted electronically,

**NOW, THEREFORE, BE IT RESOLVED,** as follows:

1. Moore County Board of Commissioners pursuant to N.C.G.S. 105-310.1 by this Resolution provides for and authorizes personal property listing to be submitted and signed electronically.

2. Electronic listing of personal property may be accomplished by a taxpayer as follows:
   a. Electronic listings of personal property must be submitted online;
   b. Facsimiles shall not be accepted as electronic listings of personal property; and
   c. In order to list personal property electronically, a taxpayer must use an electronic listing application approved by the Moore County Tax Assessor.

3. Extension of listing period to electronically file personal property listings after January 31, may be allowed if the taxpayer first files an online request for an extension of time during the month of January, on or before January 31, and if the taxpayer provides an Account ID obtained from the Moore County Tax Assessor and associated with the location of the personal property for which the extension is requested. Once an extension of time has been granted by the Moore County Tax Assessor the electronic filing must be received by the Moore County Tax Assessor no later than April 15 in order to avoid late listing penalties.

4. This resolution shall be recorded in the minutes of the Moore County Board of Commissioners and notice of the procedure and extension of time for electronic filing of personal property listings shall be published as required by N.C.G.S. 105-296(c).

5. This resolution is effective upon adoption and for all tax years after its adoption and at such time as the Moore County Tax Assessor has the ability to implement a system for electronic listing.

Adopted this 15th day of October 2024

Nick Picerno, Chair
Moore County Board of Commissioners

ATTEST:

Laura M. Williams, Clerk
Moore County Board of Commissioners

COUNTY OF MOORE CORPORATE SEAL NORTH CAROLINA

# Fee Schedule

## Permitting & Inspections Page 1 of 2

| Fee Schedule - Item | FY 2024/2025 Fee Amount |
|---|---|
| **Building Permits:** | |
| New Construction (Residential & Commercial) | .30¢ per square foot |
| Additions/Alternations/Renovations (Residential & Commercial) | .30¢ per square foot |
| Modular Residential (Plumbing, Electrical, & Mechanical included) *Additions to modular not included in the base fee | $500 |
| Moving House Includes Plumbing, Electrical, & Mechanical *Additions to House not included in the base fee | $500 |
| Modular Commercial (Plumbing, Electrical & Mechanical Not Included) | $500 |
| Portable Carports, Portable Buildings, Etc. | $100 |
| Bulkheads, Piers, Docks, Retaining Walls | .30¢ per square foot |
| Crawl Space Encapsulation Permit | $100 |
| Demolition Permit (Commercial & Residential) | $100 |
| Change of Use Permit | $50 |
| Insulation Permit | $75 |
| **Mechanical Permits:** | |
| Residential (wiring permits may apply) - Per new unit or per unit change | $90 includes duct work or $65 no duct work |
| Commercial - (wiring permits may apply) - Per new unit or per unit change out | $90 includes duct work or $65 no duct work |
| Duct work only | $50 |
| Boilers | $100 |
| Chillers - Commercial | $100 each |
| Gas Packs (Includes Gas Piping/wiring permit may apply) Per new unit or per unit change out | $100 |
| Other (additional (bath vents, etc.) | $45 |
| Refrigeration: (base fee plus $5 per case) | $50 |
| Hood Systems | $100 each |
| Fuel/Gas Piping Residential | $50 |
| Fuel/Gas Piping Commercial | $50 per service point |
| **Plumbing Permits:** | |
| Residential Each Bath or 1/2 Bath | $50 |
| Residential kitchen and/or laundry rooms | $50 |
| Commercial restroom each | $100 |
| Additional fixture in restroom (commercial) | $50 flat fee |
| Additional fixture not in restroom (commercial) | $50 flat fee |
| Potable Water Connections Residential & Commercial | $50 |
| Water Heater Change Outs (additional wiring may apply) | $50 |
| Backflow Preventers, Irrigation and Sprinklers | $50 |
| Grease Trap | $50 |
| Plumbing Other (installation of sewer lines, installation of water lines, re-piping, etc.) | $50 |

APPENDIX G

**RESOLUTION**

**WHEREAS,** Pursuant to NCGS 47-30.2, The Board of Commissioners of each county shall, by resolution, designate by name one or more person's experienced in mapping or land records management as a Review Officer to review each map and plat required to be submitted for review before the map or plat is presented to the Register of Deeds for recording. A resolution designating a Review Officer shall be recorded in the county registry and indexed on the grantor index in the name of the Review Officer.

**NOW THEREFORE, BE IT RESOLVED,** that the following additional staff members are recommended to the Moore County Board of Commissioners for appointment as Review Officers for the Moore County as indicated in accordance with the General Statutes:

**Ginger Bauerband**
**Melissa Parlapiano-Conger**

**BE IT FURTHER RESOLVED** that this Resolution redesignating **Dena Barner, Debra Ensminger, Ruth Pedersen, Danielle Orloff, and Erin Accetturo** as Review Officers.

**BE IT FURTHER RESOLVED** that upon discontinuing employment or otherwise assuming different job responsibilities with the County of Moore, the duties of an appointed individual shall cease.

**BE IT FURTHER RESOLVED** that a copy of this Resolution appointing staff members as Review Officers for Moore County be recorded in the Moore County Register of Deed's Office and indexed in the names of Review Officers.

Adopted this the 15th of October 2024

Nick Picerno, Chairman
Moore County Board of Commissioners

Laura M. Williams
Clerk to the Board

COUNTY OF MOORE CORPORATE SEAL

APPENDIX H

# Resolution Supporting Operation Green Light for Veterans

**WHEREAS,** the residents of Moore County have great respect, admiration, and the utmost gratitude for all the men and women who have selflessly served our country and this community in the Armed Forces; and

**WHEREAS,** the contributions and sacrifices of those who served in the Armed Forces have been vital in maintaining the freedoms and way of life enjoyed by our citizens; and

**WHEREAS,** Moore County seeks to honor individuals who have made countless sacrifices for freedom by placing themselves in harm's way for the good of all; and

**WHEREAS,** there are approximately 11,383 veterans living in Moore County, and

**WHEREAS,** veterans continue to serve our community in the American Legion, Veterans of Foreign Wars, religious groups, civil service, and by functioning as County Veterans Service Officers in 29 states to help fellow former service members access more than $52 billion in federal health, disability and compensation benefits each year; and

**WHEREAS,** Approximately 200,000 service members transition to civilian communities annually; and

**WHEREAS,** an estimated 20 percent increase of service members will transition to civilian life in the near future; and

**WHEREAS,** studies indicate that 44-72 percent of service members experience high levels of stress during transition from military to civilian life; and

**WHEREAS,** active military service members transitioning from military service are at a high risk for suicide during their first year after military service; and

**WHEREAS,** the National Association of Counties encourages all counties, parishes and boroughs to recognize Operation Green Light for Veterans; and

**WHEREAS**, Moore County appreciates the sacrifices of our United States military personnel and believes specific recognition should be granted; and

**NOW, THEREFORE BE IT RESOLVED**, with designation as a Green Light for Veterans County, the Moore County Board of Commissioners hereby declares November 1st through November 15th, 2024, a time to salute and honor the service and sacrifices of our men and women in uniform transitioning from active service; and

**BE IT FURTHER RESOLVED**, that in observance of Operation Green Light, Moore County encourages its citizens in patriotic tradition to recognize the importance of honoring all those who made immeasurable sacrifices to preserve freedom by displaying green lights in a window of their place of business or residence from November 1st through the 15th, 2024.

This the 15th day of October 2024.

Nick Picerno, Chairman

Laura M. Williams, Clerk to the Board



APPENDIX I

**Agenda Item:** 9.A.
**Meeting Date:** October 15, 2024

**MEMORANDUM TO THE MOORE COUNTY BOARD OF COMMISSIONERS:**

**FROM:** Debra Ensminger, Planning Director
**DATE:** 10/02/2024
**SUBJECT:** Quasi-Judicial Hearing for an Amendment to a Special Use Permit: Conservation Subdivision – Gretchen Pines Phase 5 – PID 20220346, part of 10000166
**PRESENTER:** Debra Ensminger, Planning Director

**REQUEST:** A request for an amendment to a Special Use Permit and approval of a preliminary plat: "Gretchen Pines Subdivision Phase 5 Preliminary Plat" for an additional phase containing 27 lots, on one parcel containing 42.04 acres, located off NC Hwy 73, West End, NC (PID 20220346 and part of 10000166), owned by TKCSJM Harris, LLC per Deed Book 5870, Page 1 and Deed Book 6183, Page 374.

**BACKGROUND: LOCATION:**
The proposed project is located near NC 73 Hwy, West End, NC and will be accessed through Pewter Dr., a private road within the existing Gretchen Pines subdivision Phase 4. The property is owned by TKCSJM Harris per Deed Book 5870, Page 1. The subject parcel contains a small portion of parcel ID 10000166 shown as "Area A" on Plat Cabinet 20, Slide 297, which was conveyed to TKCSJM Harris, LLC and combined with the main parcel ID 20220346 in Deed Book 6183, Page 374. At the time of this meeting, the recombination has not been reflected on Moore County GIS.

**SUBDIVISION TYPE:**
The Gretchen Pines major conservation subdivision was originally approved by the Board of Commissioners on August 20, 2019, for four phases containing 166 lots. The lots have been reconfigured since initial approval and final plats have been signed for phases one through four totaling 139 lots. To date, the homes in phases one through three are built out, and the homes in phase four are under construction. With the proposed addition of Phase 5 (27 lots), the total number of lots in Gretchen Pines (Phases 1 -5) will equal 166 lots. The amendment to the Special Use Permit, Gretchen Pines Major Conservation Subdivision (Phases 1 – 4), adding Phase 5, requires the applicant to follow the process of a new special use permit major subdivision application.

The 27 lots proposed in Phase 5 meet the minimum open space requirements and density requirements, as defined in Section 19.9 of the Moore County Unified Development Ordinance.

- Proposed improvements shall comply with all local and state codes and ordinance requirements such as the Moore County Unified Development Ordinance Subdivision Requirements, Moore County Watershed Overlay District Requirements, North Carolina Department of Transportation, Moore County Department of Public Works, Moore County Department of Public Safety, Moore County Department of Environmental Health, Moore County Building Inspections, and Moore County Department of 911 Addressing.

The allowable density for a conservation subdivision is calculated by dividing the minimum lot size of the zoning district by the gross area of the site. The minimum lot size is 40,000 square feet or 0.918 acres. The total property acreage is 245.769 acres. 245.769 / 0.918 equals 268 allowable dwelling units. The total number of units proposed, including Phase 5, is 166.

**INFRASTRUCTURE:**

Water and Sewer

- Water: The proposed Phase 5 will be served by Moore County Public Utilities.
- Water Capacity: There is adequate water supply and storage to serve the proposed Phase 5 as determined by the Moore County Department of Public Works.
- Fire Flow: The fire flow test dated May 3, 2024, projected results at 20 PSI with residual pressure of 617 GPM.
- Septic: The development will utilize individual private septic systems. The applicant submitted the Preliminary Soil Evaluation Report dated May 31, 2024, which found suitable soil that can be permitted for a septic system on each lot. Due to varying soil quality, usable soil depth, available space, and topography/landscape position, the type of septic systems may vary from building lot to building lot. Additionally, due to limited suitable soil area on some building lots, the building location, building footprint, bedroom count, and driveway location may require the septic system drain field to be designed prior to issuance of improvement permits.

**OVERLAY DISTRICTS:**

- Watershed: The property is within the WS-IIIP Cape Fear Little River (Vass) Watershed.
- High Quality Water: The property is within a high-quality watershed which, reduces the allowable density to 1 dwelling unit per acre or 12% impervious surface area.
- Voluntary Agricultural District: There is a Voluntary Agricultural District adjacent to the subject property.

**STORMWATER:**

The applicant was required to submit a stormwater management plan with Stormwater Control Measures (SCMs) meeting the most current edition of the North Carolina Department of Environmental Quality (NCDEQ) Stormwater Design Manual prior to preliminary plat approval. The stormwater management plan has been submitted to the County. NCDEQ has reviewed the stormwater management plan and, upon approval, issued a Post-Construction Stormwater Management Permit (Permit No. SW6230801) dated March 18, 2024, for the construction, management, operation, and maintenance of built-upon area (BUA) for the low-density subdivision area (Phase 5). The maximum amount of built-upon area (BUA) for the entire project (Phase 5) is 217,545 square feet. The maximum built-upon area (BUA) for each of the 27 lots number 118-144 is 4,800 square feet. The subdivision will utilize dispersed flow of stormwater runoff through vegetated areas to minimize the channelization of flow.

**SEDIMENTATION AND EROSION CONTROL:**

The applicant has obtained approval of a Sedimentation and Erosion Control Plan for Phase 5 to grade the site and construct the roads in this proposed phase.

Each preceding phase 1-4 is also subject to a sedimentation and erosion control plan. NCDEQ completed an inspection of Phase 4 and Phase 5 on June 25, 2024. The inspection reports are enclosed as attachments.

**TRANSPORTATION:**

- The existing Pewter Dr. is a private road built to NCDOT standards and is proposed to be extended to serve Phase 5.
- Phase 5 also includes two proposed new roads, Ivory Lane and Arcadia Way which intersect Pewter Dr. These road names were approved by the Moore County Board of Commissioners on February 18, 2020.

**UTILITIES:**

- All utilities shall be underground per the preliminary plat.

**STREET TREES:**

The subdivider shall plant or leave at least one street tree for each 20 feet of street frontage along all streets, outside of sight triangles, as illustrated on the preliminary plat. The trees planted shall be a minimum height of six feet at the time of installation, with the intent to grow to 10 feet within two years. Street trees shall be configured in accordance with Section 7.11.H of the Moore County Unified Development Ordinance "List of Recommended Native Species." Street trees may be installed either before final plat approval or before Certificate of Occupancy is issued for each dwelling unit.

**CLUSTER MAILBOXES:**

The existing mail kiosk in Phase 1 will support the proposed lots in Phase 5. The existing mail kiosk is located outside of the right-of-way and located within a homeowner's association-maintained area.

**ENTRANCE SIGNS:**

There are existing entrance signs at the entrances to the subdivision on NC 73 Hwy and Carthage Rd. Phase 5 will not have an entrance on an external road, so no other entrance signs are being proposed.

**OPEN SPACE:**

The proposed Phase 5 will include 3.76 acres of open space. The total open space for the whole subdivision will be 75.745 acres, or 30.82% of the subdivision. The minimum open space requirement for a conservation subdivision is 30%. The open space proposed exceeds the 30% requirement.

**SUBDIVISION REVIEW BOARD:**

The Moore County Subdivision Review Board met on September 10, 2024, and recommended the Board of Commissioners place the following condition on approval of the Special Use Permit:

- If fences are installed within any drainage easements area, they must be installed to allow water to flow through the fencing. This requirement shall be incorporated as a note placed on the final plat and included in the restrictive covenants.

The Subdivision Review Board **approved** this preliminary plat "Gretchen Pines Subdivision Phase 5 Preliminary Plat" and forwarded the Special Use Permit amendment application to the Moore County Board of Commissioners for consideration.

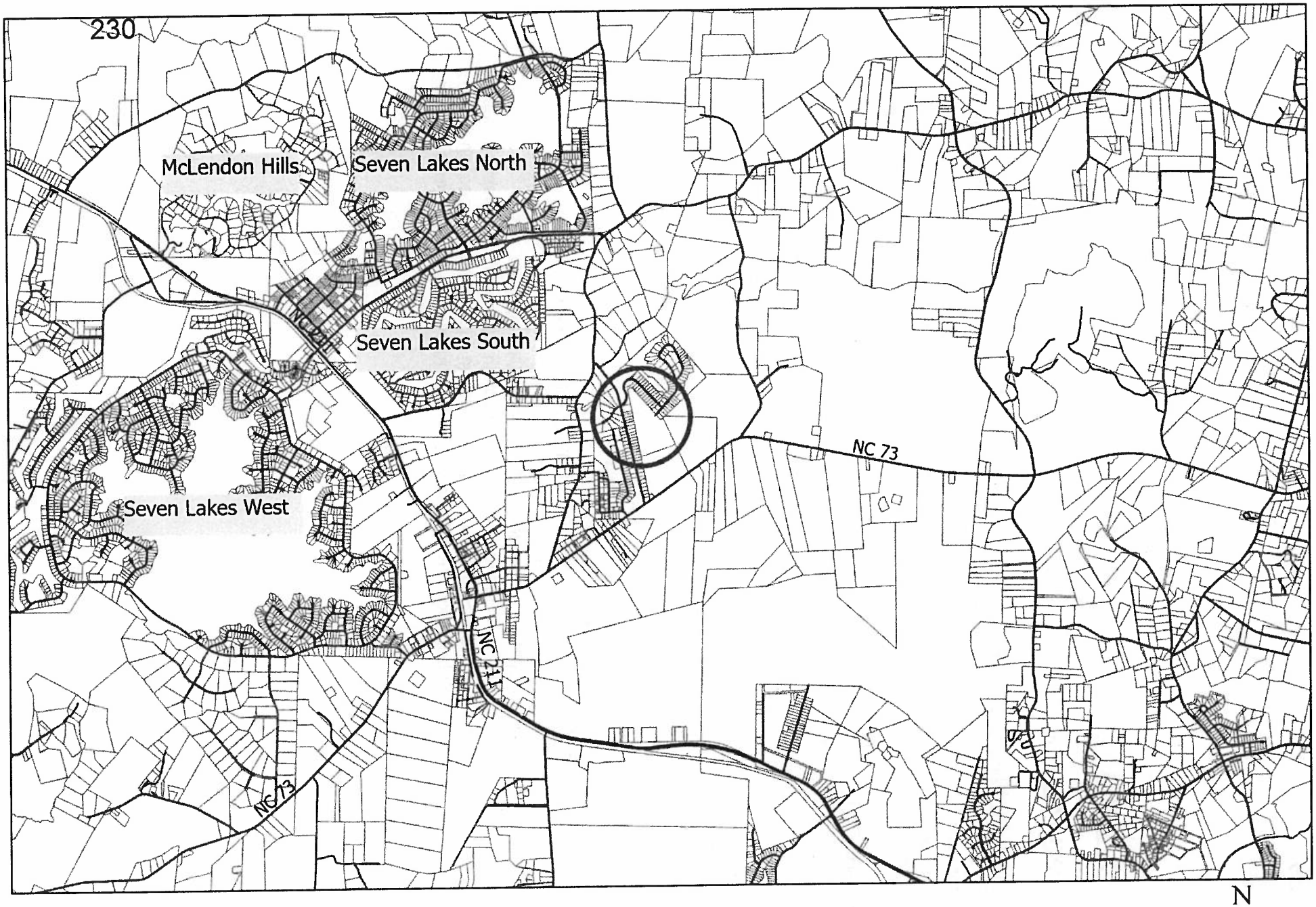
**FINANCIAL IMPACT:** No financial impact to the County's FY 2024-2025 budget.

**IMPLEMENTATION PLAN:** Hold a Quasi-Judicial Hearing on October 15, 2024.

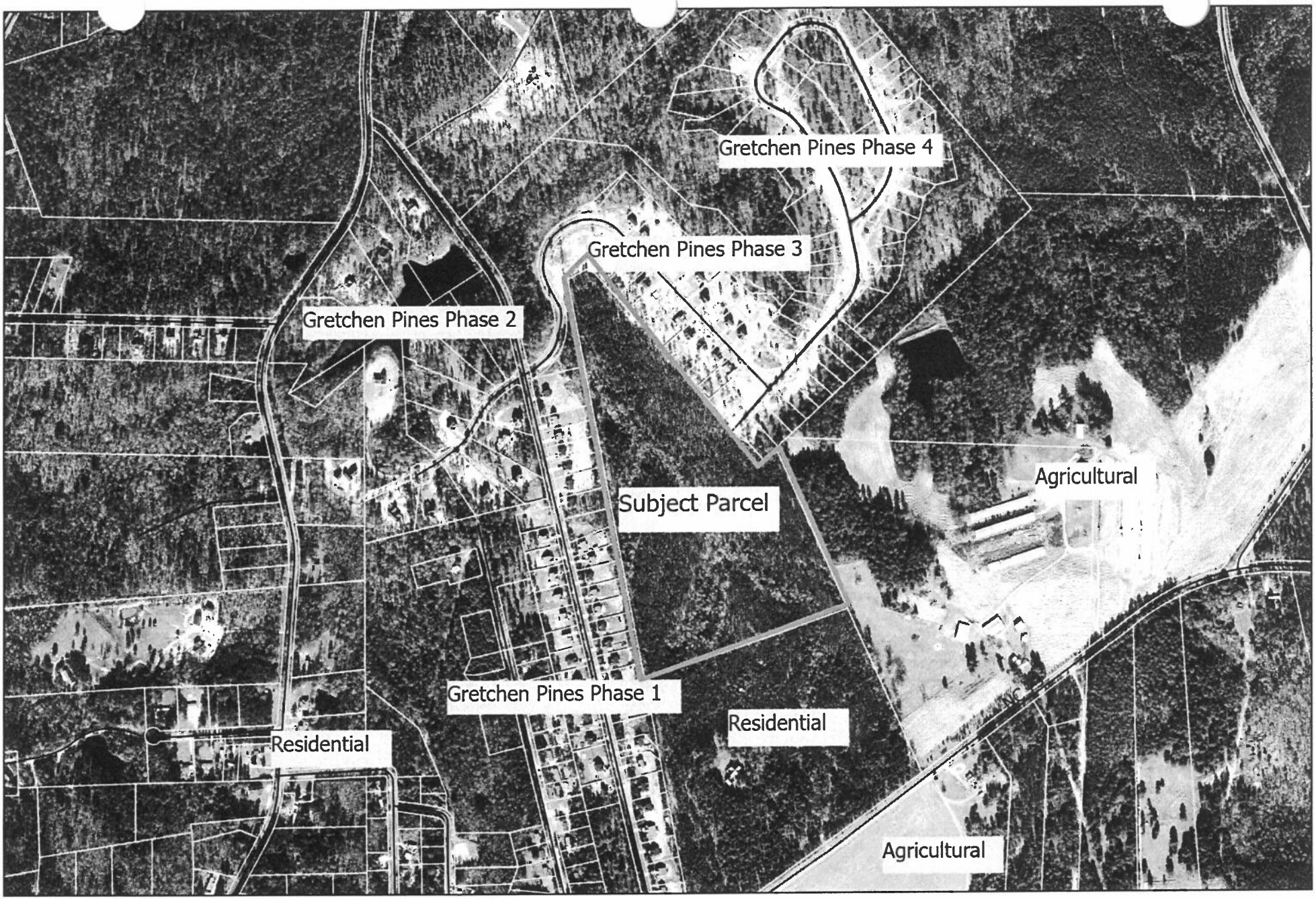
**RECOMMENDATION SUMMARY:** Make a motion to approve/deny the amendment to a Special Use Permit and preliminary plat for "Gretchen Pines Subdivision Phase 5 Preliminary Plat" for an additional phase containing 27 lots, on one parcel containing 42.04 acres, located off NC Hwy 73, West End, NC (PID 20220346 and partial of 10000166), owned by TKCSJM Harris, LLC per Deed Book 5870, Page 1 and Deed Book 6183, Page 374.

**ATTACHMENTS:**

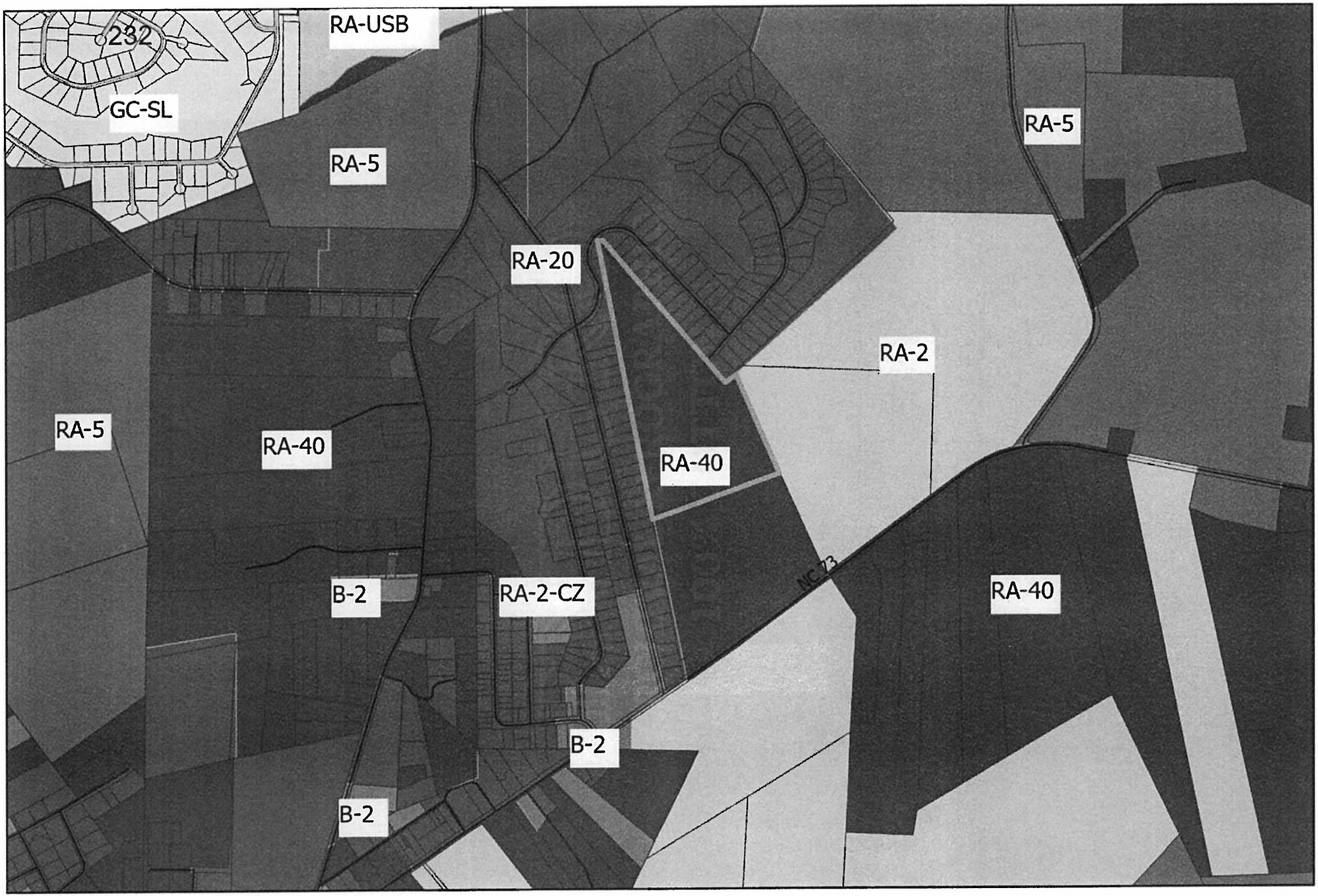
1. Vicinity Map
2. Land Use Map
3. Zoning Map
4. Application
5. Post Construction Stormwater Permit and Swale Calculations
6. Submitted Preliminary Plat
7. Hydrant Flow Map
8. Hydrant Flow Test Report
9. Preliminary Soil Evaluation Report
10. Deed Book 5870, Page 1
11. Deed Book 6183, Page 374-375
12. Plat Cabinet 20, Slide 297
13. Approval of 401 Water Quality Certification
14. Approval of 404 Wetland Permit
15. Approval of Erosion and Sediment Control Plan
16. Phase 4 Sedimentation/Construction Stormwater Inspection Report
17. Phase 5 Sedimentation/Construction Stormwater Inspection Report
18. Subdivision Review Board Draft Minutes of 9-10-24 Special Meeting




# Vicinity Map


Gretchen Pines Phase 4
Gretchen Pines Phase 3
Gretchen Pines Phase 2
Agricultural
Subject Parcel
Gretchen Pines Phase 1
Residential
Residential
Agricultural
0 0.040.09 0.17 0.26 0.34
Miles
N

# Land Use Map


232
RA-USB
GC-SL
RA-5
RA-5
RA-20
RA-2
RA-5
RA-40
RA-40
NC 73
B-2
RA-2-CZ
RA-40
B-2
B-2
0 0.07 0.15 0.3 0.45 0.6
Miles
N

# Zoning Map

# Major Subdivision Special Use Permit Application

| | |
|---|---|
| Application Date | 06/10/2024 |
| Location/Address of Property | Approximately 300 feet SW of the intersection of Silver Lane & Pewter DR |
| Applicant | Steve Harris |
| Email | GRETCHENPINES@gmail.com |
| Phone Number | (910) 690-1268 |
| Applicant Address | 4921 Dowd RD |
| City | Carthage |
| State | NC |
| Zip | 28327 |
| Owner | TKCSJM HARRIS LLC |
| Owner Address | 4921 Dowd RD |
| City | Carthage |
| State | NC |
| Zip | 28327 |
| Current Zoning District: | RA-40 |
| Proposed Use: | RA-40 |
| Comments: | No change in zoning |
| Does the property have joint ownership? | • No |

I (We), the undersigned, certify that all statements furnished in this application are true to the best of my (our) knowledge, and do hereby agree to follow all reasonable requests for information as designated by the County of Moore Zoning Administrator.

| | |
|---|---|
| Applicant/Owner Signature | Steve Harris |
| Print Applicant/Owner Name | Steve Harris |
| Date | 06/10/2024 |
| Are you submitting on behalf of the owner/owners? | • No |

| | |
|---|---|
| Concept Plan Submittal | PREL-GRETCHEN5-PLAN-6-7-24One Owner-REV.pdf |
| Fire Flow Test Results | Gretchen Pines (Platinum Cir) Flow Test.pdf<br>3021 Platinum Cir Flow Map.pdf |
| Preliminary Plat | PREL-GRETCHEN5-PLAN-6-7-24One Owner-REV.pdf |
| Army Corp of Engineers Approval if Applicable | 404 PERMIT GRETCHEN PINES PHASE 5.pdf<br>401 PERMIT GRETCHEN PINES PHASE 5.pdf |
| NC DEQ Storm Water Management Plan if Applicable | STORM-GRETCHEN5-PLAN-6-7-24One Owner-REV.pdf |
| Preliminary Soil Evaluation Report if Applicable | Grethen Pines Phase 5 Lot Review 053124.pdf |

**Office Use Only:**

ParID: 20220346

Received By: [signature]

Date: 6/10/24

# Major Subdivision Plat Review

| | |
|---|---|
| LRK | 20220345 |
| Date | 06/10/2024 |
| Zoning District | RA-40 |
| Type of Subdivision | • Major-Neighborhood Conservation Option |
| Total Number of Lots Proposed (including parent tract) | 27 |
| Acreage of Existing Parcel | 42.04 |
| Applicants Name | Steve Harris |
| Address | 4921 Dowd Rd<br>Carthage, NC 28327 |
| Phone Number | (910) 690-1268 |
| Property Owners Name | TKCSJM HARRIS LLC |
| Location of Property | Approximately 300 feet SW of the intersection of Silver Lane & Pewter DR |
| Surveyor Name | DZT Land Surveying, PLLC |
| Phone Number | (910) 420-1325 |
| Utilities | • Private Septic Tank(s)<br>• Public Water |
| Subdivision will involve the creation of new roads or streets | • Yes |
| Type of streets proposed | • Private |

For Office Use Only:

Review Officer Checklist

- LRK ✓
- Owners Name ✓
- Approval Signature by Jurisdiction ✓
- Name: _____
- Township: Mineral Springs
- City: West End
- State: NC
- North Arrow Reference: ✓
- Scale Text ✓
- Scale Bar Scale of Map: ✓ 1=100
- Survey Statement ✓
- Meets Size Requirements ✓
- Surveyor Signature N/A
- Surveyor Seal Reg Number: N/A - Engineer; 022023
- Change to Existing Street ~~xxxxxxx~~ New private streets: Pewter Dr., Arcadia Way, Ivory Ln.
- New Public Street Dedication

Approved by: Ryan Pedersen

Approval Date: 6/10/24

Requires Subdivision Review Board Approval: ☑ YES ☐ NO Meeting Date: ~~7/9/2024~~ 9/3/24

Requires Board of County Commissioners Approval: ☑ YES ☐ NO Meeting Date: ~~9/17/2024~~ 10/15/24

**KEN BRIGHT ASSOCIATES, PLLC**
**Consulting Engineers**

January 12, 2024

Jodi Pace
Regional Engineering Associate
Division of Energy, Mineral and Land Resources
North Carolina Department of Environmental Quality
225 Green St., Suite 714
Fayetteville, NC 28301

Re: **MOORE-2024-007 Gretchen Pines Subdivision Phase 5**

Dear Jodi,

We modified the plans as per the request of NC Stormwater. The following changes were made to the plans:

1. The piping between YI2 to YI-4 was removed.
2. In Road 1, cross pipes were added at Sta -4+00, Sta -9+28 & Sta 2+20 and swales 15, 16 & 17 were added.
3. Swales were renumbered for clarification.
4. The disturbed area increased to 10.16 Ac. A check for $ 100.00 is included.

Attached please find:

1. Revised swales and pipe calculations
2. Revised erosion control plan sheets C10, C10.1, C10.2, C10.3, C11.0, C11.1 & C11.2.

If you have any questions, please feel free to contact me.

Sincerely,

Ken W. Bright

Ken W Bright, PE

*File:proj2023/Gretchen Pines Phase 5/Erosion Control/ Letter Erosion Control Revisions Gretche Pines Ph 5-9-1-2023 MOORE 2024-007*

P.O Box 553
2305 Carthage Street
Sanford, NC 27330

Phone: (919) 356-4687

e-mail: mabright@kenbrightengineering.com

ROY COOPER
*Governor*
ELIZABETH S. BISER
*Secretary*
WILLIAM E. TOBY VINSON, JR
*Interim Director*

NORTH CAROLINA
***Environmental Quality***

March 18, 2024

TKCSJM Harris, LLC
Attn: Steve Harris, Partner
4291 Dowd Road
Carthage, NC 28327

**Subject:** **Post-Construction Stormwater Management Permit No. SW6230801**
**Gretchen Pines Subdivision Phase 5**
**Low Density Subdivision Project**
**Moore County**

Dear Mr. Harris:

The Division of Energy, Mineral and Land Resources received a complete Post-Construction Stormwater Management Permit Application for the subject project on March 15, 2024. Staff review of the plans and specifications has determined that the project, as proposed, complies with the Stormwater Regulations set forth in Title 15A NCAC 2H.1000 amended on January 1, 2017 (2017 Rules). We are hereby forwarding Permit No. SW6230801 dated March 18, 2024, for the construction, operation and maintenance of the built-upon areas (BUA) and vegetated conveyances or areas associated with the subject project.

This permit shall be effective from the date of issuance until rescinded and does not supersede any other agency permit that may be required. The project shall be subject to the conditions and limitations as specified therein. Failure to comply with these requirements will result in future compliance problems. Please note that this permit is not transferable except after notice to and approval by the Division.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing by filing a written petition with the Office of Administrative Hearings (OAH). The written petition must conform to Chapter 150B of the North Carolina General Statutes and must be filed with the OAH within thirty (30) days of receipt of this permit. You should contact the OAH with all questions regarding the filing fee (if a filing fee is required) and/or the details of the filing process at 6714 Mail Service Center, Raleigh, NC 27699-6714, or via telephone at 919-431-3000, or visit their website at www.NCOAH.com. Unless such demands are made this permit shall be final and binding.

This project will be kept on file at the Fayetteville Regional Office. If you have any questions concerning this permit, please contact Jim Farkas in the Central Office, at (919) 707-3646 or postconstruction@deq.nc.gov.

Sincerely,

*Original signed by James Farkas*

*For* William E. Toby Vinson, Jr., Interim Director
Division of Energy, Mineral and Land Resources

Enclosures: Attachment A – Designer's Certification Form
Application Documents

DES/jf: \\WaterResources\DEMLR - Stormwater\SW Permits\SW6230801

cc: Ken W. Bright, PE; Ken Bright Associates, PLLC
Debra Ensminger, Moore County Planning
David Allen Francis, Moore County Planning
NCDOT District Engineer
Fayetteville Regional Office Stormwater File

**STATE OF NORTH CAROLINA**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DIVISION OF ENERGY, MINERAL AND LAND RESOURCES**

# POST-CONSTRUCTION STORMWATER MANAGEMENT PERMIT

## LOW DENSITY SUBDIVISION DEVELOPMENT

In compliance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations promulgated and adopted by the North Carolina Environmental Management Commission, including 15A NCAC 02H.1000 amended on January 1, 2017 (2017 Rules) (the "stormwater rules"),

PERMISSION IS HEREBY GRANTED TO

*TKCSJM Harris, LLC*

*Gretchen Pines Subdivision Phase 5*

*Silver Lane, Mineral Springs Township, Moore County*

FOR THE

construction, management, operation and maintenance of built-upon area (BUA) for a low density subdivision area (the "low density area(s)") as outlined in the application, approved stormwater management plans, supplements, calculations, operation and maintenance agreement, recorded documents, specifications, and other supporting data (the "approved plans and specifications") as attached and/or on file with and approved by the Division of Energy, Mineral and Land Resources (the "Division" or "DEMLR"). The project shall be constructed, operated and maintained in accordance with these approved plans and specifications. The approved plans and specifications are incorporated by reference and are enforceable parts of this permit.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the following specified conditions and limitations. The permit issued shall continue in force and effect until the permittee files a request with the Division for a permit modification, transfer, or rescission; however, these actions do not stay any condition. The issuance of this permit does not prohibit the Director from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit for cause as allowed by the laws, rules, and regulations contained in 15A NCAC 2H.1000 and NCGS 143-215.1 et.al.

1. BUA REQUIREMENTS. The maximum amount of BUA allowed for the entire project is 217,545 square feet. The BUA requirements and allocations for this project are as follows:

   a. LOW DENSITY AREA BUA LIMITS. The low density area must not exceed 12% per the requirements of the stormwater rules. Within this low density area, this permit approves a percent BUA of 11.93% and the construction of a total of 217,545 square feet of BUA. This permit does not provide any allocation of BUA for future development within this low density area.

   b. BUA FOR INDIVIDUAL LOTS. Each of the twenty-seven (27) lots, numbered 118-144 are limited to a maximum of 4,800 square feet of BUA, as indicated in the approved plans and specifications. **The maximum BUA assigned to each lot via this permit and the recorded deed restrictions and protective covenants may not be increased or decreased by either the individual lot owner or the permittee unless and until the permittee notifies the Division and obtains written approval from the Division.**

2. PERVIOUS AREA IMPROVEMENTS. At this time, none of the pervious area improvements listed in G.S. 143-214.7(b2) or the Stormwater Design Manual have been proposed for this project. Pervious area improvements will be allowed in this project if documentation is provided demonstrating those improvements meet the requirements of the stormwater rule.

3. LOW DENSITY AREA REQUIREMENTS. The low density area requirements for this project are as follows:

   a. LOW DENSITY AND CONVEYANCE DESIGN. The low density area is permitted based on the design criteria presented in the sealed, signed and dated supplement and as shown in the approved plans and specifications. This low density area and conveyances must be provided and maintained at the design condition.

   b. PIPING. Other than the piping shown on the approved plans, only minimal amounts of piping under driveways and roads is allowed within the low density area when it cannot be avoided. No additional piping is allowed.

   c. DISPERSED FLOW. The low density area has maximized dispersed flow of stormwater runoff through vegetated areas and minimized the channelization of flow.

   d. VEGETATED CONVEYANCES. Stormwater runoff that could not be released as dispersed flow may be transported by vegetated conveyances with minimum side slopes of 3:1 (H:V) designed to not erode during the peak flow from the 10-year storm event as defined in the stormwater rules and approved by the Division.

4. STORMWATER OUTLETS. The peak flow from the 10-year storm event shall not cause erosion downslope of the discharge point.

5. VEGETATED SETBACKS. A 30-foot wide vegetative setback must be provided and maintained in grass or other vegetation adjacent to all surface waters as shown on the approved plans. The setback is measured horizontally from the normal pool elevation of impounded structures, from the top of bank of each side of streams or rivers, and from the mean high waterline of tidal waters, perpendicular to the shoreline.

   a. BUA IN THE VEGETATED SETBACK. BUA may not be added to the vegetated setback except as shown on the approved plans or in the following instances where the BUA has been minimized and channelizing runoff from the BUA is avoided:
      i. Water dependent structures; and
      ii. Minimal footprint uses such as poles, signs, utility appurtenances, and security lights that cannot practically be located elsewhere.

   b. RELEASE OF STORMWATER NOT TREATED IN A STORMWATER CONTROL MEASURE (SCM). Stormwater that is not treated in an SCM, such as in this low density project (including roof drains), must be released at the edge of the vegetated setback and allowed to flow through the setback as dispersed flow.

6. RECORDED DOCUMENT REQUIREMENTS. The stormwater rules require the following documents to be recorded with the Office of the Register of Deeds prior to the sale of individual lots or groups of lots:

   a. EASEMENTS. All stormwater collection systems, vegetated conveyances, and maintenance access located on property owned by other persons or entities must be located in permanent recorded easements or drainage easements as shown on the approved plans.

   b. OPERATION AND MAINTENANCE AGREEMENT. The operation and maintenance agreement must be recorded with the Office of the Register of Deeds.

   c. FINAL PLATS. If a final plat is recorded, it must reference the operation and maintenance agreement and must also show all public rights-of-way, dedicated common areas, and/or permanent drainage easements, in accordance with the approved plans.

d. DEED RESTRICTIONS AND PROTECTIVE COVENANTS. The permittee shall record deed restrictions and protective covenants prior to the issuance of a certificate of occupancy to ensure the permit conditions and the approved plans and specifications are maintained in perpetuity. Recorded deed restrictions and protective covenants must include, at a minimum, the following statements related to stormwater management:

i. The following covenants are intended to ensure ongoing compliance with Stormwater Management Permit Number SW6230801, as issued by the Division of Energy, Mineral and Land Resources (the "Division") under 15A NCAC 02H.1000, effective January 1, 2017.

ii. The State of North Carolina is made a beneficiary of these covenants to the extent necessary to maintain compliance with the Stormwater Management Permit.

iii. These covenants are to run with the land and be binding on all persons and parties claiming under them.

iv. The covenants pertaining to stormwater may not be altered or rescinded without the express written consent of the Division.

v. Alteration of the drainage as shown on the approved plans may not take place without the concurrence of the Division.

vi. The maximum built-upon area (BUA) per lot is 4,800 square feet. This allotted amount includes any BUA constructed within the lot property boundaries, and that portion of the right-of-way between the front lot line and the edge of the pavement not shown on the approved plans. BUA has the same meaning as G.S. 143-214.7, as amended.

vii. The maximum allowable BUA shall not be exceeded on any lot until the permit is modified to ensure compliance with the stormwater rules, permit, and the approved plans and specifications.

viii. Filling in, piping or altering any vegetated conveyances (ditches, swales, etc.) associated with the development, except for average driveway crossings, is prohibited by any persons.

ix. A 30-foot wide vegetative setback must be provided and maintained adjacent to all surface waters in accordance with 15A NCAC 02H.1003(4) and the approved plans.

x. All roof drains shall be released no closer than at the edge of the 30-foot wide vegetated setback and allowed to flow through the setback as dispersed flow. At no time shall stormwater runoff be piped into or through the setback.

xi. Any individual or entity found to be in noncompliance with the provisions of a stormwater management permit or the requirements of the stormwater rules is subject to enforcement procedures as set forth in NCGS 143, Article 21.

7. CONSTRUCTION. During construction, erosion shall be kept to a minimum and any eroded areas of the on-site stormwater system will be repaired immediately.

a. PROJECT CONSTRUCTION, OPERATION AND MAINTENANCE. During construction, all operation and maintenance for the project and stormwater system shall follow the Erosion Control Plan requirements until the Sediment-Erosion Control devices are no longer needed.

b. FINAL GRADING. The vegetated areas and vegetated conveyances shall be entirely constructed and vegetated. Once the final grading is completed and the site is stabilized, the permittee shall provide and perform the operation and maintenance as outlined in the applicable section below.

8. MODIFICATIONS. No person or entity, including the permittee, shall alter any component shown in the approved plans and specifications, except for minimum driveway crossings. Prior to the construction of any modification to the approved plans, the permittee shall submit to the Director, and shall have received approval for modified plans, specifications, and calculations including, but not limited to, those listed below. For changes to the project that impact the certifications, a new or updated certification(s), as applicable, will be required and a copy must be submitted to the appropriate DEQ regional office upon completion of the modification.

   a. Any modification to the approved plans and specifications, regardless of size including the BUA, details, etc.

   b. Redesign or addition to the approved amount of BUA.

   c. Further development, subdivision, acquisition, lease or sale of any, all or part of the project and/or property area as reported in the approved plans and specifications.

   d. Altering, modifying, removing, relocating, redirecting, regrading, or resizing of any component of the approved stormwater collection system and/or vegetative conveyance shown on the approved plan, except for minimum driveway crossings.

   e. The construction of any allocated future BUA.

   f. Adding the option to use infiltrating permeable pavement or #57 stone within the lots as a pervious surface. The request may require a proposed amendment to the deed restrictions and protective covenants for the subdivision to be submitted and recorded.

   g. The construction of any infiltrating permeable pavement, #57 stone area, public trails, or landscaping material within the common areas to be considered a pervious surface that were not included in the approved plans and specifications.

   h. Other modifications as determined by the Director.

9. DESIGNER'S CERTIFICATION. Upon completion of the project, the permittee shall determine if the project is in compliance with the approved plans and take the necessary following actions:

   a. If the permittee determines that the project is in compliance with the approved plans, then within 45 days of completion, the permittee shall submit to the Division one hard copy and one electronic copy of the following:
      i. The completed and signed Designer's Certification provided in Attachment A noting any deviations from the approved plans and specifications. Deviations may require approval from the Division;
      ii. A copy of the recorded operation and maintenance agreement;
      iii. Unless already provided, a copy of the recorded deed restrictions and protective covenants; and
      iv. A copy of the recorded plat delineating the public rights-of-way, dedicated common areas and/or permanent recorded easements, when applicable.

   b. If the permittee determines that the project is <u>not</u> in compliance with the approved plans, the permittee shall submit an application to modify the permit within 30 days of completion of the project or provide a plan of action, with a timeline, to bring the site into compliance.

10. OPERATION AND MAINTENANCE. The permittee shall provide and perform the operation and maintenance necessary, as listed in the signed operation and maintenance agreement, to assure that all components of the permitted on-site stormwater system are maintained at the approved design condition. The approved operation and maintenance agreement must be followed in its entirety and maintenance must occur at the scheduled intervals.

    a. CORRECTIVE ACTIONS REQUIRED. In the event that the low density area fails to meet the requirements of low density, the permittee shall take immediate corrective actions. This includes actions required by the Division and the stormwater rules such as the construction of additional or replacement on-site stormwater systems. These additional or replacement measures shall receive a permit from the Division prior to construction.

b. MAINTENANCE RECORDS. Records of maintenance activities must be kept and made available upon request to authorized personnel of the Division. The records will indicate the date, activity, name of person performing the work and what actions were taken.

11. CHANGES TO THE PROJECT NAME, PERMITTEE NAME OR CONTACT INFORMATION. The permittee shall submit a completed Permit Information Update Application Form to the Division within 30 days to making any one of these changes.

12. TRANSFER. This permit is not transferable to any person or entity except after notice to and approval by the Director. Neither the sale of the project and/or property, in whole or in part, nor the conveyance of common area to a third party constitutes an approved transfer of the permit.

    a. TRANSFER REQUEST. The transfer request must include the appropriate application, documentation and the processing fee as outlined in 15A NCAC 02H.1045(2). This request must be submitted within 90 days of the permit holder meeting one or more of the following:
        i. A natural person who is deceased;
        ii. A partnership, limited liability corporation, corporation, or any other business association that has been dissolved;
        iii. A person or entity who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur through foreclosure, bankruptcy, or other legal proceeding.
        iv. A person or entity who has sold the property, in whole or in part, on which the permitted activity is occurring or will occur, except in the case of an individual residential lot sale that is made subject to the recorded deed restrictions and protective covenants;
        v. The assignment of declarant rights to another individual or entity;
        vi. The sale or conveyance of the common areas to a Homeowner's or Property Owner's Association, subject to the requirements of NCGS 143-214.7(c2);

    b. TRANSFER INSPECTION. Prior to transfer of the permit, a file review and site inspection will be conducted by Division personnel to ensure the permit conditions have been met and that the project and the on-site stormwater system complies with the permit conditions. Records of maintenance activities performed to date may be requested. Projects not in compliance with the permit will not be transferred until all permit and/or general statute conditions are met.

13. COMPLIANCE. The permittee is responsible for complying with the terms and conditions of this permit and the approved plans and specifications until the Division approves the transfer request.

    a. REVIEWING AND MONITORING EACH LOT FOR COMPLIANCE. The permittee is responsible for verifying that the proposed BUA on each individual lot, within each drainage area and for the entire project does not exceed the maximum amount allowed by this permit. The permittee shall review all individual lot plans for new construction and all subsequent modifications and additions for compliance. The plans reviewed must include all proposed BUA, grading, and driveway pipe placement. The permittee shall not approve any lot plans where the maximum allowed BUA limit has been exceeded or where modifications are proposed to the grading and/or to the stormwater collection system and/or to the vegetated conveyance unless and until a permit modification has been approved by the Division. The permittee shall review and routinely monitor the project and each lot to ensure continued compliance with the conditions of the permit, the approved plans and specifications, and the recorded deed restrictions and protective covenants. The permittee shall notify any lot owner that is found to be in noncompliance with the conditions of this permit in writing and shall require timely resolution.

    b. ARCHITECTURAL REVIEW BOARD (ARB) OR COMMITTEE (ARC). The permittee may establish an ARB or ARC or other group to conduct individual lot reviews on the permittee's behalf. However, any approval given on behalf of the permittee does not relieve the permittee of the responsibility to maintain compliance with the conditions of the permit and the approved plans and specifications.

c. APPROVED PLANS AND SPECIFICATIONS. A copy of this permit, approved plans, application, supplements, operation and maintenance agreement, all applicable recorded documents, and specifications shall be maintained on file by the permittee at all times.

d. MAINTENANCE ACCESS. SCMs, stormwater collection systems, and vegetated conveyances must be accessible for inspection, operation, maintenance and repair as shown on the approved plans.

e. DIVISION ACCESS. The permittee grants Division Staff permission to enter the property during normal business hours to inspect all components of the permitted project.

f. ENFORCEMENT. Any individual or entity found to be in noncompliance with the provisions of a stormwater management permit or the requirements of the stormwater rules is subject to enforcement procedures as set forth in NCGS 143 Article 21.

g. ANNUAL CERTIFICATION. The permittee shall electronically submit to the Division an annual certification completed by either the permittee or their designee confirming the projects conformance with permit conditions.

h. OBTAINING COMPLIANCE. The Director may notify the permittee when the permitted site does not meet one or more of the minimum requirements of the permit. Within the time frame specified in the notice, the permittee shall submit a written time schedule to the Director for modifying the site to meet minimum requirements. The permittee shall provide copies of modified plans and certification in writing to the Director that the changes have been made.

i. OTHER PERMITS. The issuance of this permit does not preclude the permittee from obtaining and complying with any and all other permits or approvals that are required for this development to take place, as required by any statutes, rules, regulations, or ordinances, which are imposed by any other Local, State or Federal government agency having jurisdiction. Any activities undertaken at this site that cause a water quality violation or undertaken prior to receipt of the necessary permits or approvals to do so are considered violations of NCGS 143-215.1, and subject to enforcement procedures pursuant to NCGS 143-215.6.

Permit issued this the 18th day of March 2024.

NORTH CAROLINA ENVIRONMENTAL MANAGEMENT COMMISSION

*Original signed by James Farkas*

For William E. Toby Vinson, Jr., Interim Director
Division of Energy, Mineral and Land Resources
By Authority of the Environmental Management Commission

**Permit Number SW6230801**

## Attachment A

Certification Forms

The following blank Designer Certification forms are included and specific for this project:

- As-Built Permittee Certification
- As-Built Designer's Certification General MDC
- As-Built Designer's Certification for Low Density Projects

*A separate certification is required for each SCM. These blank certification forms may be copied and used, as needed, for each SCM and/or as a partial certification to address a section or phase of the project.*

## AS-BUILT PERMITTEE CERTIFICATION

I hereby state that I am the current permittee for the project named above, and I certify by my signature below, that the project meets the below listed Final Submittal Requirements found in NCAC 02H.1042(4) and the terms, conditions and provisions listed in the permit documents, plans and specifications on file with or provided to the Division.

☐ Check here if this is a partial certification. Section/phase/SCM #?_____
☐ Check here if this is part of a Fast Track As-built Package Submittal.

Printed Name_____Signature_____

I, _____, a Notary Public in the State of _____

County of _____, do hereby certify that _____

personally appeared before me this _____ day of _____, 20_____

and acknowledge the due execution of this as-built certification. (SEAL)

Witness my hand and official seal

_____

My commission expires _____

| Permittee's Certification NCAC .1042(4) | Completed / Provided | N/A |
|---|---|---|
| **A. DEED RESTRICTIONS / BUA RECORDS** | | |
| 1. The deed restrictions and protective covenants have been recorded and contain the necessary language to ensure that the project is maintained consistent with the stormwater regulations and with the permit conditions. | Y or N | |
| 2. A copy of the recorded deed restrictions and protective covenants has been provided to the Division. | Y or N | |
| 3. Records which track the BUA on each lot are being kept. (See Note 1) | Y or N | |
| **B. MAINTENANCE ACCESS** | | |
| 1. The SCMs are accessible for inspection, maintenance and repair. | Y or N | |
| 2. The access is a minimum of 10 feet wide. | Y or N | |
| 3. The access extends to the nearest public right-of-way. | Y or N | |
| **C. EASEMENTS** | | |
| 1. The SCMs and the components of the runoff collection / conveyance system are located in recorded drainage easements. | Y or N | |
| 2. A copy of the recorded plat(s) is provided. | Y or N | |
| **D. SINGLE FAMILY RESIDENTIAL LOTS** - Plats for residential lots that have an SCM include the following: | Y or N | |
| 1. The specific location of the SCM on the lot. | Y or N | |
| 2. A typical detail for the SCM. | Y or N | |
| 3. A note that the SCM is required to meet stormwater regulations and that the lot owner is subject to enforcement action as set forth in NCGS 143 Article 21 if the SCM is removed, relocated or altered without prior approval. | Y or N | |
| **E. OPERATION AND MAINTENANCE AGREEMENT** | Y or N | |
| 1. The O&M Agreement is referenced on the final recorded plat. | Y or N | |
| 2. The O&M Agreement is recorded with the Register of Deeds and appears in the chain of title. | Y or N | |
| **F. OPERATION AND MAINTENANCE PLAN** – maintenance records are being kept in a known set location for each SCM and are available for review. | Y or N | |
| **G. DESIGNER'S CERTIFICATION FORM** – has been provided to the Division. | Y or N | |

Note 1- Acceptable records include ARC approvals, as-built surveys, and county tax records.

Provide an explanation for every requirement that was not met, and for every "N/A" below. Attach additional sheets as needed.

## AS-BUILT DESIGNER'S CERTIFICATION GENERAL MDC

I hereby state that I am a licensed professional and I certify by my signature and seal below, that I have observed the construction of the project named above to the best of my abilities with all due care and diligence, and that the project meets the below listed General MDC found in NCAC 02H.1050 in accordance with the permit documents, plans and specifications on file with or provided to the Division, except as noted on the "AS-BUILT" drawings, such that the intent of the stormwater rules and statutes has been preserved.

☐ Check here if this is a partial certification. Section/phase/SCM #?_____
☐ Check here if this is a part of a Fast-Track As-Built Package Submittal per .1044(3).
☐ Check here if the designer did not observe the construction, but is certifying the project.
☐ Check here if pictures of the SCM are provided.

Printed Name_____Signature_____

NC Registration Number _____ Date _____

SEAL:

Consultant's Mailing Address:

_____

City/State/ZIP _____

Phone Number _____

Consultant's Email address:

_____

O Circle N if the as-built value differs from the Plan. If N is circled, provide an explanation on Page 2.
ON/E = not evaluated (provide explanation on page 2) ON/A = not applicable to this SCM or project.

| Consultant's Certification NCAC .1003((3) & General MDC .1050 | OAs-built | ON/E | ON/A |
|---|---|---|---|
| **A. TREATMENT REQUIREMENTS** | | | |
| 1. The SCM achieves runoff treatment. | Y or N | | |
| 2. The SCM achieves runoff volume match. | Y or N | | |
| 3. Runoff from offsite areas and/or existing BUA is bypassed. | Y or N | | |
| 4. Runoff from offsite areas and/or existing BUA is directed into the permitted SCM and is accounted for at the full build-out potential. | Y or N | | |
| 5. The project controls runoff through an offsite permitted SCM that meets the requirements of the MDC. | Y or N | | |
| 6. The net area of new BUA increase for an existing project has been accounted for at the appropriate design storm level. | Y or N | | |
| 7. The SCM(s) meets all the specific minimum design criteria. | Y or N | | |
| **B. VEGETATED SETBACKS / BUA** | | | |
| 1. The width of the vegetated setback has been measured from the normal pool of impounded waters, the MHW line of tidal waters, or the top of bank of each side of rivers or streams. | Y or N | | |
| 2. The vegetated setback is maintained in grass or other vegetation. | Y or N | | |
| 3. BUA that meets the requirements of NCGS 143-214.7 (b2)(2) is located in the setback. | Y or N | | |
| 4. BUA that does not meet the requirements of NCGS 143-214.7 (b2)(2) is located within the setback and is limited to: | Y or N | | |

| | | | |
|---|---|---|---|
| a. Publicly funded linear projects (road, greenway sidewalk)<br>b. Water-dependent structures<br>c. Minimal footprint uses (utility poles, signs, security lighting and appurtenances) | | | |
| 5. Stormwater that is not treated in an SCM is released at the edge of the setback and allowed to flow through the setback as dispersed flow. | Y or N | | |
| | OAs-built | ON/E | ON/A |
| **C. STORMWATER OUTLETS** – the outlet handles the peak flow from the 10 year storm with no downslope erosion. | Y or N | | |
| **D. VARIATIONS** | | | |
| 1. A variation (alternative) from the stormwater rule provisions has been implemented. | Y or N | | |
| 2. The variation provides equal or better stormwater control and equal or better protection of surface waters. | Y or N | | |
| **E. COMPLIANCE WITH OTHER REGULATORY PROGRAMS** has been met. | Y or N | | |
| **F. SIZING** -the volume of the SCM takes the runoff from all surfaces into account and is sufficient to handle the required storm depth. | Y or N | | |
| **G. CONTAMINATED SOILS** – infiltrating SCM's are not located in or on areas with contaminated soils. | Y or N | | |
| **H. SIDE SLOPES** | | | |
| 1. Vegetated side slopes are no steeper than 3H:1V. | Y or N | | |
| 2. Side slopes include retaining walls, gabion walls, or other surfaces that are steeper than 3H:1V. | Y or N | | |
| 3. Vegetated side slopes are steeper than 3H:1V (provide supporting documents for soils and vegetation). | Y or N | | |
| **I. EROSION PROTECTION** | | | |
| 1. The inlets do not cause erosion in the SCM. | Y or N | | |
| 2. The outlet does not cause erosion downslope of the discharge point during the peak flow from the 10 year storm. | Y or N | | |
| **J. EXCESS FLOWS** – An overflow / bypass has been provided. | Y or N | | |
| **K. DEWATERING** – A method to drawdown standing water has been provided to facilitate maintenance and inspection. | Y or N | | |
| **L. CLEANOUT AFTER CONSTRUCTION** – the SCM has been cleaned out and converted to its approved design state. | Y or N | | |
| **M. MAINTENANCE ACCESS** | | | |
| 1. The SCM is accessible for maintenance and repair. | Y or N | | |
| 2. The access does not include lateral or incline slopes >3:1. | Y or N | | |
| **N. DESIGNER QUALIFICATIONS (FAST-TRACK PERMIT)** – The designer is licensed under Chapters 89A, 89C, 89E, or 89F of the General Statutes. | Y or N | | |

Provide an explanation for every MDC that was not met, and for every item marked "N/A" or "N/E", below. Attach additional pages as needed:

## AS-BUILT DESIGNER'S CERTIFICATION FOR LOW DENSITY PROJECTS

I hereby state that I am a licensed professional and I certify by my signature and seal below, that I have observed the construction of the project named above to the best of my abilities with all due care and diligence, and that the project meets all of the MDC found in 15A NCAC 02H.1003, in accordance with the permit documents, plans and specifications on file with or provided to the Division, except as noted on the "AS-BUILT" drawings, such that the intent of the stormwater rules and the general statutes has been preserved.

☐ Check here if this is a partial certification. Section or phase_____
☐ Check here if this is part of a Fast-Track As-Built Package Submittal per 15A NCAC 02H .1044(3).
☐ Check here if the Designer did not observe the construction but is certifying the project.
☐ Check here if pictures of the project are provided.

Printed Name_____Signature _____

NC Registration Number_____Date _____

SEAL:

Consultant's Mailing Address:

_____

City:_____State:_____ Zip:_____

Phone:(___) _____

Consultant's Email address:

_____

O Circle N if the as-built value differs from the Plan/permit. If N is circled, provide an explanation on page 3.
O N/E = Not Evaluated (provide explanation on page 2). ON/A = Not Applicable to this project/plan.

| Consultant's Certification (MDC 15A NCAC 02H .1003) | | | |
|---|---|---|---|
| **Project Density and Built-Upon Area** | OAs-built | ON/E | ON/A |
| 1. The project has areas of high density based on natural drainage area boundaries, variations in land use or construction phasing. | Y or N | | |
| 2. The project's built-upon area does not exceed the maximum limit specified in the permit. | Y or N | | |
| **Dispersed Flow** | OAs-built | ON/E | ON/A |
| 1. The project maximizes dispersed flow through vegetated areas and minimizes channelized flow. | Y or N | | |

| **Vegetated Conveyances** | OAs-built | ON/E | ON/A |
|---|---|---|---|
| 1. Stormwater that is not released as dispersed flow is transported by vegetated conveyances. | Y or N | | |
| 2. The project has a minimal amount of non-vegetated conveyances to reduce erosion. | Y or N | | |
| 3. Other than minimal piping under driveways and roads, no piping has been added beyond what is shown on the approved plans. | Y or N | | |
| 4. Side slopes are no steeper than 3H:1V. | Y or N | | |
| 5. The conveyance does not erode in response to the peak flow from the 10-year storm. | Y or N | | |
| **Curb outlet systems (if applicable)** | OAs-built | ON/E | ON/A |
| 1. The swale or vegetated area can carry the peak flow from the 10-year storm at a non-erosive velocity. | Y or N | | |
| 2. The longitudinal slope of the swale or vegetated areas does not exceed 5%. | Y or N | | |
| 3. The swale has a trapezoidal cross-section and a minimum bottom width of two feet. | Y or N | | |
| 4. The minimum length of the swale or vegetated area is 100 feet. | Y or N | | |
| 5. Side slopes are no steeper than 3H:1V. | Y or N | | |
| 6. The project utilizes treatment swales designed per Section .1061 in lieu of the curb outlet system requirements. | Y or N | | |
| **Vegetated Setbacks (if applicable)** | OAs-built | ON/E | ON/A |
| 1. The width of the vegetated setback is at least 50'. | Y or N | | |
| 2. The width of the vegetated setback has been measured from the normal pool of impounded waters, the MHW line of tidal waters, or the top of bank of each side of rivers or streams. | Y or N | | |
| 3. The vegetated setback is maintained in grass or other vegetation. | Y or N | | |
| 4. BUA that meets the requirements of NCGS 143-214.7(b2)(2) is located in the setback. | Y or N | | |
| 5. BUA that does NOT meet the requirements of NCGS 143-214.7(b2)(2) is located within the setback and is limited to:<br>• Publicly-funded linear projects (road, greenway, or sidewalk)<br>• Water dependent structures<br>• Minimal footprint uses such as poles, signs, utility appurtenances, and security lights. | Y or N | | |
| 6. The amount of BUA within the setback is minimized, and channeling of the runoff from the BUA has been avoided. | Y or N | | |
| 7. Stormwater is not discharged (via swale or pipe) through a vegetated setback. Stormwater is released at the edge of the setback and allowed to flow through the setback as dispersed flow. | Y or N | | |

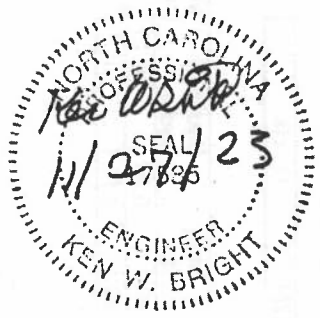
| **Outlets** | OAs-built | ON/E | ON/A |
|---|---|---|---|
| 1. Stormwater outlets do not cause erosion downslope of the discharge point during the peak flow from the 10-year storm. | Y or N | | |
| **Variations** | OAs-built | ON/E | ON/A |
| 1. The project has variations from the MDC that were not previously approved. (Modification may be required.) | Y or N | | |
| **Deed restrictions (if applicable)** | OAs-built | ON/E | ON/A |
| 1. Deed restrictions are recorded and ensure that the project and the BUA will be maintained in perpetuity consistent with the permit, approved plans, and specifications. | Y or N | | |
| **For Subdivisions Only (Residential or Commercial)** | OAs-built | ON/E | ON/A |
| 1. The number of platted lots is consistent with the approved plans. | Y or N | | |
| 2. The project area is consistent with the approved plans. | Y or N | | |
| 3. The layout of the lots and streets is consistent with the approved plan. | Y or N | | |
| 4. The width / radius of streets, paved accesses, cul-de-sacs and sidewalks is consistent with the approved plan. | Y or N | | |
| 5. No piping, other than those minimum amounts needed under a driveway or under a road, has been added. | Y or N | | |
| 6. The lot grading, road grading, vegetated conveyances, piping, inverts, and elevations are consistent with the approved plans. | Y or N | | |

**Provide an explanation below for every MDC that was not met, and for every item marked "N/A" or "N/E." Attach additional pages as needed.**

# STORMWATER CALCULATIONS FOR

# GRETCHEN PINES PHASE 5

# MOORE COUNTY




**PREPARED BY:**
**Ken Bright Associates, PLLC**
**P.O. Box 553**
**Sanford, NC 27331**
**(919) 776-3444**
**kwbright@kenbrightengineering.com**

**NOVEMBER 27, 2023**

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 08/22/23
FILE: SWALE-1-GP5-8-22-2023.xlsx

INPUT: SWALE # 1 RD 2 STA 6+15 TO CUL DE SAC NORTH SIDE

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.13 | 0.12 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0 | 0.00 |
| Lawn | 0.15 | 1.17 | 0.18 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 1.3 | 0.30 |

Weighted C = 0.23 se 0.3 min
Impervious Ac = 0.13
Pervious Ac = 1.17

| | | |
|---|---|---|
| Area = | 1.3 | Ac |
| C = | 0.30 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 0 | if triangular must be zero |
| Channel slope = | 2.1 | % |
| Side slope = | 4 | ft per ft |

**Q25= 3.41 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 3.41 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.3 | 1.08 | 0.020 | check | 2.99 | 0.36 | 0.15 | 2.47 | 2.4 |
| NA Green S75 | 0.56 | 3.55 | 0.032 | okay | 2.83 | 1.25 | 0.27 | 4.62 | 4.48 |

Shear stress = 0.73 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.54 |
| NA Green P300= | 8 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 3.41 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 1 | 3.55 | | 0.150 | 0.43 | HR okay Depth OK | 0.89 | 4.00 | 0.49 | 8.25 | 8 |
| D | 0.00 | 0.78 | 3.44 | | 0.080 | 0.53 | HR okay Depth OK | 1.41 | 2.43 | 0.38 | 6.43 | 6.24 |
| | | | | | | | use depth = | ft. | | | | |

8/28/2023, 2:48 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 07/15/23
FILE: SWALE-2-GP5.xlsx

INPUT: SWALE # 2 RD 2 STA 6+15 TO CUL DE SAC WEST SIDE

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.18 | 0.17 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0 | 0.00 |
| Lawn | 0.15 | 0.14 | 0.02 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 0.32 | 0.19 |

Weighted C = 0.60
Impervious Ac = 0.18
Pervious Ac = 0.14

| | | |
|---|---|---|
| Area = | 0.32 | Ac |
| C = | 0.60 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 0 | if triangular must be zero |
| Channel slope = | 2.1 | % |
| Side slope = | 4 | ft per ft |

**Q25= 1.68 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 1.68 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.3 | 1.08 | 0.020 | check | 2.99 | 0.36 | 0.15 | 2.47 | 2.4 |
| NA Green S75 | 0.45 | 1.98 | 0.032 | okay | 2.45 | 0.81 | 0.22 | 3.71 | 3.6 |

Shear stress = 0.59 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.54 |
| NA Green P300= | 8 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 1.68 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 0.9 | 2.01 | | 0.200 | 0.27 | HR okay Depth OK | 0.62 | 3.24 | 0.44 | 7.42 | 7.2 |
| D | 0.00 | 0.65 | 1.82 | | 0.093 | 0.34 | HR okay Depth OK | 1.08 | 1.69 | 0.32 | 5.36 | 5.2 |
| | | | | | | use depth = | ft. | | | | | |

7/17/2023, 3:30 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/11/23
FILE: SWALE-3-GP5-11-11-2023.xlsx

INPUT: SWALE # 3 PEWTER TO 0+00 PIPE

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.25 | 0.24 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.44 | 0.42 |
| Lawn | 0.15 | 3.49 | 0.52 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 4.18 | 1.18 |
| | Weighted C = | 0.28 | Use 0.3 min. |

Impervious Ac = 0.69
Pervious Ac = 3.49

| | | |
|---|---|---|
| Area = | 4.18 | Ac |
| C = | 0.30 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRAP | |
| Bottom width = | 2 | if triangular must be zero |
| Channel slope = | 8 | % |
| Side slope = | 4 | ft per ft |

**Q25= 10.97 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 10.97 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.12 | 1.35 | 0.020 | check | 4.53 | 0.30 | 0.10 | 2.99 | 2.96 |
| NA Green S250 | 0.47 | 11.36 | 0.031 | okay | 6.23 | 1.82 | 0.31 | 5.88 | 5.76 |

Shear stress = 2.35 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green S250**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.54 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use bermuda which has a velocity capacity of 5 fps fo** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 10.97 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 2.00 | 0.58 | 11.33 | | 0.048 | 1.67 | HR okay | Depth OK | 4.52 | 2.51 | 0.37 | 6.78 | 6.64 |
| D | 2.00 | 0.69 | 11.21 | | 0.070 | 1.46 | HR okay | Depth OK | 3.41 | 3.28 | 0.43 | 7.69 | 7.52 |
| | | | | | | use depth = | | ft. | | | | | |

11/12/2023, 4:33 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 07/15/23
FILE: SWALE-4.xlsx

INPUT: SWALE # 4 Road 2 sta 2+00 to St 6+15 west

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.07 | 0.07 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | | 0.00 |
| Lawn | 0.15 | 0.22 | 0.03 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 0.29 | 0.10 |

Weighted C = 0.34
Impervious Ac = 0.07
Pervious Ac = 0.22

Area = 0.29 Ac
C = 0.34 Weighted C from above
Tc = 5 minutes;
I 25 = 8.75 IN/HR FROM NOOA
type channel: TRI
Bottom width = 0 if triangular must be zero
Channel slope = 7 %
Side slope = 4 ft per ft

**Q25= 0.87 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 0.87 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 0.67 | 0.020 | check | 4.16 | 0.16 | 0.10 | 1.65 | 1.6 |
| NA Green S75 | 0.27 | 0.93 | 0.032 | okay | 3.18 | 0.29 | 0.13 | 2.23 | 2.16 |

Shear stress = 1.18 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.54 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 0.87 | n from tabl | n from curve | VR - hydraulice radius times Vel calculate computed | comments | | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 0.6 | 1.13 | | 0.220 | 0.23 | HR okay | Depth OK | 0.79 | 1.44 | 0.29 | 4.95 | 4.8 |
| D | 0.00 | 0.41 | 0.90 | | 0.100 | 0.27 | HR okay | Depth OK | 1.34 | 0.67 | 0.20 | 3.38 | 3.28 |
| | | | | | | | use depth = | | ft. | | | | |

11/12/2023, 12:55 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/11/23
FILE: SWALE-5A.xlsx

INPUT: SWALE # 5A Pewter Pipe to Sta 7+27

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.23 | 0.22 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.1 | 0.10 |
| Lawn | 0.15 | 1 | 0.15 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 1.33 | 0.46 |
| | Weighted C = | 0.35 | |
| Impervious Ac = | | 0.33 | |
| Pervious Ac = | | 1.00 | |

| | | |
|---|---|---|
| Area = | 1.33 | Ac |
| C = | 0.35 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 2 | if triangular must be zero |
| Channel slope = | 9.5 | % |
| Side slope = | 4 | ft per ft |

**Q25= 4.06 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 4.06 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 3.69 | 0.020 | check | 6.58 | 0.56 | 0.15 | 3.65 | 3.6 |
| NA Green S150 | 0.25 | 4.14 | 0.027 | okay | 5.52 | 0.75 | 0.18 | 4.06 | 4 |

Shear stress = 1.48 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green S150**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n

grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 4.06 | n from tabl | n from curve | VR - hydraulice radius times Vel calculate computed | comments | | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 2.00 | 0.55 | 4.08 | | 0.130 | 0.62 | HR okay | Depth OK | 1.77 | 2.31 | 0.35 | 6.54 | 6.4 |
| D | 2.00 | 0.4 | 4.48 | | 0.062 | 0.84 | HR okay | Depth OK | 3.11 | 1.44 | 0.27 | 5.30 | 5.2 |
| | | | | use depth = | | ft. | | | | | | | |

11/12/2023, 11:44 AM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/11/23
FILE: SWALE-5B.xlsx

INPUT: SWALE # 5B Pewter Sta 5+00 to Sta 7+20 EAST

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.17 | 0.16 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.1 | 0.10 |
| Lawn | 0.15 | 0.86 | 0.13 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 1.13 | 0.39 |

Weighted C = 0.34
Impervious Ac = 0.27
Pervious Ac = 0.86

| | | |
|---|---|---|
| Area = | 1.13 | Ac |
| C = | 0.34 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 2 | if triangular must be zero |
| Channel slope = | 4 | % |
| Side slope = | 4 | ft per ft |

**Q25= 3.37 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 3.37 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 2.39 | 0.020 | check | 4.27 | 0.56 | 0.15 | 3.65 | 3.6 |
| NA Green S75 | 0.31 | 3.52 | 0.031 | okay | 3.51 | 1.00 | 0.22 | 4.56 | 4.48 |

Shear stress = 0.77 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 3.37 | n from tabl | n from curve | VR - hydraulice radius times Vel calculate computed | comments | | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 2.00 | 0.62 | 3.40 | | 0.130 | 0.48 | HR okay | Depth OK | 1.22 | 2.78 | 0.39 | 7.11 | 6.96 |
| D | 2.00 | 0.5 | 4.04 | | 0.070 | 0.66 | HR okay | Depth OK | 2.02 | 2.00 | 0.33 | 6.12 | 6 |
| | | | | | | | use depth = | | ft. | | | | |

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 08/30/23
FILE: SWALE-6-11-10-23.xlsx

INPUT: SWALE # 6 Pewter Sta 5+00 to Sta 7+20

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.16 | 0.15 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0 | 0.00 |
| Lawn | 0.15 | 0.41 | 0.06 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 0.57 | 0.21 |

Weighted C = 0.37
Impervious Ac = 0.16
Pervious Ac = 0.41

Area = 0.57 Ac
C = 0.37 Weighted C from above
Tc = 5 minutes;
I 25 = 8.75 IN/HR FROM NOOA
type channel: TRI
Bottom width = 2 if triangular must be zero
Channel slope = 9.5 %
Side slope = 4 ft per ft

**Q25= 1.87 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 1.87 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 3.69 | 0.020 | depth okay | 6.58 | 0.56 | 0.15 | 3.65 | 3.6 |
| NA Green S75 | 0.18 | 1.96 | 0.031 | okay | 4.00 | 0.49 | 0.14 | 3.48 | 3.44 |

Shear stress = 1.07 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 1.87 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 2.00 | 0.4 | 1.85 | | 0.150 | 0.35 | HR okay Check Depth | 1.28 | 1.44 | 0.27 | 5.30 | 5.2 |
| D | 2.00 | 0.3 | 2.26 | | 0.070 | 0.50 | HR okay Depth OK | 2.35 | 0.96 | 0.21 | 4.47 | 4.4 |
| | | | | | | | use depth = | ft. | | | | |

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## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/10/23
FILE: SWALE-7-R-11-10-2023.xlsx

INPUT: SWALE # 7 Pewter INTERSECTION TO STA 4+50

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.22 | 0.21 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.13 | 0.12 |
| Lawn | 0.15 | 1.13 | 0.17 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 1.48 | 0.50 |

Weighted C = 0.34
Impervious Ac = 0.35
Pervious Ac = 1.13

Area = 1.48 Ac
C = 0.34 Weighted C from above
Tc = 5 minutes;
I 25 = 8.75 IN/HR FROM NOOA
type channel: TRI
Bottom width = 2 if triangular must be zero
Channel slope = 8 %
Side slope = 4 ft per ft

**Q25= 4.39 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 4.39 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 3.38 | 0.020 | check | 6.04 | 0.56 | 0.15 | 3.65 | 3.6 |
| NA Green S150 | 0.3 | 4.68 | 0.031 | okay | 4.87 | 0.96 | 0.21 | 4.47 | 4.4 |

Shear stress = 1.50 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green S150**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

NA Green SC250= 3

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 4.39 | n from tabl | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 2.00 | 0.53 | 4.51 | | 0.100 | 0.71 | HR okay Depth OK | 2.06 | 2.18 | 0.34 | 6.37 | 6.24 |
| D | 2.00 | 0.41 | 4.46 | | 0.060 | 0.83 | HR okay Depth OK | 2.99 | 1.49 | 0.28 | 5.38 | 5.28 |
| | | | | | | | use depth = ft. | | | | | |

11/12/2023, 4:37 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-8.xlsx

INPUT: SWALE # 8 RD 2 STA 1+50 TO CUL DE SAC SOUTH

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.38 | 0.36 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.38 | 0.36 |
| Lawn | 0.15 | 3.28 | 0.49 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 4.04 | 1.21 |

Weighted C = 0.30
Impervious Ac = 0.76
Pervious Ac = 3.28

| | | |
|---|---|---|
| Area = | 4.04 | Ac |
| C = | 0.30 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 3 | if triangular must be zero |
| Channel slope = | 7 | % |
| Side slope = | 4 | ft per ft |

**Q25= 10.62 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 10.62 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 4.48 | 0.020 | check | 5.89 | 0.76 | 0.16 | 4.65 | 4.6 |
| NA Green SC150 | 0.41 | 10.80 | 0.031 | okay | 5.68 | 1.90 | 0.30 | 6.38 | 6.28 |

Shear stress = 1.79 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green SC150**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 10.62 | n from tabl | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 3.00 | 0.66 | 10.63 | | 0.080 | 1.26 | HR okay Depth OK | 2.85 | 3.72 | 0.44 | 8.44 | 8.28 |
| D | 3.00 | 0.53 | 10.99 | | 0.050 | 1.49 | HR okay Depth OK | 4.05 | 2.71 | 0.37 | 7.37 | 7.24 |
| | | | | | | | use depth = ft. | | | | | |

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## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-9A-11-12-23.xlsx

INPUT: SWALE # 9A RD 2 STA 1+50 TO STA 4+00

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.11 | 0.10 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.21 | 0.20 |
| Lawn | 0.15 | 1.42 | 0.21 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 1.74 | 0.52 |

Weighted C = 0.30
Impervious Ac = 0.32
Pervious Ac = 1.42

| | | |
|---|---|---|
| Area = | 1.74 | Ac |
| C = | 0.30 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 0 | if triangular must be zero |
| Channel slope = | 5 | % |
| Side slope = | 4 | ft per ft |

**Q25= 4.57 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 4.57 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 0.56 | 0.020 | check | 3.52 | 0.16 | 0.10 | 1.65 | 1.6 |
| NA Green SC150 | 0.52 | 4.64 | 0.031 | okay | 4.29 | 1.08 | 0.25 | 4.29 | 4.16 |

Shear stress = 1.62 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green SC150**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 4.57 | n from tabl | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 0.8 | 5.04 | | 0.090 | 0.76 | HR okay Depth OK | 1.97 | 2.56 | 0.39 | 6.60 | 6.4 |
| D | 0.00 | 0.7 | 4.74 | | 0.067 | 0.82 | HR okay Depth OK | 2.42 | 1.96 | 0.34 | 5.77 | 5.6 |
| | | | | | | | use depth = | ft. | | | | |

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## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-9B-11-12-23.xlsx

INPUT: SWALE # 9B RD 2 STA 4+00 TO STA 9 +60

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.3 | 0.29 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.37 | 0.35 |
| Lawn | 0.15 | 3.14 | 0.47 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 3.81 | 1.11 |
| | Weighted C = | 0.29 | |

Impervious Ac = 0.67
Pervious Ac = 3.14

| | | | |
|---|---|---|---|
| Area = | 3.81 | Ac | |
| C = | 0.30 | Weighted C from above | |
| Tc = | 5 | minutes; | |
| I 25 | 8.75 | IN/HR | FROM NOOA |
| type channel: | TRI | | |
| Bottom width = | 0 | if triangular must be zero | |
| Channel slope = | 4.45 | % | |
| Side slope = | 4 | ft per ft | |

**Q25= 10.00 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 10.00 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimeter | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 0.53 | 0.020 | check | 3.32 | 0.16 | 0.10 | 1.65 | 1.6 |
| NA Green SC150 | 0.71 | 10.04 | 0.031 | okay | 4.98 | 2.02 | 0.34 | 5.85 | 5.68 |

Shear stress = 1.97 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green SC150**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass check PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n

grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 10.00 | n from table | n from curve | VR - hydraulice radius times Vel calculated computed | comments | | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 1.04 | 10.14 | | 0.085 | 1.18 | HR okay | Depth OK | 2.34 | 4.33 | 0.50 | 8.58 | 8.32 |
| D | 0.00 | 0.85 | 10.06 | | 0.050 | 1.44 | HR okay | Depth OK | 3.48 | 2.89 | 0.41 | 7.01 | 6.8 |
| | | | | use depth = | | | | | ft. | | | | |

11/18/2023, 4:36 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-9C-11-12-231.xlsm

INPUT: SWALE # 9C RD 2 AROUND CUL DE CSAC

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.11 | 0.10 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.14 | 0.13 |
| Lawn | 0.15 | 0.94 | 0.14 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 1.19 | 0.38 |

Weighted C = 0.32
Impervious Ac = 0.25
Pervious Ac = 0.94

| | | |
|---|---|---|
| Area = | 1.19 | Ac |
| C = | 0.32 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 0 | if triangular must be zero |
| Channel slope = | 4.45 | % |
| Side slope = | 4 | ft per ft |

**Q25= 3.31 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 3.31 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 0.53 | 0.020 | check | 3.32 | 0.16 | 0.10 | 1.65 | 1.6 |
| NA Green S75 | 0.47 | 3.34 | 0.031 | okay | 3.78 | 0.88 | 0.23 | 3.88 | 3.76 |

Shear stress = 1.31 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 3.31 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 0.85 | 3.35 | | 0.150 | 0.48 | HR okay Depth OK | 1.16 | 2.89 | 0.41 | 7.01 | 6.8 |
| D | 0.00 | 0.65 | 3.52 | | 0.070 | 0.66 | HR okay Depth OK | 2.08 | 1.69 | 0.32 | 5.36 | 5.2 |
| | | | | | | | use depth = ft. | | | | | |

11/18/2023, 4:42 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-10-11-12-23.xlsx

INPUT: SWALE # 10 RD 2 STA 3+00 BELOW SWALE 15 TO Sta 6+00

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.11 | 0.10 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0 | 0.00 |
| Lawn | 0.15 | 1.41 | 0.21 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 1.52 | 0.32 |
| | Weighted C = | 0.21 | |
| Impervious Ac = | | 0.11 | |
| Pervious Ac = | | 1.41 | |

| | | |
|---|---|---|
| Area = | 1.52 | Ac |
| C = | 0.30 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 0 | if triangular must be zero |
| Channel slope = | 7 | % |
| Side slope = | 4 | ft per ft |

| PRECIPITATION | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

**Q25= 3.99 cfs**

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 3.99 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 0.67 | 0.020 | check | 4.16 | 0.16 | 0.10 | 1.65 | 1.6 |
| NA Green C125 | 0.47 | 4.17 | 0.031 | okay | 4.72 | 0.88 | 0.23 | 3.88 | 3.76 |

Shear stress = 2.05 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green C125**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n

grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 3.99 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 0.71 | 4.11 | | 0.095 | 0.70 | HR okay | Depth OK | 2.04 | 2.02 | 0.34 | 5.85 | 5.68 |
| D | 0.00 | 0.62 | 4.19 | | 0.065 | 0.82 | HR okay | Depth OK | 2.72 | 1.54 | 0.30 | 5.11 | 4.96 |
| | | | | | | use depth = | | ft. | | | | | |

11/18/2023, 6:37 PM

# SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 01/12/23
FILE: SWALE-11-11-12-23.xlsx

INPUT: SWALE # 11 RD 2 STA 0+15 - Sta 3+00

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.02 | 0.02 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.03 | 0.03 |
| Lawn | 0.15 | 0.57 | 0.09 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 0.62 | 0.13 |

Weighted C = 0.21 Use 0.3 min

Impervious Ac = 0.05

Pervious Ac = 0.57

| | | |
|---|---|---|
| Area = | 0.62 | Ac |
| C = | 0.30 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 0 | if triangular must be zero |
| Channel slope = | 5 | % |
| Side slope = | 4 | ft per ft |

**Q25= 1.63 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 1.63 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.3 | 1.66 | 0.020 | depth okay | 4.61 | 0.36 | 0.15 | 2.47 | 2.4 |
| NA Green S75 | 0.36 | 1.74 | 0.031 | okay | 3.36 | 0.52 | 0.17 | 2.97 | 2.88 |

Shear stress = 1.12 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n

grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 1.63 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 0.71 | 1.65 | | 0.200 | 0.28 | HR okay Depth OK | 0.82 | 2.02 | 0.34 | 5.85 | 5.68 |
| D | 0.00 | 0.52 | 1.69 | | 0.085 | 0.39 | HR okay Depth OK | 1.56 | 1.08 | 0.25 | 4.29 | 4.16 |
| | | | | | | use depth = | | ft. | | | | |

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/10/23
FILE: SWALE-12.xlsx

INPUT: SWALE # 12 RD 2 STA 0+15 - Sta 3+00

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.04 | 0.04 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0 | 0.00 |
| Lawn | 0.15 | 0.07 | 0.01 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 0.11 | 0.05 |
| | Weighted C = | 0.44 | |
| Impervious Ac = | | 0.04 | |
| Pervious Ac = | | 0.07 | |

| | | |
|---|---|---|
| Area = | 0.11 | Ac |
| C = | 0.44 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 0 | if triangular must be zero |
| Channel slope = | 5 | % |
| Side slope = | 4 | ft per ft |

**Q25= 0.42 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 0.42 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimeter | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 0.56 | 0.020 | depth okay | 3.52 | 0.16 | 0.10 | 1.65 | 1.6 |
| NA Green S75 | 0.23 | 0.53 | 0.031 | okay | 2.49 | 0.21 | 0.11 | 1.90 | 1.84 |

Shear stress = 0.72 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

4

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n

grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 0.42 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.00 | 0.4 | 0.36 | | 0.200 | 0.11 | checkHR Check Depti | 0.56 | 0.64 | 0.19 | 3.30 | 3.2 |
| D | 0.00 | 0.4 | 0.55 | | 0.130 | 0.17 | HR okay Depth OK | 0.86 | 0.64 | 0.19 | 3.30 | 3.2 |

use depth = ft.

11/18/2023, 7:15 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-13-GP5-11-12-23.xlsx

INPUT: SWALE # 13 PEWETER STA 11+75 TO END CUL DE SAC

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.11 | 0.10 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.34 | 0.32 |
| Lawn | 0.15 | 2.08 | 0.31 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 2.53 | 0.74 |

Weighted C = 0.29
Impervious Ac = 0.45
Pervious Ac = 2.08

Area = 2.53 Ac
C = 0.30 Weighted C from Table 0.3 min)
Tc = 5 minutes;
I 25 = 8.75 IN/HR FROM NOOA
type channel: TRAP
Bottom width = 2 if triangular must be zero
Channel slope = 2.89 %
Side slope = 4 ft per ft

**Q25= 6.64 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 6.64 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.3 | 4.36 | 0.020 | check | 4.54 | 0.96 | 0.21 | 4.47 | 4.4 |
| NA Green C125 | 0.48 | 6.91 | 0.032 | okay | 3.67 | 1.88 | 0.32 | 5.96 | 5.84 |

Shear stress = 0.87 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green C125**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 = | 2.25 |
| NA Green C125 BN= | 2.54 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use bermuda which has a velocity capacity of 5 fps fo** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 6.64 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| C | 2.00 | 0.8 | 6.84 | | 0.095 | 0.80 | HR okay Depth OK | 1.64 | 4.16 | 0.48 | 8.60 | 8.4 |
| D | 2.00 | 0.65 | 6.92 | | 0.060 | 0.94 | HR okay Depth OK | 2.32 | 2.99 | 0.41 | 7.36 | 7.2 |
| | | | | | | | use depth = | ft. | | | | |

# SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-14-GP5-11-12-23.xlsx

INPUT: SWALE # 14 LOT 133

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.11 | 0.10 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.34 | 0.32 |
| Lawn | 0.15 | 2.65 | 0.40 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 3.1 | 0.83 |
| | Weighted C = | 0.27 | |
| Impervious Ac = | | 0.45 | |
| Pervious Ac = | | 2.65 | |

| | | |
|---|---|---|
| Area = | 3.1 | Ac |
| C = | 0.30 | Weighted C from Table 0.3 min) |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRAP | |
| Bottom width = | 4 | if triangular must be zero |
| Channel slope = | 6.25 | % |
| Side slope = | 4 | ft per ft |

| Q25= | 8.14 | cfs |
|---|---|---|

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 8.14 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.3 | 11.25 | 0.020 | depth okay | 7.21 | 1.56 | 0.24 | 6.47 | 6.4 |
| NA Green C125 | 0.32 | 8.15 | 0.031 | okay | 4.83 | 1.69 | 0.25 | 6.64 | 6.56 |

Shear stress = 1.25 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green C125**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 = | 2.25 |
| NA Green C125 BN= | 2.54 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n

grass type: **use bermuda which has a velocity capacity of 5 fps fo** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 8.14 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 4.00 | 0.57 | 8.38 | | 0.088 | 0.96 | HR okay | Depth OK | 2.34 | 3.58 | 0.41 | 8.70 | 8.56 |
| D | 4.00 | 0.45 | 8.28 | | 0.057 | 1.07 | HR okay | Depth OK | 3.17 | 2.61 | 0.34 | 7.71 | 7.6 |
| | | | | use depth = | | | | ft. | | | | | |

11/12/2023, 11:40 AM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-15-GP5-11-12-23.xlsx

INPUT: SWALE # 15 OPEN SPACE PARALLEL WITH LOT 115

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0 | 0.00 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0 | 0.00 |
| Lawn | 0.15 | 1.31 | 0.20 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 1.31 | 0.20 |
| | Weighted C = | 0.15 | |

Impervious Ac = 0
Pervious Ac = 1.31

| | | |
|---|---|---|
| Area = | 1.31 | Ac |
| C = | 0.30 | Weighted C from Table 0.3 min) |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRAP | |
| Bottom width = | 1 | if triangular must be zero |
| Channel slope = | 3.6 | % |
| Side slope = | 4 | ft per ft |

**Q25= 3.44 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 3.44 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.3 | 3.08 | 0.020 | check | 4.67 | 0.66 | 0.19 | 3.47 | 3.4 |
| NA Green C125 | 0.4 | 3.68 | 0.031 | okay | 3.54 | 1.04 | 0.24 | 4.30 | 4.2 |

Shear stress = 0.90 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green C125**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 = | 2.25 |
| NA Green C125 BN= | 2.54 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use bermuda which has a velocity capacity of 5 fps fo** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 3.44 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | |
| C | 1.00 | 0.76 | 3.76 | | 0.130 | 0.52 | HR okay Depth OK | 1.22 | 3.07 | 0.42 | 7.27 | 7.08 |
| D | 1.00 | 0.55 | 3.57 | | 0.065 | 0.64 | HR okay Depth OK | 2.03 | 1.76 | 0.32 | 5.54 | 5.4 |
| | | | | | | | use depth = | ft. | | | | |

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-16-GP5-11-12-23.xlsx

INPUT: SWALE # 16 BETWEEN LOTS

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.2 | 0.19 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0 | 0.00 |
| Lawn | 0.15 | 4.12 | 0.62 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 4.32 | 0.81 |
| | Weighted C = | 0.19 | |
| Impervious Ac = | | 0.2 | |
| Pervious Ac = | | 4.12 | |

| | | |
|---|---|---|
| Area = | 4.32 | Ac |
| C = | 0.30 | Weighted C from Table 0.3 min) |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRAP | |
| Bottom width = | 4 | if triangular must be zero |
| Channel slope = | 6.6 | % |
| Side slope = | 4 | ft per ft |

**Q25= 11.34 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 11.34 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.3 | 11.56 | 0.020 | depth okay | 7.41 | 1.56 | 0.24 | 6.47 | 6.4 |
| NA Green C125 | 0.4 | 12.58 | 0.031 | okay | 5.62 | 2.24 | 0.31 | 7.30 | 7.2 |

Shear stress = 1.65 lb per sq. ft., formula T = yds, page 8.05.12

comments: Use **NA Green C125**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 = | 2.25 |
| NA Green C125 BN= | 2.54 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n

grass type: **use bermuda which has a velocity capacity of 5 fps fo** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 11.34 | n from tabl | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 4.00 | 0.6 | 11.95 | | 0.070 | 1.34 | HR okay Depth OK | 3.11 | 3.84 | 0.43 | 8.95 | 8.8 |
| D | 4.00 | 0.52 | 11.57 | | 0.055 | 1.40 | HR okay Depth OK | 3.66 | 3.16 | 0.38 | 8.29 | 8.16 |
| | | | | | | | use depth = | ft. | | | | |

11/12/2023, 12:44 PM

## SWALE DESIGN

PROJ: GRETCHEN PINES PHASE 5
DATE: 11/12/23
FILE: SWALE-17.xlsx

INPUT: SWALE # 17 BETWEEN LTS 138 & 139

| | C | Area (Ac) | C X A |
|---|---|---|---|
| Asphalt | 0.95 | 0.21 | 0.20 |
| Commercial | 0.7 | 0 | 0.00 |
| Bare | 0.3 | | 0.00 |
| Bldg | 0.95 | 0.23 | 0.22 |
| Lawn | 0.15 | 2.08 | 0.31 |
| Gravel | 0.4 | 0 | 0.00 |
| | Total | 2.52 | 0.73 |

Weighted C = 0.29
Impervious Ac = 0.44
Pervious Ac = 2.08

| | | |
|---|---|---|
| Area = | 2.52 | Ac |
| C = | 0.30 | Weighted C from above |
| Tc = | 5 | minutes; |
| I 25 | 8.75 | IN/HR FROM NOOA |
| type channel: | TRI | |
| Bottom width = | 3 | if triangular must be zero |
| Channel slope = | 7.5 | % |
| Side slope = | 4 | ft per ft |

**Q25= 6.62 cfs**

PRECIPITATION

| | 25-Yr |
|---|---|
| 5-min: | 8.75 |
| 10-min: | 6.97 |
| 15-min: | 5.89 |
| 30-min: | 4.36 |
| 60-min: | 2.9 |

if velocity greater than 2 fps on bare earth then use temporary liner

| condition | depth ft. | Q25 cfs 6.62 | n | comments | velocity ft/sec | area SF | hydraulic radius | Wetted Perimete | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|
| bare earth | 0.2 | 4.64 | 0.020 | check | 6.10 | 0.76 | 0.16 | 4.65 | 4.6 |
| NA Green S75 | 0.31 | 6.62 | 0.031 | okay | 5.03 | 1.31 | 0.24 | 5.56 | 5.48 |

Shear stress = 1.45 lb per sq. ft., formula T = yds, page 8.05.12
comments: Use **NA Green S75**

| LINING | T (lb/sf) |
|---|---|
| Excelsior Mat | 1.55 |
| Straw with net | 1.45 |
| Class B Rip-Rap | 3 |
| Class 1 Riprap | 5 |
| Class 2 Riprap | 7.5 |

| NA Green | T (lb/sf) |
|---|---|
| NA Green S75 = | 1.55 |
| NA Green S150= | 1.75 |
| NA Green SC150= | 2.1 |
| NA Green C125 T= | 2.25 |
| NA Green C125 BN= | 2.8 |
| NA Green C350= | 3.2 |

Grass checl PERMANENT use figure 8.05c Mannings 'n' for grass- make sure HR times velocity yields same n
grass type: **use fescue which has a velocity capacity of 4.5 fps for** velocity 4.5 fps

| grass condition | Bottom width | depth ft. | Q25 cfs 6.62 | n from tab | n from curve | VR - hydraulice radius times Vel calculate computed | comments | velocity fps | area of channel sq. ft. | R-hydraulic radius | Wetted Perimeter ft. | Top width ft. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | 3.00 | 0.77 | 8.03 | | 0.150 | 0.86 | HR okay Depth OK | 1.72 | 4.68 | 0.50 | 9.35 | 9.16 |
| D | 3.00 | 0.6 | 10.38 | | 0.070 | 1.31 | HR okay Depth OK | 3.20 | 3.24 | 0.41 | 7.95 | 7.8 |
| | | | | | | | use depth = | ft. | | | | |

11/18/2023, 7:11 PM

# PIPE DESIGN

PROJECT: **GRETCHEN PINES PHA** DATE: **11/27/23**

**https://d.docs.live.net/c859b0af219e4b05/[PIPE ROAD NORTH STA 2^M00 1-27-2023.xlsx]Design**

FILE:

| | FROM | TO |
|---|---|---|
| **PIPE #** | | **Road 1 Sta2+00** |

| | AREA | C | Area x C |
|---|---|---|---|
| Woods | | **0.15** | 0 |
| Road | **0.13** | **0.95** | 0.1235 |
| Sidewalk | | **0.95** | 0 |
| Lawn-Sandy soil | **2.70** | **0.15** | 0.405 |
| Bldg | | **0.95** | 0 |
| Residential | | **0.17** | 0 |
| Commercial | | **0.6** | 0 |
| | | **Total** | **0.5285** |
| **Total Area** | **2.83** | **C-aver =** | **0.19** |

land use: RESIDENTIAL

composite area = **2.83**

C = **0.30**

Additional Flow = 0 cfs

Enter storm event

Enter Q10 or Q25 **Q25** SANDY soil type:

Tc = **5** minutes; caculate from Fig. 8.03a, use 5 minutes minimum

pipe: type pipe: RCP (type RCP or PVC)

pipe n= 0.013 Table 8.05b or bureau of rds or malcolm

pipe slope to calc trial size C31 = **4.9** % Length = ft.

channel: type channel: TRI

width = **0** ft. must be zero for triangular

slope = **4.9** % for receiving ditch

side slope = **3** ft per ft

Kb adjust = **1** frm Fig8.05d(tria use 1)

**TIME OF CONCENTRATION - RATIONA**

C-COEFF =

L =

SLOPE

**tc = #DIV/0! MIN**

USE Tc = 5 min

WEST END

| Storm | I (in/hr) | Q - cfs | DIAM - IN | Use Diam | Area - Full | HW-depth - FT | HW/D | Velocity (ft/sec) |
|---|---|---|---|---|---|---|---|---|
| 10 - yr | 7.94 | **6.7** | **11.3** | 18.0 | **1.77** | **1.4** | 0.9 | **3.8** |
| 25- yr | 8.75 | **7.4** | **11.7** | 18.0 | **1.77** | **1.5** | 1.0 | **4.2** |
| 100- - yr | 9.79 | **8.3** | **12.2** | 18.0 | **1.77** | **1.7** | 1.1 | **4.7** |

| USE PIPE SIZE INCHES | 18 | HDPE | 4.9 % |
|---|---|---|---|

Cd = **0.60** (0,6 TYP)

apron: if Q< 3 cfs use 2'x3' apror maintain 2.5 fps min

11

**PIPE OUTLET STATBIIZATION STRUCTURE**

flow conditior **free outlet**

length apron = **10** enter from Fig.8.06a inlet control

width apron downstrean **11.5**

apron width at pipe **4.5** ft.

comments: **USE 4.5'x10'Lx11.5' apron**

flow conditior **submerged**

length apron = **0** enter from Fig.8.06b outlet control

width apron downstrean **1.50**

apron width at pipe **4.50** ft. or if flared end used same width as outlet

2.3

# PIPE DESIGN

PROJECT: GRETCHEN PINES PHA DATE: 11/27/23

FILE: Z:\A-PROJECTS\PROJECTS 2023\GRETCHEN PHASE 5 2023.02\EROSION CONTROL\PIPES\[PIPE ROAD NORTH STA -400 1-27-2023.xlsx]Design

| PIPE # | FROM | TO |
|---|---|---|
| | Road 1 Sta -4+00 | |

| | AREA | C | Area x C |
|---|---|---|---|
| Woods | | 0.15 | 0 |
| Road | 0.14 | 0.95 | 0.133 |
| Sidewalk | | 0.95 | 0 |
| Lawn-Sandy soil | 1.38 | 0.15 | 0.207 |
| Bldg | 0.21 | 0.95 | 0.1995 |
| Residential | | 0.17 | 0 |
| Commercial | | 0.6 | 0 |
| | | Total | 0.5395 |
| Total Area | 1.73 | C-aver = | 0.31 |

land use: RESIDENTIAL

composite area = 1.73

C = 0.31

Additional Flow = 0 cfs

Enter storm event

Enter Q10 or Q25: Q25 SANDY soil type:

Tc = 5 minutes; caculate from Fig. 8.03a, use 5 minutes minimum

pipe: type pipe: RCP (type RCP or PVC)

pipe n= 0.013 Table 8.05b or bureau of rds or malcolm

pipe slope to calc trial size C31 = 4.9 % Length = ft.

channel: type channel: TRI

width = 0 ft. must be zero for triangular

slope = 4.9 % for receiving ditch

side slope = 3 ft per ft

Kb adjust = 1 frm Fig8.05d(tria use 1)

**TIME OF CONCENTRATION - RATIONA**

C-COEFF =

L =

SLOPE

**tc = #DIV/0! MIN**

USE Tc = 5 min

WEST END

| Storm | I (in/hr) | Q - cfs | DIAM - IN | Use Diam | Area - Full | HW-depth - FT | HW/D | Velocity (ft/sec) |
|---|---|---|---|---|---|---|---|---|
| 10 - yr | 7.94 | 4.3 | 9.5 | 18.0 | 1.77 | 1.0 | 0.7 | 2.4 |
| 25- yr | 8.75 | 4.7 | 9.9 | 18.0 | 1.77 | 1.1 | 0.7 | 2.7 |
| 100- - yr | 9.79 | 5.3 | 10.3 | 18.0 | 1.77 | 1.1 | 0.8 | 3.0 |

| USE PIPE SIZE INCHES | 18 | HDPE | 4.9 % |
|---|---|---|---|

Cd = 0.60 (0,6 TYP)

apron: if Q< 3 cfs use 2'x3' apror maintain 2.5 fps min

11

## PIPE OUTLET STATBIIZATION STRUCTURE

flow conditior **free outlet**

length apron = 10 enter from Fig.8.06a inlet control

width apron downstrean = 11.5

apron width at pipe = 4.5 ft.

comments: USE 4.5'x10'Lx11.5' apron

flow conditior **submerged**

length apron = 0 enter from Fig.8.06b outlet control

width apron downstrean = 1.50

apron width at pipe = 4.50 ft. or if flared end used same width as outlet

1/12/2024

# PIPE DESIGN

PROJECT: **GRETCHEN PINES PHA** DATE: **11/27/23**

FILE: **Z:\A-PROJECTS\PROJECTS 2023\GRETCHEN PHASE 5 2023.02\EROSION CONTROL\PIPES\[PIPE ROAD NORTH STA - 928 1-27-2023.xlsx]Design**

| PIPE # | FROM | TO |
|---|---|---|
| | **Road 1 Sta -9+28** | |

land use: RESIDENTIAL

composite area = **3.80**

C = **0.30**

Additional Flow = 0 cfs

| | AREA | C | Area x C |
|---|---|---|---|
| Woods | | **0.15** | 0 |
| Road | **0.29** | **0.95** | 0.2755 |
| Sidewalk | | **0.95** | 0 |
| Lawn-Sandy soil | **3.14** | **0.15** | 0.471 |
| Bldg | **0.37** | **0.95** | 0.3515 |
| Residential | | **0.17** | 0 |
| Commercial | | **0.6** | 0 |
| | | **Total** | **1.098** |
| **Total Area** | **3.80** | **C-aver =** | **0.29** |

Enter storm event

Enter Q10 or Q25 Q25 SANDY soil type:

Tc = **5** minutes; caculate from Fig. 8.03a, use 5 minutes minimum

pipe: type pipe: RCP (type RCP or PVC)

pipe n= 0.013 Table 8.05b or bureau of rds or malcolm

pipe slope to calc trial size C31 = **4.9** % Length = ft.

channel: type channel: TRI

width = **0** ft. must be zero for triangular

slope = **4.9** % for receiving ditch

side slope = **3** ft per ft

Kb adjust = **1** frm Fig8.05d(tria use 1)

**TIME OF CONCENTRATION - RATIONA**

C-COEFF =

L =

SLOPE

**tc = #DIV/0! MIN**

USE Tc = 5 min

WEST END

| Storm | I (in/hr) | Q - cfs | DIAM - IN | Use Diam | Area - Full | HW-depth - FT | HW/D | Velocity (ft/sec) |
|---|---|---|---|---|---|---|---|---|
| 10 - yr | 7.94 | **9.1** | **12.6** | 18.0 | **1.77** | **1.9** | 1.3 | **5.1** |
| 25- yr | 8.75 | **10.0** | **13.1** | 18.0 | **1.77** | **2.1** | 1.4 | **5.6** |
| 100- - yr | 9.79 | **11.2** | **13.7** | 18.0 | **1.77** | **2.5** | 1.6 | **6.3** |

| USE PIPE SIZE INCHES | 18 | HDPE | 4.9 % |
|---|---|---|---|

Cd = **0.60** (0,6 TYP)

apron: if Q< 3 cfs use 2'x3' apror maintain 2.5 fps min

11

**PIPE OUTLET STATBIIZATION STRUCTURE**

flow conditior **free outlet**

length apron = **10** enter from Fig.8.06a inlet control

width apron downstrean **11.5**

apron width at pipe **4.5** ft.

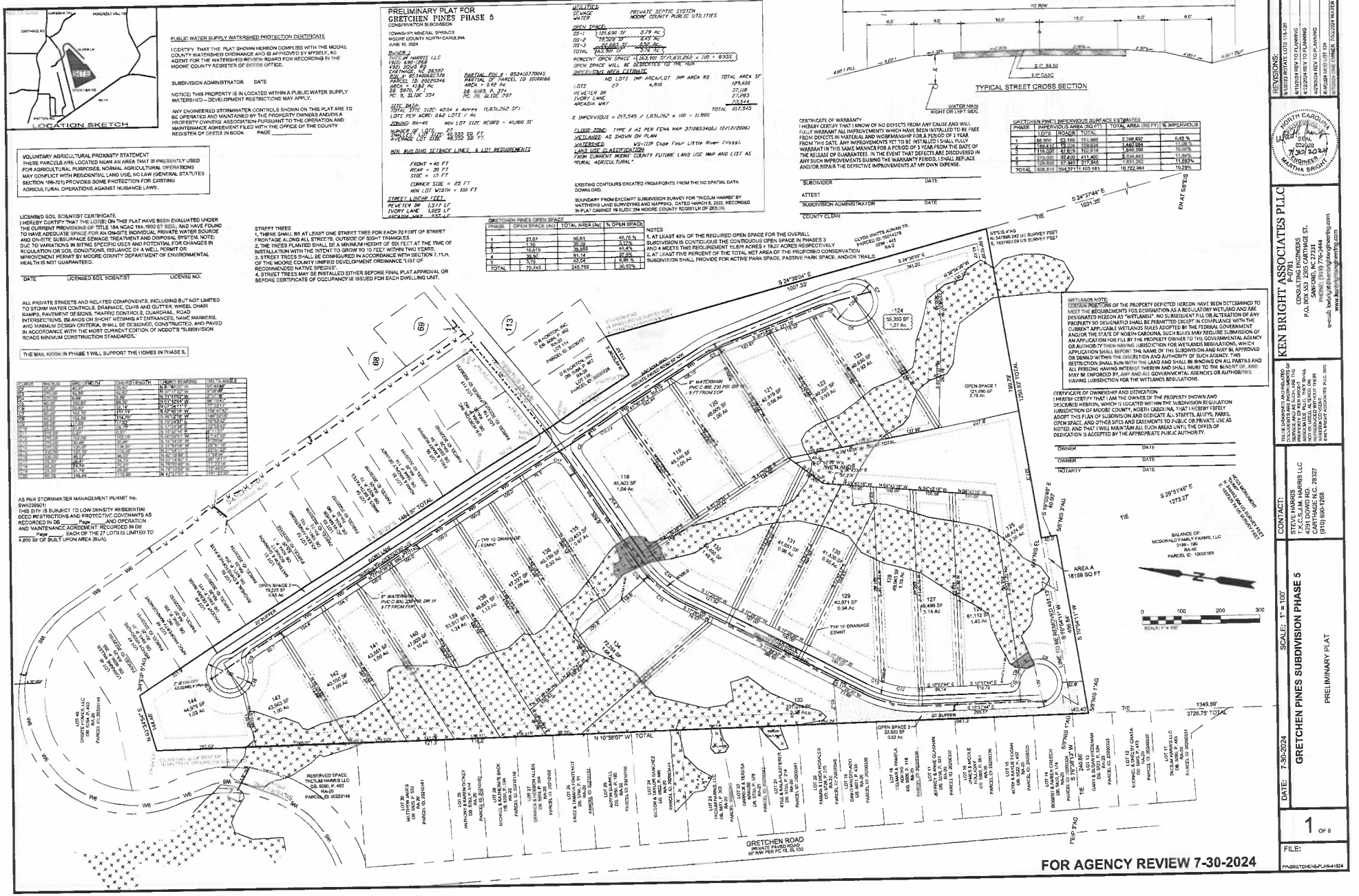
comments: **USE 4.5'x10'Lx11.5' apron**

flow conditior **submerged**

length apron = **0** enter from Fig.8.06b outlet control

width apron downstrean **1.50**

apron width at pipe **4.50** ft. or if flared end used same width as outlet


LOCATION SKETCH
SITE
KARRBROOK TR
MORLAND MILL RD
CARTHAGE RD
SILVER LN
DIVERSION RD
NC 73
PATTON RD
PUBLIC WATER SUPPLY WATERSHED PROTECTION CERTIFICATE
I CERTIFY THAT THE PLAT SHOWN HEREON COMPLIES WITH THE MOORE COUNTY WATERSHED ORDINANCE AND IS APPROVED BY MYSELF, AS AGENT FOR THE WATERSHED REVIEW BOARD FOR RECORDING IN THE MOORE COUNTY REGISTER OF DEEDS OFFICE.
SUBDIVISION ADMINISTRATOR DATE
NOTICE: THIS PROPERTY IS IN LOCATED WITHIN A PUBLIC WATER SUPPLY WATERSHED – DEVELOPMENT RESTRICTIONS MAY APPLY.
ANY ENGINEERED STORMWATER CONTROLS SHOWN ON THIS PLAT ARE TO BE OPERATED AND MAINTAINED BY THE PROPERTY OWNERS AND/OR A PROPERTY OWNERS ASSOCIATION PURSUANT TO THE OPERATION AND MAINTENANCE AGREEMENT FILED WITH THE OFFICE OF THE COUNTY REGISTER OF DEEDS IN BOOK PAGE
VOLUNTARY AGRICULTURAL PROXIMITY STATEMENT
THESE PARCELS ARE LOCATED NEAR AN AREA THAT IS PRESENTLY USED FOR AGRICULTURAL PURPOSES. NORMAL AGRICULTURAL OPERATIONS MAY CONFLICT WITH RESIDENTIAL LAND USE. NC LAW (GENERAL STATUTES SECTION 106-701) PROVIDES SOME PROTECTION FOR EXISTING AGRICULTURAL OPERATIONS AGAINST NUISANCE LAWS.
LICENSED SOIL SCIENTIST CERTIFICATE
I HEREBY CERTIFY THAT THE LOT(S) ON THIS PLAT HAVE BEEN EVALUATED UNDER THE CURRENT PROVISIONS OF TITLE 15A NCAC 18A.1900 ET SEQ., AND HAVE FOUND TO HAVE ADEQUATE SPACE FOR AN ON-SITE INDIVIDUAL PRIVATE WATER SOURCE AND ON-SITE SUBSURFACE SEWAGE TREATMENT AND DISPOSAL SYSTEM. NOTE: DUE TO VARIATIONS IN SITING SPECIFIC USES AND POTENTIAL FOR CHANGES IN REGULATION OR SOIL CONDITIONS, ISSUANCE OF A WELL PERMIT OR IMPROVEMENT PERMIT BY MOORE COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH IS NOT GUARANTEED.
DATE LICENSED SOIL SCIENTIST LICENSE NO.
ALL PRIVATE STREETS AND RELATED COMPONENTS, INCLUDING BUT NOT LIMITED TO STORM WATER CONTROLS, DRAINAGE, CURB AND GUTTER, WHEEL CHAIR RAMPS, PAVEMENT DESIGNS, TRAFFIC CONTROLS, GUARDRAIL, ROAD INTERSECTIONS, ISLANDS OR SHORT MEDIANS AT ENTRANCES, NAME MARKERS, AND MINIMUM DESIGN CRITERIA, SHALL BE DESIGNED, CONSTRUCTED, AND PAVED IN ACCORDANCE WITH THE MOST CURRENT EDITION OF NCDOT'S "SUBDIVISION ROADS MINIMUM CONSTRUCTION STANDARDS."
THE MAIL KIOSK IN PHASE 1 WILL SUPPORT THE HOMES IN PHASE 5.
AS PER STORMWATER MANAGEMENT PERMIT No. SW1230501:
THIS SITE IS SUBJECT TO LOW DENSITY RESIDENTIAL DEED RESTRICTIONS AND PROTECTIVE COVENANTS AS RECORDED IN DB Page AND OPERATION AND MAINTENANCE AGREEMENT RECORDED IN DB Page EACH OF THE 27 LOTS IS LIMITED TO 4,800 SF OF BUILT UPON AREA (BUA).
PRELIMINARY PLAT FOR
GRETCHEN PINES PHASE 5
CONSERVATION SUBDIVISION
TOWNSHIP: MINERAL SPRINGS
MOORE COUNTY NORTH CAROLINA
JUNE 10, 2024
OWNER
STEVE HARRIS I, LLC
(910) 690-1968
4291 DOWD RD
CARTHAGE, NC 28327
PIN # 853400687329
PARCEL ID: 00020346
DB 5970, P. 1
PC 9, SLIDE 354
PARTIAL PIN # : 853400770045
PARTIAL OF PARCEL ID: 00000166
AREA = 0.48 AC
DB 6383, P. 374,
PC 36, SLIDE 297
SITE DATA
TOTAL SITE SIZE: 42.04 ± Acres (1,831,262 SF)
LOTS PER ACRE: 0.62 LOTS / Ac
ZONING: RA-40 MIN LOT SIZE REQD = 40,000 SF
NUMBER OF LOTS: 27
SMALLEST LOT SIZE: 40,332 SF
AVERAGE LOT SIZE: 48,556 SF
MIN. BUILDING SETBACK LINES, & LOT REQUIREMENTS
FRONT = 40 FT
REAR = 30 FT
SIDE = 15 FT
CORNER SIDE = 25 FT
MIN LOT WIDTH = 100 FT
STREET LINEAR FEET
REVETON DR 1,577 LF
IVORY LANE 1,089 LF
ARCADIA WAY 837 LF
UTILITIES
SEWAGE PRIVATE SEPTIC SYSTEM
WATER MOORE COUNTY PUBLIC UTILITIES
OPEN SPACE
OS-1 101,690 SF 2.79 Ac.
OS-2 79,329 SF 1.25 Ac.
OS-3 22,683 SF 0.52 Ac.
TOTAL 183,901 SF 4.76 Ac.
PERCENT OPEN SPACE = (183,901 SF / 1,831,262 x 100 = 9.93%)
OPEN SPACE WILL BE DEDICATED TO THE HOA
IMPERVIOUS AREA ESTIMATE

| NO. LOTS | IMP. AREA/LOT | IMP. AREA RD | TOTAL AREA SF |
|---|---|---|---|
| LOTS 27 | 4,800 | | 129,600 |
| REVETER DR | | | 37,118 |
| IVORY LANE | | | 27,793 |
| ARCADIA WAY | | | 23,544 |
| | | TOTAL | 217,545 |

% IMPERVIOUS = 217,545 / 1,831,262 x 100 = 11.88%
FLOOD ZONE: TYPE X AS PER FEMA MAP 3710853400J (2/17/2006)
WETLANDS AS SHOWN ON PLAN
WATERSHED: WS-III/P Cape Fear Little River Class).
LAND USE CLASSIFICATION
FROM CURRENT MOORE COUNTY FUTURE LAND USE MAP AND LIST AS "RURAL AGRICULTURAL."
EXISTING CONTOURS CREATED FROM POINTS FROM THE NC SPATIAL DATA DOWNLOAD.
BOUNDARY FROM EXCEPT SUBDIVISION SURVEY FOR "TKCSJM HARRIS" BY MATTHEWS LAND SURVEYING AND MAPPING, DATED MARCH 6, 2022. RECORDED IN PLAT CABINET 19 SLIDE 284 MOORE COUNTY REGISTER OF DEEDS.
TYPICAL STREET CROSS SECTION
WATER MAIN RIGHT OR LEFT SIDE
CERTIFICATE OF WARRANTY
I HEREBY CERTIFY THAT I KNOW OF NO DEFECTS FROM ANY CAUSE AND WILL FULLY WARRANT ALL IMPROVEMENTS WHICH HAVE BEEN INSTALLED TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF 1 YEAR FROM THIS DATE. ANY IMPROVEMENTS YET TO BE INSTALLED I SHALL FULLY WARRANT IN THIS SAME MANNER FOR A PERIOD OF 1 YEAR FROM THE DATE OF THE RELEASE OF GUARANTEES. IN THE EVENT THAT DEFECTS ARE DISCOVERED IN ANY SUCH IMPROVEMENTS DURING THE WARRANTY PERIOD, I SHALL REPLACE AND/OR REPAIR THE DEFECTIVE IMPROVEMENTS AT MY OWN EXPENSE.
SUBDIVIDER DATE
ATTEST
SUBDIVISION ADMINISTRATOR DATE
COUNTY CLERK
GRETCHEN PINES IMPERVIOUS SURFACE ESTIMATES

| PHASE | IMPERVIOUS AREA (SQ FT) | | TOTAL AREA (SQ FT) | % IMPERVIOUS |
|---|---|---|---|---|
| | LOTS | ROADS | TOTAL | |
| 1 | 88,800 | 62,189 | 151,989 | 8.42 % |
| 2 | 146,400 | 93,074 | 239,474 | 12.28 % |
| 3 | 115,200 | 67,615 | 182,815 | 10.40% |
| 4 | 319,200 | 92,400 | 411,600 | 11.58% |
| 5 | 129,600 | 87,945 | 217,545 | 11.883% |
| TOTAL | 809,200 | 394,571 | 1,203,383 | 10.29% |

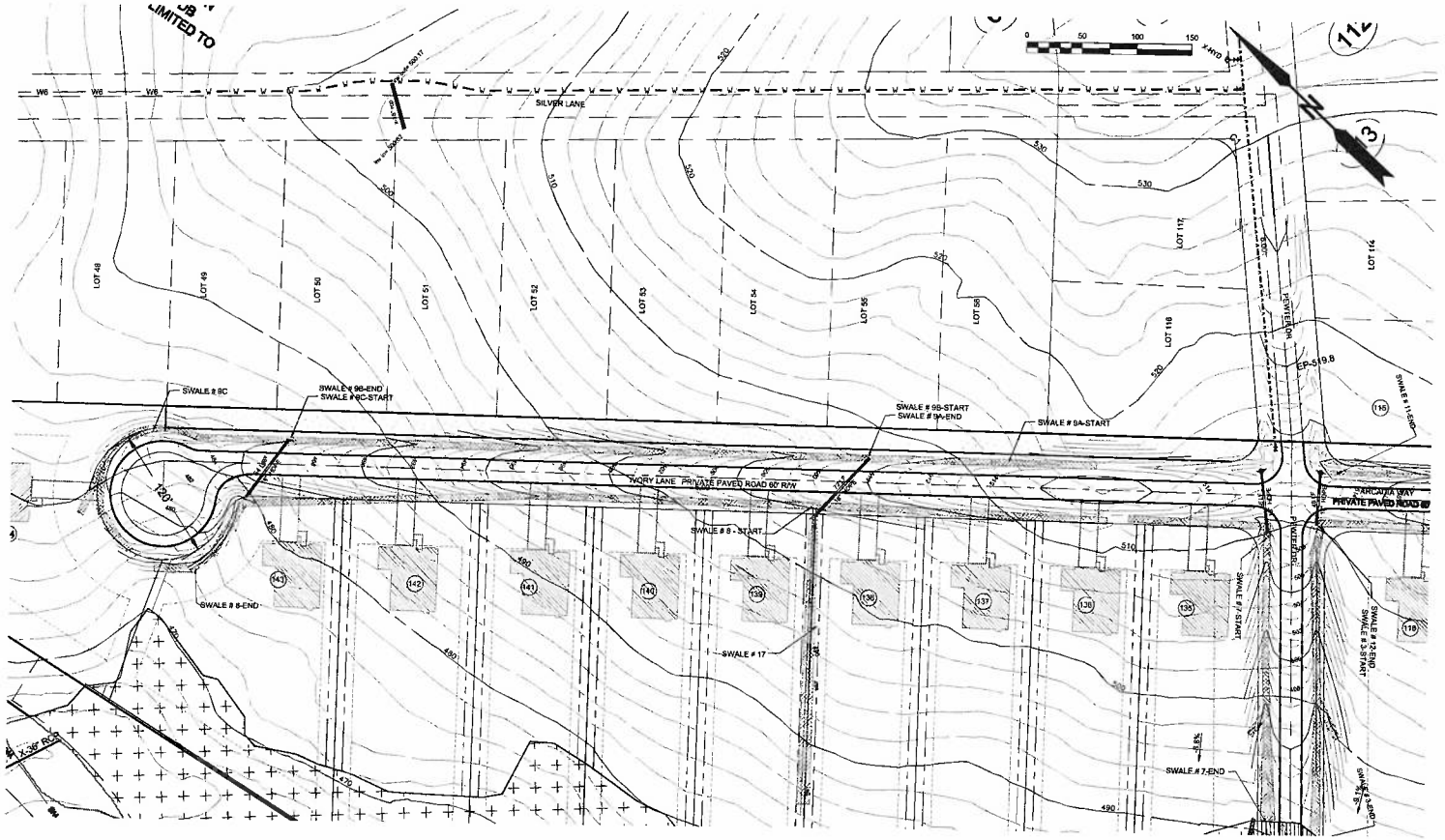
GRETCHEN PINES OPEN SPACE

| PHASE | OPEN SPACE (Ac) | TOTAL AREA (Ac) | % OPEN SPACE |
|---|---|---|---|
| 1 | 20.07 | 50.61 | 46.76 % |
| 2 | 1.30 | 30.29 | 3.27% |
| 3 | 10.515 | 39.359 | 45.8% |
| 4 | 39.50 | 81.14 | 37.0% |
| 5 | 3.70 | 42.04 | 8.86 % |
| TOTAL | 75.765 | 245.769 | 30.50% |

NOTES
1. AT LEAST 40% OF THE REQUIRED OPEN SPACE FOR THE OVERALL SUBDIVISION IS CONTIGUOUS THE CONTIGUOUS OPEN SPACE IN PHASES 3 AND 4 MEETS THIS REQUIREMENT 15.876 ACRES > 19.07 ACRES RESPECTIVELY
2. AT LEAST FIVE PERCENT OF THE TOTAL NET AREA OF THE PROPOSED CONSERVATION SUBDIVISION SHALL PROVIDE FOR ACTIVE PARK SPACE, PASSIVE PARK SPACE, AND/OR TRAILS.
STREET TREES
1. THERE SHALL BE AT LEAST ONE STREET TREE FOR EACH 70 FEET OF STREET FRONTAGE ALONG ALL STREETS, OUTSIDE OF SIGHT TRIANGLES.
2. THE TREES PLANTED SHALL BE A MINIMUM HEIGHT OF SIX FEET AT THE TIME OF INSTALLATION WITH THE INTENT TO GROW TO 15 FEET WITHIN TWO YEARS.
3. STREET TREES SHALL BE CONFIGURED IN ACCORDANCE WITH SECTION 7.11.H OF THE MOORE COUNTY UNIFIED DEVELOPMENT ORDINANCE "LIST OF RECOMMENDED NATIVE SPECIES".
4. STREET TREES MAY BE INSTALLED EITHER BEFORE FINAL PLAT APPROVAL OR BEFORE CERTIFICATE OF OCCUPANCY IS ISSUED FOR EACH DWELLING UNIT.
WETLANDS NOTE:
CERTAIN PORTIONS OF THE PROPERTY DEPICTED HEREON HAVE BEEN DETERMINED TO MEET THE REQUIREMENTS FOR DESIGNATION AS A REGULATORY WETLAND AND ARE DESIGNATED HEREON AS "WETLANDS". NO SUBSEQUENT FILL OR ALTERATION OF ANY PROPERTY SO DESIGNATED SHALL BE PERMITTED EXCEPT IN COMPLIANCE WITH THE CURRENT APPLICABLE WETLANDS RULES ADOPTED BY THE FEDERAL GOVERNMENT AND/OR THE STATE OF NORTH CAROLINA, SUCH RULES MAY REQUIRE SUBMISSION OF AN APPLICATION FOR FILL BY THE PROPERTY OWNER TO THE GOVERNMENTAL AGENCY OR AUTHORITY THEN HAVING JURISDICTION FOR WETLANDS REGULATIONS, WHICH APPLICATION SHALL REPORT THE NAME OF THE SUBDIVISION AND MAY BE APPROVED OR DENIED WITHIN THE DISCRETION AND AUTHORITY OF SUCH AGENCY. THIS RESTRICTION SHALL RUN WITH THE LAND AND SHALL BE BINDING ON ALL PARTIES AND ALL PERSONS HAVING INTEREST THEREIN AND SHALL INURE TO THE BENEFIT OF, AND MAY BE ENFORCED BY, ANY AND ALL GOVERNMENTAL AGENCIES OR AUTHORITIES HAVING JURISDICTION FOR THE WETLANDS REGULATIONS.
CERTIFICATE OF OWNERSHIP AND DEDICATION
I HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, WHICH IS LOCATED WITHIN THE SUBDIVISION REGULATION JURISDICTION OF MOORE COUNTY, NORTH CAROLINA, THAT I HEREBY FREELY ADOPT THIS PLAN OF SUBDIVISION AND DEDICATE ALL STREETS, ALLEYS, PARKS, OPEN SPACE, AND OTHER SITES AND EASEMENTS TO PUBLIC OR PRIVATE USE AS NOTED, AND THAT I WILL MAINTAIN ALL SUCH AREAS UNTIL THE OFFER OF DEDICATION IS ACCEPTED BY THE APPROPRIATE PUBLIC AUTHORITY.
OWNER DATE
OWNER DATE
NOTARY DATE
S 24°36'04" E 1007.33'
S 24°37'44" E 1031.35'
TIE
EN AT 56°E'S
1259.70' TOTAL
S 24°36'04" E 1487.97' TOTAL
N 10°58'07" W TOTAL
S 10°34'11" W 456.84'
S 10°34'11" W 491.15'
S 29°51'48" E 1273.27'
S 87°45'16" E 1349.89'
3726.75' TOTAL
N 87°45'16" W 1349.89'
S 87°45'16" E 1349.89'

FOR AGENCY REVIEW 7-30-2024
GRETCHEN PINES SUBDIVISION PHASE 5
GRADING PAN - OVERALL
DATE: 7-30-2024
SCALE: AS SHOWN
2 OF 6
FILE:
CONTACT:
SITEVE HARRIS
TXCE.S.J.M. HARRIS LLC
4291 DOMD RD.
CARTHAGE N.C. 28327
(910) 690-1268
KEN BRIGHT ASSOCIATES PLLC
P-0781
CONSULTING ENGINEERS
P.O. BOX 353 2305 CARTHAGE ST.
SANFORD, NC 27331
PHONE: (919) 776-3444
e-mail: kenbright@kenbrightengineering.com
www.kenbrightengineering.com
REVISIONS:
4/15/2024 REV TO PLANNING
6/7/2024 ONE OWNER
PROJECTED-GRADE-PLAN-H1.5N

FOR AGENCY REVIEW 7-30-2024
NOTE:
THE HOUSE FLOOR PLANS AND DRIVEWAY LOCATION WILL VARY.
SEE TABLE 1 SHEET C12.4 FOR ALLOWED BUA PER LOT
GRETCHEN PINES SUBDIVISION PHASE 5
STORMWATER PLAN OVERALL
DATE: 7-30-2024
SCALE: 1" = 100'
CONTACT:
SITEE HARRIS
T.K.C.S.J.M. HARRIS LLC
4291 DOWD RD.
CARTHAGE N.C. 28327
(910) 690-1268
KEN BRIGHT ASSOCIATES PLLC
CONSULTING ENGINEERS
P.O. BOX 533 2335 CARTHAGE ST.
SANFORD, NC 27331
PHONE: (919) 776-3444
e-mail: kenbright@kenbrightengineering.com
www.kenbrightengineering.com
REVISIONS:
4/19/2024 REV TO PLANNING
11-27-2023 REV AS PER STORMWATER
4-15-2024 ROTATE LOTS 116-29
6/7/2024 REV TO PLANNING
6/7/2024 ADD SWALE 13 & STORM DRAINAGE
6-26-2023 REV TO ONE OWNER
3
OF 9
FILE:
P:\PROJECTS\GRETCHEN PINES\PHASE 5\PLANS\GRETCHEN PINES PHASE 5 OVERALL.dwg




FOR AGENCY REVIEW 7-30-2024

REVISIONS:
8-28-2023 ADD SWALE 12 & STORM DRAINAGE
9-15-2023 REV TO PLANNING
11-27-2023 REV AS PER SUBDIVISION
6-5-2024 REVISE LOTS 116-120
6/7/2024 REV TO PLANNING
7/7/2024 ADD CAE OWNER

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 024228 MARTHA WRIGHT 7/30/2024

KEN BRIGHT ASSOCIATES PLLC
P-0781
CONSULTING ENGINEERS
P.O. BOX 553 2305 CARTHAGE ST.
SANFORD, NC 27331
PHONE: (910) 774-7444
e-mail: kenbrightassociates@bellsouth.net
www.kenbrightassociates.com

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CONTACT:
STEVE HARRIS
T & C FARM HARRIS LLC
4291 DOWD RD.
CARTHAGE N.C. 28327
(910) 690-1288

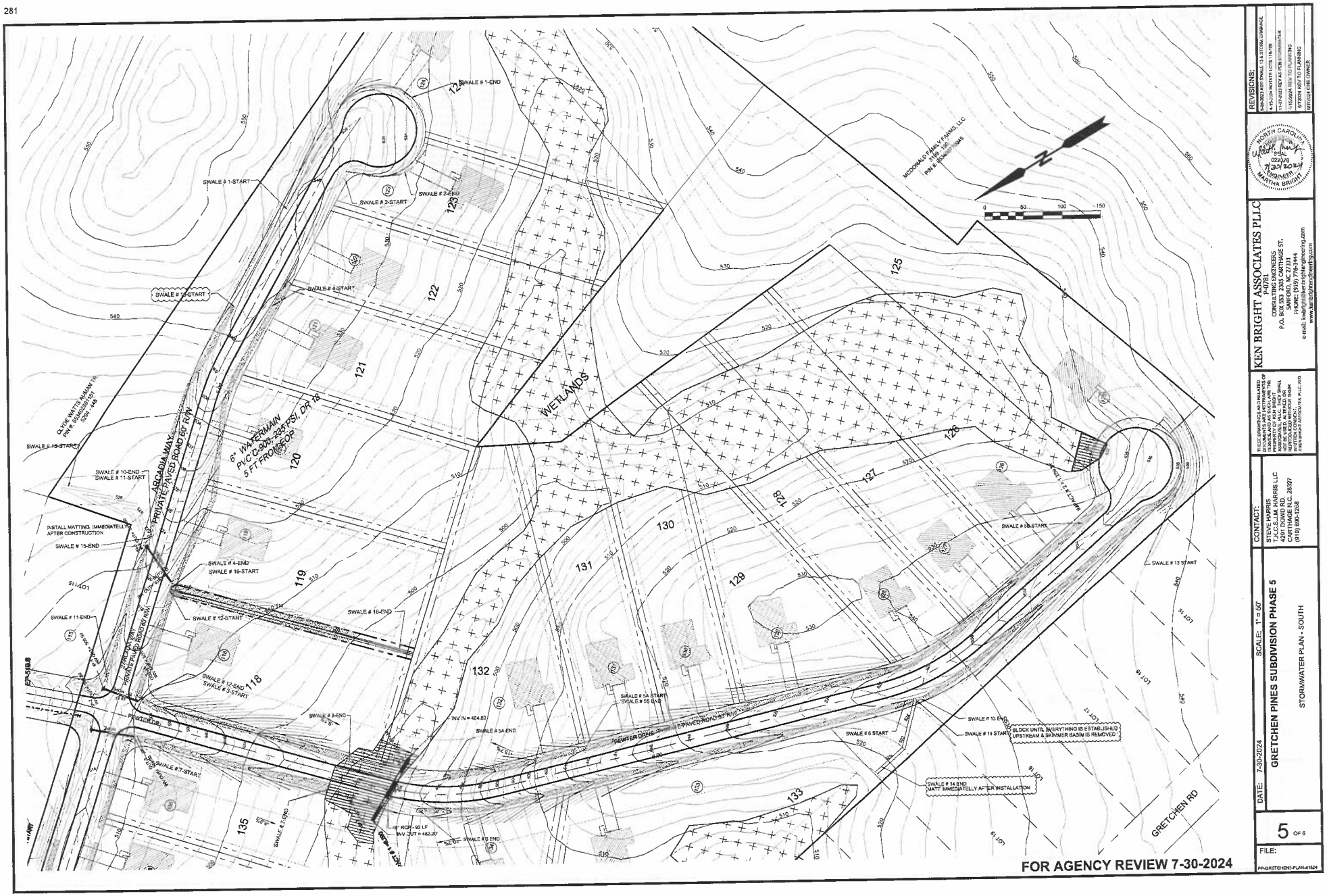
DATE: 7-30-2024
SCALE: 1" = 50'

GRETCHEN PINES SUBDIVISION PHASE 5

STORMWATER PLAN - NORTH

4 OF 8

FILE:
P:\JOB\GRETCHENS-PLAN-41524




FOR AGENCY REVIEW 7-30-2024

| REVISIONS: |
|---|
| 5-28-2023 ADD SWALE 13 & STORM GUARDRAIL |
| 4-15-2024 ROTATE LOTS 116-76 |
| 11-27-2023 REV AS PER STORMWATER |
| 7-15-2024 RED TO PLANNING |
| 7-30-2024 REV TO PLANNING |
| 8/7/2024 CWE OWNER |

NORTH CAROLINA PROFESSIONAL ENGINEER MARTHA BRIGHT SEAL 032478 7-30-2024

KEN BRIGHT ASSOCIATES PLLC
PE/PLS
CONSULTING ENGINEERS
P.O. BOX 553 2365 CARTHAGE ST.
SANFORD, NC 27331
PHONE (919) 776-2344
e-mail: kwbright@kenbrightengineering.com
www.kenbrightengineering.com

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CONTACT:
STEVE HARRIS
T.I.C.C.S.J.M. HARRIS LLC
4291 DOWD RD.
CARTHAGE N.C. 28327
(910) 890-1268

SCALE: 1" = 50'

DATE: 7-30-2024

# GRETCHEN PINES SUBDIVISION PHASE 5

STORMWATER PLAN - SOUTH

5 OF 6

FILE: PP-GRETCHEN1-PLAN-41524

**PROJECT INFORMATION:**

RIVER BASIN: CAPE FEAR

FLOOD ZONE: ZONE X - MINIMAL RISK AS PER MAP 3710853400J

WETLANDS: THERE ARE WETLANDS ON SITE AS SHOWN. PERMITS WILL BE OBTAINED FOR IMPACTS.

THE SITE IS WOODED AND HAS WOODLANDS AND CROPS ON THE SURROUNDING AREA.

SOILS:
ARE INDICATED IN SHEET C10.0

NOTE:
THE HOUSE FLOOR PLANS AND DRIVEWAY LOCATION WILL VARY.

SEE TABLE 1 FOR ALLOWED BUA PER LOT

THE SITE IS MOSTLY WOODLANDS.

PROJECT IS LOW DENSITY. STORMWATER WILL BE MANAGED BY CONVEYANCE SWALES ALONG THE ROADS AND DISPERSED FLOW IN THE LOTS.

IN ACCORDANCE WITH TITLE 15 NCAC 2H.1000 AND S.L. 2006-246, THE STORMWATER MANAGEMENT REGULATIONS, DEED RESTRICTIONS AND PROTECTIVE COVENANTS ARE REQUIRED FOR LOW DENSITY RESIDENTIAL SUBDIVISIONS WHERE LOTS WILL BE SUBDIVIDED AND SOLD. DEED RESTRICTIONS AND PROTECTIVE COVENANTS ARE NECESSARY TO ENSURE THAT THE DEVELOPMENT MAINTAINS A "BUILT-UPON" AREA CONSISTENT WITH THE APPLICABLE REGULATION GOVERNING THE DENSITY LEVEL.

TABLE 1, LOTS ALLOWABLE BUA

| LOT NO. | BUA-ALLOWED |
|---|---|
| 118 | 4,800 |
| 119 | 4,800 |
| 120 | 4,800 |
| 121 | 4,800 |
| 122 | 4,800 |
| 123 | 4,800 |
| 124 | 4,800 |
| 125 | 4,800 |
| 126 | 4,800 |
| 127 | 4,800 |
| 128 | 4,800 |
| 129 | 4,800 |
| 130 | 4,800 |
| 131 | 4,800 |
| 132 | 4,800 |
| 133 | 4,800 |
| 134 | 4,800 |
| 135 | 4,800 |
| 136 | 4,800 |
| 137 | 4,800 |
| 138 | 4,800 |
| 139 | 4,800 |
| 140 | 4,800 |
| 141 | 4,800 |
| 142 | 4,800 |
| 143 | 4,800 |
| 144 | 4,800 |

BUA INCLUDES IMPERVIOUS SURFACE AND PARTIALLY IMPERVIOUS SURFACE TO THE EXTENT THAT THE PARTIALLY IMPERVIOUS SURFACE DOES NOT ALLOW WATER TO INFILTRATE THROUGH THE SURFACE AND INTO THE SUBSOIL: BUILDINGS, STORMWATER DRIVEWAYS.

"Built-upon area" does not include:
- a slatted deck;
- the water area of a swimming pool;
- a surface of number 57 stone, as designated by the American Society for Testing and Materials, laid at least four inches thick over a geotextile fabric;
- a trail as defined in G.S. 113A-85 that is either unpaved or paved as long as the pavement is porous with a hydraulic conductivity greater than 0.031 centimeters per second (1.41 inches per hour); or
- landscaping material, including, but not limited to, gravel, mulch, sand, and vegetation, placed on areas that receive pedestrian or bicycle traffic or on portions of driveways and parking areas that will not be compacted by the weight of a vehicle, such as THE AREA BETWEEN SECTIONS OF PAVEMENT THAT SUPPORT THE WEIGHT OF A VEHICLE.

**GRETCHEN PINES SUBDIVISION PHASE 5 BUILT UPON AREA**
**WATERSHED: HOW**

| | | | |
|---|---|---|---|
| Total Property Area = | 41.855 AC | 1,823,204 | SF |
| Area below NHWL= | 0 Ac | - | SF |
| Total Project Area (TPA) = | 41.855 Ac | 1,823,204 | SF |
| Existing BUA (EBUA)= | 0 AC | - | SF |

| DESCRIPTION | NO. LOTS | DRIVEWAY | HOUSE AREA/LOT | BUA |
|---|---|---|---|---|
| PEWTER ASPHALT | | | | 37,118 |
| ROAD 1 - NORTH | | | | 27,283 |
| ROAD 1 -SOUTH | | | | 23,544 |
| | | | | |
| Lots | 27 | | 4800 | 129,600 |
| | | | TOTAL BUA | 217,545 |

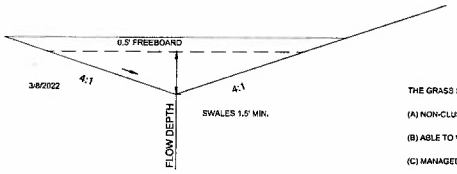
**15A NCAC 2H .1005(1): CALCULATION OF PROJECT DENSITY.**
(d) A project with existing development may use the calculation method in Sub-Item (3)(a) or shall have the option of calculating project density as the difference of total built-upon area minus existing built-upon area divided by the difference of total project area minus existing built-upon area:

| | | | |
|---|---|---|---|
| (1) TBUA - EBUA | 217,545 | - | 217,545 |
| (2) TPA-EBUA = | 1,823,204 | - | 1,823,204 |
| PROJECT DENSITY | | = (1) / (2) | 11.93% |

SINCE DENSITY IS LESS THAN 12% IT IS A LOW DENSITY PROJECT

In accordance with Title 15 NCAC 2H.1000 and S.L. 2006-246, the Stormwater Management Regulations, deed restrictions and protective covenants are required for **Low Density Residential Subdivisions** where lots will be subdivided and sold. Deed restrictions and protective covenants are necessary to ensure that the development maintains a "built-upon" area consistent with the applicable regulation governing the density level.

SEE SWALE TABLE FOR DIMENSIONS AND LINER




TYPICAL TRIANGULAR SWALE
1"=20'

THE GRASS SPECIES IN THE SWALE SHALL BE:

(A) NON-CLUMPING AND DEEP-ROOTED BERMUDA OR TALL FESCUE;

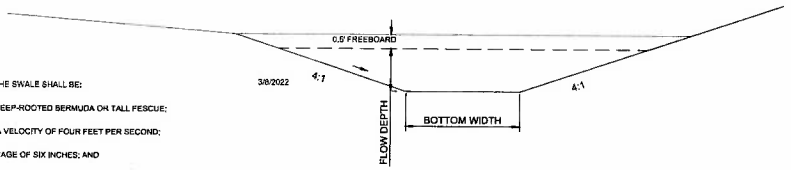
(B) ABLE TO WITHSTAND A VELOCITY OF FOUR FEET PER SECOND;

(C) MANAGED AT AN AVERAGE OF SIX INCHES; AND

(D) NOT BE CUT LOWER THAN FOUR INCHES.

(E) GRASS NEEDS TO BE WATERED FREQUENTLY FOR THE FIRST THREE WEEKS AFTER PLANTING.

(F) IF GRASS IS NOT IN GOOD CONDITION, SOD WILL BE REQUIRED.




TYPICAL TRAPEZOIDAL SWALE
1"=20'

1 **SWALE DETAILS**

**Conveyance Swale Design Information - Gretchen Pines Phase 5** REV 3-13 2024

| Swale No | Drainage Area (ac) | Impervious Area (ac) | Pervious Area (ac) | C | Q (cfs) | Slope (%) | V allow (fps) | Vactual (fps) | Flow Depth (ft) | Type | Side Slope | Bottom Width (ft) | Freeboard (ft) | Top Width (ft) | Liner | GRASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.30 | 0.11 | 1.17 | 0.3 | 3.41 | 2.1 | 5 | 3.41 | 0.78 | TRI | 4:1 | 0 | 0.5 | 6.24 | NA GREEN S75 | BERMUDA |
| 2 | 0.12 | 0.18 | 0.34 | 0.6 | 1.65 | 2.10 | 5 | 1.68 | 0.65 | TRI | 4:1 | 0 | 0.5 | 5.20 | NA GREEN S75 | BERMUDA |
| 3 | 4.18 | 0.69 | 3.49 | 0.30 | 10.57 | 8.00 | 5 | 3.41 | 0.69 | TRAP | 4:1 | 2 | 0.5 | 7.52 | NA GREEN S75 | BERMUDA |
| 4 | 0.29 | 0.07 | 0.22 | 0.34 | 0.87 | 7.00 | 5 | 1.34 | 0.41 | TRI | 4:1 | 0 | 0.5 | 3.28 | NA GREEN S250 | BERMUDA |
| 5A | 3.33 | 0.33 | 3.00 | 0.33 | 4.06 | 9.50 | 5 | 3.33 | 0.40 | TRAP | 4:1 | 2 | 0.5 | 5.20 | NA GREEN S150 | BERMUDA |
| 5B | 1.33 | 0.27 | 0.86 | 0.34 | 3.37 | 4.00 | 5 | 2.02 | 0.50 | TRAP | 4:1 | 2 | 0.5 | 6.00 | NA GREEN S75 | BERMUDA |
| 6 | 0.57 | 0.16 | 0.41 | 0.37 | 1.87 | 9.50 | 5 | 2.31 | 0.30 | TRAP | 4:1 | 2 | 0.5 | 4.40 | NA GREEN S75 | BERMUDA |
| 7 | 3.48 | 0.35 | 3.13 | 0.35 | 4.39 | 8.00 | 5 | 2.99 | 0.41 | TRAP | 4:1 | 2 | 0.5 | 5.28 | NA GREEN S150 | BERMUDA |
| 8 | 4.04 | 0.76 | 3.28 | 0.30 | 10.62 | 7.00 | 5 | 4.05 | 0.53 | TRAP | 4:1 | 3 | 0.5 | 7.24 | NA GREEN SC150 | BERMUDA |
| 9A | 1.74 | 0.32 | 1.42 | 0.30 | 4.57 | 5.00 | 5 | 2.42 | 0.70 | TRI | 4:1 | 0 | 0.5 | 5.80 | NA GREEN SC150 | BERMUDA |
| 9B | 3.81 | 0.67 | 3.14 | 0.30 | 10.00 | 4.45 | 5 | 3.48 | 0.85 | TRI | 4:1 | 0 | 0.5 | 6.80 | NA GREEN S75 | BERMUDA |
| 9C | 1.39 | 0.25 | 0.94 | 0.32 | 3.31 | 4.45 | 5 | 2.08 | 0.65 | TRI | 4.01 | 0 | 0.5 | 5.20 | NA GREEN S75 | BERMUDA |
| 10 | 1.53 | 0.11 | 1.41 | 0.30 | 3.99 | 7.00 | 5 | 2.72 | 0.62 | TRI | 4:1 | 0 | 0.5 | 4.96 | NA GREEN C125 | BERMUDA |
| 11 | 0.62 | 0.05 | 0.57 | 0.30 | 1.63 | 5.00 | 5 | 1.56 | 0.52 | TRI | 4:1 | 0 | 0.5 | 4.16 | NA GREEN S75 | BERMUDA |
| 12 | 0.11 | 0.04 | 0.07 | 0.44 | 0.42 | 5.00 | 5 | 0.86 | 0.40 | TRI | 4:1 | 0 | 0.5 | 3.20 | NA GREEN C125 | BERMUDA |
| 13 | 2.53 | 0.45 | 2.08 | 0.30 | 6.64 | 2.89 | 5 | 2.32 | 0.61 | TRAP | 4:1 | 2 | 0.5 | 7.20 | NA GREEN C125 | BERMUDA |
| 14 | 3.10 | 0.45 | 2.65 | 0.30 | 8.14 | 6.25 | 5 | 3.37 | 0.65 | TRAP | 4:1 | 4 | 0.5 | 7.50 | NA GREEN C125 | BERMUDA |
| 15 | 1.31 | 0.00 | 1.31 | 0.30 | 3.44 | 3.60 | 5 | 2.03 | 0.55 | TRAP | 4:1 | 1 | 0.5 | 5.40 | NA GREEN C125 | BERMUDA |
| 16 | 4.32 | 0.20 | 4.12 | 0.30 | 11.34 | 6.50 | 5 | 3.66 | 0.52 | TRAP | 4:1 | 4 | 0.5 | 8.16 | NA GREEN C125 | BERMUDA |
| 17 | 2.57 | 0.44 | 2.08 | 0.30 | 6.62 | 7.50 | 5 | 3.20 | 0.60 | TRAP | 4:1 | 3 | 0.5 | 7.80 | NA GREEN C125 | BERMUDA |

No. of Swales = 20

PROVIDE 0.5' FREEBOARD MINIMUM. TOP WIDTH IS AT FLOW DEPTH MAX 4.05

USE BERMUDA GRASS OR EQUAL

**FOR AGENCY REVIEW 7-30-2024**

REVISIONS:
11-27-2023 REV SWALE TABLE - SW # 1
3-1-2024 REV SWALE TABLE - SW # 1
4-15-2024 REV SWALE TABLE - SW # 1
5/7/2024 REV TO PLANNING

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030319 7/30/2024 ENGINEER MARTHA BRIGHT

KEN BRIGHT ASSOCIATES PLLC
P-0781
CONSULTING ENGINEERS
SOIL & EROSION CONTROL
P.O. BOX 1573 1005 S. HORNE ST.
SANFORD, NC 27331
PHONE: (919) 776-3444
e-mail: kvkright@kenbrightengineering.com
www.kenbrightengineering.com

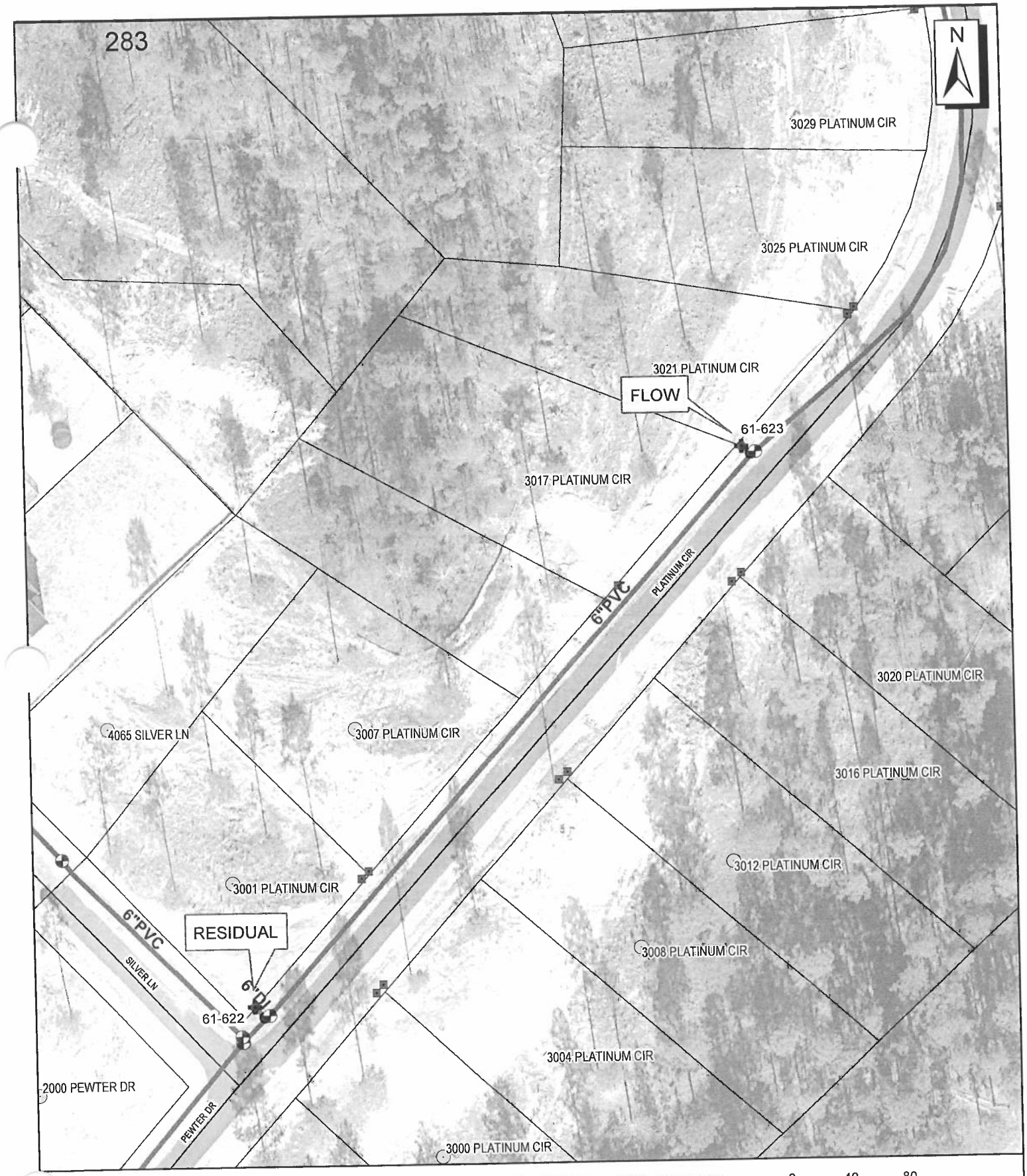
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CONTACT:
STEVE HARRIS
T.K.C.S.J.M. HARRIS LLC
1400 CHANEL ROAD
CARTHAGE N.C. 28327
(910) 690-1268

DATE: 7-30-2024
SCALE: NA
GRETCHEN PINES SUBDIVISION PHASE 5
STORMWATER NOTES & SHEDULES

6 OF 6

FILE: CP-GRETCHEN-3021.12




# MOORE COUNTY PUBLIC WORKS
# ENGINEERING DIVISION

## 3021 PLATINUM CIR FLOW TEST

**Date: 5/3/2024**

0 40 80 Feet

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Grid is based on North Carolina State Plane Coordinate System NAD83 (feet).

# HYDRANT FLOW TEST REPORT

**LOCATION:** 3021 PLATINUM CIR
**DATE:** 5/3/2024
**TIME:** 10:45 AM

**TEST MADE BY:** DFH & ADS
**REPRESENTATIVE OF:** MOORE COUNTY PUBLIC UTILITIES
**WITNESS:** N/A

**PURPOSE OF TEST:** FIRE FLOW

**CONSUMPTION RATE DURING TEST:** N/A GPM
**IF PUMPS AFFECT TEST, INDICATE PUMPS OPERATING:**

| FLOW HYDRANT #s | $A^1$ | $A^2$ | $A^3$ |
|---|---|---|---|
| | 61-623 | | |
| SIZE NOZZLE: | 2 1/2 IN | | |
| PITOT READING: | 14 PSI | | |
| TOTAL GPM: | 630 GPM | | |

**RESIDUAL HYDRANT #** 61-622
**STATIC $_B$** 97 PSI
**RESIDUAL $_B$** 17 PSI

**PROJECTED RESULTS AT** 20 PSI **RESIDUAL** 617 GPM

**REMARKS:** SEVEN LAKES NORTH TANK = 26' ;
HWY 73 BP & HWY 211 BP EACH HAVE ONE PUMP ON

*Scott Cole, NCLSS*
*312 Copples Road Ext*
*Asheboro, NC 27205*
*(336) 460-4554*

May 31, 2024

TKCSJM Harris LLC
Attn: Mr. Steve Harris
4291 Dowd Road
Carthage, NC 28327

Re: Gretchen Pines Phase 5 – Soil areas review

Mr. Harris,

I have reviewed the proposed lot configuration for Gretchen Pines Phase 5 that consists of 27 new building lots. This review focused on usable soil areas for the installation of subsurface wastewater disposal systems (septic tank systems).

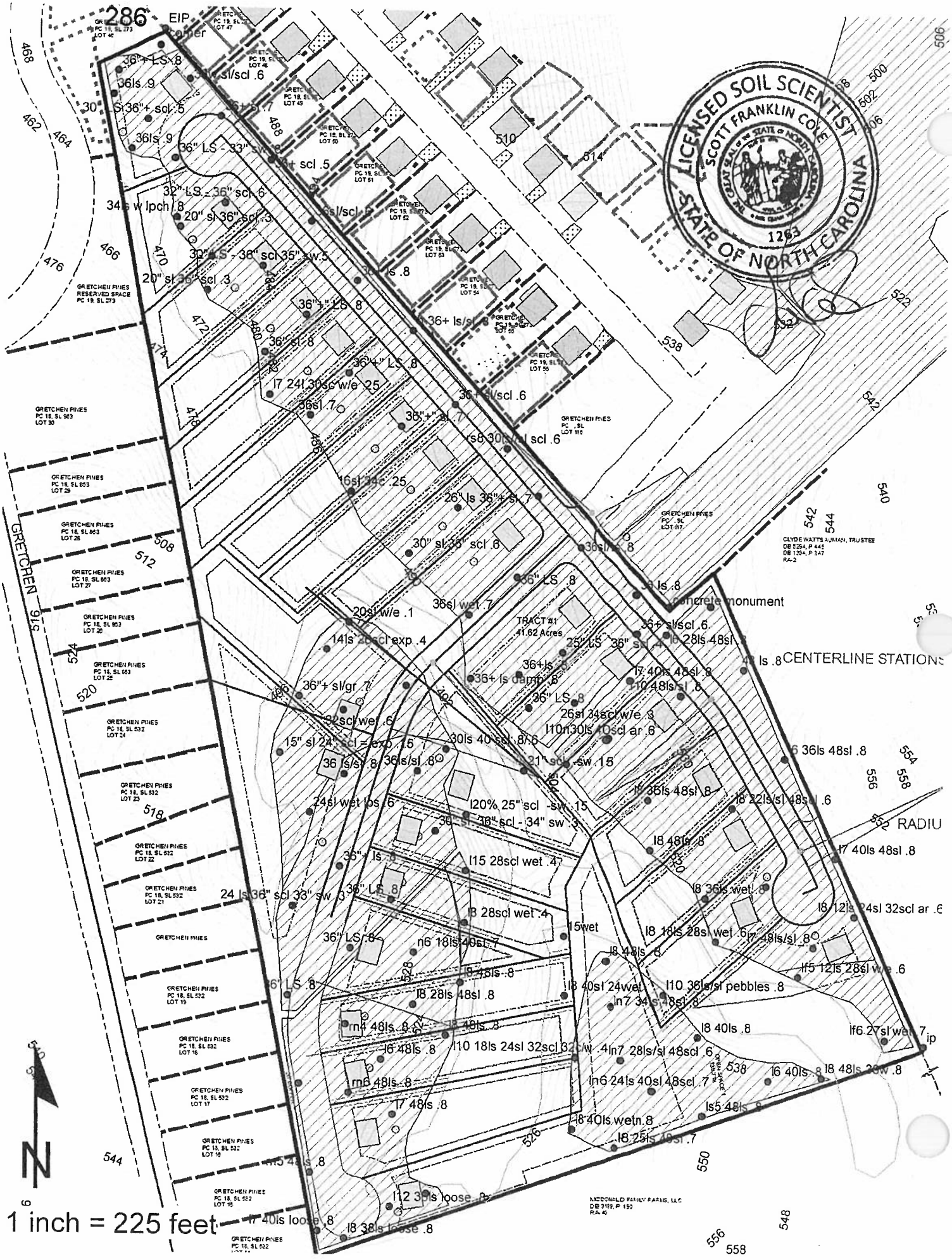
My findings are that each lot contains suitable soil that can be permitted for a septic tank system. However, due to varying soil quality, usable soil depth, available space and topography / landscape position, the type of septic systems may vary from building lot to building lot. Additionally, due to limited suitable soil area on some building lots, the building location, building footprint, bedroom count and driveway location may require the septic system drainfield to be designed prior to issuance of Improvement Permits.

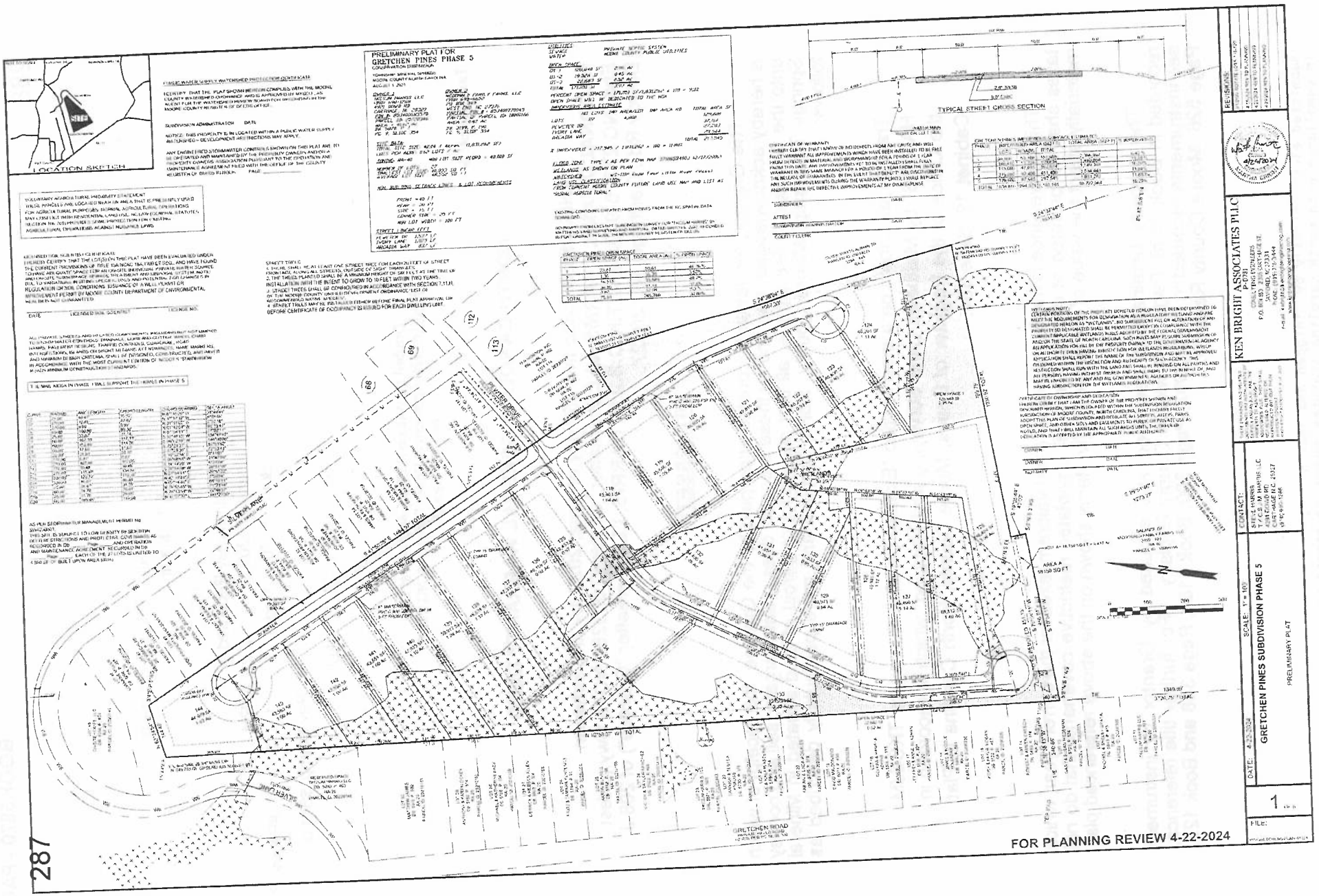
Please see the attached map that shows the location of usable soils in Gretchen Pines Phase 5.

I am pleased to be of service in this matter and can be contacted at your convenience if you have questions.

Scott Cole
NC Licensed Soil Scientist
(336) 460-4554




286
EIP
corner
LICENSED SOIL SCIENTIST
SCOTT FRANKLIN COX
STATE OF NORTH CAROLINA
1263
TRACT #1
41.62 Acres
CENTERLINE STATIONS
RADIU
concrete monument
GRETCHEN PINES
GRETCHEN
CLYDE WATTS AUMAN, TRUSTEE
DB 5284, P 445
DB 1394, P 347
RA-2
MCDONALD FAMILY FARMS, LLC
DB 2155, P 150
RA-40
1 inch = 225 feet


PRELIMINARY PLAT FOR
GRETCHEN PINES PHASE 5
LOCATION SKETCH
TYPICAL STREET CROSS SECTION
KEN BRIGHT ASSOCIATES PLLC
GRETCHEN PINES SUBDIVISION PHASE 5
PRELIMINARY PLAT
FOR PLANNING REVIEW 4-22-2024
287

For Registration Register of Deeds
Judy D. Martin

Moore County, NC
Electronically Recorded
June 21, 2022 2:25:16 PM
Book: 5870 Page: 1 - 2 #Pages: 2
Fee: $26.00 NC Rev Stamp: $664.00
Instrument # 2022010869

Drafted by William H. Pate, Attorney at Law
Mail To: 120 Applecross Road, Pinehurst, NC 28370
No Title Search

Tax Stamps: $

# NORTH CAROLINA GENERAL WARRANTY DEED

**THIS DEED** made this 25th day of June, 2022, by and between **McDONALD FAMILY FARMS, LLC** (hereafter "Grantor") of 3286 NC73 Hwy., West End, NC 27376-9132 and **T.K.C.S.J.M. HARRIS, LLC** (hereafter "Grantee") of 208 J Dowdy Rd., Carthage, NC 28327.

## WITNESSETH:

The Grantor, for valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in Mineral Springs Township, Moore County, North Carolina and more particularly described as follows:

Tract #1 as shown on a map entitled "Exempt Division Survey for TKCSJM HARRIS" by Matthews Land Surveying and Mapping, which is recorded in the Office of the Register of Deeds, Moore County, North Carolina in Plat Cabinet 19, Slide 354.

This conveyance is made subject to: (i) ad valorem taxes for the current year, which taxes shall be prorated at closing;; and (iii) unviolated restrictive covenants that do not materially affect the value of the property; (iv) items shown on the above referenced plat.

The property hereinabove described was acquired by Grantor by instrument recorded in Book 3199, Page 190, Moore County Registry. For further title reference, see instruments recorded in Book 2992, Page 300, Book 1180, Page 388 and Book 127, Page 526, Moore County Registry.

Submitted electronically by "Thigpen and Jenkins, LLP"
in compliance with North Carolina statutes governing recordable documents
and the terms of the submitter agreement with the Moore County Register of Deeds.

**TO HAVE AND TO HOLD** the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions noted herein.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and includes singular, plural, masculine, feminine or neuter as required by context.

**IN WITNESS WHEREOF**, the Grantor has hereunto set his hand and seal, the day and year first above written.

**McDONALD FAMILY FARMS, LLC**

BY: _____ (Seal)
**ANGUS A. MCDONALD, JR.**, General Manager of McDonald Family Farms, LLC

**STATE OF NORTH CAROLINA**
**COUNTY OF MOORE**

I, Notary Public of the County and State aforesaid, certify that Angus A. McDonald, Jr., General Partner of McDonald Family Farms, LLC, personally appeared before me this day and acknowledged the execution of the foregoing instrument.

Witness my hand and official stamp or seal, this 2nd day of June, 2022.

NANCY M. WILLIAMS NOTARY PUBLIC MOORE COUNTY, N.C. MY COMMISSION EXPIRES 12/14/2024

Notary Public

My commission expires: 12/14/2024

For Registration Register of Deeds
William Britton

Moore County, NC
Electronically Recorded
June 7, 2024 11:10:02 AM
Book: 6183 Page: 374 - 375 #Pages: 2
Fee: $26.00 NC Rev Stamp: $16.00
Instrument # 2024007605

# NORTH CAROLINA GENERAL WARRANTY DEED

This instrument prepared by: Frank C. Thigpen, Thigpen and Jenkins, L.L.P.
Mail after recording to: Grantee
**NO TITLE EXAMINATION COMPLETE**

Revenue Stamps-$16.00

This Deed made on June 7, 2024 by and between:

| GRANTOR: | GRANTEE: |
|---|---|
| **McDonald Family Farms, LLC**<br>a NC limited liability company | **TKCSJM Harris, LLC**<br>a NC limited liability company<br><br>**Mailing Address:**<br>208 J Dowdy Rd<br>Carthage, NC 28327 |

WITNESSETH, that the Grantors, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has bargained and sold, and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lots, tracts, or parcels of land in Sheffield Township, Moore County, North Carolina, and more particularly described as follows:

That tract of land containing 18,159 Sq. FT., Area "A", as shown on a plat thereof recorded in the office of the Register of Deeds of Moore County, North Carolina in Plat Cabinet 20, Slide 297, and said Plat is incorporated herein by reference thereto for more specific description thereof.

THE ABOVE DESCRIBED PARCEL ☐ DOES ☒ DOES NOT INCLUDE THE PRINCIPAL RESIDENCE OF THE GRANTOR.

THIS CONVEYANCE IS MADE SUBJECT TO: (I) AD VALOREM TAXES FOR THE CURRENT YEAR, WHICH TAXES SHALL BE PRORATED AT CLOSING; (II) UTILITY EASEMENTS OF RECORD; (III) RESTRICTIONS ENFORCEABLE AGAINST THE PROPERTY.

The property hereinabove described was acquired by the Grantor by deed recorded in Deed Book 3199, Page 190, and Deed Book 5870, Page 1, Moore County Registry.

Submitted electronically by "Thigpen and Jenkins, LLP"
in compliance with North Carolina statutes governing recordable documents
and the terms of the submitter agreement with the Moore County Register of Deeds.

**THE LAW FIRM OF THIGPEN AND JENKINS, LLP, HAS NEITHER EXAMINED NOR CERTIFIES TITLE TO THE ABOVE DESCRIBED PROPERTY.**

TO HAVE AND TO HOLD THE AFORESAID LOT OR PARCEL OF LAND AND ALL PRIVILEGES AND APPURTENANCES THERETO BELONGING TO THE GRANTEE IN FEE SIMPLE.

And the Grantors covenants with the Grantee, that Grantors are seized of said premises in fee simple and has the right to convey in fee simple; that the title is marketable and free and clear of all encumbrances and that the Grantors will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

IN WITNESS WHEREOF, the said Grantors have hereunto set their hands and seals the day and year first above written.

**McDonald Family Farms, LLC**
a NC limited liability company

_____ (SEAL)
**Angus A. McDonald, Jr., Manager**

STATE OF North Carolina
COUNTY OF Moore

I certify that the following person(s) personally appeared before me this day, each acknowledging to me that he or she signed the foregoing document: Principal(s): **Angus A. McDonald, Jr., Manager of McDonald Family Farms, LLC, a NC limited liability company, being so authorized.**

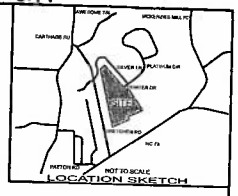
Date: 06/07/2024

_____
Notary Public

My Commission expires: 09/27/27

LEYDY DUENAS RENTERIA
My Commission Expires
NOTARY PUBLIC
September 27, 2027
MOORE COUNTY, NC

297




STATE OF NORTH CAROLINA
COUNTY OF MOORE

I, Danielle Diaff, REVIEW OFFICER OF MOORE COUNTY, NORTH CAROLINA, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING

REVIEW OFFICER DATE: 4/25/2024

I, JOHN G. MATTHEWS, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL GPS/GNSS SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:
(1) CLASS OF SURVEY: CLASS A
(2) POSITIONAL ACCURACY: <0.10'
(3) TYPE OF GPS FIELD PROCEDURE: RTK NETWORKS
(4) DATES OF SURVEY: 09/05/2023
(5) PUBLISHED/FIXED-CONTROL USE: NC CORS
(6) GEOID MODEL: GeoidNet18_NGS2012b
(7) COMBINED GRID FACTOR(S): 0.99995785
(9) UNITS: US SURVEY FEET

GRID TO GROUND SCALE POINT:
N(y): 540213.431 US SURVEY FEET
E(x): 1639913.91 US SURVEY FEET

I, JOHN G. MATTHEWS, CERTIFY THAT THIS SURVEY IS OF ANOTHER CATEGORY, SUCH AS THE RECOMBINATION OF EXISTING PARCELS, A COURT-ORDERED SURVEY, OR OTHER EXEMPTION OR EXCEPTION TO THE DEFINITION OF SUBDIVISION.

I, JOHN G. MATTHEWS, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN (DEE REFERENCE TABLE); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN (SEE REFERENCE TABLE); THAT THE RATIO OF PRECISION OF POSITIONAL ACCURACY AS CALCULATED IS 1:30000+; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS 23RD DAY OF APRIL, A.D., 2024.

SEAL L-5020 NORTH CAROLINA SURVEYOR JOHN G. MATTHEWS

PROFESSIONAL LAND SURVEYOR, L-5020

PLAT CABINET 20 SLIDE 297

FOR REGISTRATION REGISTER OF DEEDS
April 25, 2024 04:37:31 PM
BOOK 09 Page 297-297
FEE: $21.00
INSTRUMENT # 2024005426

ONSITE HOMES, LLC
DB 6064, P 403
PC 19, SL 273
LOT 45

LORRAINE MILLER
DB 6936, P 356
PC 19, SL 273
LOT 46

WENDY E. VISSCHERS
DB 5941, P 31
PC 19, SL 273
LOT 47

APDC PROPERTY MANAGEMENT, INC.
DB 5946, P 326
PC 19, SL 273
LOT 48

VINCENT E. WADE & DEBRA WADE
DB 5991, P 415
PC 19, SL 273
LOT 49

RACHEL PATE & CHRISTOPHER PATE
DB 6071, P 204
PC 19, SL 273
LOT 50

MATTHEW RYAN BONNETT & SHANNON COLLEEN BONNETT
DB 6044, P 1
PC 19, SL 273
LOT 51

JOLEEN MARIE ARMSTRONG
DB 5941, P 155
PC 19, SL 273
LOT 52

JOHN M. MAYER, IV
DB 6024, P 540
PC 19, SL 273
LOT 53

JAMES D. YATES & BETH L. YATES
DB 6027, P 75
PC 19, SL 273
LOT 54

ADAM DEVINEY & MASALY N. DEVINEY
DB 5944, P 114
PC 19, SL 273
LOT 55

PAUL R. MURPHY & MARY LOU MURPHY
DB 5837, P 54
SEE: DB 5805, P 482
PC 19, SL 273
LOT 56

D. R. HORTON, INC.
DB 5994, P 462
PC 20, SL 3
LOT 116

D. R. HORTON, INC.
DB 5994, P 462
PC 20, SL 3
LOT 117

T.K.C.S.J.M. HARRIS, LLC
DB 5990, P 463
TRACT 1
PC 19, SL 273
RESERVED SPACE

MATTHEW ALEXANDER JAMES
DB 5930, P 332
PC 19, SL 863
LOT 30

ANTHONY W. DICKEY & KAREN S. DICKEY
DB 5785, P 514
PC 19, SL 863
LOT 29

MICHAEL RACK & KATHARINE L. RACK
DB 5766, P 584
PC 19, SL 863
LOT 28

DERRICK ALLEN & HESSON ALLEN
DB 5870, P 304
PC 19, SL 863
LOT 27

FRITZ W. FONTENOT & TAMARA L. FONTENOT
DB 5754, P 91
PC 19, SL 863
LOT 26

AARON MATTHEW BUNNELL
DB 5786, P 196
PC 19, SL 863
LOT 25

VICTOR DANIEL SANCHEZ & TAYLOR WOODS SANCHEZ
DB 5922, P 462
PC 19, SL 532
LOT 24

T.K.C.S.J.M. HARRIS, LLC
DB 5871, P 303
PC 19, SL 532
LOT 23

BARROCK ALAN KRAUSE & TERESA KRAUSE
DB 5730, P 378
PC 19, SL 532
LOT 22

KYLE RYAN PLASTERER & KALA ASHLEY PLASTERER
DB 5750, P 214
PC 19, SL 532
LOT 21

FABIAN ROSALES & LINDA RASHEL ROSALES
DB 5729, P 379
PC 19, SL 532
LOT 20

DAVID LEONARD MALDONADO, JR.
DB 6071, P 432
PC 19, SL 532
LOT 19

DELMAR ADKINS, JR. & PAMELA ADKINS
DB 5506, P 188
PC 19, SL 532
LOT 18

JEFFREY S. GLASHAN & ANNE P. GLASHAN
DB 5618, P 321
PC 19, SL 532
LOT 17

JAMES P. HOLLADAY & NICOLE KRISTINE HOLLADAY
DB 5760, P 561
PC 19, SL 532
LOT 16

KORY A. HOGAN & KAYLIE HOGAN
DB 5322, P 457
PC 19, SL 532
LOT 15

ROBERT TAYLOR CREECH & AMBER RENEE CREECH
DB 5481, P 129
PC 19, SL 532
LOT 14

GARY HEDEMAN & SUSAN HEDEMAN
DB 5723, P 574
PC 19, SL 532
LOT 13

TRACT 1R
42.04 ACRES

TRACT #1
41.62 ACRES

CLYDE WATTS ALMAN, TRUSTEE
DB 5236, P 445
DB 1394, P 347
RA-2

MCDONALD FAMILY FARMS, LLC
DB 3199, P 190
RA-40
39 ACRES +/-

AREA A
16159 SQ FT

LINE TO BE REMOVED 451.13'

4"X4"ECM 8"AG
N: 548913.892 US SURVEY FEET
E: 1637073.21 US SURVEY FEET

4"X4"ECM 3"AG

5/8"EIS 4"AG
N: 547868.242 US SURVEY FEET
E: 1637493.06 US SURVEY FEET

NCGS MONUMENT
"DUMP"
N: 548482.904 US SURVEY FEET
E: 1637325.74 US SURVEY FEET

EN AT 3/4"EIP

1"EIP 3"AG

1"EIP 4"AG

EN AT 5/8"EIS

5/8"NIS 1"AG

5/8"NIS 3"AG

5/8"NIS FL

N 63°34'54" E 144.48'

S 41°07'32" E 1480.97'

N 10°56'39" W 2339.98'

N 49°42'06" E 1113.50'

S 41°38'04" E 1007.25'

S 24°37'54" E 1031.55'

S 19°05'49" E 40.00'

S 70°54'11" W 459.54'

S 70°58'13" W 240.66'

S 70°54'11" W 40.00'

S 28°51'46" E 1273.27'

799.79'
1250.92' TOTAL

1349.89'
3795.76' TOTAL

SILVER LANE
(PUBLIC 50' RIGHT-OF-WAY)
PAVED 20' WIDTH
PER DB 5941, P 31

GRETCHEN ROAD
(PUBLIC 50' RIGHT-OF-WAY)
PAVED 20' WIDTH
PER DB 5730, P 378

PEWTERS DRIVE
(PUBLIC 50' RIGHT-OF-WAY)
PAVED 20' WIDTH
PER DB 5994, P 462

CLYDE WATTS ALMAN, TRUSTEE
DB 5236, P 445
DB 1394, P 347
RA-2

NCSR 1336
(PUBLIC 60' RIGHT-OF-WAY)

LEGEND OF SYMBOLS AND ABBREVIATIONS

| | |
|---|---|
| CP | COMPUTED POINT |
| EA | EXISTING AXLE |
| ECM | EXISTING CONCRETE MONUMENT |
| EIP | EXISTING IRON PIPE |
| EIS | EXISTING IRON STAKE |
| NIS | NEW IRON STAKE |
| FH | FIRE HYDRANT |
| GV | GAS VALVE |
| UP | UTILITY POLE |
| SMH | SANITARY SEWER MANHOLE |
| SDMH | STORM MANHOLE |
| TP | TELEPHONE PEDESTAL |
| TR | TRANSFORMER |
| WM | WATER METER |
| WV | WATER VALVE |
| W | WELL |
| #AG | (#) INCHES ABOVE GRADE |
| ASPT | ABOVEGROUND PROPANE TANK |
| #BG | (#) INCHES BELOW GRADE |
| CB | CATCH BASIN |
| CL | CENTERLINE |
| CO | CLEAN OUT |
| CMP | CORRUGATED METAL PIPE |
| CPP | CORRUGATED PLASTIC PIPE |
| DB | DEED BOOK |
| DI | DROP INLET |
| EJB | ELECTRIC JUNCTION BOX |
| EM | ELECTRIC METER |
| EMN | EXISTING MAG NAIL |
| EN | EXISTING NAIL |
| EOP | EDGE OF PAVEMENT |
| EPK | EXISTING PK NAIL |
| FRRR | EXISTING RAILROAD SPIKE |
| FES | FLARED END SECTION |
| FOM | FIBER OPTIC MARKER |
| FL | FLUSH WITH GRADE |
| HVAC | HEATING, VENTILATION, & AIR CONDITIONING |
| ICV | IRRIGATION CONTROL VALVE |
| MBS | MINIMUM BUILDING SETBACKS |
| NKF | NOW OR FORMERLY |
| NMN | NEW MAG NAIL |
| P | PAGE |
| PC | PLAT CABINET |
| RCP | REINFORCED CONCRETE PIPE |
| ROW | RIGHT-OF-WAY |
| SL | SLIDE |
| TBC | TOP BACK CURB |
| TDC | TOE OF CURB |
| UPT | UNDERGROUND PROPANE TANK |
| YI | YARD INLET |

SURVEYED PROPERTY BOUNDARY
OTHER SURVEYED LINE
LINES NOT SURVEYED
RIGHT-OF-WAY
OVERHEAD ELECTRIC LINES
FENCE
SANITARY SEWER LINES
TIE LINE

REVISIONS:
04/10/2024 - COMBINE PROPERTY

PUBLIC WATER SUPPLY WATERSHED PROTECTION CERTIFICATE

I, Danielle Diaff, CERTIFY THAT THE PLAT SHOWN HEREON COMPLIES WITH THE MOORE COUNTY WATERSHED ORDINANCE AND IS APPROVED BY COUNTY REGISTER OF DEEDS OFFICE.

WATERSHED ADMINISTRATOR DATE: 4/25/2024

NOTICE: THIS PROPERTY IS LOCATED WITHIN A PUBLIC WATER SUPPLY WATERSHED - DEVELOPMENT RESTRICTIONS MAY APPLY

CERTIFICATE OF EXEMPTION

I, Danielle Diaff, HEREBY CERTIFY THAT THE DIVISION OF PROPERTY SHOWN AND DESCRIBED HEREON IS EXEMPT FROM THE MOORE COUNTY SUBDIVISION ORDINANCE BY DEFINITION IN MOORE ORDINANCE.

SUBDIVISION ADMINISTRATOR DATE: 4/25/2024

NCGS 1590-802 REVIEW ONLY STATEMENT

APPROVAL OF THIS EXEMPT SUBDIVISION PLAT CONSTITUTES COMPLIANCE WITH NORTH CAROLINA GENERAL STATUTE 1590-802 ONLY. FURTHER DEVELOPMENT OF THE PARCELS SHOWN SUBSEQUENT TO THE DATE OF THIS PLAT SHALL BE SUBJECT TO ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, STATUTES, ORDINANCES AND/OR CODES.

NOTES:
1. ACREAGE DETERMINED BY COORDINATE METHOD
2. TAX PARCEL ID: 20253548 & 10000186
3. ZONING: RA-40
4. BUILDING SETBACKS PER LDO:
FRONT = 40'
SIDE = 15'
REAR = 30'
CORNER SIDE = 25'
5. ALL ADJOINERS ZONED RA-20 UNLESS OTHERWISE NOTED.
6. PUBLIC WATER SUPPLY WATERSHED: WS-IIP
7. THIS PROPERTY IS NOT IN A SPECIAL FLOOD HAZARD AREA ACCORDING TO MAP NO. 3720613400J EFFECTIVE DATE 10/17/2006.
8. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE SEARCH AND IS SUBJECT TO ANY EASEMENTS OR CONVEYANCES OF RECORD.
9. NO ATTEMPTS MADE TO LOCATE UNDERGROUND UTILITIES
10. SETBACKS SHOWN ARE FROM RECORD DATA AND SHOULD BE VERIFIED BEFORE DESIGN OR CONSTRUCTION.

RECOMBINATION SURVEY FOR

T.K.C.S.J.M. HARRIS, LLC

MINERAL SPRINGS TOWNSHIP
MOORE COUNTY, NORTH CAROLINA

APRIL 10, 2024

0 100' 200' 300'
SCALE 1"= 100'

REFERENCE TABLE:
DEED BOOK 5972, PAGE 1
DEED BOOK 5199, PAGE 180
PLAT CABINET 19, SLIDE 354
MOORE COUNTY REGISTRY

PROPERTY ADDRESS:
180 PEWTER DR.
WEST END, NC 27376

OWNERS ADDRESS:
T.K.C.S.J.M. HARRIS, LLC
209 J DOWDY RD
CARTHAGE, NC 28327
& MCDONALD FAMILY FARMS, LLC
PO BOX 349
WEST END, NC

MATTHEWS LAND SURVEYING & MAPPING, PLLC
7 NW LICENSE P-1943

JOHN G. MATTHEWS L-5020
10 CARTHAGE SQUARE
CARTHAGE, NC 28327
910-947-2127

JOB# 10001 17178

293

ROY COOPER
*Governor*
ELIZABETH S. BISER
*ecretary*
RICHARD E. ROGERS, JR.
*Director*

NORTH CAROLINA
***Environmental Quality***

October 13, 2023

DWR # 20231207
Moore County

TKCSJM Harris LLC
Attn: Steve Harris
208 J Dowdy Road
Carthage, NC 28327

Delivered via email to: gretchenpines@gmail.com

**Subject:** **Approval of Individual 401 Water Quality Certification**
Gretchen Pines Phase 5
USACE Action ID. No. SAW-2020-01356

Dear Mr. Harris:

Attached hereto is a copy of Certification No. WQC006346 issued to TKCSJM Harris, LLC and Steve Harris, dated October 13, 2023. This approval is for the purpose and design described in your application. The plans and specifications for this project are incorporated by reference as part of this Water Quality Certification. If you change your project, you must notify the Division and you may be required to submit a new application package with the appropriate fee. If the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with all conditions. [15A NCAC 02H .0507(d)(2)].

This Water Quality Certification does not relieve the permittee of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project, including those required by, but not limited to, Sediment and Erosion Control, Non-Discharge, Water Supply Watershed, and Trout Buffer regulations.

This Water Quality Certification neither grants nor affirms any property right, license, or privilege in any lands or waters, or any right of use in any waters. This Water Quality Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and does not create any prescriptive right or any right of priority regarding any usage of water. This Water Quality Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed

by virtue of this Water Quality Certification to possess any prescriptive or other right of priority with respect to any other consumptive user.

Upon the presentation of proper credentials, the Division may inspect the property.

This Water Quality Certification shall expire on the same day as the expiration date of the corresponding Section 404 Permit. The conditions shall remain in effect for the life of the project, regardless of the expiration date of this Water Quality Certification.

Non-compliance with or violation of the conditions herein set forth may result in revocation of this Water Quality Certification for the project and may also result in criminal and/or civil penalties.

If you are unable to comply with any of the conditions of this Water Quality Certification you must notify the Fayetteville Regional Office within 24 hours (or the next business day if a weekend or holiday) from the time the permittee becomes aware of the circumstances.

The permittee shall report to the Fayetteville Regional Office any noncompliance with, and/or any violation of, stream or wetland standards [15A NCAC 02B .0200] including but not limited to sediment impacts to streams or wetlands. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the permittee became aware of the non-compliance circumstances.

This approval and its conditions are final and binding unless contested [G.S. 143-215.5].

This Certification can be contested as provided in Chapter 150B of the North Carolina General Statutes by filing a Petition for a Contested Case Hearing (Petition) with the North Carolina Office of Administrative Hearings (OAH) **within sixty (60) calendar days**. Requirements for filing a Petition are set forth in Chapter 150B of the North Carolina General Statutes and Title 26 of the North Carolina Administrative Code. Additional information regarding requirements for filing a Petition and Petition forms may be accessed at http://www.ncoah.com/ or by calling the OAH Clerk's Office at (919) 431-3000.

A party filing a Petition must serve a copy of the Petition on:

William F. Lane, General Counsel
Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601

If the party filing the Petition is not the permittee, then the party must also serve the recipient of the Certification in accordance with N.C.G.S 150B-23(a).

This letter completes the Division's review under section 401 of the Clean Water Act and 15A NCAC 02H .0500. Please contact Chad Turlington at (910) 433-3320 or chad.turlington@ncdenr.gov if you have any questions or concerns.

Sincerely,

DocuSigned by:
Trent Allen
5189C2D3DD5C42B...

Trent Allen
Regional Supervisor
Division of Water Resources
Water Quality Regional Operations Section

Electronic cc: Matthew Martin - USACE Raleigh Regulatory Field Office (via email)
Bill Mullin – Dr. J.H. Carter and Associates, Inc. Environmental Consultants (via email)
DWR 401 & Buffer Permitting Branch Electronic file

## NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

**CERTIFICATION** #WQC006346 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to North Carolina's Regulations in 15 NCAC 02H .0500 and 15A NCAC 02B .0200, to Steve Harris and TKCSJM Harris, LLC who have authorization for the impacts listed below, as described within your application received by the N.C. Division of Water Resources (Division) on August 31, 2023 and by Public Notice issued by the Division on September 6, 2023.

The State of North Carolina certifies that this activity will comply with water quality requirements and the applicable portions of Sections 301, 302, 303, 306, 307 of the Public Laws 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

The following impacts are hereby approved. No other impacts are approved, including incidental impacts. [15A NCAC 02H .0506(b)]

| Type of Impact | Amount Approved Permanent | Amount Approved Temporary | Mitigation Amount Required |
|---|---|---|---|
| **Riparian Wetland** | | | |
| W1 – Road Crossing | 0.190 acres | acres | 0.190 credits |
| W2 – Cul-de-sac | 0.029 acres | acres | 0.029 credits |
| **Intermittent Stream** | | | |
| S1 – Road Crossing | 51 linear feet | linear feet | credits |

This approval requires you to follow the conditions listed in the certification below.

CONDITIONS OF CERTIFICATION [15A NCAC 02H .0507(c)]:

1. Mitigation must be provided for the proposed impacts as specified in the table below. The attached Compensatory Mitigation Responsibility Transfer Form (Form) shall be completed and provided to the Division prior to ***any*** impacts occurring. If the Mitigation Provider specified on the attached Form(s) for the proposed impacts changes after issuance of this Certificate, then the Permittee shall request a revised Compensatory Mitigation Responsibility Transfer Form from the Division prior to conducting any impacts.

| | Compensatory Mitigation Required | River and Sub-basin Number |
|---|---|---|
| Wetland | 0.219 acres (credits) | Cape Fear<br>03030004 |

*Citation: 15A NCAC 02H .0506(c); 15A NCAC 02H .0507(c)*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. In determining that the proposed activity will comply with state water quality standards (including designated uses, numeric criteria, narrative criteria and the state's antidegradation policy), the project must provide for replacement of existing uses through compensatory mitigation.*

2. The permittee shall report to the DWR Fayetteville Regional Office any noncompliance with, and/or any violation of, stream or wetland standards [15A NCAC 02B .0200], including but not limited to sediment impacts to streams or wetlands. Information shall be provided orally within 24 hours (or the next business day if a weekend or holiday) from the time the permittee became aware of the non-compliance circumstances.

   *Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

   *Justification: Timely reporting of non-compliance is important in identifying and minimizing detrimental impacts to water quality and avoiding impacts due to water pollution that precludes any best use on a short-term or long-term basis.*

3. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters beyond the footprint of the approved impacts (including temporary impacts).

   *Citation: 15A NCAC 02H .0506; 15A NCAC 02H .0507(c)*

   *Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule (including, at minimum: aquatic life propagation, survival, and maintenance of biological integrity; wildlife; secondary contact recreation; agriculture); and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis.*

4. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. If the width of the culvert is wider than the stream channel, the culvert shall include multiple boxes/pipes, baffles, benches and/or sills to maintain the natural width of the stream channel. If multiple culverts/pipes/barrels are used, low flows shall be accommodated in one culvert/pipe and additional culverts/pipes shall be installed such that they receive only flows above bankfull.

   Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches, to allow low flow passage of water and aquatic life. If the culvert outlet is submerged within a pool or scour hole and designed to provide for aquatic passage, then culvert burial into the streambed is not required.

For structures less than 72" in diameter/width, and topographic constraints indicate culvert slopes of greater than 2.5% culvert burial is not required, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g. rock ladders, cross-vanes, sills, baffles etc.). Notification, including supporting documentation to include a location map of the culvert, culvert profile drawings, and slope calculations, shall be provided to DWR 30 calendar days prior to the installation of the culvert.

When bedrock is present in culvert locations, culvert burial is not required, provided that there is sufficient documentation of the presence of bedrock. Notification, including supporting documentation such as a location map of the culvert, geotechnical reports, photographs, etc. shall be provided to DWR a minimum of 30 calendar days prior to the installation of the culvert. If bedrock is discovered during construction, then DWR shall be notified by phone or email within 24 hours of discovery.

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.

The establishment of native woody vegetation and other soft stream bank stabilization techniques shall be used where practicable instead of rip-rap or other bank hardening methods.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

*Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. Ensuring that structures are installed properly in waters will ensure that surface water quality standards are met and conditions of waters are suitable for all best uses.*

5. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur.

   Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *North Caroline Department of Transportation Sediment and Erosion Control Manual.*

   All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient

materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.

For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC02B .0200; 15A NCAC 02B .0231*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses; and (21) turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes, or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

6. Sediment and erosion control measures shall not be installed in wetland or waters except within the footprint of temporary or permanent impacts otherwise authorized by this Certification. If placed within authorized impact areas, then placement of such measures shall not be conducted in a manner that results in dis-equilibrium of any wetlands, streambeds, or streambanks. Any silt fence installed within wetlands shall be removed from wetlands and the natural grade restored within two (2) months of the date that DEMLR or locally delegated program has released the specific area within the project to ensure wetland standards are maintained upon completion of the project.

   *Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

   *Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses; and (21) turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes, or reservoirs*

*designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

7. Erosion control matting that incorporates plastic mesh and/or plastic twine shall not be used along streambanks or within wetlands.

   *Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

   *Justification: A project that affects waters shall not be permitted unless the existing uses (including aquatic life propagation and biological integrity), and the water quality to protect such uses, are protected. Protections are necessary to ensure any remaining surface waters or wetlands, and any surface waters or wetlands downstream, continue to support existing uses during and after project completion. The Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards, or would result in secondary or cumulative impacts.*

8. If the project is covered by NPDES Construction Stormwater Permit Number NCG010000 or NPDES Construction Stormwater Permit Number NCG250000, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required.

   *Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

   *Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses; and (21) turbidity in the receiving water shall not exceed 50 Nephelometric Turbidity Units (NTU) in streams not designated as trout waters and 10 NTU in streams, lakes, or reservoirs designated as trout waters; for lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTU; if turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

9. Application of fertilizer to establish planted/seeded vegetation within disturbed riparian areas and/or wetlands shall be conducted at agronomic rates and shall comply with all other Federal, State and Local regulations. Fertilizer application shall be accomplished in a manner that minimizes the risk of contact between the fertilizer and surface waters.

*Citation: 15A 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

*Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

10. If concrete is used during construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state.

    *Citation: 15A 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

    *Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

11. All mechanized equipment operated near surface waters shall be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids, or other toxic materials. Construction shall be staged in order to minimize the exposure of equipment to surface waters to the maximum extent practicable. Fueling, lubrication, and general equipment maintenance shall be performed in a manner to prevent, to the maximum extent practicable, contamination of surface waters by fuels and oils.

    *Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0200; 15A NCAC 02B .0231*

    *Justification: A project that affects waters shall not be permitted unless the existing uses, and the water quality to protect such uses, are protected. Activities must not cause water pollution that precludes any best use on a short-term or long-term basis. As cited in Stream Standards: (12) Oils, deleterious substances, or colored or other wastes: only such amounts as shall not render the waters injurious to public health, secondary recreation, or to aquatic life and wildlife, or adversely affect the palatability of fish, aesthetic quality, or impair the waters for any designated uses. As cited in Wetland Standards: (c)(1) Liquids, fill or other solids, or dissolved gases shall not*

*be present in amounts that may cause adverse impacts on existing wetland uses; and (3) Materials producing color or odor shall not be present in amounts that may cause adverse impacts on existing wetland uses.*

12. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance and compaction.

    *Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .0231*

    *Justification: Wetland standards require maintenance or enhancement of existing uses of wetlands such that hydrologic conditions necessary to support natural biological and physical characteristics are protected; populations of wetland flora and fauna are maintained to protect biological integrity of the wetland; and materials or substances are not present in amounts that may cause adverse impact on existing wetland uses.*

13. In accordance with 143-215.85(b), the permittee shall report any petroleum spill of 25 gallons or more; any spill regardless of amount that causes a sheen on surface waters; any petroleum spill regardless of amount occurring within 100 feet of surface waters; and any petroleum spill less than 25 gallons that cannot be cleaned up within 24 hours.

    *Citation: 15A NCAC 02H .0507(c); N.C.G.S 143-215.85(b)*

    *Justification: Person(s) owning or having control over oil or other substances upon notice of discharge must immediately notify the Department, or any of its agents or employees, of the nature, location, and time of the discharge and of the measures which are being taken or are proposed to be taken to contain and remove the discharge. This action is required in order to contain or divert the substances to prevent entry into the surface waters. Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule (including, at minimum: aquatic life propagation, survival, and maintenance of biological integrity; wildlife; secondary contact recreation; agriculture); and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis.*

14. The permittee and their authorized agents shall conduct all activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act), and any other appropriate requirements of State and Federal Law.

    *Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

    *Justification: Surface water quality standards require that conditions of waters be suitable for all best uses provided for in state rule, and that activities must not cause water pollution that precludes any best use on a short-term or long-term basis. The Division must evaluate if the activity has avoided and minimized impacts to waters, would cause or contribute to a violation of standards, or would result in secondary or cumulative impacts.*

15. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this certification in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance

of this project with a copy of this Water Quality Certification. A copy of this Water Quality Certification shall be available at the project site during the construction and maintenance of this project.

*Citation: 15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c)*

*Justification: Those actually performing the work should be aware of the requirements of this 401 Water Quality Certification to minimize water quality impacts.*

This approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 Permit. The conditions in effect on the date of issuance shall remain in effect for the life of the project, regardless of the expiration date of this Certification. [15A NCAC 02H .0507(c)]

This, the 13th day of October, 2023

DocuSigned by:
Trent Allen
5189C2D3DD5C42B...

Trent Allen
Regional Supervisor
Division of Water Resources
Water Quality Regional Operations Section

ROY COOPER
*Governor*
ELIZABETH S. BISER
*Secretary*
RICHARD E. ROGERS, JR.
*Director*

NORTH CAROLINA
***Environmental Quality***

**COMPENSATORY MITIGATION RESPONSIBILITY TRANSFER FORM**

October 13, 2023

Permittee: TKCSJM Harris, LLC/ Steve Harris

DWR Project # 20231207

Project Name: Gretchen Pines Phase 5

County: Moore

The Division has received an acceptance letter from the NC Division of Mitigation Services (DMS) to satisfy the mitigation requirements set forth in 401 Individual Certification No. WQC006346 issued to TKCSJM Harris, LLC and Steve Harris, dated October 12, 2023 as provided in the table below.

| | **Compensatory Mitigation** | **River and 8-digit HUC Number** |
|---|---|---|
| Riparian Wetland | 0.219 acres (credits) | Cape Fear 03030004 |

The Permittee must provide a copy of this form to DMS who will then sign the form to verify receipt of payment and the transfer of the mitigation responsibility. Once DMS has signed this form, it is the Permittee's responsibility to ensure that a signed copy of this form is submitted to the Division ***before*** conducting any of the authorized impacts.

The Division of Mitigation Services verifies that the mitigation requirements (credits) shown above will be debited using approved released or advance credits, and for all stream or wetland credits is in accordance with the signed/approved In-Lieu Fee Instrument dated July 28, 2010. By signing below, DMS is accepting full responsibility for the identified mitigation. As a reminder to the Mitigation Provider, no more than 25 percent of the total mitigation required by Division can be met through preservation, unless requested and approved by the Division Director Director (15A NCAC 02H. 0506(c)(7).

Signature Authority Name (print): _____

Signature: _____ Date: _____

# U.S. ARMY CORPS OF ENGINEERS
## WILMINGTON DISTRICT

Action Id. SAW-2020-01356 County: Moore U.S.G.S. Quad: NC-Zion Grove

## GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Permittee: TKCSJM Harris LLC
Steve Harris
Address: 208 J Dowdy Road
Carthage, North Carolina 28327
Telephone Number: (910)690-1268
E-mail: gretchenpines@gmail.com

Size (acres) 41
Nearest Waterway Little River
USGS HUC 03030004
Nearest Town West End
River Basin Cape Fear
Coordinates 35.258749, -79.548248

Location description: The project is located approximately 0.85 mile north east of the intersection of Carthage Road and NC-73. The location is at Moore County Parcel number 853400685570 near West End North Carolina.

Description of projects area and activity: This verification authorizes the permanent discharge of fill material into 0.219 acre of potential wetland waters for roadway infrastructure related to the Gretchen Pines development. This verification also authorizes the discharge of fill material into 102 square feet of potential stream waters for the installation of a culvert at the road crossing.

Applicable Law(s): ☒ Section 404 (Clean Water Act, 33 USC 1344)
☐ Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: **Nationwide Permit 29: Residential Development**

## SEE ATTACHED NWP GENERAL, REGIONAL, AND/OR SPECIAL CONDITIONS

**Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached Conditions, your application signed and dated 8/31/2023, and the enclosed plans Gretchen Pines Phase 5, Wetland Impacts dated 8/25/2023. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.**

This verification will remain valid until the expiration date identified below unless the nationwide and/or regional general permit authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide and/or regional general permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide and/or regional general permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide and/or regional general permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide and/or regional general permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Resources (telephone 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management **Morehead City, NC, at (252) 808-2808.**

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits. If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact **Matthew K. Martin at (984)800-3741or matthew.k.martin@usace.army.mil**.

Corps Regulatory Official: _____ Date: 12/08/2023
Expiration Date of Verification: 3/15/2026

The Wilmington District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0

Copy furnished:

| | |
|---|---|
| Agent: | **Dr. J H Carter III and Associates Inc** |
| | **William Mullin** |
| Address: | **515 F Midland Road** |
| | **Southern Pines, North Carolina 28387** |
| Telephone Number: | **(910)695-1043** |
| E-mail: | **wmullin@jhcarterinc.com** |

| | |
|---|---|
| Agency: | **North Carolina Division of Water Resources** |
| | **Chad Turlington** |
| Address: | **225 Green Street, Suite 714** |
| | **Fayetteville, North Carolina 28301** |
| Telephone Number: | **(910) 433-3320** |
| E-mail: | **chad.turlington@deq.nc.gov** |

SAW-2020-01356

## SPECIAL CONDITIONS

1. In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

2. Suitable habitat for tricolored bat (Perimyotis subflavus) may be present at the site. On September 14, 2022, the USFWS published a proposal in the Federal Register to list the tricolored bat as endangered under the Endangered Species Act (ESA). The permittee understands and agrees that all work associated with the clearing and removal of trees and removal or modification of culverts must be completed prior to the effective date of the final listing of this species in the Federal Register. Work associated with the aforementioned activities not completed by that time must cease and the permittee must contact Matthew Martin of the Corps at (984) 800-3741 or matthew.k.martin@usace.army.mil to determine if additional coordination with the United States Fish and Wildlife Service is required under Section 7 of the Endangered Species Act prior to continuing work.

Action ID Number: SAW-2020-01356 County: Moore

Permittee: TKCSJM Harris LLC, Steve Harris

Project Name: Gretchen Pines Phase 5

Date Verification Issued: 12/05/2023

Project Manager: Matthew K. Martin

**Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:**

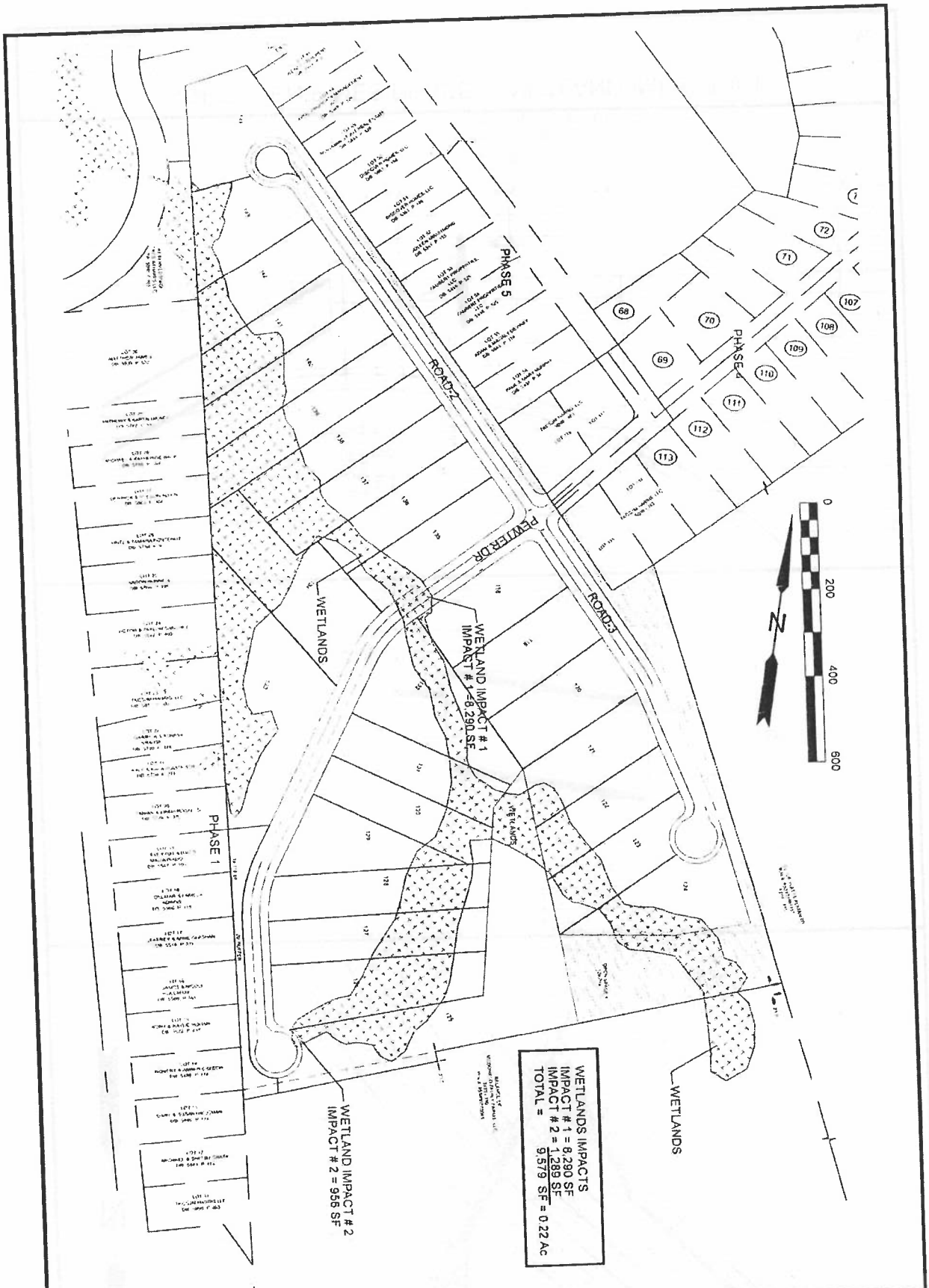
**US ARMY CORPS OF ENGINEERS**
**WILMINGTON DISTRICT**
**Attn: Matthew K. Martin**
**Raleigh Regulatory Office**
**U.S Army Corps of Engineers**
**3331 Heritage Trade Drive, Suite 105**
**Wake Forest, North Carolina 27587**
**or**
**matthew.k.martin@usace.army.mil**

**Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.**

**I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.**

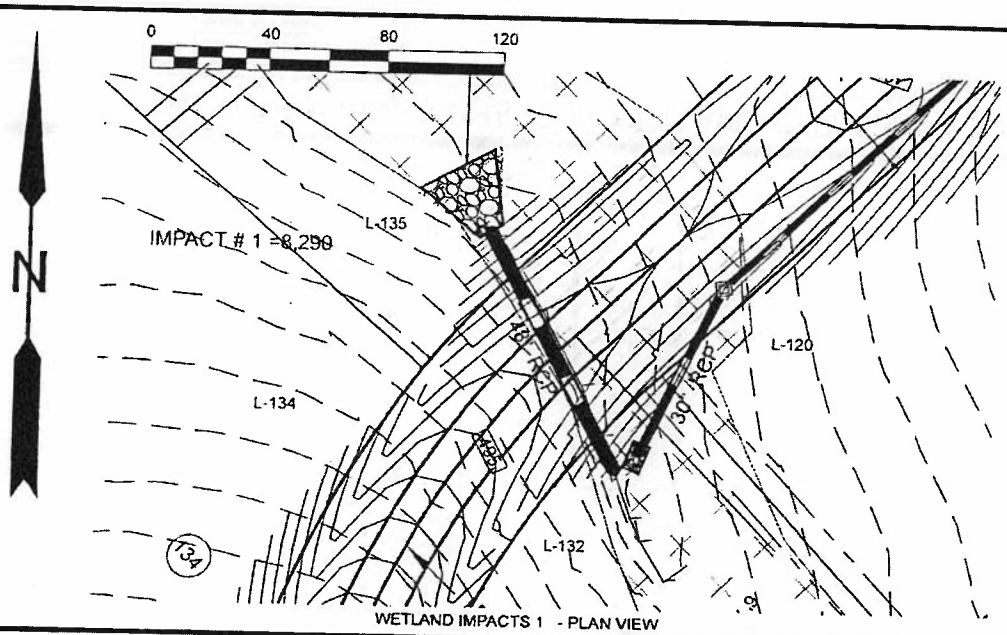
_____ _____

Signature of Permittee Date

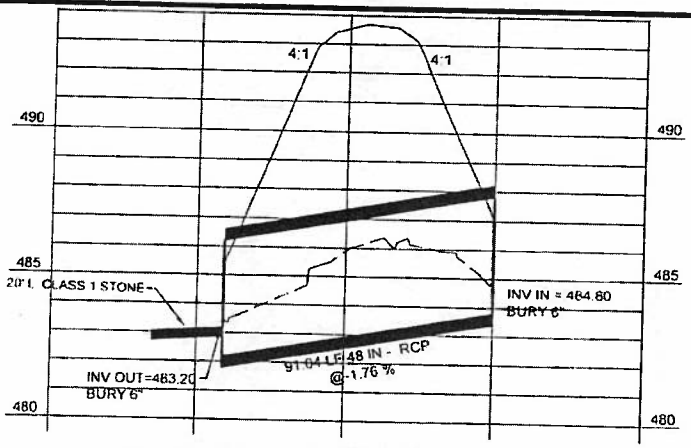



# GRETCHEN PINES PHASE 5- WETLAND IMPACTS

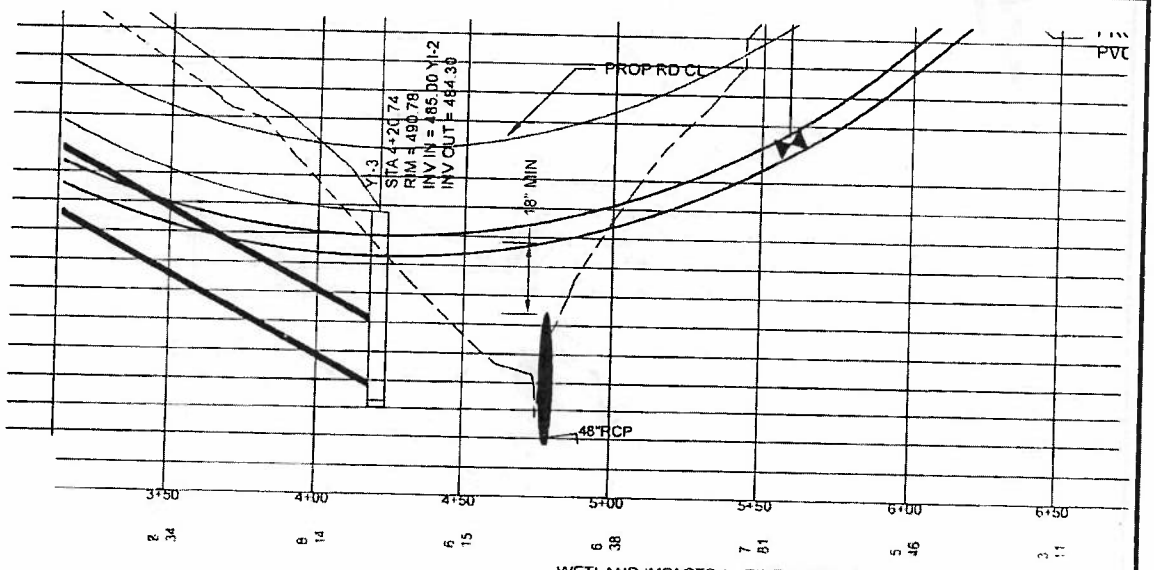
| | | |
|---|---|---|
| KEN W. BRIGHT ASSOCIATES, PLLC<br>CONSULTING ENGINEERS<br>P.O. BOX 553 SANFORD, NC 27331<br>(919) 776-3444 | SCALE: AS-SHOWN<br>DATE: 5-22-2023<br>REVISIONS: 8-25-2023 | WL-1 |




WETLAND IMPACTS 1 - PLAN VIEW




WETLAND IMPACTS 1 - CROSS SECTION
HOR SCALE: 1"=40' VERT SCALE: 1" =4'



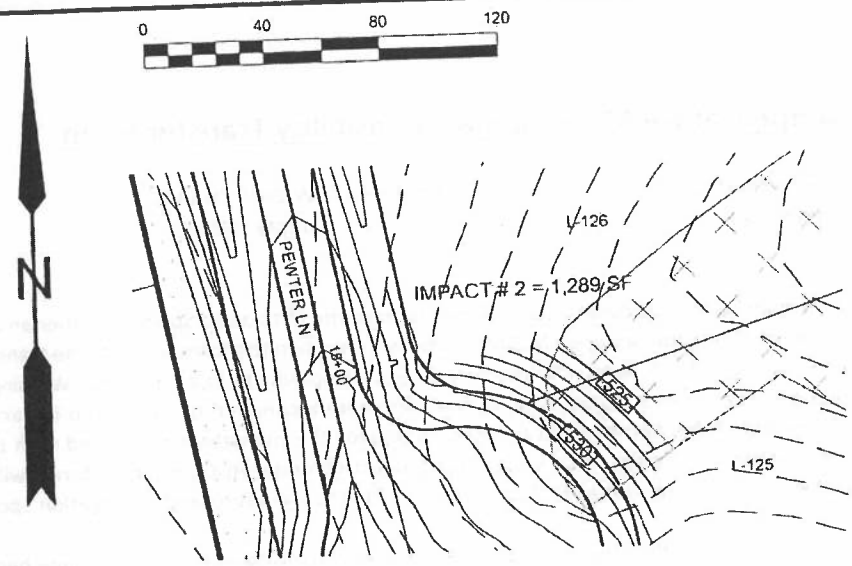

WETLAND IMPACTS 1 - PIPE PROFILE
HOR SCALE: 1"=40' VERT SCALE 1" =4'

# GRETCHEN PINES PHASE 5 WETLAND IMPACT # 1

KEN W. BRIGHT ASSOCIATES PLLC
CONSULTING ENGINEERS
P.O. BOX 553 SANFORD, NC 27331
(919) 776-3444

SCALE AS SHOWN
DATE 5-22-2023
REVISIONS 8-25-2023

WL-2




WETLAND IMPACTS 2 - PLAN VIEW

# GRETCHEN PINES PHASE 5 - WETLAND IMPACT # 2

KEN W. BRIGHT ASSOCIATES, PLLC
CONSULTING ENGINEERS
P.O. BOX 553 SANFORD, NC 27331
(919) 776-3444

SCALE: AS SHOWN
DATE: 5-22-2023
REVISIONS: 8-25-2023

WL-3

# Compensatory Mitigation Responsibility Transfer Form

**Permittee:** TKCSJM Harris LLC, Steve Harris
**Project Name:** Gretchen Pines Phase 5

**Action ID:** SAW-2020-01356
**County:** Moore

**Instructions to Permittee:** The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Division of Mitigation Services (NCDMS), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that Wilmington District Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one Mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate Mitigation Sponsors.

**Instructions to Sponsor:** The Sponsor verifies that the mitigation requirements (credits) shown below have been released and are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated ledger to the Permittee, the Project Manager who issued the permit, the Bank Project Manager, and the District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

**Permitted Impacts and Compensatory Mitigation Requirements:**

**Permitted Impacts Requiring Mitigation*** **8-digit HUC and Basin: 03030004, Cape Fear River Basin**

| Stream Impacts (linear feet) | | | Wetland Impacts (acres) | | | |
|---|---|---|---|---|---|---|
| Warm | Cool | Cold | Riparian Riverine | Riparian Non-Riverine | Non-Riparian | Coastal |
| | | | | **0.219** | | |

*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

**Compensatory Mitigation Requirements:** **8-digit HUC and Basin: 03030004, Cape Fear River Basin**

| Stream Mitigation (credits) | | | Wetland Mitigation (credits) | | | |
|---|---|---|---|---|---|---|
| Warm | Cool | Cold | Riparian Riverine | Riparian Non-Riverine | Non-Riparian | Coastal |
| | | | | **0.438** | | |

**Mitigation Site Debited:** **NCDMS**
(List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS acceptance letter identifies a specific site, also list the specific site to be debited).

***Section to be completed by the Mitigation Sponsor***

**Statement of Mitigation Liability Acceptance:** I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCDMS), as approved by the Wilmington District, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.

**Mitigation Sponsor Name:** _____

**Name of Sponsor's Authorized Representative:** _____

_____ _____
**Signature of Sponsor's Authorized Representative** **Date of Signature**

**Conditions for Transfer of Compensatory Mitigation Credit:**

- Once this document has been signed by the Mitigation Sponsor and the District is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the District is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. When NCDMS provides mitigation for authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by NCDMS must be provided to the District within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the District has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the District Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the District, the Sponsor must obtain case-by-case approval from the District Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the District administrative records for both the permit and the Bank/ILF Instrument.

**Comments/Additional Conditions**: A letter from **North Carolina Division of Mitigation Services**, confirming they are willing and able to accept the applicant's compensatory mitigation responsibility, dated **9/18/2023** was included with the preconstruction notification.

This form is not valid unless signed below by the District Project Manager and by the Mitigation Sponsor on Page 1. ***Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the District Project Manager at the address below, 3) the Bank Manager listed in RIBITS, and 4) the Wilmington District Mitigation Office, 3331 Heritage Trade Drive, Suite 105, Wake Forest, NC 27587 (or by email to SAWMIT@usace.army.mil)***. Questions regarding this form or any of the permit conditions may be directed to the District Mitigation Office.

**USACE Project Manager:** Matthew K. Martin
**USACE Field Office:** Raleigh Regulatory Office
US Army Corps of Engineers
3331 Heritage Trade Drive, Suite 105
Wake Forest, North Carolina 27587
**Email:** matthew.k.martin@usace.army.mil

**USACE Project Manager Signature**

12/08/2023
**Date of Signature**

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at http://ribits.usace.army.mil.

## Nationwide Permit 29
## Residential Developments

Effective Date: March 15, 2021 / Expiration Date: March 15, 2026
Authorities: Sections 10 and 404

Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of a single residence, a multiple unit residential development, or a residential subdivision. This NWP authorizes the construction of building foundations and building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters.

*Subdivisions*: For residential subdivisions, the aggregate total loss of waters of United States authorized by this NWP cannot exceed 1/2-acre. This includes any loss of waters of the United States associated with development of individual subdivision lots.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 32.) (Authorities: Sections 10 and 404)

### GENERAL CONDITIONS

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. **Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. **Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. **Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. **Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. **Removal of Temporary Structures and Fills.** Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. **Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. **Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. **Wild and Scenic Rivers.** (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for

such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical

habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7

consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. **Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. **Historic Properties.** (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of,

or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties

of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. **Discovery of Previously Unknown Remains and Artifacts.** Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. **Designated Critical Resource Waters.** Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. **Mitigation.** The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless

the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is

provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. **Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. **Water Quality.** (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. **Coastal Zone Management.** In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. **Use of Multiple Nationwide Permits.** The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. **Transfer of Nationwide Permit Verifications.** If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification

must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____
(Transferee)

_____
(Date)

30. **Compliance Certification.** Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. **Activities Affecting Structures or Works Built by the United States.** If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph

(b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. **Pre-Construction Notification.** (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification*: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification*: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

**District Engineer's Decision**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district

engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

**Further Information**

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

**Definitions**

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded,

excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of

NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

**REGIONAL CONDITIONS:**

The following Regional Conditions have been approved by the Wilmington District for the Nationwide Permits (NWPs) published in the January 13, 2021, *Federal Register* (86 FR 2744) announcing the reissuance of 12 existing (NWPs) and four new NWPs, as well as the reissuance of NWP general conditions and definitions with some modifications.

**A. EXCLUDED WATERS AND/OR AREAS**

The Corps has identified waters that will be excluded from the use of all NWP's during certain timeframes. These waters are:

1. **Anadromous Fish Spawning Areas.** Work in waters of the U.S. designated by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are prohibited from February 15th through June 30th, without prior written approval from the Corps and the appropriate wildlife agencies (NCDMF, NCWRC and/or the National Marine Fisheries Service (NMFS)). Work in waters of the U.S. designated by NCWRC as primary nursery areas in inland waters are prohibited from February 15th through September 30th, without prior written approval from the Corps and the appropriate wildlife agencies. Work in waters of the U.S. designated by NCDMF as primary nursery areas shall be coordinated with NCDMF prior to being authorized by this NWP. Coordination with NCDMF may result in a required construction moratorium during periods of significant biological productivity or critical life stages.

2. **Trout Waters Moratorium.** Work in waters of the U.S. in the designated trout watersheds of North Carolina are prohibited from October 15th through April 15th

without prior written approval from the NCWRC, or from the Eastern Band of Cherokee Indians (EBCI) Fisheries and Wildlife Management (FWM) office if the project is located on EBCI trust land. (See Section C.3. above for information on the designated trout watersheds).

3. **Sturgeon Spawning Areas.** No in-water work shall be conducted in waters of the U.S. designated by the National Marine Fisheries Service as Atlantic sturgeon critical habitat from February 1st through June 30th. No in-water work shall be conducted in waters of the U.S. in the Roanoke River designated as Atlantic sturgeon critical habitat from February 1st through June 30th, and August 1st through October 31st, without prior written approval from NMFS.

4. **Submerged Aquatic Vegetation.** Impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP, except NWP 48, NWP 55 and NWP 56, unless Essential Fish Habitat (EFH) consultation has been completed pursuant to the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act). Permittees shall submit a PCN (See NWP General Condition 32) to the District Engineer prior to commencing the activity if the project would affect SAV. The permittee may not begin work until notified by the Corps that the requirements of the Magnuson-Stevens Act have been satisfied and that the activity is verified.

## B. REGIONAL CONDITIONS APPLICABLE TO ALL NWP's

1. **Critical Habitat in Western NC.** For proposed activities within waters of the U.S. that require a Pre-Construction Notification (PCN) and are located in the thirteen counties listed below, permittees must provide a copy of the PCN to the U.S. Fish and Wildlife Service (USFWS), 160 Zillicoa Street, Asheville, North Carolina 28801 and the Corps Asheville Regulatory Field Office. Please see General Condition 18 for specific PCN requirements related to the Endangered Species Act and the below website for information on the location of designated critical habitat.

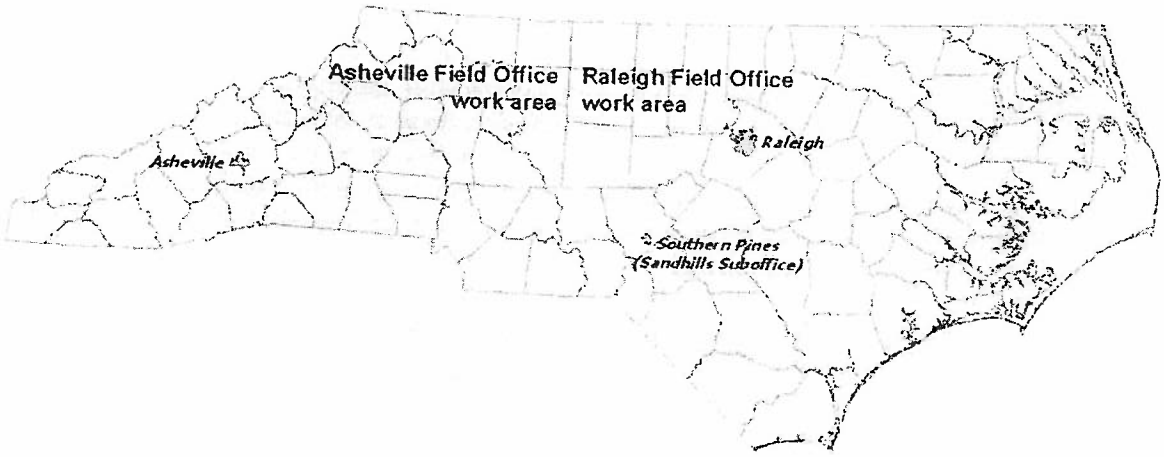
Counties with tributaries that drain to designated critical habitat that require notification to the Asheville U.S. Fish and Wildlife Service: Avery, Cherokee, Graham, Haywood, Henderson, Jackson, Macon, Mecklenburg, Mitchell, Swain, Transylvania, Union and Yancey.

Website and office addresses for Endangered Species Act Information:

The Wilmington District has developed the following website for permittees which provides guidelines on how to review linked websites and maps in order to fulfill NWP General Condition 18 (Endangered Species) requirements:
http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram/AgencyCoordination/ESA.aspx.

Permittees who do not have internet access may contact the appropriate U.S. Fish and Wildlife Service offices listed below or Corps at (910) 251-4850.

Below is a map of the USFWS Field Office Boundaries:




Asheville U.S. Fish and Wildlife Service Office counties: All counties west of and including Anson, Stanly, Davidson, Forsythe and Stokes Counties.

U.S. Fish and Wildlife Service
Asheville Field Office
160 Zillicoa Street
Asheville, NC 28801
Telephone: (828) 258-3939

Raleigh U.S. Fish and Wildlife Service Office counties: All counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

U.S. Fish and Wildlife Service
Raleigh Field Office
Post Office Box 33726
Raleigh, NC 27636-3726
Telephone: (919) 856-4520

2. **Special Designation Waters.** Prior to the use of any NWP that involves a discharge of dredged or fill material in any of the following identified waters and/or adjacent wetlands in North Carolina, permittees shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32). The North Carolina waters and wetlands that require additional PCN requirements are:

"Primary Nursery Areas" (PNA), including inland PNA, as designated by the North Carolina Marine Fisheries Commission and/or the North Carolina Wildlife Resources Commission. The definition of and designated PNA waters can be found in the North Carolina State Administrative Code at Title 15A, Subchapters 3R and 10C (15A NCAC

03R .0103; 15A NCAC 10C .0502; and 15A NCAC 10C .0503) and at the following web pages:

- http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2003%20-%20marine%20fisheries/subchapter%20r/15a%20ncac%2003r%20.0103.pdf

- http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2010%20-%20wildlife%20resources%20and%20water%20safety/subchapter%20c/15a%20ncac%2010c%20.0502.pdf

- http://reports.oah.state.nc.us/ncac/title%2015a%20-%20environmental%20quality/chapter%2010%20-%20wildlife%20resources%20and%20water%20safety/subchapter%20c/15a%20ncac%2010c%20.0503.pdf

3. **Trout Waters.** Prior to any discharge of dredge or fill material into streams, waterbodies or wetlands within the 294 designated trout watersheds of North Carolina, the permittee shall submit a PCN (see General Condition 32) to the District Engineer prior to commencing the activity. The permittee shall also provide a copy of the PCN to the appropriate NCWRC office, or to the EBCI FWM Office (if the project is located on EBCI trust land), to facilitate the determination of any potential impacts to designated Trout Waters.

NCWRC and NC Trout Watersheds:

| NCWRC Contact** | Counties that are entirely within Trout Watersheds* | | Counties that are partially within Trout Watersheds* | |
|---|---|---|---|---|
| Mountain Coordinator<br>645 Fish Hatchery Rd., Building B<br>Marion, NC 28752<br>828-803-6054<br><br>For NCDOT Projects:<br><br>NCDOT Coordinator | Alleghany<br>Ashe<br>Avery<br>Graham<br>Haywood | Jackson<br>Macon<br>Swain<br>Transylvania<br>Watauga | Burke<br>Buncombe<br>Caldwell<br>Cherokee<br>Clay<br>Henderson<br>Madison | McDowell<br>Mitchell<br>Polk<br>Rutherford<br>Surry<br>Wilkes<br>Yancey |

| | | |
|---|---|---|
| 12275 Swift Rd.<br>Oakboro, NC 28129<br>704-984-1070 | | |
| **EBCI Contact**** | **Counties that are within Trout Watersheds*** | |
| Office of Natural Resources<br>P.O. Box 1747, Cherokee, NC 28719<br>(828) 359-6113 | Qualla Boundary and non-contiguous tracts of trust land located in portions of Swain, Jackson, Haywood, Graham and Cherokee Counties. | |

*NOTE: To determine PCN requirements, contact the Corps Asheville Regulatory Field Office at (828) 271-7980 or view maps showing trout watersheds in each County at the following webpage: http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout/.

**If a project is located on EBCI trust land, submit the PCN in accordance with Regional Condition C.16. Contact the Corps Asheville Regulatory Field Office at (828) 271-7980 with questions.

4. **Western NC Waters and Corridors.** The permittee shall submit a PCN (see General Condition 32) to the District Engineer prior to commencing the activity in waters of the U.S. if the activity will occur within any of the following identified waters in western North Carolina, within 0.5 mile on either side of these waters, or within 0.75 mile of the Little Tennessee River, as measured from the top of the bank of the respective water (i.e., river, stream, or creek):

Brasstown Creek
Burningtown Creek
Cane River
Caney Fork
Cartoogechaye Creek
Chattooga River
Cheoah River
Cowee Creek
Cullasaja River
Deep Creek

Ellijay Creek
French Broad River
Garden Creek
Hiwassee River
Hominy Creek
Iotla Creek
Little Tennessee River (within the river or within 0.75 mile on either side of this river)
Nantahala River
Nolichucky River
North Fork French Broad River
North Toe River
Nottley River
Oconaluftee River (portion not located on trust/EBCI land)
Peachtree Creek
Shooting Creek
Snowbird Creek
South Toe River
Stecoah Creek
Swannanoa River
Sweetwater Creek
Tuckasegee River (also spelled Tuckaseegee or Tuckaseigee)
Valley River
Watauga Creek
Watauga River
Wayah Creek
West Fork French Broad River

To determine PCN requirements, contact the Corps Asheville Regulatory Field Office at (828) 271-7980 or view maps for all corridors at the following webpage: http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Designated-Special-Waters.aspx .

5. **Limitation of Loss of Stream Bed.** NWPs may not be used for activities that may result in the loss of more than 0.05 acres of stream bed, except for NWP 32.

6. **Pre-Construction Notification for Loss of Stream Bed Exceeding 0.02 acres.** The permittee shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32) prior to the use of any NWP for any activity that results in the loss of more than 0.02 acres of stream bed. This applies to NWPs that do not have PCN requirements as well as those NWPs that require a PCN.

7. **Mitigation for Loss of Stream Bed.** For any NWP that results in a loss of more than 0.02 acres of stream bed, the permittee shall provide a mitigation proposal to compensate for more than minimal individual and cumulative adverse impacts to the aquatic environment, unless the District Engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse

effects of the proposed activity are minimal. For stream bed losses of 0.02 acres or less that require a PCN, the District Engineer may determine, on a case-by-case basis, that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

8. **Riprap.** For all NWPs that allow for the use of riprap material for bank stabilization, the following conditions shall be applied:

a. Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters. The placement of filter fabric is not required if the riprap will be pushed or "keyed" into the bank of the waterbody. A waiver from the specifications in this Regional Condition must be requested in writing.

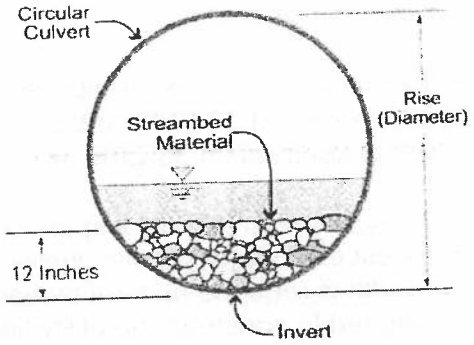
b. Riprap shall be placed only on the stream banks, or, if it is necessary to be placed in the stream bed, the finished top elevation of the riprap should not exceed that of the original stream bed.

9. **Culvert Placement.** For all NWPs that allow for culvert placement, the following conditions shall be applied:

a. For all NWPs that involve the construction/installation of culverts, measures shall be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms

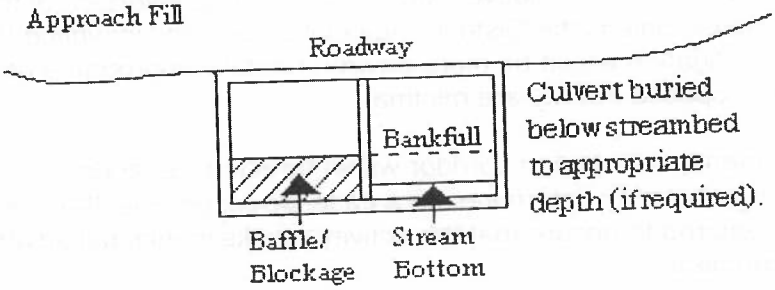
Placement of culverts and other structures in streams shall be below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20% of the culvert diameter for culverts having a diameter less than or equal to 48 inches. If the culvert outlet is submerged within a pool or scour hole and designed to provide for aquatic passage, then culvert burial into the streambed is not required.
Culvert burial is not required for structures less than 72 inch diameter/width, where the slope of the culvert will be greater than 2.5%, provided that all alternative options for flattening the slope have been investigated and aquatic life movement/connectivity has been provided when possible (e.g., rock ladders, cross vanes, sills, baffles etc.). Culvert burial is not required when bedrock is present in culvert locations.

Installation of culverts in wetlands shall ensure continuity of water movement and be designed to adequately accommodate high water or flood conditions. When roadways, causeways, or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges shall be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands.




A waiver from the depth specifications in this condition may be requested, in writing, by the permittee and issued by the Corp. This waiver request must be specific as to the reasons(s) for the request. The waiver will be issued if it can be demonstrated that the proposed design would result in less impacts to the aquatic environment. Culverts placed across wetland fills purely for the purposes of equalizing surface water do not have to be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

b. Bank-full flows (or less) shall be accommodated through maintenance of the existing bank-full channel cross sectional area. Additional culverts or culvert barrels at such crossings shall be allowed only to receive bank-full flows.




c. Culverts shall be designed and installed in such a manner that the original stream profiles are not altered and allow for aquatic life movement during low flows. The dimension, pattern, and profile of the stream above and below a pipe or culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of a proposed culvert shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. If the width of the culvert is wider than the stream channel, the culvert shall include multiple boxes/pipes, baffles, benches and/or sills to maintain the natural width of the stream channel. If multiple culverts/pipes/barrels are used, low flows shall be accommodated in one culvert/pipe and additional culverts/pipes shall be installed such that they receive only flows above bankfull.

10. **Utility Lines.** For all NWPs that allow for the construction and installation of utility lines, the following conditions shall be applied:

a. Utility lines consisting of aerial electric power transmission lines crossing navigable waters of the U.S. (which are defined at 33 CFR part 329) must comply with the applicable minimum clearances specified in 33 CFR 322.5(i).

b. The work area authorized by this permit, including temporary and/or permanent fills, will be minimized to the greatest extent practicable. Justification for work corridors exceeding forty (40) feet in width is required and will be based on pipeline diameter and length, size of equipment required to construct the utility line, and other construction information deemed necessary to support the request. The permittee is required to provide this information to the Corps with the initial PCN package.

c. A plan to restore and re-vegetate wetland areas cleared for construction must be submitted with the required PCN. Cleared wetland areas shall be re-vegetated, as appropriate, with species of canopy, shrub, and herbaceous species. The permittee shall not use fescue grass or any other species identified as invasive or exotic species by the NC Native Plant Society (NCNPS): https://ncwildflower.org/invasive-exotic-species-list/.

d. Any permanently maintained corridor along the utility right of way within forested wetlands shall be considered a loss of aquatic function. A compensatory mitigation plan will be required for all such impacts associated with the requested activity if the activity requires a PCN and the cumulative total of permanent conversion of forested wetlands exceeds 0.1 acres, unless the District Engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal.

Where permanently maintained corridor within forested wetlands is 0.1 acres or less, the District Engineer may determine, on a case-by-case basis, that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment.

e. When directional boring or horizontal directional drilling (HDD) under waters of the U.S., including wetlands, permittees shall closely monitor the project for hydraulic fracturing or "fracking." Any discharge from hydraulic fracturing or "fracking" into waters of the U.S., including wetlands, shall be reported to the appropriate Corps Regulatory Field Office within 48 hours. Restoration and/or compensatory mitigation may be required as a result of any unintended discharges.

11. **Temporary Access Fills.** The permittee shall submit a PCN to the District Engineer prior to commencing the activity if the activity will involve the discharge of dredged or fill material into more than 0.1 acres of wetlands or 0.02 acres of stream channel for the construction of temporary access fills and/or temporary road crossings. The PCN must

include a restoration plan that thoroughly describes how all temporary fills will be removed, how pre-project conditions will be restored, and include a timetable for all restoration activities.

12. **Federal Navigation Channel Setbacks.** Authorized structures and fills located in or adjacent to Federally authorized waterways must be constructed in accordance with the latest setback criteria established by the Wilmington District Engineer. You may review the setback policy at http://www.saw.usace.army.mil/Missions/Navigation/Setbacks.aspx. This general permit does not authorize the construction of hardened or permanently fixed structures within the Federally Authorized Channel Setback, unless the activity is approved by the Corps. The permittee shall submit a PCN (see General Condition 32) to the District Engineer to obtain a written verification prior to the construction of any structures or fills within the Federally Authorized Channel Setback.

13. **Northern Long-eared Bat – Endangered Species Act Compliance**

The Wilmington District, U.S. Army Corps of Engineers has consulted with the United States Fish and Wildlife Service (USFWS) in regard to the threatened Northern long-eared bat (NLEB) (*Myotis septentrionalis*) and Standard Local Operating Procedures for Endangered Species (SLOPES) have been approved by the Corps and the USFWS. This condition concerns effects to the NLEB only and does not address effects to other federally listed species and/or federally designated critical habitat.

A. Procedures when the Corps is the lead federal* agency for a project:

The permittee must comply with (1) and (2) below when:

• the project is located in the western 41 counties of North Carolina, to include non-federal aid North Carolina Department of Transportation (NCDOT) projects, OR;
• the project is located in the 59 eastern counties of North Carolina and is a non-NCDOT project.

*Generally, if a project is located on private property or on non-federal land, and the project is not being funded by a federal entity, the Corps will be the lead federal agency due to the requirement to obtain Department of the Army authorization to impact waters of the U.S. If the project is located on federal land, contact the Corps to determine the lead federal agency.

(1) A permittee using an NWP must check to see if their project is located in the range of the NLEB by using the following website: http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf. If the project is within the range of the NLEB, or if the project includes percussive activities (e.g., blasting, pile driving, etc.), the permittee is then required to check the appropriate website in the paragraph below to discover if their project:

• is located in a 12-digit Hydrologic Unit Code area ("red HUC" - shown as red areas on the map), AND/OR;
• involves percussive activities within 0.25 mile of a red HUC.

Red HUC maps - for the western 41 counties in NC (covered by the Asheville Ecological Services Field Office), check the project location against the electronic maps found at: http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html. For the eastern 59 counties in NC (covered by the Raleigh Ecological Services Field Office), check the project location against the electronic maps found at: https://www.fws.gov/raleigh/NLEB_RFO.html.

(2) A permittee must submit a PCN to the District Engineer, and receive written verification from the District Engineer, prior to commencing the activity, if the activity will involve any of the following:

• tree clearing/removal and/or, construction/installation of wind turbines in a red HUC, AND/OR;
• bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, (applies anywhere in the range of the NLEB), AND/OR:
• percussive activities in a red HUC, or within 0.25 mile of a red HUC.

The permittee may proceed with the activity without submitting a PCN to either the Corps or the USFWS, provided the activity complies with all applicable NWP terms and general and regional conditions, if the permittee's review under A.(1) and A.(2) above shows that the project is:

• located outside of a red HUC (and there are no percussive activities), and the activity will NOT include bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, OR;
• located outside of a red HUC and there are percussive activities, but the percussive activities will not occur within 0.25-mile of a red HUC boundary, and the activity will NOT include bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, OR;
• located in a red HUC, but the activity will NOT include tree clearing/removal; construction/installation of wind turbines; bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, and/or; any percussive activities.

B. Procedures when the USACE is not the lead federal agency:

For projects where another federal agency is the lead federal agency - if that other federal agency has completed project-specific ESA Section 7(a)(2) consultation for the NLEB, and has (1) determined that the project would not cause prohibited incidental take of the NLEB, and (2) completed coordination/consultation that is required by the USFWS (per the directions on the respective USFWS office's website), that project may

proceed without PCN to either the USACE or the USFWS, provided all General and Regional Permit Conditions are met.

The NLEB SLOPES can be viewed on the USACE website at: http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/. Permittees who do not have internet access may contact the USACE at (910) 251- 4633.

14. **West Indian Manatee Protection.** In order to protect the endangered West Indian manatee (*Trichechus manatus*) the Permittee shall implement the USFWS' Manatee Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at https://www.fws.gov/raleigh/pdfs/ManateeGuidelines2017.pdf.

15. **ESA Programmatic Biological Opinions.** The Wilmington District, USFWS, NCDOT, and the FHWA have conducted programmatic Section 7(a)(2) consultation for a number of federally listed species and designated critical habitat (DCH), and programmatic consultation concerning other federally listed species and/or DCH may occur in the future. The result of completed programmatic consultation is a Programmatic Biological Opinion (PBO) issued by the USFWS. These PBOs contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" of whichever species or critical habitat is covered by a specific PBO. Authorization under NWPs is conditional upon the permittee's compliance with all the mandatory terms and conditions associated with incidental take of the applicable PBO (or PBOs), which are incorporated by reference in the NWPs. Failure to comply with the terms and conditions associated with incidental take of an applicable PBO, where a take of the federally listed species occurs, would constitute an unauthorized take by the permittee, and would also constitute permittee non-compliance with the authorization under the NWPs. If the terms and conditions of a specific PBO (or PBOs) apply to a project, the Corps will include this/these requirements in any NWP verification that may be issued for a project. For an activity/project that does not require a PCN, the terms and conditions of the applicable PBO(s) also apply to that non-notifying activity/project. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO and the ESA. All PBOs can be found on our website at: https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/.

16. **Work on Eastern Band of Cherokee Land.**

Notifying NWPs - All PCNs submitted for activities in waters of the U.S. on Eastern Band of Cherokee Indians (EBCI) trust land (i.e., Qualla Boundary and non-contiguous tracts of trust land located in portions of Swain, Jackson, Haywood, Graham and Cherokee Counties), must comply with the requirements of the latest MOU between the Wilmington District and the EBCI.

Non-notifying NWPs - Prior to the use of any non-notifying NWP for activities in

waters of the U.S. on EBCI trust land (i.e., Qualla Boundary and non-contiguous tracts of trust land located in portions of Swain, Jackson, Haywood, Graham and Cherokee Counties), all prospective permittees must comply with the requirements of the latest MOU between the Wilmington District and the EBCI; this includes coordinating the proposed project with the EBCI Natural Resources Program and obtaining a Tribal Approval Letter from the Tribe.

The EBCI MOU can be found at the following URL: http://saw-reg.usace.army.mil/FO/Final-MOU-EBCI-USACE.pdf

17. **Sedimentation and Erosion Control Structures and Measures**
All PCNs will identify and describe sedimentation and erosion control structures and measures proposed for placement in waters of the U.S. The structures and measures should be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams.

**C. REGIONAL CONDITIONS APPLICABLE TO NWP 29**

a. Discharges in streams and wetlands for stormwater management facilities are prohibited under this NWP.

b. Discharges of dredged or fill material into waters of the U.S., including wetlands, within the floodway* or mapped FEMA 100-year floodplain resulting in permanent above-grade fills are not authorized by this NWP.

* NOTE: Floodway means the area designated and/or regulated by Federal, State, or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated height identified by the regulating entity within the 100-year floodplain.

**D. SECTION 401 WATER QUALITY CERTIFICATION (WQC) AND/OR COASTAL ZONE MANAGEMENT ACT (CZMA) CONSISTENCY DETERMINATION SUMMARY AND APPLICABLE CONDITIONS**

The CZMA Consistency Determination and all Water Quality Certifications for the NWPs can be found at: https://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Permits/2017-Nationwide-Permits/

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ROY COOPER
*Governor*
ELIZABETH S. BISER
*Secretary*
DOUGLAS R. ANSEL
*Interim Director*

NORTH CAROLINA
***Environmental Quality***

September 1, 2023

**LETTER OF APPROVAL WITH MODIFICATIONS**

T.K.C.S.J.M. Harris, LLC
Attn: Steve Harris, Managing Member
4291 Dowd Road
Carthage, NC 28327

RE: Project Name: Gretchen Pines Subdivision Phase 5
Acres Approved: 9.6
Project ID: MOORE-2024-007
County: Moore, City: Mineral Springs, Address: Silver Lane
River Basin: Cape Fear
Stream Classification: HQW
Submitted By: Ken Bright Associates, PLLC
Date Received by LQS: August 2, 2023
Plan Type: New

Dear Mr. Harris:

This office has reviewed the subject erosion and sedimentation control plan and hereby issues this Letter of Approval. This plan approval shall expire three (3) years following the date of approval, if no land-disturbing activity has been undertaken, as is required by Title 15A NCAC 4B .0129. Should the plan not perform adequately, a revised plan will be required (G.S. 113A-54.1)(b).

As of April 1, 2019, all new construction activities are required to complete and submit an electronic Notice of Intent (eNOI) form requesting a Certificate of Coverage (COC) under the NCG010000 Construction General Permit. After the form is reviewed and found to be complete, you will receive a link with payment instructions for the $100 annual permit fee. After the fee is processed, you will receive the COC via email. As the Financially Responsible Party shown on the FRO form submitted for this project, you MUST obtain the COC prior to commencement of any land disturbing activity. The eNOI form may be accessed at deq.nc.gov/NCG01. Please direct questions about the NOI form or Paul Clark at Paul.clark@ncdenr.gov. After you submit a complete and correct NOI Form, a COC will be emailed to you within **three business days**. A $100 fee will be charged annually until a Notice of Termination is issued. This fee is to be sent to the DEMLR Stormwater Central Office staff in Raleigh. If the owner/operator of this project changes in the future, the new responsible party must obtain a new COC.

Title 15A NCAC 4B .0118(a) and the NCG01 permit require that the following documentation be kept on file at the job site:

1. The approved E&SC plan as well as any approved deviation.
2. The NCG01 permit and the COC, once it is received.
3. Records of inspections made during the previous 12 months.

Also, this letter gives the notice required by G.S. 113A-61.1(a) of our right of periodic inspection to ensure compliance with the approved plan.

Title 15A NCAC 4B .0118(a) requires that a copy of the approved erosion control plan be on file at the job site. Also, this letter gives the notice required by G.S. 113A-61.1(a) of our right of periodic inspection to ensure compliance with the approved plan.

North Carolina's Sedimentation Pollution Control Act is performance-oriented, requiring protection of existing natural resources and adjoining properties. If, following the commencement of this project, it is determined that the erosion and sedimentation control plan is inadequate to meet the requirements of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statute 113A-51 through 66), this office may require revisions to the plan and implementation of the revisions to ensure compliance with the Act.

Acceptance and approval of this plan is conditioned upon your compliance with Federal and State water quality laws, regulations, and rules. In addition, local city or county ordinances or rules may also apply to this land-disturbing activity. This approval does not supersede any other permit or approval.

Please note that this approval is based in part on the accuracy of the information provided in the Financial Responsibility Form, which you provided. You are requested to file an amended form if there is any change in the information included on the form. This permit allows for a land-disturbance, as called for on the application plan, not to exceed the approved acres. Exceeding the acreage will be a violation of this permit and would require a revised plan and additional application fee. In addition, it would be helpful if you notify this office of the proposed starting date for this project.

Your cooperation is appreciated.

Sincerely,

Jodi Pace

Jodi Pace, EI
Regional Engineering Associate
DEMLR

Enclosures: Certificate of Approval
Modifications Required for Approval
NPDES NCG01 Fact Sheet

cc: Martha Bright, Ken Bright Associates, PLLC (electronic copy)
Debra Ensminger, Moore County Planning (electronic copy)
DEMLR - Fayetteville Regional Office File

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## MODIFICATIONS REQUIRED FOR APPROVAL

Project Name: GRETCHEN PINES SUBDIVISION PHASE 5
Project Number: MOORE-2024-007
County: MOORE

No disturbance is allowed in the wetland without permits from the US Army corps of Engineers and NC Water Resources Division. Provide a copy of the USACE 404 permit and DWR 401 certifications for the office file. Submit documentation with maps showing location and extent of impacts to streams and wetlands with any special condition pertaining to erosion and sediment control and restoration of affected areas.

This plan approval is for streets, utilities and sediment and erosion control measures only. Land disturbing activity on individual lots is not approved with this plan review. Before house construction begins on the lots, a plan showing individual Lot measures is required.

Provide 2 copies of the revised plan sheets, corresponding to the e-mail received in this office, before land disturbance begins.

Ref: G.S. 113A-54.1 through G.S. 113A-57
Sections 15A NCAC 04A.0101 through 15A NCAC 04E.0504
General Permit NCG 010000 NPDES for Construction Activities

# Sedimentation/Construction Stormwater Inspection Report

North Carolina Department of Environmental Quality
Land Resources: Systel Building, 225 Green Street, Suite 714, Fayetteville, NC 28301-5094
(910) 433-3300

**County:** Moore **Project:** Gretchen Pines Phase 4 **River basin:** Cape Fear

**Person financially responsible:** T.K.C.S.J.M Harris, LLC - Steve Harris, Partner **Project #:** MOORE-2022-021 NCC216818

**Address:** 4291 Dowd Road, Carthage, NC 28327

1. **Project Location:** Gretchen Road, Mineral Springs
   **Pictures:** No
2. **Weather and soil conditions:** sunny/partly cloudy workable soils **Initial inspection:** No
3. **Is site currently under notice of violation?** No
4. **Is the site in compliance with S.P.C.A. and rules?** Yes If no, check violations below:
5. **Violations:**
6. **Is the site in compliance with NPDES Permit NCG010000 Construction Stormwater requirements?** Yes
   Describe:
7. **Has sedimentation damage occurred since last inspection?** No If Yes, where? (check all that apply)

   Degree of damage:
8. **Contact made with (name):** Title:

   Inspection report: Sent Report Date given/sent: June 26, 2024
9. **Corrective action needed:**
10. **Comments:** 1. Continue to establish permanent ground cover.
    2. Clean out sediment buildup in swales and re-stabilize in the back part of Platinum Circle.

**Reported by:** Penny Markle **Others present:**

**Date of inspection:** June 25, 2024 **Time arriving on site:** 11:10 AM **Time leaving site:** 11:20 AM

cc:

# Sedimentation/Construction Stormwater Inspection Report

North Carolina Department of Environmental Quality
Land Resources: Systel Building, 225 Green Street, Suite 714, Fayetteville, NC 28301-5094
(910) 433-3300

**County:** Moore **Project:** Gretchen Pines Subdivision Phase 5 **River basin:** Cape Fear

**Person financially responsible:** T.K.C.S.J.M Harris, LLC - Steve Harris, Partner **Project #:** MOORE-2024-007 NCC240118

**Address:** 4291 Dowd Road, Carthage, NC 28327

1. **Project Location:** Silver Lane, Mineral Springs
   **Pictures:** No
2. **Weather and soil conditions:** sunny/workable soils **Initial inspection:** No
3. **Is site currently under notice of violation?** No
4. **Is the site in compliance with S.P.C.A. and rules?** No If no, check violations below:
5. **Violations:**
   - ✓ b. Failure to follow approved plan, G.S. 113A-57(5), G.S. 113A-57(5)
   - ✓ j. Failure to install and maintain measures, 15A N.C.A.C. 4B.0113, 15 NCAC 4B .0113
   - ✓ n. Failure to develop or adhere to approved plan, NCG 010000, Part I
   - ✓ p. Failure to provide ground stabilization, NCG 010000 Part II, E
   - ✓ r. Failure to install and maintain BMP's, NCG 010000 Part II, G.2-3
   - ✓ t. Bypass of stormwater control facilities, NCG 010000, Part II, G.5-6
6. **Is the site in compliance with NPDES Permit NCG010000 Construction Stormwater requirements?** No
   Describe:
7. **Has sedimentation damage occurred since last inspection?** No If Yes, where? (check all that apply)

   Degree of damage:
8. **Contact made with (name):** Title:

   Inspection report: Sent Report Date given/sent: June 26, 2024
9. **Corrective action needed:**
   1. Install all sedimentation and erosion control measures as shown on the approved plan.
   2. Provide adequate temporary or permanent ground cover on areas where land-disturbing activity has ceased in 7 or 14 days according to NCG 010000 permit conditions.
   3. Install temporary sediment traps or basins and associated diversions as shown on the approved plan.
   4. Install and maintain measures to divert storm run-off through the stormwater control facilities, such as but not limited to temporary sediment traps or basins.
10. **Comments:** 1. Install all sediment and erosion control plans per approved plan.
    2. Install skimmer basins per specifications per approved sediment and erosion control plan. Install baffles, skimmer, dissipaters and stabilize slopes.
    3. Provide ground cover per applicable time-frames within the approved sediment and erosion control plan.
    4. Provide matting in swales as shown on approved plan.
    5. There is a pipe that is by-passing any sediment and erosion control measure.

# Sedimentation/Construction Stormwater Inspection Report

North Carolina Department of Environmental Quality
Land Resources: Systel Building, 225 Green Street, Suite 714, Fayetteville, NC 28301-5094
(910) 433-3300

6. If using the entrance at Phase 3 of Silver Lane as a construction entrance then add a construction entrance. Add construction entrance at Pewter Drive.
7. ***Re- inspect in 2 weeks for compliance.** *

**Reported by:** Penny Markle

**Others present:**

**Date of inspection:** June 25, 2024

**Time arriving on site:** 11:21 AM **Time leaving site:** 11:45 AM

cc:

# MEETING MINUTES
# MOORE COUNTY SUBDIVISION REVIEW BOARD
# SPEPCIAL MEETING
# SEPTEMBER 10, 2024, 3:00 PM
# 5227 US HWY 15/501, CARTHAGE, NC 28327

**BOARD MEMBERS PRESENT:** Debra Ensminger, Planning (Chair)
Brian Patnode, Moore County Public Utilities
Matt Dawkins, Moore County Public Safety
Jennifer Wincklhofer, Citizen
DeAngelo Jones, NCDOT
Rachel Smith, Moore County GIS
Nathan Hinson, Moore County Environmental Health
Stephen Sheffield, Surveyor
Chris Wiley, Moore County Parks and Recreation

**BOARD MEMBERS ABSENT:** Jonathan Russell, Moore County Soil & Water
Jenny Purvis, Moore County Schools

**STAFF PRESENT:** Ruth Pedersen, Senior Planner
Ginger Bauerband, Planning and Zoning Specialist,
Bryan Phillips, Moore County Public Safety Director
Eli Seawell, Moore County Environmental Health

**APPLICANTS PRESENT:** Philip Picerno, LKC Engineering
Wes Caddell, Tri-South Builders
Martha Bright, Ken Bright Associates, PLLC
Ken Bright, Ken Bright Associates, PLLC
Steve Harris, TKCSJM Harris, LLC

**I. WELCOME/ROLL CALL**
Debra Ensminger explains reconvention per lack of a quorum at the September 3, 2024 SRB Meeting. The subdivisions remain on track to be on the October 15 BOC Meeting. Ensminger started roll call.

**II. APPROVAL OF MINUTES:** Minutes from June 13, 2024, Regular Meeting.
Ensminger made motion to approve, Sheffield seconded. Motion passed unanimously.

**III. SUBDIVISION REVIEW: Senior Planner, Ruth Pedersen.**

**A. Gretchen Pines Proposed Phase 5 Conservation Subdivision Preliminary Plat**

East of Seven lakes, Phase 5 had been excluded from initial plat. Phases 3 & 4 have been approved. Phases 1-3 are built out, Phase 4 beginning construction. Plat shows extension of 2 roads, Pewter Drive and Ivory Lane. Phase 5 meets minimum open space, adequate water supply to provide Moore Co service. Phase 5 will use individual septic systems. Fire flow test from May 3, 2024, projected results 20 PSI with residual pressure 617 GPM. Phase 5 is in watershed district WSIIIP and in a high-quality water area. NCDEQ has required Phase 5 to have stormwater management plan. Plan has been submitted to Moore County. Adjacent to Voluntary Ag district.

Martha Bright explained the stormwater plan. Maximum 12 % impervious limit per WSIIIP. Phase 5 is 10.3%, a low-density project. Project uses swales to carry water from one side of the road to the other, and between some lots like 118 & 119. The rest of the water goes where the natural grade flows. Martha continued to explain pipe drainage system. Most of the water is coming from the direction of the McDonald's Farm tract.

Pedersen continued, a S&E Control plan approval from DEQ has been obtained for Phase 5. Road names, Ivory Lane and Arcadia Way were approved by BOC Feb. 18, 2020. Phase 5 has met requirements (utilities will be underground, street trees, postal kiosk, roads, etc…) 30.82% of open space greater than UDO requirement. No plans to add additional entrances.

Pedersen stated that Staff recommendation at this time was for the SRB to determine if proposed application is complete, and if the preliminary plat meets the requirements of the UDO.

Brian Patnode noticed 2 fire hydrants at corner of Ivory & Arcadia. Martha acknowledged the error. Patnode continued water supply is sufficient. Patnode asked for comments about construction and impacts on wetlands? Martha replied no construction will take place on wetlands, soils outside of wetlands are useable soils. Pedersen stated they had obtained a Wetland 404.

Public safety had no comments.

Ensminger asked about drainage 15 ft. easement on lot 137 & 138, could a condition be added that any fencing would be required to allow (not block) drainage? Bright & Harris acknowledged there would be a note for every lot to ensure compliance.

Ensminger reminded SRB members to be prepared to discuss stormwater and erosion to BOC.

Nathan Hinson asked who will be submitting septic applications? Harris replied, they will have Environmental Health do the permits.

Sheffield asked if the project had met ordinance standards? Roundtable of each department replied Yes, meets all UDO requirements.

**MOTION:** Sheffield made motion to deem this preliminary plat Gretchen Pines Phase 5 Preliminary Plat, complete, and forward the Special Use Permit application to the Moore County Board of Commissioners. Rachel Smith (GIS) seconded. Motion passed unanimously.

**B. Brookwood Phase 5 Preliminary Plat, Senior Planner, Ruth Pedersen**

Pedersen introduced the project proposal for Brookwood Phase 5, an additional 4 lots to current 128 lots (total 132) requiring amendment to SUP. 4 additional lots at the end of a cul de sac so no additional roads will be constructed, no additional infrastructure. Phase 5 allowable density, served by MCPU. The 4 additional lots will use individual private septic. Primarily WSIIIP Water Shed High Quality, adjacent to Vol Ag. District. Required to submit DEQ permit and stormwater plan to the County and have done so.

Picerno addressed board. The addition of Phase 5 yields no additional infrastructure, no additional impervious. 1 dwelling unit per acre. Ditch and shoulder subdivision. Retention ponds made good use of area. DEQ permit issued.

Pedersen explained Enfield Drive is an existing road built to DOT standards. Conditions include street trees outside of site triangles, lots will use individual post boxes instead of a postal kiosk.

Pedersen continued; all open space is contained within other phases yielding 36.8% over 30% minimum. Phase 5 was not open space on previous plats.

Ensminger asked if a condition could be added that any fences built in a drainage easement be required not to block the flow of water.

**MOTION:** Deem this preliminary plat for Tri-South Builders Brookwood Subdivision Phase 5 complete and forward the Special Use Application amendment to the Moore County Board of Commissioners. Nathan Hinson made motion to approve, Patnode seconded. Motion passed unanimously.

**C. Membership Updates**

Debra Ensminger stated that membership updates are needed. Brian Patnode will be the representative from Moore County Public Utilities. DeAngelo Jones will be the representative from NCDOT with Kevin Reddinger as backup. Nathan Hinson will be the representative from Environmental Health with Eli Seawell as backup. Jennifer Wincklhofer will be re-appointed as citizen member at next Board of Commissioners meeting.

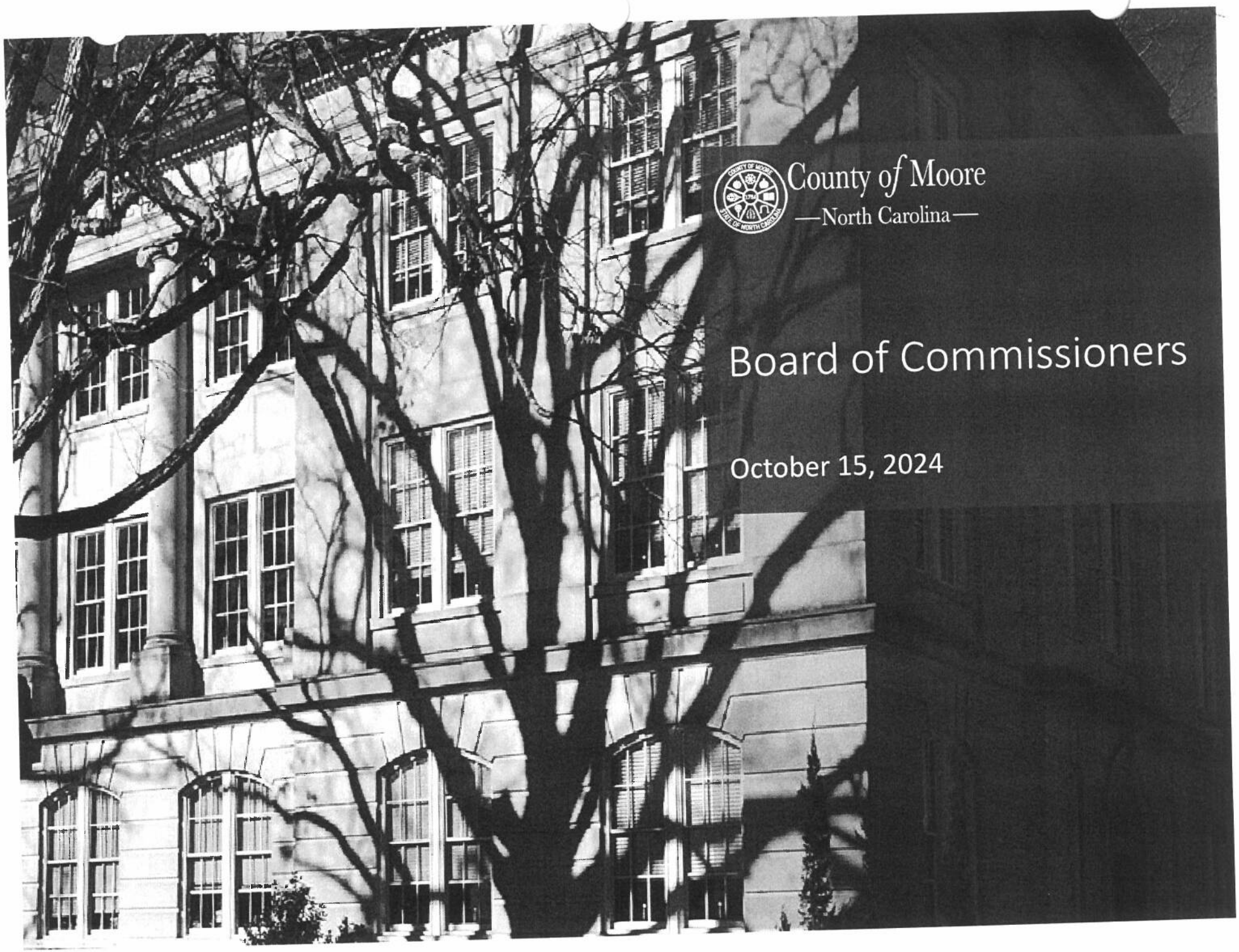
Ensminger asked Stephen Sheffield if he would like to continue to serve. Sheffield replied he would.

Ensminger stated that a new chair needed to be appointed.

Ensminger made a motion to appoint Brian Patnode as chair. Nathan Hinson seconded. Motion passed unanimously.

Ensminger made a motion to appoint Nathan Hinson as vice-chair. Brian Patnode seconded. Motion passed unanimously.

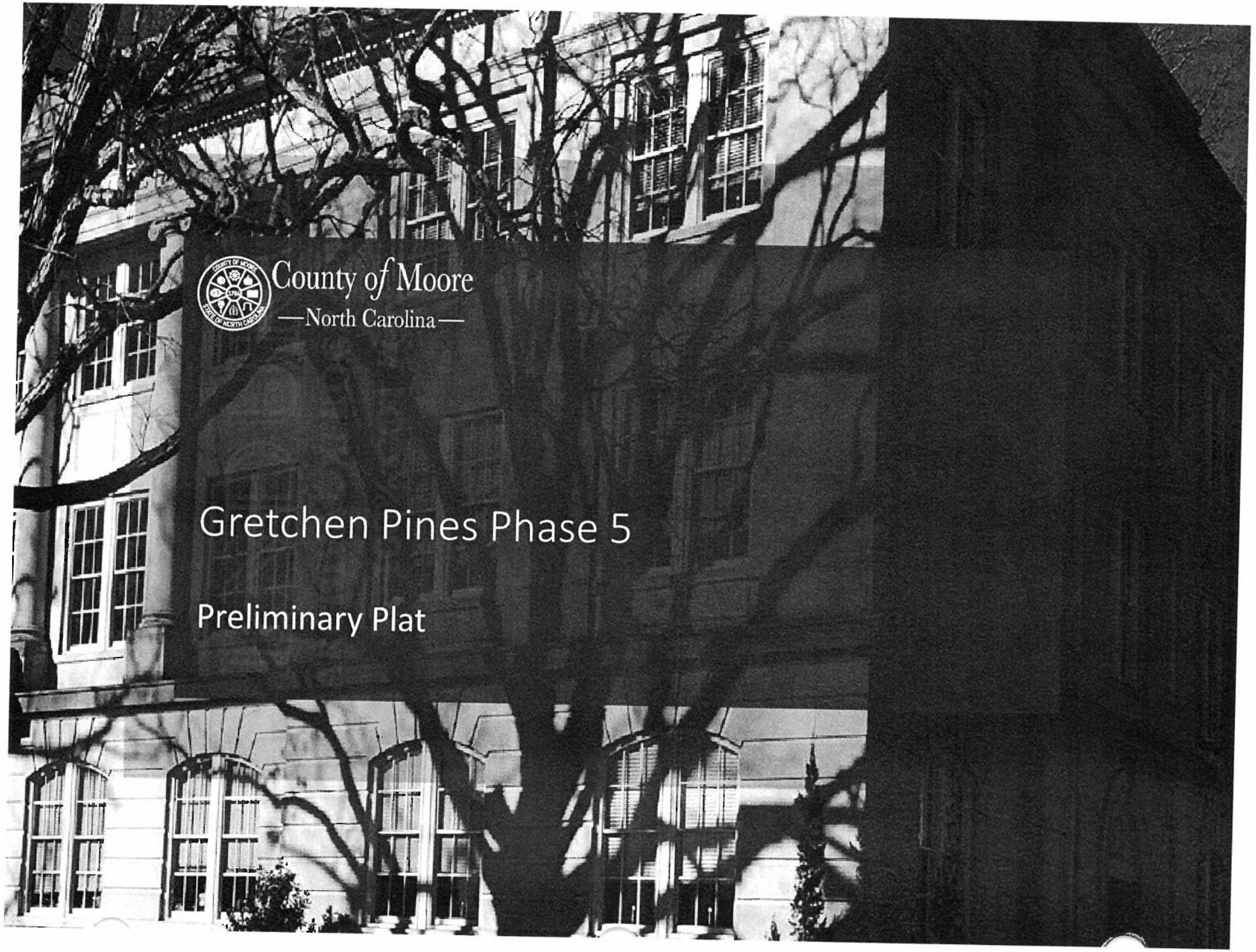
**ADJOURNMENT:** Sheffield made motion to adjourn Dawkins seconded. Adjourned 3:42pm



County of Moore
—North Carolina—

# Board of Commissioners

October 15, 2024



County of Moore
—North Carolina—

# Gretchen Pines Phase 5

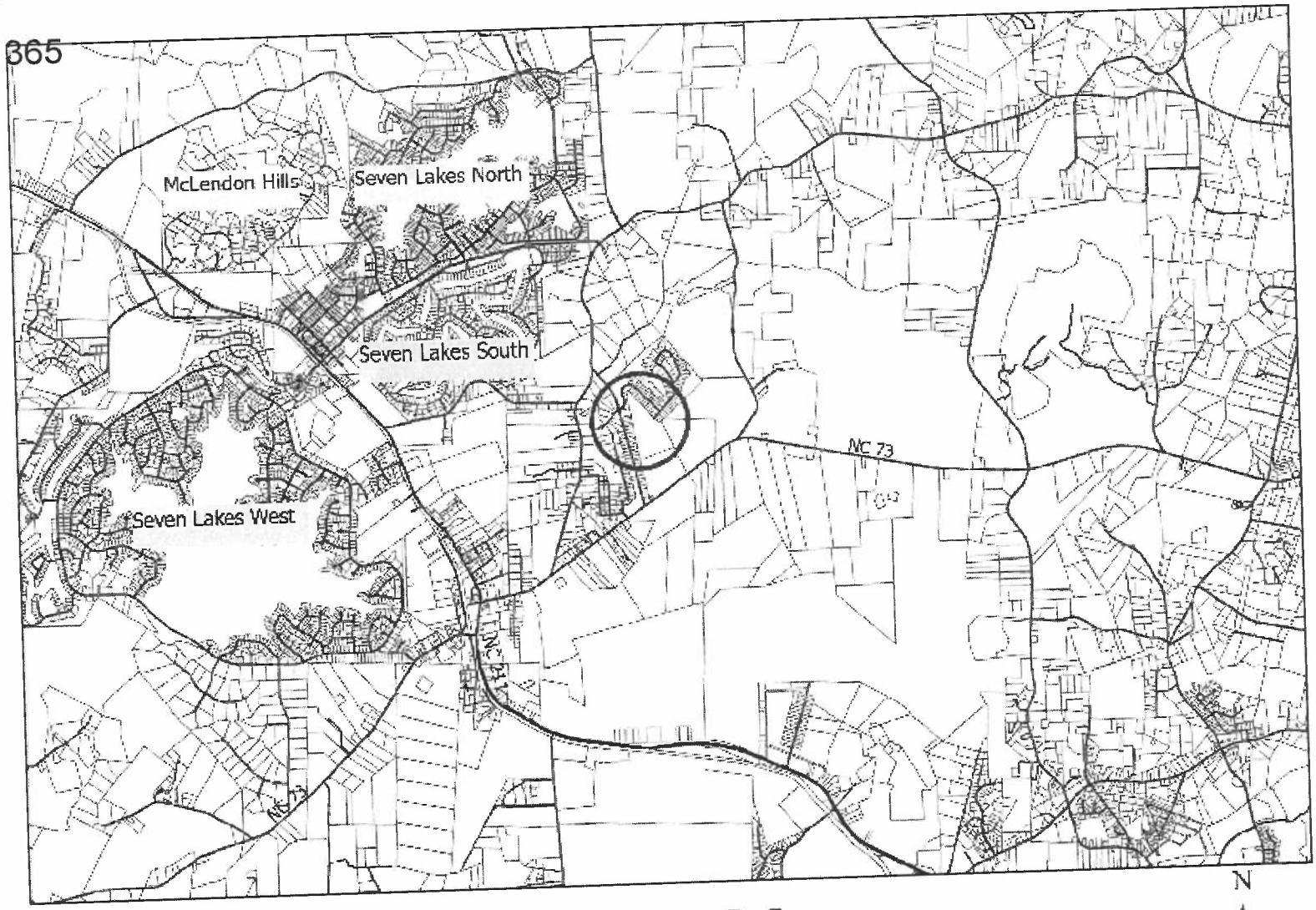
## Preliminary Plat

# Background Information

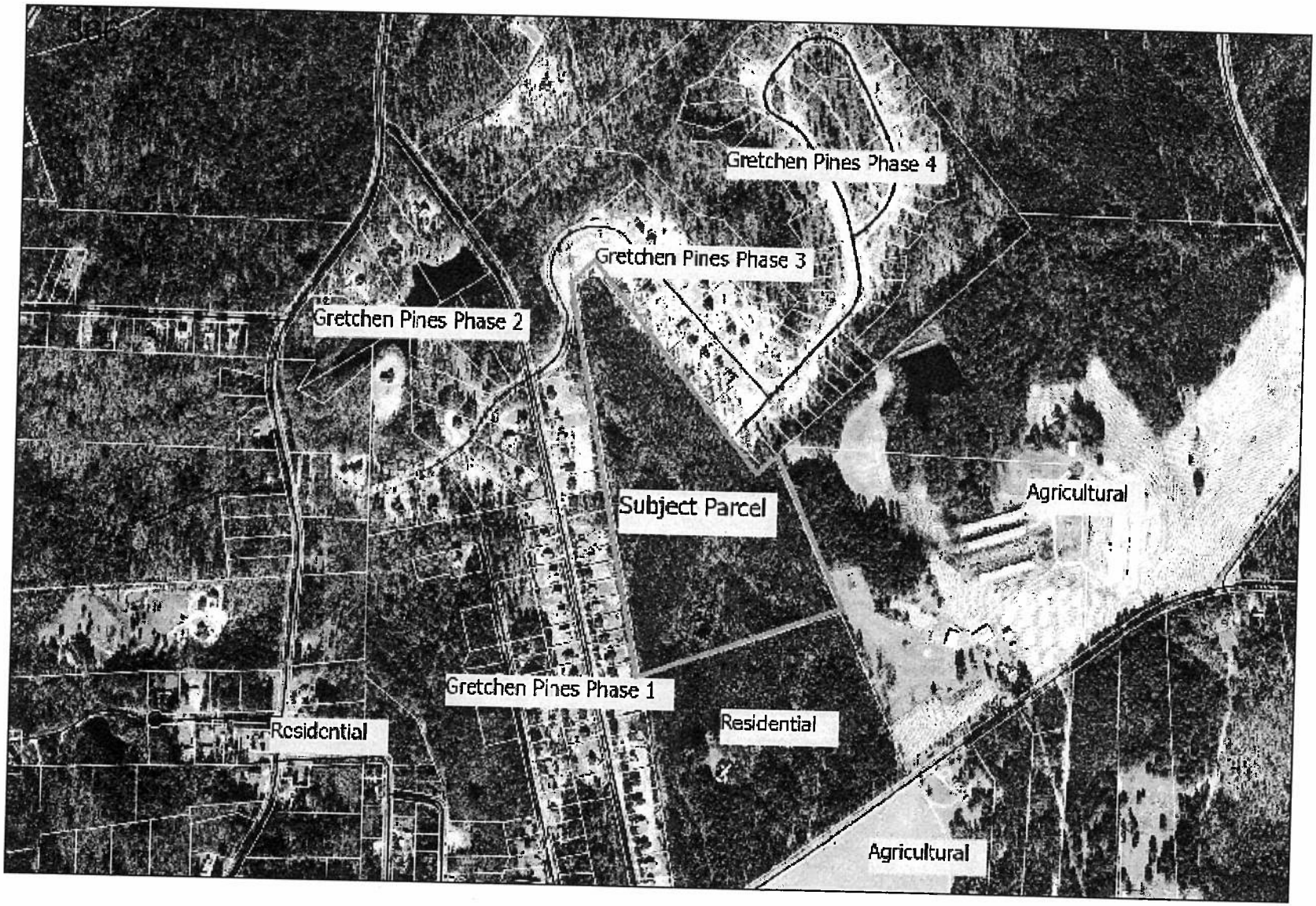
- Gretchen Pines Major Conservation Subdivision was originally approved by the Board of Commissioners on August 20, 2019, for four phases containing 166 lots.
- Lots have been reconfigured since initial approval and final plats have been recorded for phases one through four totaling 139 lots.
- The proposed addition of phase 5 (27 lots) will bring the total to 166 lots.
- The amendment to the Special Use Permit to add a new phase requires the applicant to follow the process of a new Special Use Permit Major Subdivision Application.

# Subdivision Type

- The allowable density for a major conservation subdivision is calculated by dividing the minimum lot size of the zoning district by the gross area of the site.
- The minimum lot size is 40,000 square feet or 0.918 acres.
- The total property acreage is 245.769
- 245.769 / 0.918 = 268 allowable dwelling units.
- Dwelling units proposed = 166.

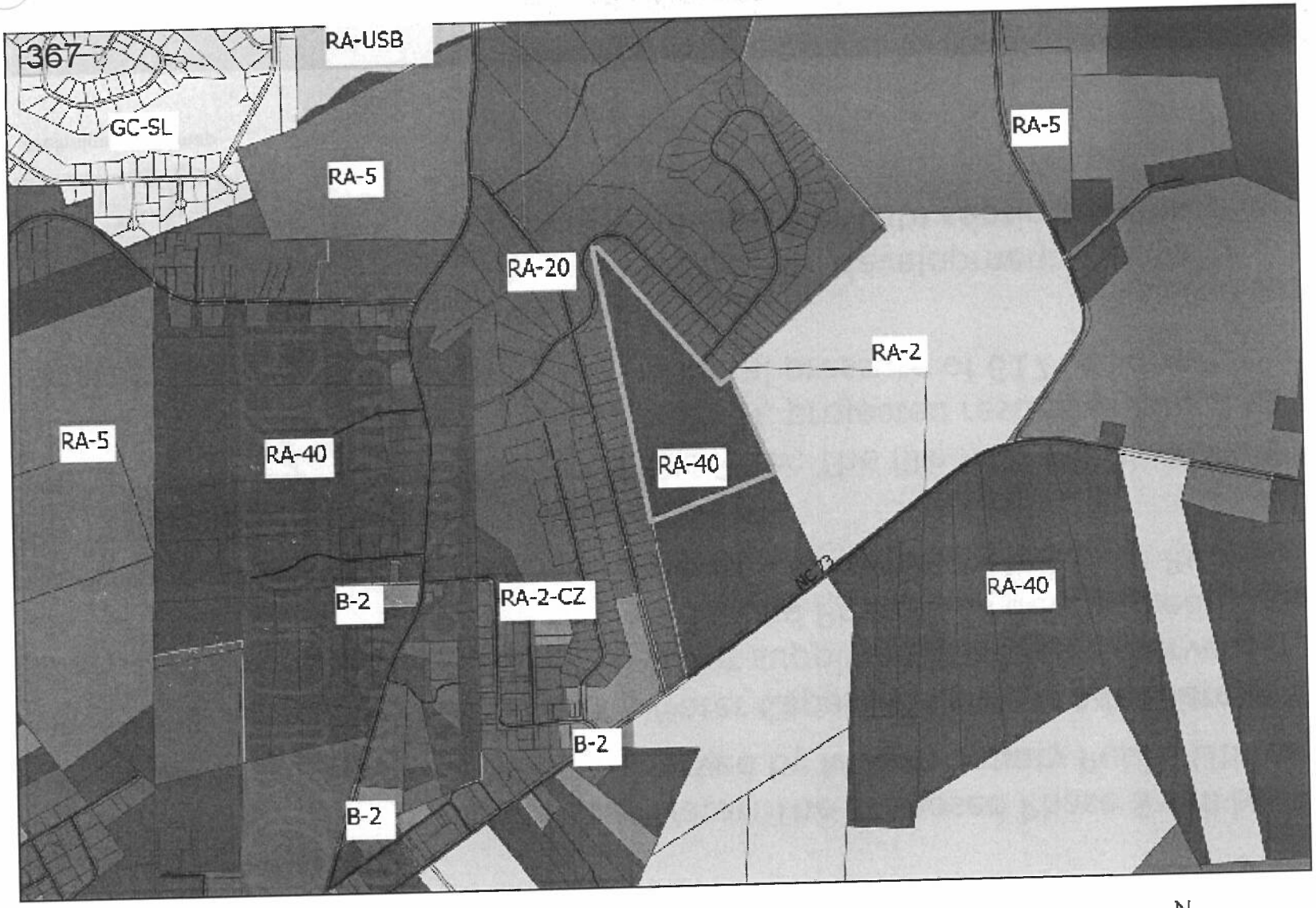



# Vicinity Map




# Land Use Map

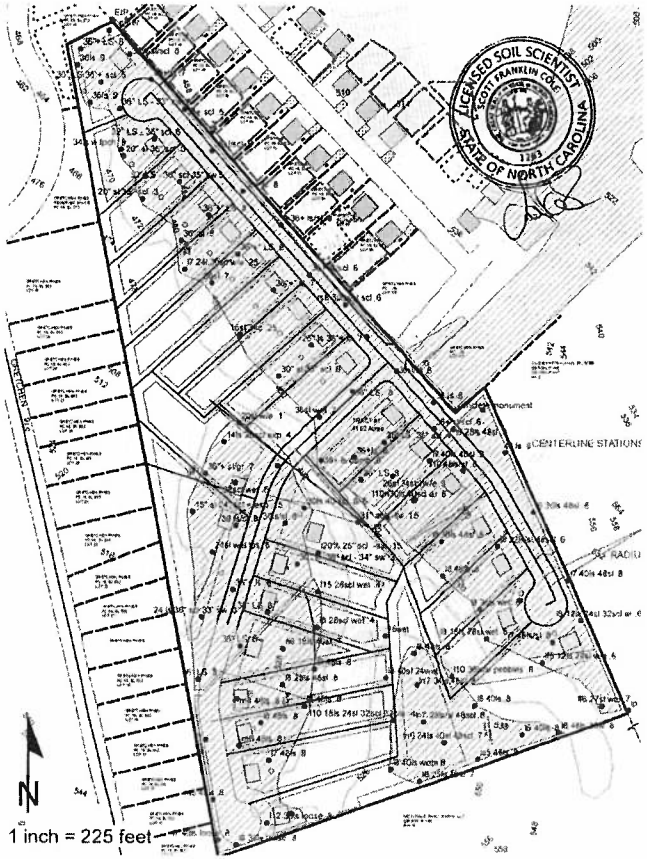
County of Moore
—North Carolina—




# Zoning Map

County of Moore
—North Carolina—

# Infrastructure

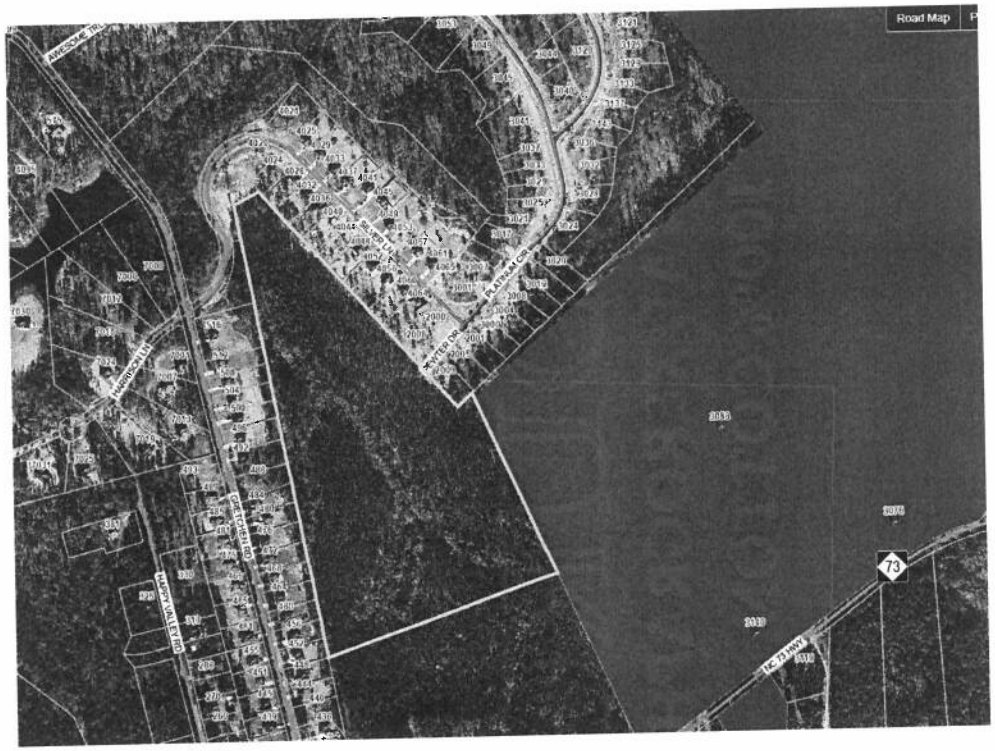



Preliminary soils map

- Water: The proposed Phase 5 will be served by Moore County Public Utilities
- Water Capacity: There is adequate water supply and storage to serve the proposed Phase 5 as determined by the Moore County Department of Public Works.
- Fire Flow: The fire flow test dated May 3, 2024, projected results at 20 PSI with residual pressure of 617 Gallons Per Minute.
- Septic: The development will utilize individual private septic systems.

# Overlay Districts

- Watershed: The property is within the WS-IIIP Cape Fear Little River (Vass) Watershed.
- High Quality Water: The property is within a high-quality watershed which reduced the allowable density to 1 dwelling unit per acre or 12% impervious surface area.
- Voluntary Agricultural District: There is a Voluntary Agricultural District adjacent to the subject property.




Green = Voluntary Agricultural District

# Stormwater

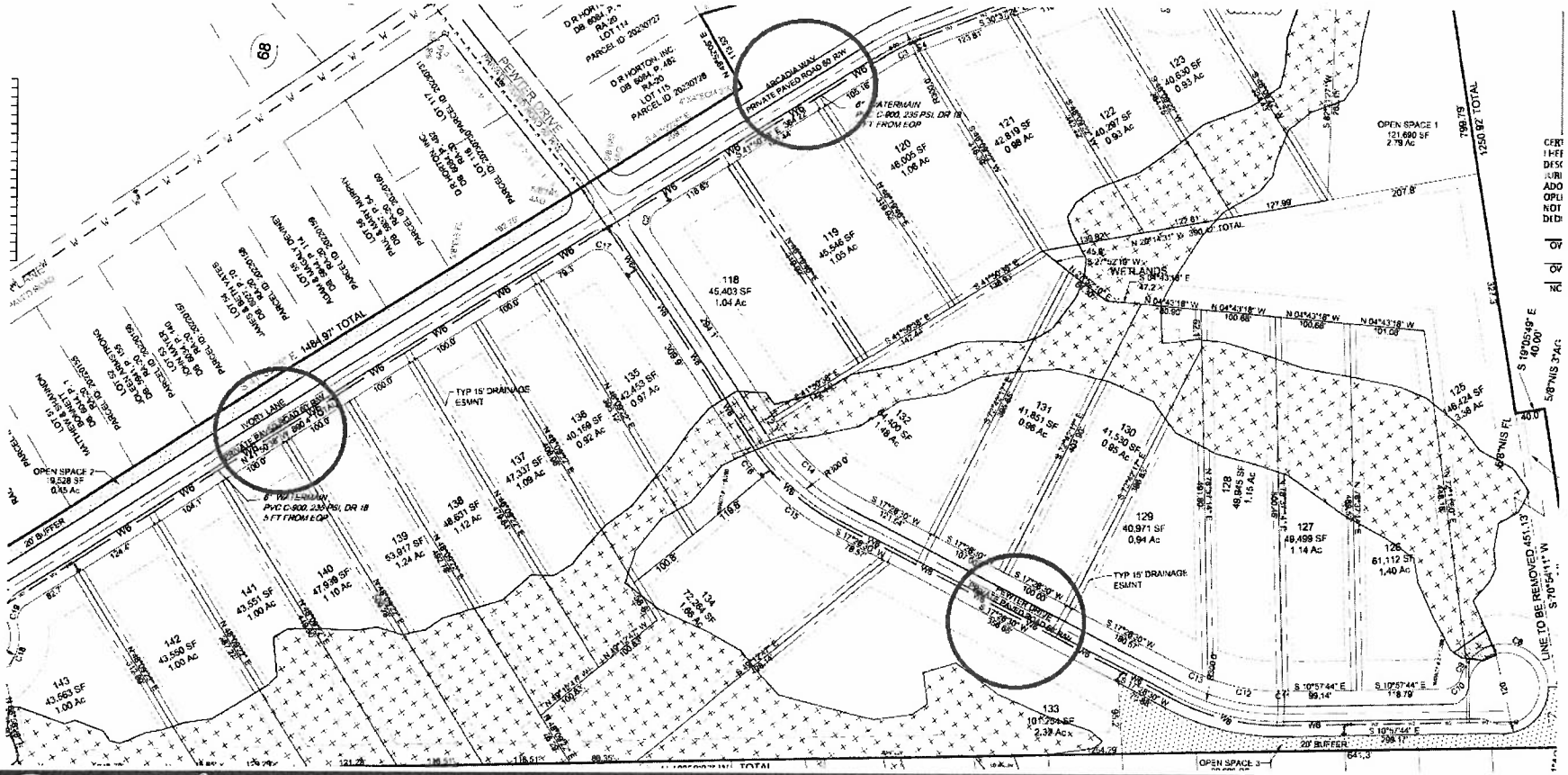
- The applicant was required to submit a stormwater management plan prior to preliminary plat approval.
- The stormwater management plan has been submitted to the County.
- NCDEQ has reviewed the stormwater management plan and, upon approval, issued a Post-Construction Stormwater Management Permit (Permit No. SW6230801) dated March 18, 2024, for the construction, management, operation, and maintenance of built-upon area (BUA) for the low-density subdivision area (Phase 5).
- The maximum amount of built upon area for the entire Phase 5 is 217,545 square feet.
- The maximum built upon area for each individual lot in Phase 5 (lots 118-144) is 4,800 square feet.

# Sedimentation and Erosion Control

- The applicant has obtained approval of a Sedimentation and Erosion Control Plan for Phase 5.

# Transportation/Utilities

- The existing Pewter Dr. is a private road built to NCDOT standards and is proposed to be extended to serve Phase 5.
- Phase 5 also includes two new roads, Ivory Lane and Arcadia Way which intersect Pewter Dr. These road names were approved by the Moore County Board of Commissioners on February 18, 2020.
- All utilities will be underground.



# Street Trees

- The subdivider shall plant or leave at least one street tree for each 20 feet of street frontage along all streets, outside of sight triangles, as illustrated on the preliminary plat.

# Cluster Mailboxes

- The existing mail kiosk in Phase 1 will support the proposed lots in Phase 5.
- The mail kiosk is located outside of the right-of-way and within a homeowner's association-maintained area.



# Entrance Signs

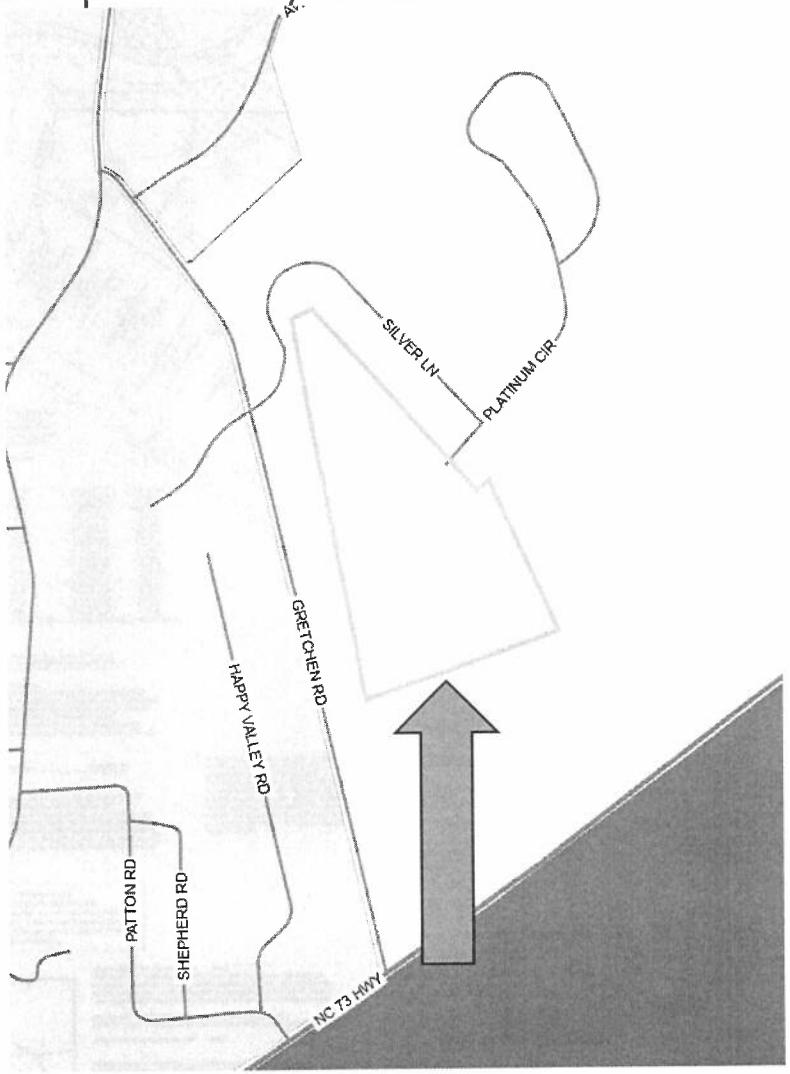
- There are existing signs at the entrances to the subdivision on NC 73 Hwy and Carthage Rd.
- Phase 5 will not have an entrance on an external road, so no other entrance signs are being proposed.

# Open Space

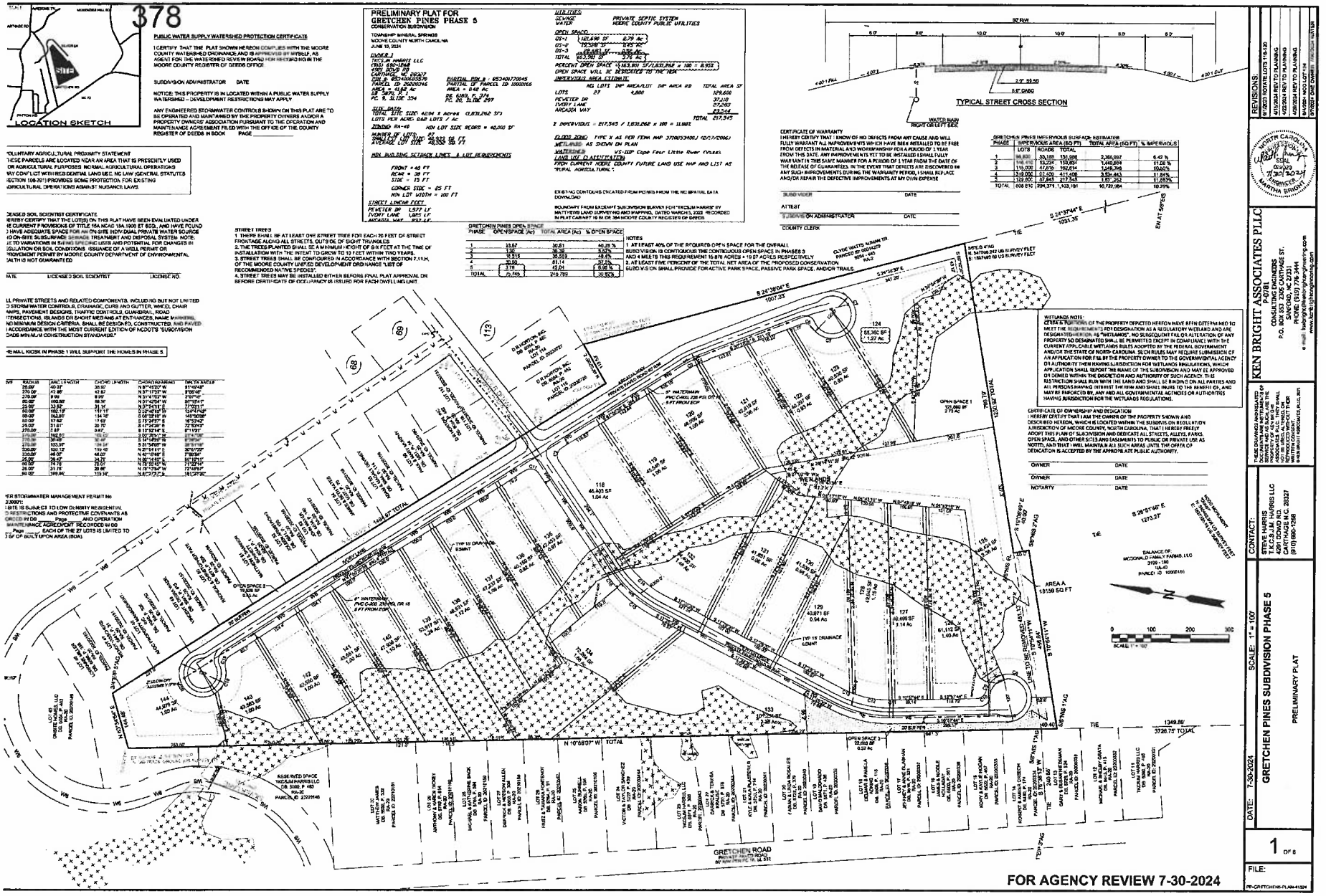
- The proposed Phase 5 will include 3.76 acres of open space.
- The total open space for the whole subdivision will be 75.745 acres, or 30.82% of the subdivision.
- The minimum open space requirement for a conservation subdivision is 30%.
- The open space proposed exceeds the 30% requirement.


OPEN SPACE 1
121,680 SF
2.79 AC
OPEN SPACE 2
19,528 SF
0.45 AC
OPEN SPACE 3
77,580 SF
1.82 AC
WETLANDS
1484.97' TOTAL
N 10°58'07" W TOTAL
118
45,403 SF
1.04 AC
119
45,346 SF
1.04 AC
120
46,005 SF
1.06 AC
121
42,818 SF
0.98 AC
123
40,636 SF
0.93 AC
124
40,597 SF
0.93 AC
125
61,112 SF
1.40 AC
126
48,124 SF
1.10 AC
127
49,499 SF
1.14 AC
128
49,845 SF
1.14 AC
129
40,971 SF
0.94 AC
130
41,100 SF
0.94 AC
131
41,851 SF
0.96 AC
132
42,145 SF
0.97 AC
133
101,794 SF
2.34 AC
134
72,284 SF
1.66 AC
135
42,403 SF
0.97 AC
136
40,158 SF
0.92 AC
137
47,437 SF
1.09 AC
138
49,631 SF
1.14 AC
139
51,917 SF
1.19 AC
140
47,918 SF
1.10 AC
141
43,565 SF
1.00 AC
142
43,566 SF
1.00 AC
143
43,563 SF
1.00 AC
TYP 15' DRAINAGE ESMNT
50' BUFFER
LINE TO BE REMOVED
S 10°58'07" E
40.00'
S 58°16'13" W
S 10°58'07" E
S 10°58'07" E
S 10°58'07" E

# Compatibility with 2013 Moore County Future Land Use Plan




- Portion of Phases 1 and 2 are designated Medium Density Residential (yellow)
- Phase 3, 4, and proposed Phase 5 are designated Rural Agricultural (white)
- If approved, this area on the Future Land Use Map will be updated to Medium Density Residential


PRELIMINARY PLAT FOR
GRETCHEN PINES PHASE 5
CONSERVATION SUBDIVISION
TOWNSHIP: MINERAL SPRINGS
MOORE COUNTY, NORTH CAROLINA
JUNE 19, 2024
OWNER:
TWO JR HARRIS LLC
(910) 690-1848
4301 ROYAL DR
CARTHAGE, NC 28327
DEED REF: BK 5080, P. 483
PARCEL ID: 22771148
DEVELOPER:
STEVE HARRIS
(910) 690-1848
4301 ROYAL DR
CARTHAGE, NC 28327
SURVEYOR:
KEN BRIGHT ASSOCIATES PLLC
P.O. BOX 1148
SANFORD, NC 27331
(919) 776-3444
kbright@kenbrightengineering.com
PARCEL ID: 00034279
PARCEL ID: 00034280
PARCEL ID: 00034281
PARCEL ID: 00034282
PARCEL ID: 00034283
PARCEL ID: 00034284
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PARCEL ID:

# Recommendation

Staff recommends the Moore County Board of Commissioners make the following motion:

Make a motion to **approve/deny** the amendment to a Special Use Permit and preliminary plat for "Gretchen Pines Subdivision Phase 5 Preliminary Plat" for an additional phase containing 27 lots, on one parcel containing 42.04 acres, located off NC Hwy 73, West End, NC (PID 20220346 and partial of 10000166), owned by TKCSJM Harris, LLC per Deed Book 5870, Page 1 and Deed Book 6183, Page 374.

**Agenda Item:** 10.B.
**Meeting Date:** October 15, 2024

**MEMORANDUM TO THE MOORE COUNTY BOARD OF COMMISSIONERS:**

**FROM:** Debra Ensminger, Planning Director
**DATE:** 09/25/2024
**SUBJECT:** Conventional Rezoning Request: Neighborhood Business (B-1) to Rural Agricultural (RA) Doby Rd.
**PRESENTER:** Debra Ensminger, Planning Director

**REQUEST:** A request for a Conventional Rezoning of one parcel of approximately 2.59 acres, located at 129 Doby Rd, and further described as Parcel ID 00990314 in Moore County tax records, from Neighborhood Business (B-1) to Rural Agricultural (RA). The parcel is owned by the Ruby C. Howard Revocable Trust of 2024 per Deed Book 6169, Page 254. The potentially affected properties are located on Doby Road and surrounding properties.

Public notification consisted of publishing a legal notice in the local newspaper for two consecutive weeks, notification by certified mail to adjacent property owners, and placing public hearing signs on the property.

**BACKGROUND:** William L. Howard, and wife, Ruby C. Howard acquired the property in July 1995 in Deed Book 1099, Page 29 as tenants by the entirety. The property owners established a welding shop business on the property. In addition, the property owners built their single-family residence on the property in 1995. Since the establishment of County-wide zoning in 1999, the property has been zoned as Neighborhood Business (B-1). Mr. Howard passed away on June 4, 2022 (Estate File 22 E 830), and Ms. Howard automatically became the sole owner of the property. Ms. Howard transferred the property in May 2024 to the Ruby C. Howard Revocable Trust of 2024 in Deed Book 6169, Page 254. Ms. Howard passed away on May 10, 2024 (Estate File 24 E 437). The Howard's two daughters, Lisa M. Howell, and Tammy D. Bishop, who are the co-executors of the estate, co-successor trustees, and beneficiaries, have the home listed for sale. A bank will not loan money on the property under the current zoning classification, Neighborhood Business (B-1).

The Conventional Rezoning request to Rural Agricultural (RA) is compatible with adjacent residential uses. Adjacent properties include single family dwellings, vacant commercial buildings, and rural agricultural properties. Adjacent and surrounding parcels are currently zoned Rural Agricultural (RA) and Neighborhood Business (B-1).

**BOARD OF COMMISSIONERS DECISION: Chapter 11.3.C**
1. After the conclusion of a legislative public hearing, the Board of Commissioners shall decide the text amendment or conventional rezoning application in accordance with the standards in Section 11.3.D, Review Criteria.

2. The decision shall be one of the following:
i. Approval of the application;
ii. Denial of the application;
iii. Approval of a revised application; or
iv. Remand of the application to County staff for further consideration.
3. The decision shall be based on the legislative discretion of the Board of Commissioners, taking into consideration the recommendation of the Planning Board and the standards in Section 11.3.D, Review Criteria.
4. When adopting or rejecting any text or conventional zoning map amendment, the Board of Commissioners shall approve a brief statement describing whether its action is consistent or inconsistent with an adopted comprehensive plan.

**REVIEW CRITERIA: Chapter 11.3.D**
The advisability of approval of a text amendment or conventional rezoning application is a matter committed to the legislative discretion of the Board of Commissioners and is not controlled by any one factor. In determining whether to adopt or deny an application, the Board of Commissioners may weigh the relevance of and consider the following:
1. Whether the proposed application advances the public health, safety, or welfare;
2. Whether and the extent to which the proposed application is appropriate for its proposed location, and is consistent with the purposes, goals, objectives, and policies of the County's Adopted Comprehensive Land Use Plan;
3. Whether the application is necessitated by changed conditions;
4. If approval of the application addresses a demonstrated community need;
5. If the application addresses an unforeseen matter not present when the Ordinance was adopted;
6. Whether an approval of the application is reasonable and in the public interest; and
7. Other factors as the Board of Commissioners may determine to be relevant

**ZONING DISTRICT COMPATIBILITY**
The Unified Development Ordinance defines a Rural Agricultural (RA) district as a district intended to encourage the continuance of agricultural uses as well as to ensure that residential development of appropriate intensities that are consonant with the suitability of land, availability of public services, and that are compatible with surrounding development, will occur at appropriate densities to provide a healthful environment. The RA district is also intended to accommodate rural commercial activities where the use, vegetative buffers, larger lots, and the compatibility of adjacent land uses are considered to provide suitable locations for rural commerce and other rural activities.

The requested rezoning to RA is compatible with the existing uses located near the property including residential uses. Zoning districts adjacent to the property include RA and B-1. Rezoning to RA is compatible with the adjacent properties and would reduce the intensity of allowable land uses, from the current zoning of B-1, if future redevelopment of the property were to occur. A comprehensive list of the allowable uses for both zoning districts is delineated below.

Currently, the B-1 zoning district has 47 allowable uses.

Currently, the B-1 zoning district has 47 allowable uses.

| | |
|---|---|
| AGRICULTURAL USES | - One total - permitted by right |
| RESIDENTIAL USES | - Two total (1- SUP, 1 - permitted by right) |
| COMMERCIAL USES | -Twenty-four total (5 - CZ, 1 - SUP, 18 - permitted by right) |
| EDUCATIONAL & INSTITUTIONAL USES | - Seven total (7- permitted by right) |
| RECREATION USES | - Five total (1- SUP, 4 - permitted by right) |
| INDUSTRIAL USES | - Eight total (2- CZ, 6- permitted by right) |

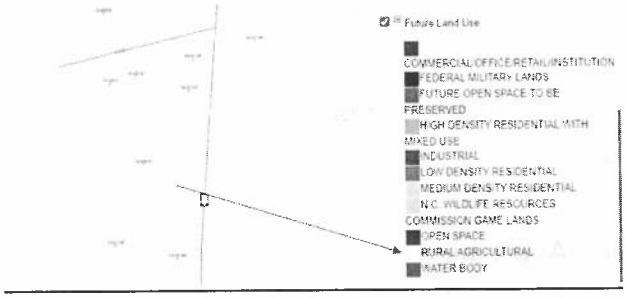
Currently the RA zoning district has 52 allowable uses.

| | |
|---|---|
| AGRICULTURAL USES | - One total - permitted by right category, |
| RESIDENTIAL USES | - Six total (2 - CZ, 1 - SUP, 3 - permitted by right) |
| COMMERCIAL USES | - Twelve total (6 - CZ, 4 – SUP, 2- permitted by right), |
| EDUCATIONAL & INSTITUTIONAL USES | - Eight total (7- SUP, 1- permitted by right) |
| RECREATION USES | - Thirteen total (5- CZ, 3-SUP, 5- permitted by right) |
| INDUSTRIAL USES | - Twelve total (6- CZ, 3- SUP, 3- permitted by right) |

| ALLOWED IN NEIGHBORHOOD BUSINESS (B-1) | ALLOWED IN RURAL AGRICULTURAL (RA) |
|---|---|
| **Agricultural Uses and Buildings** | **Agricultural Uses and Buildings** |
| Group Care Facility (Special Use Permit) | **Dwellings, Single Family** |
| **Nursing Home** | **Family Care Home (6 or less)** |
| Kennels Overnight (CZ) | **Manufactured Home** |
| **Pet Day Care, Grooming, Obedience Training** | Manufactured Home Park (CZ) |
| **Veterinary Clinic** | Group Care Facility (CZ) |
| **Commissary Kitchen** | Nursing Home (Special Use Permit) |
| **Dry Cleaning and Laundromat** | Animal Shelter (CZ) |
| **Office** | Animal Training Facility, Military (CZ) |
| **Small Appliance Repair Shop** | Kennels Overnight (CZ) |
| Trade Contractor Office and Workshop (CZ) | Pet Day Care, grooming, Obedience Training (CZ) |
| **Auction House** | Veterinary Clinic (CZ) |
| **Convenience Store** | Bed and Breakfast (CZ) |
| **Feed and Seed Sales** | **Commissary Kitchen** |
| **Florist** | Convenience Store (Special Use Permit) |
| Flea Market (CZ) | Feed and Seed Sales (Special Use Permit) |
| **Garden Center** | **Florist** |
| **Restaurant** | Flea Market (Special Use Permit) |
| **Retail** | Brewery/Winery (Special Use Permit) |
| **Car Wash & Detailing** | Cemetery or Mausoleum, Commercial (Special Use Permit) |
| Commercial truck Wash (Special Use Permit) | Childcare Facility (Special Use Permit) |
| **Parking lot as a Principal Use** | College/ Business & Trade School (Special Use Permit) |
| Taxi Service (CZ) | **Government Facility** |
| **Vehicle, Auto Parts, Tires, Farm Equipment, Boat, RV-Sales, Rental or Service** | Museum / Art Gallery (Special Use Permit) |
| **Vehicle Service Station (Gas Stations)** | Religious Institution (Special Use Permit) |
| Vehicle Wrecker Service (CZ) | Security Training Facility (Special Use Permit) |
| **Massage & Bodywork Therapy** | School, Elementary/Middle/High (Special Use Permit) |
| **Cemetery or Mausoleum, Commercial** | Airport, Public or Private (Special Use Permit) |
| **Childcare Facility** | Airstrip, Small Private (Special Use Permit) |
| **Funeral Home with Crematorium** | Assembly Hall (CZ) |
| **Government Facility** | **Camp or Care Center** |
| **Museum /Art Gallery** | **Campground, Public and Private** |
| **Religious Institution** | **Camp, Recreation Day** |
| **School, Elementary/Middle/High** | Civic, Social Club, Lodge, Organization (Special Use Permit) |
| **Airstrip, Small Private** | **Neighborhood Park** |
| **ALLOWED IN NEIGHBORHOOD BUSINESS (B-1)** | **ALLOWED IN RURAL AGRICULTURAL (RA)** |
| **Civic, Social Club, Lodge, Organization** | **Recreation, Low Impact Outdoor** |
| **Neighborhood Park** | Recreation, High Impact Outdoor (CZ) |
| Recreation, Indoor (Special Use Permit) | Shooting Range, Indoor (CZ) |
| **Recreation, Low Impact Outdoor** | Shooting range, Outdoor (CZ) |
| **Manufacturing & Sales Pottery** | Zoo / Petting Zoo (CZ) |
| **Public & Private Utility Facilities** | **Manufacturing & Sales Pottery** |
| **Antenna Collocation, Major** | Contractors Storage Yard and Office (CZ) |
| **Antenna Collocation, Minor** | Freight Terminal (CZ) |
| **Small Wireless Facility** | **Public & Private Utility Facilities** |
| **Telecommunications Tower, Minor** | Antenna Collocation, Major (Special Use Permit) |
| Mini-Warehouse Self-Storage (CZ) | **Antenna Collocation, Minor** |

| | |
|---|---|
| Debris Management Facility (CZ) | Small Wireless Facility (Special Use Permit) |
| | Telecommunications Tower, Major (CZ) |
| | Telecommunications Tower, Minor (Special Uses Permit) |
| | Warehousing or Distribution Center (CZ) |
| | Debris Management Facility (CZ) |
| | Mining / Quarry Operation (CZ) |

**MOORE COUNTY FUTURE LAND USE MAP**




## CONSISTENCY WITH THE 2013 MOORE COUNTY LAND USE PLAN

The Future Land Use Map identifies the property and the surrounding area as Rural Agricultural. The Land Use Plan states that the Rural Agricultural classification's primary use of land is to support rural residential life associated with agricultural uses (e.g., row crops, forestry, horticulture, grazing, poultry, dairy, swine operations, and intensive agricultural uses in certain areas) and other rural activities. Major subdivisions of land are strongly discouraged; however, family subdivisions and subdivisions of four or less lots would be considered.

The rezoning request does align with the Future Land Use Map classification of Rural Agricultural and aligns with the following Goals and Actions as included in the attached Land Use Plan Consistency Statement, including:

**Goal 1**: Preserve and Protect the Ambiance and Heritage of the County of Moore (inclusive of areas around municipalities).

- Action 1.8.5: Support and promote infill development that will optimize the use of existing infrastructure.

This rezoning to RA would make the parcel more consistent than its current zoning of B -1. RA offers lower intensity potential land uses, which are more compatible with the surrounding properties than the existing district of B-1 when comparing to the Future Land Use Map.

## PLANNING BOARD RECOMMENDATION:

The Planning Board met on September 5, 2024, and voted 6-0 the requested rezoning was Consistent with the Moore County Land Use Plan and voted 6-0 to recommend approval of the rezoning request.

**FINANCIAL IMPACT:** None

**IMPLEMENTATION PLAN:** Hold a Public Hearing on October 15, 2024, at 5:30 p.m.

**RECOMMENDATION SUMMARY:** Staff recommends the Board of Commissioners make two separate motions:

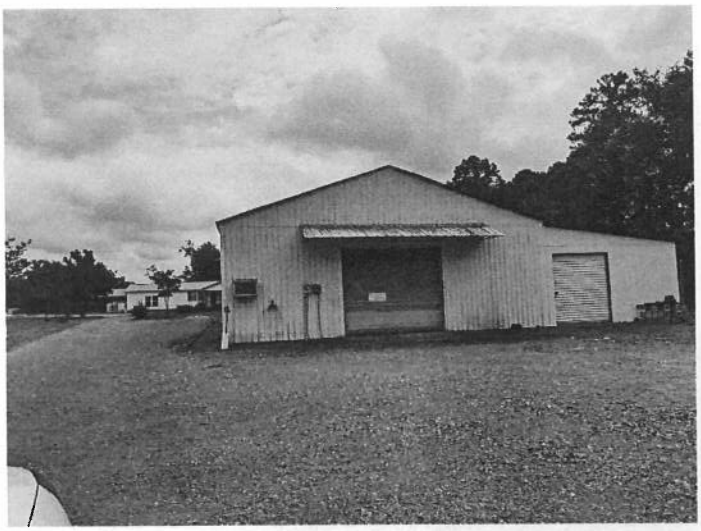
**Motion #1**: Make a motion to adopt the attached Board of Commissioners Land Use Plan

Consistency Statement (**Consistent** or **Inconsistent**) and authorize the Chairman to execute the document as required by North Carolina General Statute 160D-605.

**Motion #2**: Make a motion to **Approve** or **Deny** the Conventional Rezoning of one parcel of approximately 2.59 acres, located at 129 Doby Rd, and further described as Parcel ID 00990314 in Moore County tax records, from Neighborhood Business (B-1) to Rural Agricultural (RA). The parcel is owned by Ruby C. Howard Revocable Trust of 2024 per Deed Book 6169, Page 254.

**ATTACHMENTS:**

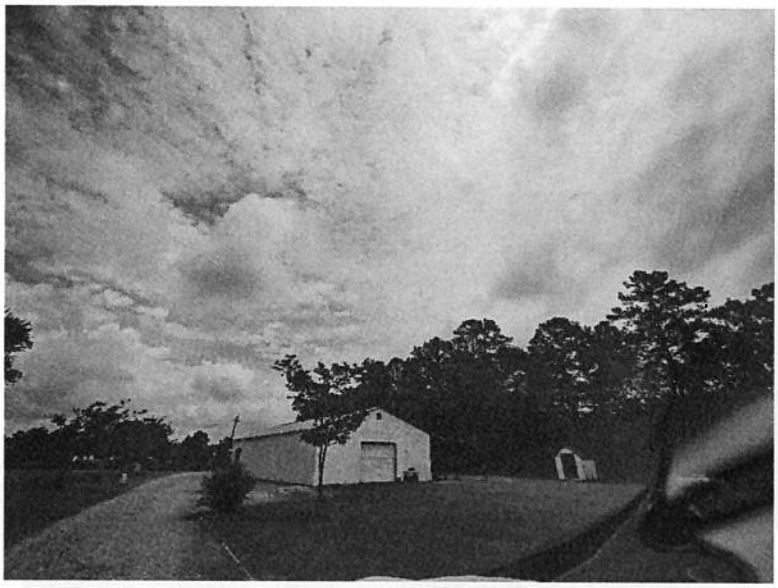
1. Pictures of Property and Adjacent Properties
2. Vicinity Map
3. Land Use Map
4. Zoning Map
5. Submitted Rezoning Application
6. Deed Book 1099 Pages 29-30
7. Deed Book 6169 Pages 254-258
8. Deed Book 6169 Pages 259-269
9. Application & Assignment Year's Allowance (22E 830)
10. Notice to Beneficiary (24 E 437)
11. Allowable Uses Comparison B-1 vs RA
12. Bord of Commissioners Consistency Statements (Consistent/Inconsistent)



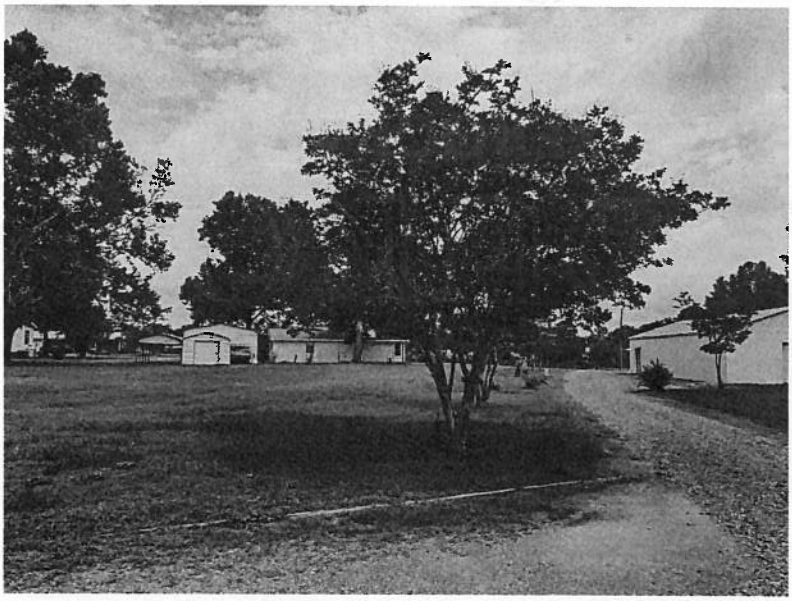
From Doby Road looking to front of 129 Doby Rd (previous welding shop with house behind it)



Front of house at 129 Doby ( behind welding shop)



Back of welding shop when looking from house on 129 Doby Rd



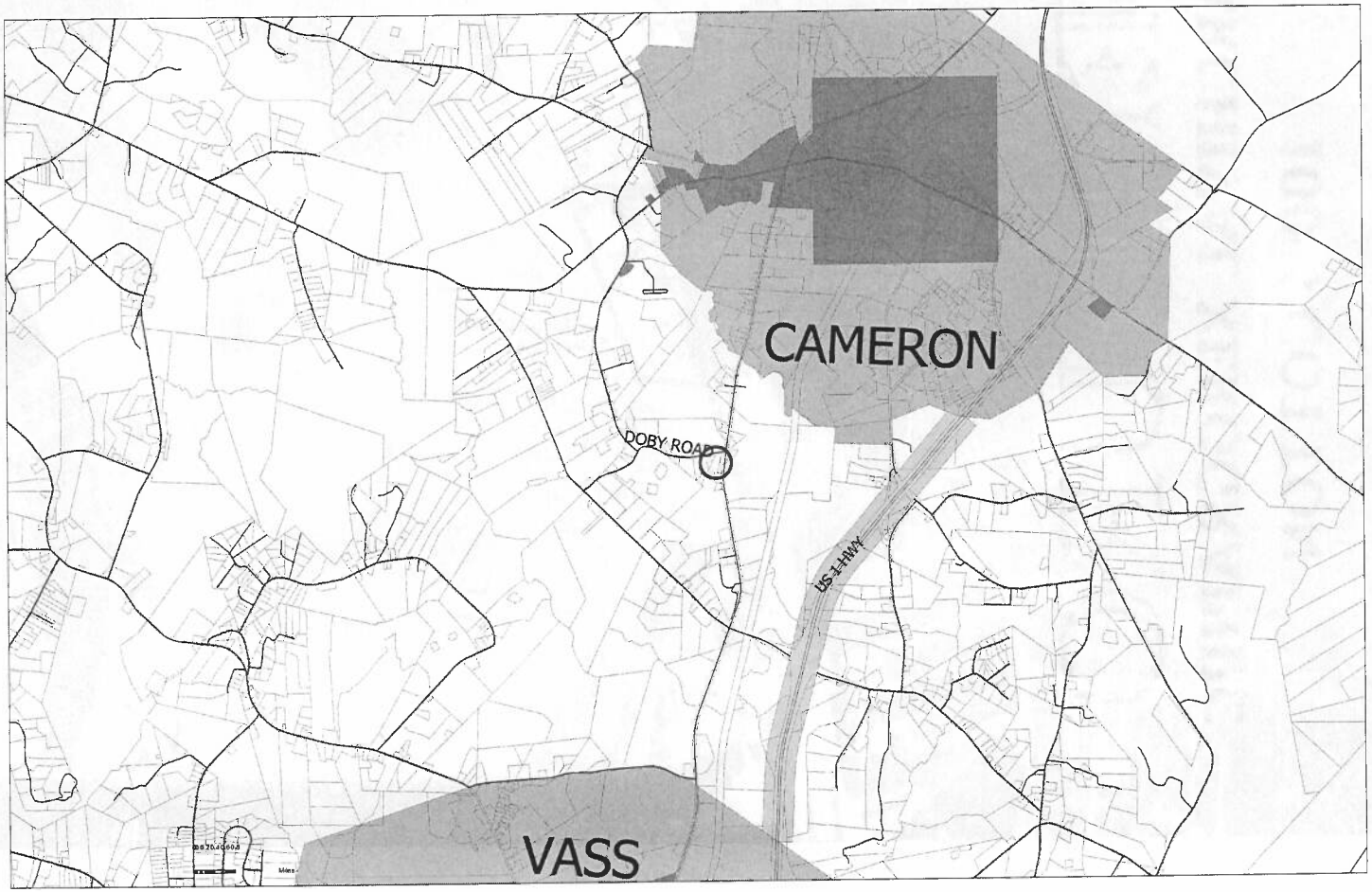
Neighbors house when looking from front of house ( 129 Doby Rd)



Right side of house at 129 Doby Rd (when looking to Doby Rd)

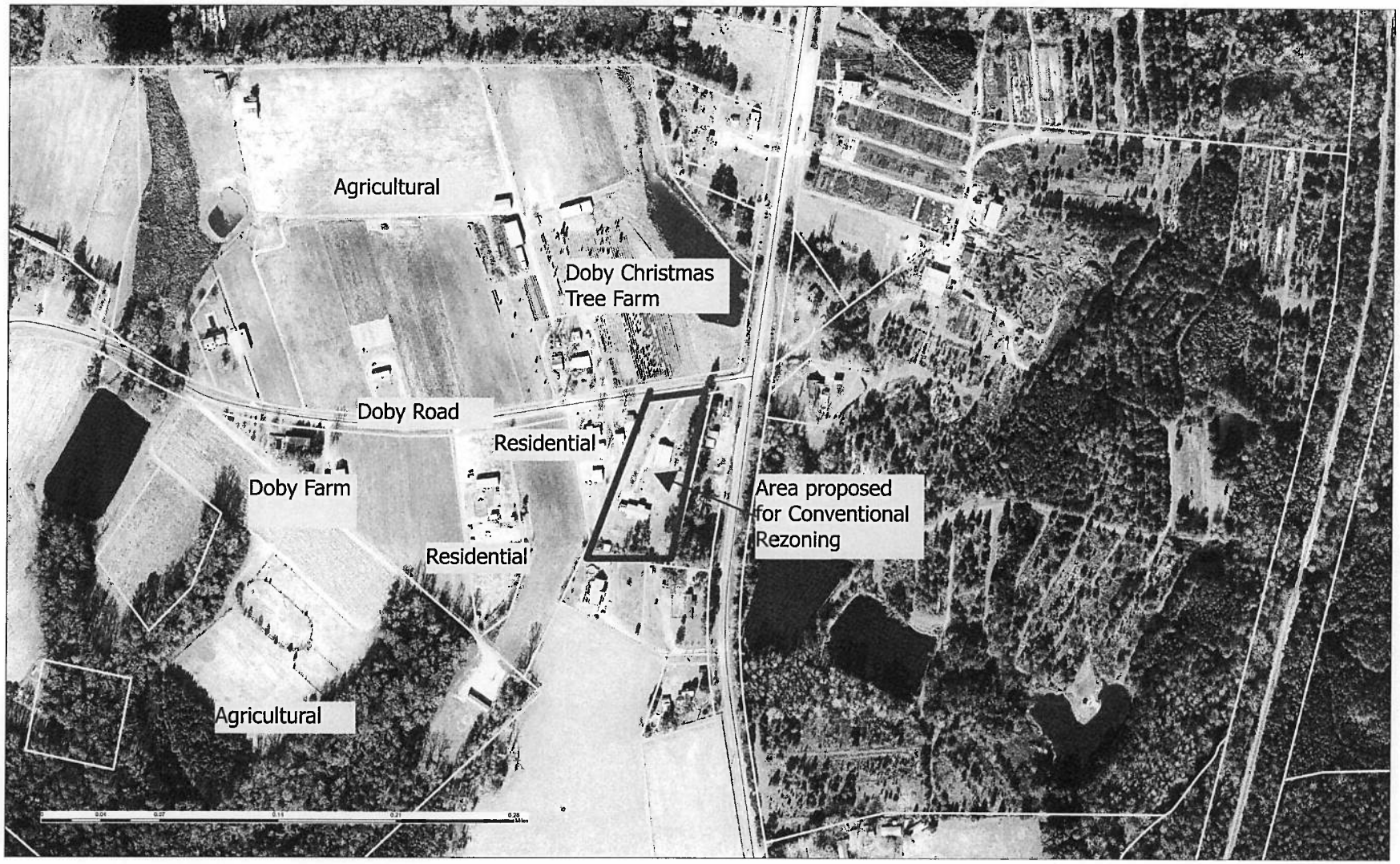


Neighbors to the left of 129 Doby Road (when looking to Doby Rd)

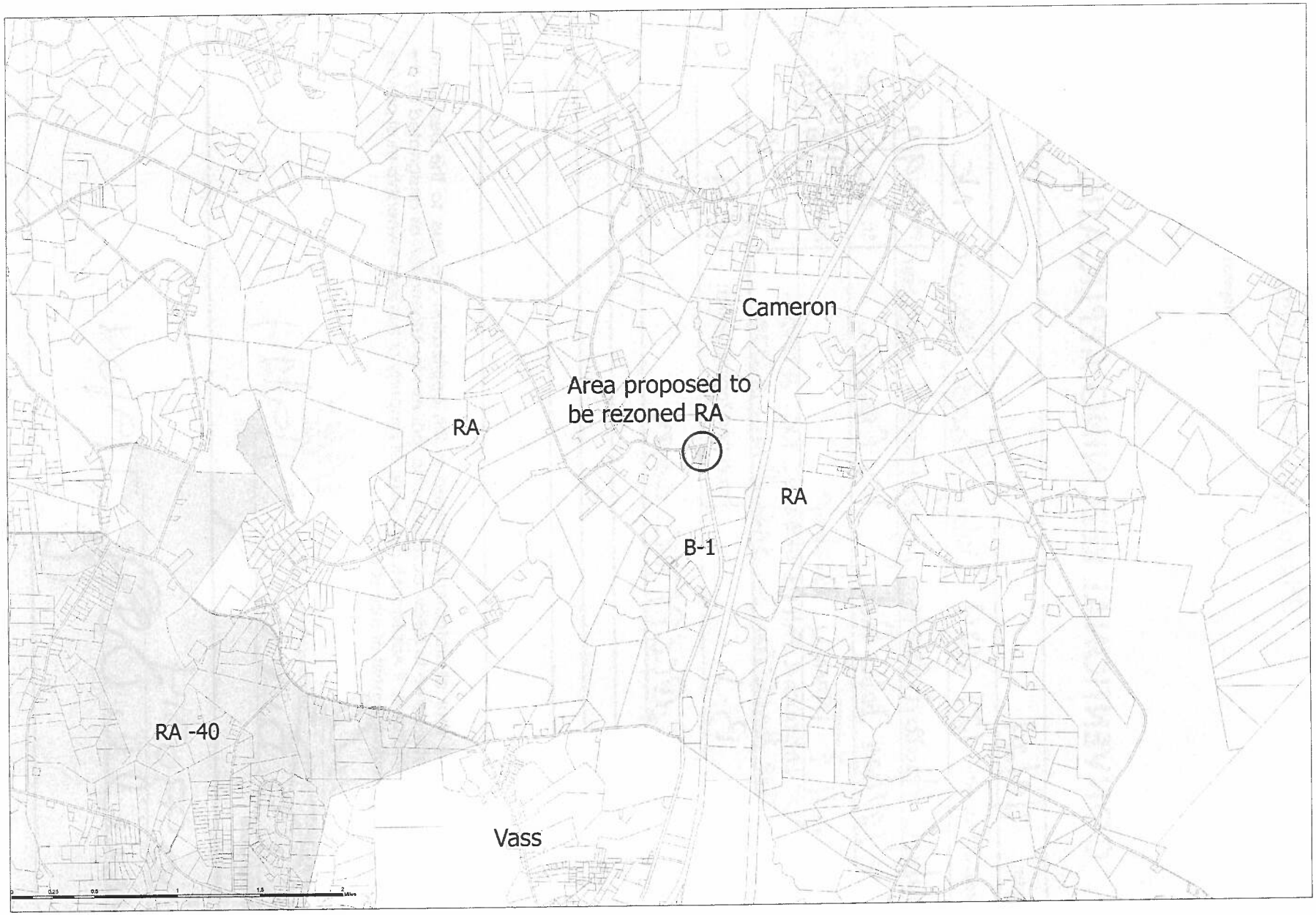



Vicinity Map

N


Agricultural
Doby Christmas Tree Farm
Doby Road
Residential
Doby Farm
Area proposed for Conventional Rezoning
Residential
Agricultural
N

Land Use Map




# Zoning Map

N

County of Moore
Planning and Inspections

Inspections/Permitting: (910) 947-2221
Planning: (910) 947-5010
Fax: (910) 947-1303

# CONVENTIONAL REZONING APPLICATION

| | | | |
|---|---|---|---|
| Application Date: 7/9/24 | | | |
| Location/Address of Property: 127 / 129 Doby Road Camern NC 28326 | | | |
| Applicant: Ruby C. Howard estate / Lori Howell executor | | Phone: 919-499-7898 | |
| Applicant Address: 127/129 Doby Rd | City: Camern | St: NC | Zip: 28326 |
| Owner: Lori Howell & Tammy Bishop | | Phone: 919-499-7898 919-895-0886 | |
| Owner Address: Lori - 925 LAKEWOOD FALL Rd Godwin NC 28352 Tammy - 8609 Peach Tree Dr. Sanford NC 27330 | City: | St: | Zip: |
| Current Zoning District: B-1 | Proposed Zoning District: RA | | |

Comments: Phill:p@CCPFNC.com

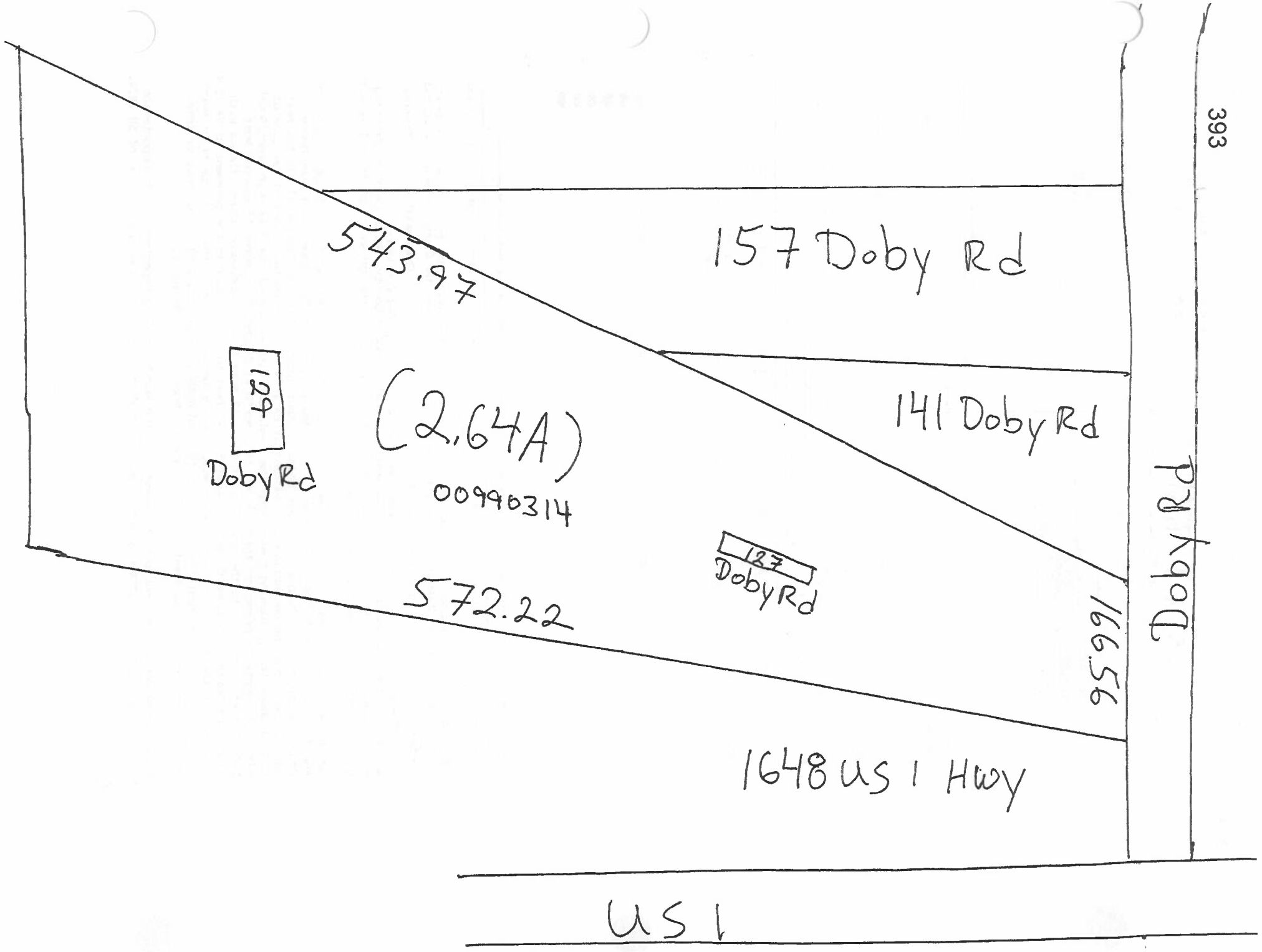
I (We), the undersigned, certify that all statements furnished in this application are true to the best of my (our) knowledge, and do hereby agree to follow all reasonable requests for information as designated by the County of Moore Zoning Administrator. If Applicant is not owner of property or has joint ownership must provide notarized statement of acknowledgement of submittal.

Lori M. Howell — 7/9/24
Applicant/Owner Signature — Date

[signature] — 7/9/24
Applicant/Owner Signature — Date

Office Use Only:
PARID: 00990314

[signature] — 7/9/24
Received By — Date


393
543.97
157 Doby Rd
121
Doby Rd
(2.64A)
00990314
141 Doby Rd
127
Doby Rd
572.22
166.56
Doby Rd
1648 US 1 Hwy
US 1

STATE OF NORTH CAROLINA Real Estate Excise Tax
JUL 14 '95
RP 14712
$ 39.00

TAX ADDRESS ✓
RECORDING $ 10.00
STAMP 39.00
TOTAL $ 49.00 pd

39.00
Excise Tax

BOOK PAGE
01099 00029

Jul 14 4 17 PM '95

MRS. JUDITH H. ADAMS
REGISTER OF DEEDS
MOORE COUNTY, N.C

Recording Time, Book and Page

Tax Lot No. ..... Parcel Identifier No. .....
Verified by ..... County on the ..... day of ....., 19.....
by .....

Mail after recording to William L. Howard
✓ 129 Doby Road, Sanford, N.C. 27330
This instrument was prepared by W.W Seymour, Jr., P.O. Box 3516, Sanford, N.C. 27331-3516
Brief description for the Index

# NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this 14th day of July, 1995, by and between

| GRANTOR | GRANTEE |
|---|---|
| Randall P. Hall, unmarried | William L. Howard and wife, Ruby C. Howard |

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of ....., Greenwood Township, Moore County, North Carolina and more particularly described as follows:

A certain tract or parcel of land in Greenwood Township, Moore County, North Carolina fronting on the south side of SR 1824, and lying abount 50 yards west of the intersection of SR 1824 with U.S. Highway No. 1 described as follows:

BEGINNING at a p.k. nail in the pavement of SR 1824 (60 feet wide); said nail being a corner of the 7.12 acre Linda G. Doby tract that is recorded in Deed Book 527, Page 312 in the Moore County Registry; said beginning corner being further located South 80 degrees 31 minutes West 100.00 feet from the centerline intersection of SR 1824 with the western right of way line of U.S. Highway No. 1; running thence from the beginning with a line of the 7.12 acre tract South with J.A. Merkel's property; thence a new line North 81 degrees 38 minutes 58 seconds West 266.49 feet to a point in the west line of the 7.12 acre tract, referenced above; thence with said line North 26 degrees 00 minutes East 543.97 feet to a p.k. nail in the pavement of SR 1824 a corner of the 7.12 acre tract; thence with the northernmost line of the 7.12 acre tract North 80 degrees 31 minutes East 166.56 feet to the BEGINNING, containing 2.59 acres, more or less. For further reference see Deed Book 936, Page 75, Moore County Registry.

This conveyance is made subject to easement to the North Carolina Department of Transportation for that portion of the property described herein which lies within the right of way of SR 1824.

W. Seymour

N. C. Bar Assoc. Form No. 3 © 1976, Revised © 1977 — James Williams & Co., Inc., Box 127, Yadkinville, N. C. 27055
Printed by Agreement with the N. C. Bar Assoc. - 1981

BOOK PAGE
01099 00030

The property hereinabove described was acquired by Grantor by instrument recorded in .....
Book 936, Page 75 , Moore County Registry

A map showing the above described property is recorded in Plat Book ..... page.....

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever except for the exceptions hereinafter stated.
Title to the property hereinabove described is subject to the following exceptions:

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal, or if corporate, has caused this instrument to be signed in its corporate name by its duly authorized officers and its seal to be hereunto affixed by authority of its Board of Directors, the day and year first above written.

..... (Corporate Name)

By: .....

.....President

ATTEST:

.....

.....Secretary (Corporate Seal)

USE BLACK INK ONLY

Randall P. Hall (SEAL)
RAndall P. Hall

.....(SEAL)

.....(SEAL)

.....(SEAL)

(SEAL)

MARY B. FITZHUGH NOTARY PUBLIC LEE COUNTY, NC

NORTH CAROLINA, Lee County.

I, a Notary Public of the County and State aforesaid, certify that .....
Randall P. Hall, unmarried Grantor,
personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this 14th day of July, 19 95.

My commission expires: May 30, 1996 Mary B. Fitzhugh Notary Public

MARY B. FITZHUGH NOTARY PUBLIC LEE COUNTY, NC

NORTH CAROLINA, .....County.

I, a Notary Public of the County and State aforesaid, certify that .....
personally came before me this day and acknowledged that ..... he is ..... Secretary of
..... a North Carolina corporation, and that by authority duly
given and as the act of the corporation, the foregoing instrument was signed in its name by its .....
President, sealed with its corporate seal and attested by ..... as its ..... Secretary.
Witness my hand and official stamp or seal, this .....day of .....19.....

My commission expires: ..... Notary Public

North Carolina--Moore County

The foregoing Certificate(s) of Mary B. Fitzhugh, Notary Public
.....
.....

is/are certified to be correct. This instrument and this certificate are duly registered at the date and time and in the Book and Page shown on the first page hereof.

Judith M. Adams REGISTER OF DEEDS FOR Moore COUNTY

By Judy D. Martin Deputy/Assistant - Register of Deeds

N. C. Bar Assoc. Form No. 3 © 1976, Revised © 1977 — James Williams & Co., Inc., Box 127, Youngsville, N. C. 27596
Printed by Agreement with the N. C. Bar Assoc. — 1991

Return to: N. Blane Stanaland
101 S. Elm St.
Suite #350
Greensboro, NC 27401

FOR REGISTRATION REGISTER OF DEEDS
William Britton
Moore County, NC
May 10, 2024 10:10:51 AM
Book 6169 Page 254-258
FEE: $26.00
INSTRUMENT # 2024006124



INSTRUMENT # 2024006124

Prepared by and Return to: N. Blane. Stanaland
101 South Elm Street, Suite #350
Greensboro, NC 27401

(NO TAXABLE CONSIDERATION)

Excise Tax 0.00 Recording Time Book and Page _____
Tax Lot No. _____ Parcel Identifier No. 9643-12-8185-00
Verified by _____ County on the ____ day of _____, ____
By _____
Mail after recording to Ruby C. Howard
129 Doby Road, Cameron, NC 28326
This instrument was prepared by: N. Blane Stanaland (without title examination)
Brief description for the Index 129 Doby Road, Cameron, NC – WITHOUT OPINION OF TITLE

# NORTH CAROLINA GENERAL WARRANTY DEED

THIS DEED made this ___ day of May, 2024 by and between

| GRANTOR | GRANTEE |
|---|---|
| **Ruby C. Howard, Widow** | **Ruby C. Howard, Trustee of the Ruby C. Howard Revocable Trust of 2024, under Agreement dated 5-9-24** |
| **Property Address: 129 Doby Road Cameron, NC 28326** | **Mailing Address: 129 Doby Road Cameron, NC 28326** |

Enter in appropriate block for each party: name, address, and, if appropriate, character of entity, e.g. corporation or partnership.

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the **Greenwood Township, County of Moore**, North Carolina and more particularly described as follows:

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**A certain tract or parcel of land in Greenwood Township, Moore County, North Carolina fronting on the south side of SR 1824, and lying abount 50 yards west of the intersection of SR 1824 with U.S. Highway No. 1 described as follows:**

**BEGINNING at a p.k. nail in the pavement of SR 1824 (60 feet wide); said nail being a corner of the 7.12 acre Linda G. Doby tract that is recorded in Deed Book 527, Page 312 in the Moore County Registry; said beginning corner being further located South 80 degrees 31 minutes West 100.00 feet from the centerline intersection of SR 1824 with the western right of way line of U.S. Highway No. 1; running thence from the beginning with a line of the 7.12 acre tract South with J.A. Merkel's property; thence a new line North 81 degrees 38 minutes 58 seconds West 266.49 feet to a point in the west line of the 7.12 acre tract, referenced above; thence with said line North 26 degrees 00 minutes East 543.97 feet to a p.k. nail in the pavement of SR 1824 a corner of the 7.12 acre tract; thence with said line North 26 degrees 00 minutes East 543.97 feet to a p.k. nail in the pavement of SR 1824 a corner of the 7.12 acre tract; thence with the northernmost line of the 7.12 acre tract North 80 degrees 31 minutes East 166.56 feet to the BEGINNING, containing 2.59 acres, more or less. For further reference see Deed Book 936, Page 75, Moore County Registry.**

**This conveyance is made subject to easement to the North Carolina Department of Transportation for that portion of the property described herein which lies within the right of way of SR 1824.**

The property hereinabove was acquired by Grantor by instrument recorded in Book 01099, Page 00029-00030 of the Moore County Register of Deeds.

Ruby C. Howard, Trustee, or Successor Trustee, of the Ruby C. Howard Revocable Trust dated the 9th day of May, 2024 has a Certificate of Trust attached to this Deed as an Exhibit.

N. Blane Stanaland, Attorney has not examined, nor does he certify, title to the above-referenced property. No Opinion of Title is implied.

The conveyance described herein contains the primary residence of the Grantor.

TO HAVE AND TO HOLD THE aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor has done nothing to impair such title as Grantor received, and Grantor will warrant and defend the title against the lawful claims of all persons claiming by, under and through Grantor, except for the exceptions hereafter stated.

Title to the property hereinabove described is subject to the following exceptions:

Easements, restrictions, rights-of-way of record and ad valorem taxes for the current year.

IN WITNESS WHEREOF, the Grantor has hereunto set his/her hand and seal, the day and year first above written.

Ruby C. Howard (SEAL)

Ruby C. Howard

**STATE OF NORTH CAROLINA**

**COUNTY OF** Lee

I, the undersigned notary public, certify as follows: (1) that Ruby C. Howard personally appeared before me this day; (2) that he or she acknowledged that they voluntarily signed the foregoing document: (3) that he or she acknowledged that they so signed for the purposes stated herein: and (4) I further certify that I either (i) personal knowledge or (ii) satisfactory evidence of his or her identity.

Witness my hand and official seal, this 9th day of May, 2024.

My commission expires: 2/13/2028

{Notary Seal}

ANITA D. PERLEY-BOLEN NOTARY PUBLIC LEE COUNTY, NC

Notary Public

Anita D Perley-Bolen

Printed Name of Notary

399

IN WITNESS WHEREOF, this Certification is being signed by the currently acting Trustee and is being executed in conformity with the provisions of N.C.G.S. Section 36C-10-1013.

This 9th day of May, 2024.

Ruby C. Howard, Trustee of the Ruby C. Howard Revocable Trust of 2024

STATE OF NORTH CAROLINA
Lee COUNTY

I, hereby certify that the following person(s) personally appeared before me this day, each acknowledging to me that he voluntarily signed the foregoing document for the purpose stated therein and in the capacity indicated:

RUBY C. HOWARD, TRUSTEE OF THE RUBY C. HOWARD REVOCABLE TRUST OF 2024 UNDER AGREEMENT DATED 5-9-24.

WITNESS my hand and official seal this 9th day of May, 2024.

Notary Public

Anita D Perley-Bolen Notary Public
(printed or typed name)

ANITA D. PERLEY-BOLEN NOTARY PUBLIC LEE COUNTY, NC

My commission expires: 2/13/28

400

Exhibit A

NORTH CAROLINA
MOORE COUNTY

CERTIFICATION OF TRUST

Ruby C. Howard, Trustee of the Ruby C. Howard Revocable Trust of 2024, under agreement dated 5/9/24, (the "Trust") makes the following Certification of Trust:

1. The Trust was formed on 5/9/24. The Trust is revocable and fully amendable until the death of the grantor, Ruby C. Howard, at which time the Trust shall become irrevocable and unable to be amended.

2. The grantor is Ruby C. Howard who is currently alive.

3. The currently acting Trustee is:

Ruby C. Howard
129 Doby Road
Cameron, NC 28326

4. The Trustee has those powers enumerated in N.C.G.S. 32-27, and any amendment thereto or recodification thereof, subject to the limitations provided in N.C.G.S. Section 32-26 which powers are incorporated by reference in the Trust Agreement.

The decision of the Trustee, acting in good faith, shall be binding upon all parties with respect to the determination of the value of the Trust assets, the payment of all reasonable expenses and the distribution of the Trust assets.

5. The Trust has a tax-payer identification number. The tax-payer identification number for the Trust will be furnished when appropriate.

6. Property owned by the Trust will be titled in the name of the Trust.

7. Whenever there shall be more than one Trustee serving hereunder, the Trustees, by way of paper writing, may appoint one among themselves to carry out the day-to-day administrative tasks of the Trust.

8. Certification: The Trust has not been revoked, modified, or amended in any manner that would cause the representations contained in this certification to be incorrect.

9. Indemnification: This certification is executed in accordance with the revisions N.C.G.S. Section 36C-10-1013(f) no person or entity who acts in good faith reliance upon this certification, without knowledge that the representations contained in it are incorrect, shall be liable to any person for so acting and may assume, without inquiry, the existence of the facts contained in this certification. Such person or entity is specifically relieved of any obligation to inquire into the terms of the Trust Agreement or the authority of the Trustee. Any transaction entered into by persons or entities acting in good faith reliance on this certification shall be enforceable against the Trust assets. The undersigned Trustee hereby indemnifies and saves harmless any person or entity, acting in good faith, with respect to any transaction or distribution authorized, performed or participated in by Trustee.

401

Return to: N. Blane Standley
101 S. Elm St.
Suite #350
Greensboro, NC 27401

FOR REGISTRATION REGISTER OF DEEDS
William Britton
Moore County, NC
May 10, 2024 10:10:51 AM
Book 6169 Page 259-269
FEE: $26.00
INSTRUMENT # 2024006125



INSTRUMENT # 2024006125

NORTH CAROLINA

MOORE COUNTY

# REVOCABLE TRUST AGREEMENT

THIS REVOCABLE TRUST AGREEMENT is entered this 9th day of May, 2024 by and between Ruby C. Howard, of Moore County, North Carolina, as Grantor, and Ruby C. Howard, of Moore County, North Carolina, as Trustee, who is referred to in this trust instrument as the "Trustee."

## ARTICLE I

### Name of Trust

This Trust shall, for convenience, be known as the "RUBY C. HOWARD REVOCABLE TRUST OF 2024" and it shall be sufficient that it be referred to as such in any instruments of transfer, assignment, deed, bequest or devise.

## ARTICLE II

### Trust Property

A. Original Trust Property. The Grantor hereby delivers, assigns, transfers or conveys as the original trust property the sum of Ten Dollars ($10.00), receipt of which the Trustee acknowledges.

B. Additions to Trust Property. The Grantor or any other person may make additions to the principal of any trust under this Trust Agreement by lifetime gift, Will, designation of the Trustee as beneficiary or otherwise.

## ARTICLE III

### Disposition of Trust Property During the Grantor's Lifetime

During the Grantor's lifetime the trust property shall be disposed of as follows:

A. Distribution to Grantor. The Trustee may distribute all or any portion of the net income

and principal of the trust to the Grantor, in such amounts and at such times as the Grantor may request. During such time as the Grantor is serving as the Trustee hereunder there shall be no requirement for formal notification between the Grantor and the Trustee.

B. Distribution in Trustee's Discretion. During such period or periods that the Grantor is incapacitated, as hereinafter defined, the Successor Trustee shall distribute so much of the net income and principal as the Successor Trustee, in the exercise of the Successor Trustee's discretion, shall determine to be necessary for the Grantor's health, education, support and maintenance. The Successor Trustee, hereinafter named, shall have the broadest possible powers in expending income or principal for medical care and treatment at any hospital or other similar institution, nursing care, in-home nursing care, nursing home facility and any and all other such necessary treatment on behalf of Grantor.

## ARTICLE IV

### Disposition of Trust Property After Grantor's Death

After Grantor's death the trust property, including any property payable to the Trustee as a result of Grantor's death, shall be disposed of as provided in this Article.

Section 4.1 Disposition of Remaining Assets. All of the remaining assets of the trust including any assets received by the Trustee of the trust shall be divided into as many equal shares as the Grantor shall have children then living and children then deceased with issue surviving creating one (1) equal share for each living child of the Grantor and one (1) equal share for each deceased child of the Grantor who left surviving issue (for such issue's benefit), per stirpes. The Trustee shall pay and deliver the share created for each living child of the Grantor directly to such child, outright and discharged of trust. The Trustee shall pay and deliver the share created for the living issue of a deceased child of the Grantor directly to such issue, per stirpes, subject, however, to the Retention

Provisions set forth hereinafter. If a child of the Grantor is not then living and if such child was not survived by living issue, the share for such deceased child shall lapse and be added to the other shares.

Section 4.2 Retention Provisions. In the event a portion of any trust is set apart for a surviving issue of a deceased child, and the issue shall be under twenty-five (25) years of age at the time the trust portion is required to be distributed absolutely to the issue, although such trust portion shall immediately vest in the issue, the Trustee, in the discretion of the Trustee, may retain the share of the issue as a separate trust. In that event and during that time, the Trustee shall pay to or apply for the benefit of the issue as much of the income and principal of the issue's separate trust as the Trustee, in the exercise of the Trustee's discretion, shall deem necessary or desirable to provide for the health, education, support and maintenance of the issue. Any income from a separate trust not distributed shall be added to the principal of that trust at the end of each fiscal year. As the issue shall attain the age of twenty-five (25) years, the Trustee shall distribute to the issue, discharged of trust, the remaining balance of principal and undistributed income of the issue's separate trust. If an issue shall die before the complete distribution of the issue's separate trust, the Trustee shall distribute the remaining assets of the issue's separate trust to the estate of the deceased issue.

Section 4.3 Ultimate Beneficiaries. In the event that the Grantor and the Grantor's children shall all die as a result of a common accident or if they should all die prior to the final distribution without leaving any living issue, then the remaining assets of this trust shall be distributed to those individuals who would take the personal property of the Grantor had she died on the date of final distribution, unmarried and intestate, domiciled in the State of North Carolina.

## ARTICLE V

## General Trust Provisions

The following provisions shall apply to each separate trust created under this Trust

Agreement, unless elsewhere herein specifically provided otherwise, or unless the context of any passage clearly requires otherwise.

Section 5.1 Alienation. To the greatest extent of the law, no income or principal payable to or held for the beneficiary shall, while in the possession of the Trustee, be alienated, disposed of, or encumbered in any manner other than by Trustee action authorized hereby. Throughout the duration of each trust, no beneficiary shall have the power voluntarily to sell, alienate, convey, assign, transfer, mortgage, pledge, or otherwise dispose of or encumber any principal or income hereof or any interest whatever therein until physical distribution or payment is made to the beneficiary, and no interest of any beneficiary in or claim to any trust assets or benefits shall be subject to the claims of any of the beneficiary's creditors or to judgment, levy, execution, sequestration, garnishment, attachment, bankruptcy or other insolvency proceedings, or any other legal or equitable process. Nothing in this paragraph shall interfere with the exercise of any right or power expressly given herein to the Trustee or any beneficiary. Each trust created herein is intended to be a "spendthrift trust" as that term is used in North Carolina General Statutes §36C-1-103(18) and §36C-5-502.

Section 5.2 Notice to Trustee. Until the Trustee shall receive written notice of any event upon which the right to distribution of the income or principal of any trust may depend, the Trustee shall incur no liability for distributions made in good faith to persons whose interest may have been affected by that event.

Section 5.3 Reliance by Third Parties. No grantee, purchaser, or other person dealing with the Trustee while the Trustee is purporting to act in such capacity under any power or authority granted the Trustee herein need inquire into the initial or continued existence of facts upon which the purported power or authority depends, or into the continued existence of the power, the expediency of the transaction, or the proper application of the proceeds or other consideration.

Section 5.4 Situs of Trust. This Trust Agreement was executed in the State of North Carolina and this trust and each separate trust created hereunder shall be construed and regulated and all rights under it shall be governed by the laws of the State of North Carolina.

Section 5.5 Trustee as Beneficiary. If any Trustee serving hereunder (other than the Grantor) shall also be a beneficiary, then, to the extent that the Trustee may exercise discretion in the distribution of income or principal, the Trustee shall not exercise that discretion for his or her own benefit. Also, no individual (other than the Grantor) serving as Trustee hereunder shall exercise his or her discretion in any manner nor participate in any decision that would result in a benefit being directly or indirectly conferred upon him or her.

Section 5.6 Definitions. Whenever used in this Trust Agreement, unless the context of any passage thereof requires otherwise:

(a) The singular includes the plural and the plural includes the singular.

(b) The term "Grantor" refers to Ruby C. Howard.

(c) The term "Trustee" or "Trustees" shall mean the Trustee named hereinabove, as well as any Successor Trustee or Trustees serving in that capacity under the terms of this Trust Agreement. For this purpose, the singular shall include the plural and the plural shall include the singular as the context shall require.

(d) The term "Code" shall refer to the Internal Revenue Code of 1986, as the same may be amended from time to time, and accompanying rulings and regulations and other interpretive guidelines issued by the Internal Revenue Service and U.S. Treasury Department.

(e) The term "issue" shall be limited to lawful issue and shall mean descendants by blood of any degree, including persons conceived but not yet born and legally adopted persons, but shall exclude step-issue.

(f) The term "child" or "children" shall mean the following named children of the Grantor: The Grantor's daughter, Lori Michelle Howell; and the Grantor's daughter, Tammy Denise Bishop.

(g) An individual, specifically including a Trustee or Successor Trustee, shall be deemed incapacitated or not competent under any one or more of the following circumstances: (i) During any period that the individual is legally incompetent as determined by a court of competent jurisdiction; (ii) during any period beginning when two physicians licensed to practice medicine certify in writing that, in their opinion, the individual, as a result of illness, age or other cause, no longer has the capacity to act prudently or effectively in financial affairs and continuing until two such physicians (whether or not those making the initial determination) certify in writing that, in their opinion, the individual's capacity is restored; or (iii) during any period that a person (other than such individual) or an institution who is a Trustee, or, if none, who is designated as a Successor Trustee, or, if none, who can appoint a Successor Trustee, has evidence that the individual is absent without explanation or is being detained against his will under circumstances in which he does not have the capacity to act prudently or effectively in financial affairs.

## ARTICLE VI

Payment of Bequests, Devises, Debts, Expenses and Taxes of Grantor's Estate

Notwithstanding the directions previously given as to the disposition of the trust property after Grantor's death, the Trustee shall pay those amounts to Grantor's estate or to the persons or authorities eligible to receive the same which are certified by the Personal Representative of Grantor's estate as being required to pay (i) any bequest or devise in Grantor's Will, (ii) any of Grantor's debts, health care expenses, funeral expenses and administration expenses of Grantor's estate, except that the

Trustee in the Trustee's discretion, may decline to pay any of Grantor's debts or any of Grantor's debts or expenses from life insurance proceeds which are exempt from creditor's claims, and (iii) any death taxes imposed by reason of Grantor's death, including any inheritance, estate, generation-skipping, transfer or succession taxes and interest and penalties payable in connection with such taxes. Such amounts shall be paid first from the trust property which is subject to allocation under the Section of Article IV entitled "Allocation of Trust Property." So long as other property is available, such amount shall not be paid from any property which would otherwise be exempt from death taxes imposed by reason of Grantor's death.

ARTICLE VII

Powers of Trustees

Section 7.1 General Powers. In the management, care, and distribution of the trust, the Grantor confers upon the Trustees all of the powers set forth in North Carolina General Statutes Section 32-27, which are hereby incorporated by reference as they exist at the date of the execution of this trust. These powers are granted to the Trustee subject to the provisions of General Statutes Section 32-26 and shall be in addition to, and not in limitation of, the powers granted by General Statutes Section 28A-13-3. The Trustee shall also have, in addition to the powers incorporated above, the powers, authority, and discretion hereinafter set out.

Section 7.2 Principal and Income. The Trustee shall have the power (i) to determine the manner in which items should be credited or charged to or between income and principal, regardless of whether such item is credited or charged contrary to the provisions of any statute, and (ii) to charge or not charge against income a reasonable allowance for depreciation of property whether or not contrary to the provisions of any statute.

Section 7.3 Distribution Directly to Beneficiary. The Trustee is authorized to make immediate

distribution directly to the beneficiary or beneficiaries of any trust of all the principal of any trust created under this Trust Agreement if the beneficiary or beneficiaries are entitled to receive all such principal at the time the Trustee is to make distribution to any trust.

Section 7.4 Digital Assets. The Trustee shall have the power to access, handle, distribute and dispose of the Grantor's "digital assets." "Digital assets" includes files stored on the "Cloud" and on the Grantor's digital devices, including but not limited to, desktops, laptops, tablets, peripherals, storage devices, mobile telephones, smartphones, and any similar digital device which currently exists or may exist as technology develops or such comparable items as technology develops. The term "digital assets" also includes but is not limited to emails received, email accounts, digital music, digital photographs, digital videos, software licenses, social network accounts, file sharing accounts, financial accounts, domain registrations, DNS service accounts, web hosting accounts, tax preparation service accounts, online stores, affiliate programs, other online accounts and similar digital items which currently exist or may exist as technology develops or such comparable items as technology develops, regardless of the ownership of the physical device upon which the digital item is stored.

## ARTICLE VIII

## Trustees

Section 8.1 Resignation of Trustee. Any Trustee serving hereunder shall have the right to resign at any time by giving written notice to the Successor Trustee designated below or, if none, to the person or persons designated below who are authorized to appoint a Successor Trustee. Such resignation shall become effective upon acceptance of the Trusteeship by a Successor Trustee. A resigning Trustee shall render an accounting as of the effective date of the resignation, and shall execute all instruments necessary to vest title in the Successor Trustee.

Section 8.2 Succession of Trustees. If, for any reason, Ruby C. Howard shall fail to serve or

continue as Trustee hereunder, then the Grantor's daughters, Lori Michelle Howell and Tammy Denise Bishop, shall serve jointly as Co-Successor Trustees of all trusts created hereunder. If, for any reason, either Co-Successor Trustee shall fail to serve or continue as a Successor Trustee, then the remaining individual shall serve as sole Successor Trustee of all trusts created hereunder. If, for any reason, both of the Grantor's children shall fail to serve or continue as a Trustee, then the last one of them so serving may appoint a Successor Trustee to serve as the Trustee of all trusts created hereunder. Subject to and consistent with the preceding provisions, at any time that there shall be only one Trustee serving as Trustee, then such then serving Trustee shall have the ability to appoint a Successor Trustee to serve as Trustee of all trusts created hereunder. Such appointment may be made, in advance, by way of a paper writing signed by the appointing party and kept with the original trust records.

In the event that a vacancy shall occur in the office of Trustee despite implementation of the preceding provisions, then a Successor Trustee may be appointed by a court of competent jurisdiction upon petition by a resigning Trustee or any beneficiary hereunder.

The appointment of a Successor Trustee shall be made by way of a paper writing delivered to such Successor Trustee and all then living ascertainable beneficiaries.

Any Successor Trustee shall accept the office by written instrument, assuming the duties thereof immediately upon delivery of a copy of the acceptance to the prior Trustee or to the beneficiaries, without the necessity of any other act, conveyance or transfer. The title to the trust property shall immediately vest in any Successor Trustee acting pursuant to these provisions.

Section 8.3 Bonds. No bond shall be required of any Trustee serving hereunder unless requested in writing by the Grantor.

Section 8.4 Compensation. Each individual Trustee shall be entitled to reasonable

compensation for serving as a Trustee hereunder. Each corporate or professional Trustee shall be entitled to reasonable compensation determined in accordance with the Trustee's published schedule of fees in effect at the time the services of the Trustee are rendered. All Trustees shall be reimbursed for all necessary and reasonable costs of administration of this trust and any of the separate trusts established hereunder.

Section 8.5 Accounting. The Trustee shall furnish upon request, at least annually, accounts of receipts and disbursements of trust property to each beneficiary to whom income of the trust could then be paid who is not under any legal disability and to each person (other than a governmental authority) having custody of any such beneficiary who is under legal disability. The Grantor hereby waives any other accountings required by law, specifically including the requirement of an annual accounting to any court.

ARTICLE IX

Amendments and Revocation

The Grantor reserves the right at any time to amend or revoke this trust instrument in whole or in part by written instrument delivered to the Trustee. Upon the death of the Grantor, this trust shall become irrevocable.

IN WITNESS WHEREOF, the Grantor and the Trustee have executed this Trust Agreement effective the date and year first above written.

Mabel Horne
Witness as to Grantor

Phyllis Farnham
Witness as to Grantor

Mabel Horne
Witness as to Trustee

Ruby C. Howard (SEAL)
Ruby C. Howard
"Grantor"

Ruby C. Howard (SEAL)
Ruby C. Howard
"Trustee"

411

Phyllis Farnham
Witness as to Trustee
STATE OF NORTH CAROLINA

COUNTY OF Lee

Subscribed, sworn to and acknowledged before me by Ruby C. Howard, the Grantor, and subscribed and sworn to before me by Phyllis Farnham and Mabel Horne, witnesses, this the 9th day of May, 2024.

Notary Public

My Commission Expires: 2/13/28

STATE OF NORTH CAROLINA

COUNTY OF Lee

Subscribed, sworn to and acknowledged before me by Ruby C. Howard, the Trustee, and subscribed and sworn to before me by Phyllis Farnham and Mabel Horne, witnesses, this the 9th day of May, 2024.

Notary Public

My Commission Expires: 2/13/28

412

# STATE OF NORTH CAROLINA

File No. 22 E 830

MOORE County

FILED
2022 SEP 12 P 1:28
CSC

In The General Court Of Justice
Superior Court Division
Before The Clerk

**IN THE MATTER OF THE ESTATE OF**

*Name Of Decedent*
WILLIAM LAWRENCE HOWARD

*Date Of Death*
06/04/2022

## APPLICATION AND ASSIGNMENT YEAR'S ALLOWANCE

G.S. 30-15, 30-16, 30-17, 30-21

I am applying for an allowance for a year's support for the person(s) named and state:

1. ☒ a. The decedent died a resident of this county on the date shown above.
   ☐ b. The decedent did not die a resident of this county, but personal property that belonged to the decedent at his or her death, which was on the date shown above, is located in this county.
2. The surviving spouse, if any, named below is entitled to an allowance from the personal property of the decedent of the value of sixty thousand dollars ($60,000), for a year's support if the surviving spouse has not forfeited that right.* The child(ren), if any, named below is/are entitled to an allowance of five thousand dollars ($5,000) for a year's support.*
3. I request assignment of
   ☒ Sixty thousand dollars (**$60,000**) from the funds or other personal property of the decedent for a year's support to the surviving spouse.
   ☐ Five thousand dollars (**$5,000**) from the funds or other personal property of the decedent for a year's support to each child named below.

**SPOUSE AND CHILD(REN)* ENTITLED TO ALLOWANCE**

| Full Name | Age | Relationship | Complete Address *(including zip code)* |
|---|---|---|---|
| RUBY CRUTCHFIELD HOWARD | 21+ | Spouse | 129 DOBY ROAD CAMERON, NC 28326 |
| | | Child | |
| | | Child | |
| | | Child | |
| | | Child | |
| | | Child | |
| | | Child | |

***NOTE:** *For a surviving spouse to be entitled to receive an allowance, he or she must have been a resident of North Carolina at the time of the decedent's death, or the decedent must have been a resident of North Carolina at that time. See S.L. 2019-113. For a child to be entitled to receive an allowance, he or she must be one of the following: (1) a child under the age of 18 years, including an adopted child or a child with whom the widow was pregnant at the death of her husband; (2) a child who is less than 22 years of age who is a full-time student in any educational institution; (3) a child under 21 years of age who has been declared mentally incompetent; (4) a child under 21 years of age who is totally disabled; (5) a person under the age of 18 years who resided with the deceased parent at the time of death and to whom the deceased parent or the surviving parent stood in loco parentis.*
*See G.S. 30-17 and G.S. 12-3(16), (17).*

*Name And Address Of Applicant (type or print)*
RUBY CRUTCHFIELD HOWARD
129 DOBY ROAD CAMERON, NC 28326

☒ *Spouse Of Decedent*
☐ *Personal Representative*
☐ *Guardian*
☐ *Other:* 919-770-6996
☐ *Child/Full-Time Student*
☐ *Next Friend Of Child*

By signing below, I agree that the information in this filing is true to the best of my knowledge, information, or belief. I understand that, in some circumstances, persons who make false filings can be subject to legal penalties or sanctions and, depending on the situation, may be charged with a crime.

*Date*
09/12/2022

*Signature Of Applicant*
Ruby Crutchfield Howard

Original-File Copy-Applicant
(Over)

AOC-E-100, Rev. 9/21
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## ASSIGNMENT OF YEAR'S ALLOWANCE

I have examined the above application and have determined the money and other personal property of the decedent. I find that the allegations in the application are true and that each person(s) named in the application is entitled to the allowance requested.

I ASSIGN to the applicant the funds or other items of the personal property of the decedent listed below, which I have valued as indicated. This property is assigned free and clear of any lien by judgment or execution against the decedent and is to be paid by the applicant to the person(s) entitled. I assess as a DEFICIENCY the amount, if any, shown below, which is to be paid or delivered to the proper person when any additional personal assets of the decedent are discovered.

| Personal Property Assigned | Value |
|---|---|
| BCBS CHECK #151554 | 255.02 |
| | |
| | |
| |

**STATE OF NORTH CAROLINA**

File No. 2024 E 000437

MOORE County

In The General Court Of Justice
Superior Court Division
Before The Clerk

**IN THE MATTER OF THE ESTATE OF**

Name Of Decedent
RUBY C HOWARD

TO

Name And Address Of Beneficiary
LORI MICHELLE HOWELL
925 LAKEWOOD FALLS ROAD

GOLDSTON NC 27252

**NOTICE TO BENEFICIARY**

G.S. 28A-2A-3

TAKE NOTICE that the Last Will and Testament of the deceased named above, of which you are a beneficiary, was admitted to probate in this office. The name, address, title, and telephone number of the fiduciary who qualified is set out below.

| Name, Address, And Title Of Fiduciary 1 | Name, Address, And Title Of Fiduciary 2 |
|---|---|
| LORI MICHELLE HOWELL, CO-EXECUTOR<br>925 LAKEWOOD FALLS ROAD<br>GOLDSTON NC 27252 | TAMMY DENISE BISHOP, CO-EXECUTOR<br>8609 PEACHTREE DRIVE<br>SANFORD NC 27330 |
| Telephone No. | Telephone No. |

Date: 6/27/2024

Signature: Jennifer A Jackson

☐ Deputy CSC ☐ Assistant CSC ☐ Clerk Of Superior Court

AOC-E-405, Rev. 6/14
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| ALLOWED IN NEIGHBORHOOD BUSINESS (B-1) | ALLOWED IN RURAL AGRICULTURAL (RA) |
|---|---|
| **Agricultural Uses and Buildings** | **Agricultural Uses and Buildings** |
| Group Care Facility (Special Use Permit) | **Dwellings, Single Family** |
| **Nursing Home** | **Family Care Home (6 or less)** |
| Kennels Overnight (CZ) | **Manufactured Home** |
| **Pet Day Care, Grooming, Obedience Training** | Manufactured Home Park (CZ) |
| **Veterinary Clinic** | Group Care Facility (CZ) |
| **Commissary Kitchen** | Nursing Home (Special Use Permit) |
| **Dry Cleaning and Laundromat** | Animal Shelter (CZ) |
| **Office** | Animal Training Facility, Military (CZ) |
| **Small Appliance Repair Shop** | Kennels Overnight (CZ) |
| Trade Contractor Office and Workshop (CZ) | Pet Day Care, grooming, Obedience Training (CZ) |
| **Auction House** | Veterinary Clinic (CZ) |
| **Convenience Store** | Bed and Breakfast (CZ) |
| **Feed and Seed Sales** | **Commissary Kitchen** |
| **Florist** | Convenience Store (Special Use Permit) |
| Flea Market (CZ) | Feed and Seed Sales (Special Use Permit) |
| **Garden Center** | **Florist** |
| **Restaurant** | Flea Market (Special Use Permit) |
| **Retail** | Brewery/Winery (Special Use Permit) |
| **Car Wash & Detailing** | Cemetery or Mausoleum, Commercial (Special Use Permit) |
| Commercial truck Wash (Special Use Permit) | Childcare Facility (Special Use Permit) |
| **Parking lot as a Principal Use** | College/ Business & Trade School (Special Use Permit) |
| Taxi Service (CZ) | **Government Facility** |
| **Vehicle, Auto Parts, Tires, Farm Equipment, Boat, RV-Sales, Rental or Service** | Museum / Art Gallery (Special Use Permit) |
| **Vehicle Service Station (Gas Stations)** | Religious Institution (Special Use Permit) |
| Vehicle Wrecker Service (CZ) | Security Training Facility (Special Use Permit) |

| ALLOWED IN NEIGHBORHOOD BUSINESS (B-1) | ALLOWED IN RURAL AGRICULTURAL (RA) |
|---|---|
| **Massage & Bodywork Therapy** | School, Elementary/Middle/High (Special Use Permit) |
| **Cemetery or Mausoleum, Commercial** | Airport, Public or Private (Special Use Permit) |
| **Child Care Facility** | Airstrip, Small Private (Special Use Permit) |
| **Funeral Home with Crematorium** | Assembly Hall (CZ) |
| **Government Facility** | **Camp or Care Center** |
| **Museum /Art Gallery** | **Campground, Public and Private** |
| **Religious Institution** | **Camp, Recreation Day** |
| **School, Elementary/Middle/High** | Civic, Social Club, Lodge, Organization (Special Use Permit) |
| **Airstrip, Small Private** | **Neighborhood Park** |
| **Civic, Social Club, Lodge, Organization** | **Recreation, Low Impact Outdoor** |
| **Neighborhood Park** | Recreation, High Impact Outdoor (CZ) |
| Recreation, Indoor (Special Use Permit) | Shooting Range, Indoor (CZ) |
| **Recreation, Low Impact Outdoor** | Shooting range, Outdoor (CZ) |
| **Manufacturing & Sales Pottery** | Zoo / Petting Zoo (CZ) |
| **Public & Private Utility Facilities** | **Manufacturing & Sales Pottery** |
| **Antenna Collocation, Major** | Contractors Storage Yard and Office (CZ) |
| **Antenna Collocation, Minor** | Freight Terminal (CZ) |
| **Small Wireless Facility** | **Public & Private Utility Facilities** |
| **Telecommunications Tower, Minor** | Antenna Collocation, Major (Special Use Permit) |
| Mini-Warehouse Self-Storage (CZ) | **Antenna Collocation, Minor** |
| Debris Management Facility (CZ) | Small Wireless Facility (Special Use Permit) |
| | Telecommunications Tower, Major (CZ) |
| | Telecommunications Tower, Minor (Special Uses Permit) |
| | Warehousing or Distribution Center (CZ) |
| | Debris Management Facility (CZ) |
| | Mining / Quarry Operation (CZ) |

**Moore County Board of Commissioners**
**Land Use Plan Reasonableness & Consistency Statement**
**Conventional Rezoning**
**Neighborhood Business (B-1) to Rural Agricultural (RA) Doby Road**

The Moore County Board of Commissioners finds that:
Section 1: The proposed conventional rezoning, RA, ***is consistent*** with the following as listed in the 2013 Moore County Land Use Plan:

1. Goal 1: Preserve and Protect the Ambiance and Heritage of the County of Moore (inclusive of areas around municipalities).
    - Action 1.8.5: Support and promote infill development that will optimize the use of existing infrastructure.
        - The requested rezoning to RA will reduce intensity of allowable uses on the property compared to the current B-1 zoning.

Section 2: The proposed conventional rezoning is reasonable and in the public interest because:

1. It supports the current 2013 Moore County Land Use Plan goal and action listed above. The rezoning also reduces the intensity of potential uses of future development, compared to the B-1 zoning, on the subject property.
2. RA zoning is also more compatible and consistent with surrounding land uses and development patterns.

Therefore, the Moore County Board of Commissioners finds the conventional rezoning is **consistent** with the land use plan.

_____ _____

Nick Picerno, Chair
Moore County Board of Commissioners

Date

**Moore County Board of Commissioners**
**Land Use Plan Reasonableness & Consistency Statement**
**Conventional Rezoning**
**Neighborhood Business (B-1) to Rural Agricultural (RA) Doby Road**

The Moore County Board of Commissioners finds that:

Section 1: The proposed conventional rezoning ***is not consistent*** with the Moore County Future Land Use Plan:

1. Goal 1: Preserve and Protect the Ambiance and Heritage of the County of Moore (inclusive of areas around the municipalities)
    - Recommendation 1.7: Support and promote local businesses.
        - The requested rezoning to RA will reduce the allowability of current more commercial allowed zoning uses along highway corridors.

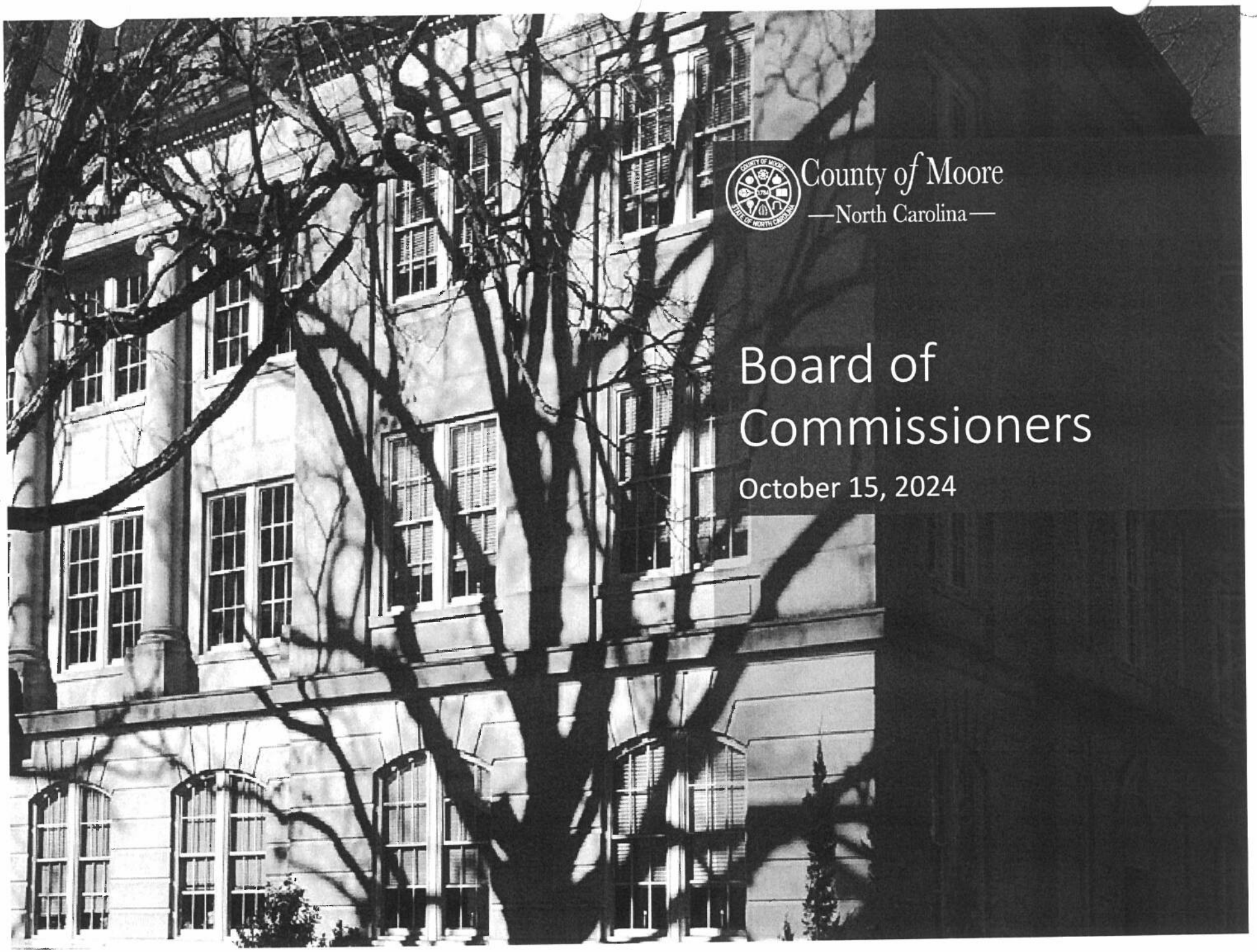
2. The proposed conventional rezoning is not reasonable and not in the public interest because: The proposed conventional rezoning will have an unreasonable impact on the surrounding community.

Therefore, the Moore County Board of Commissioners finds the conventional rezoning is **inconsistent** with the land use plan.

_____ _____

Nick Picerno, Chair
Moore County Board of Commissioners

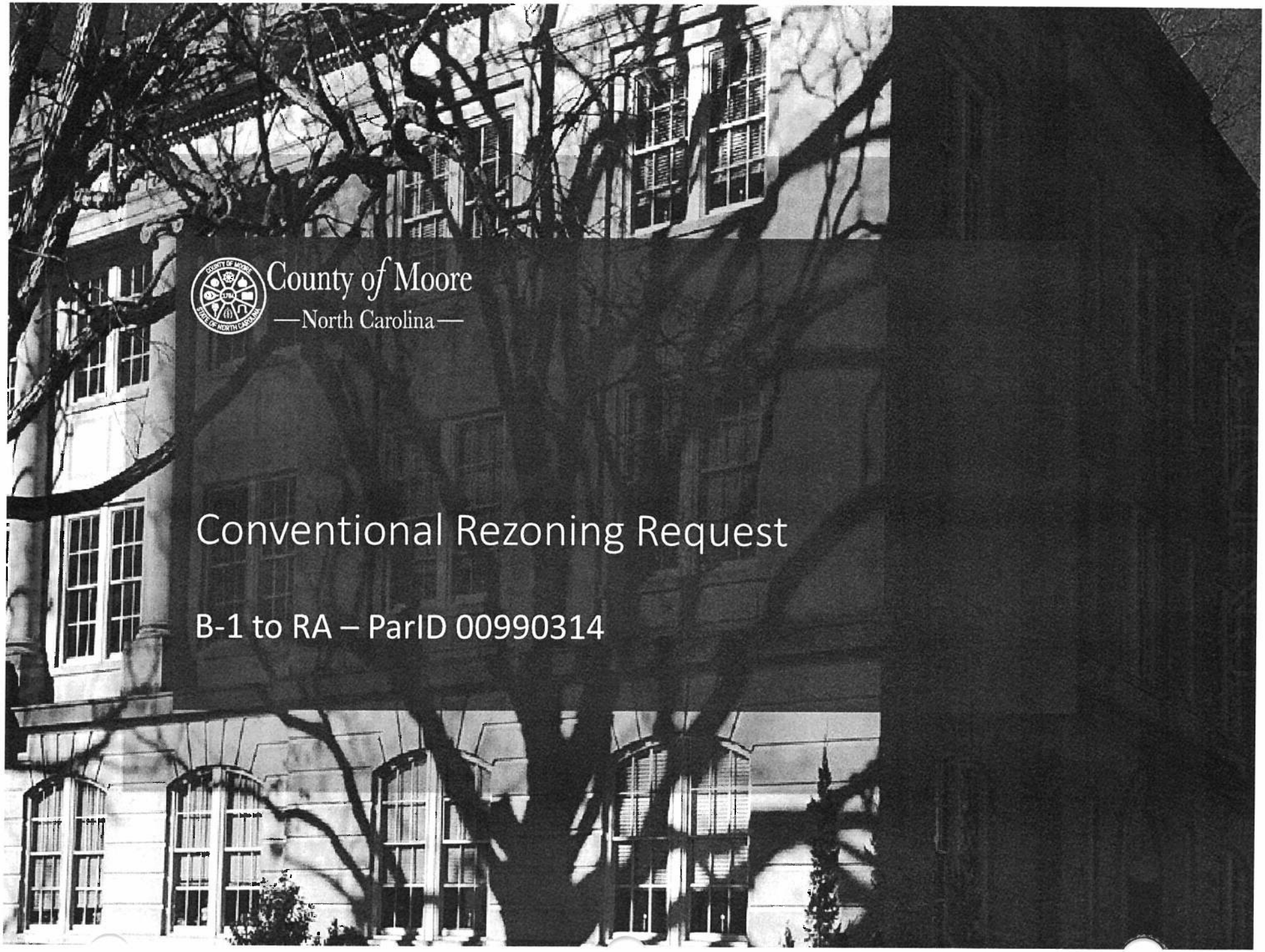
Date

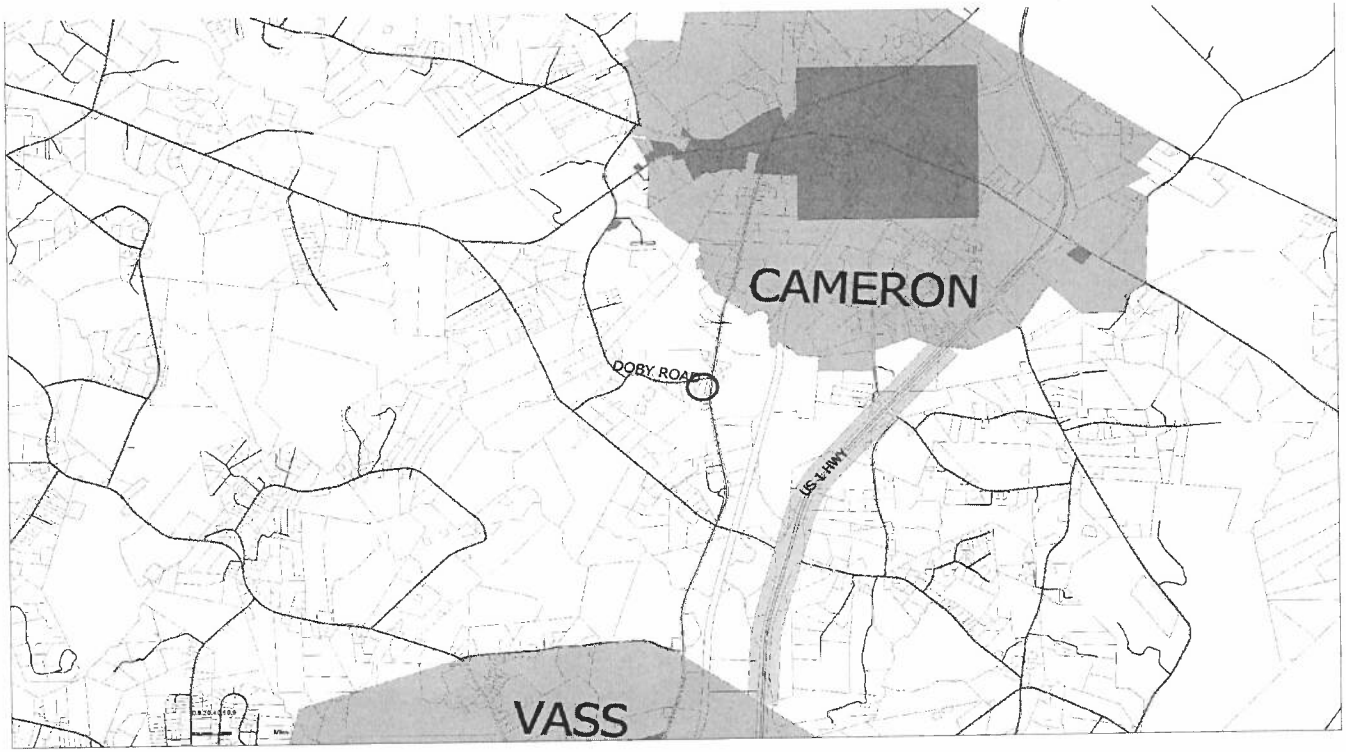


County of Moore
—North Carolina—

# Board of Commissioners

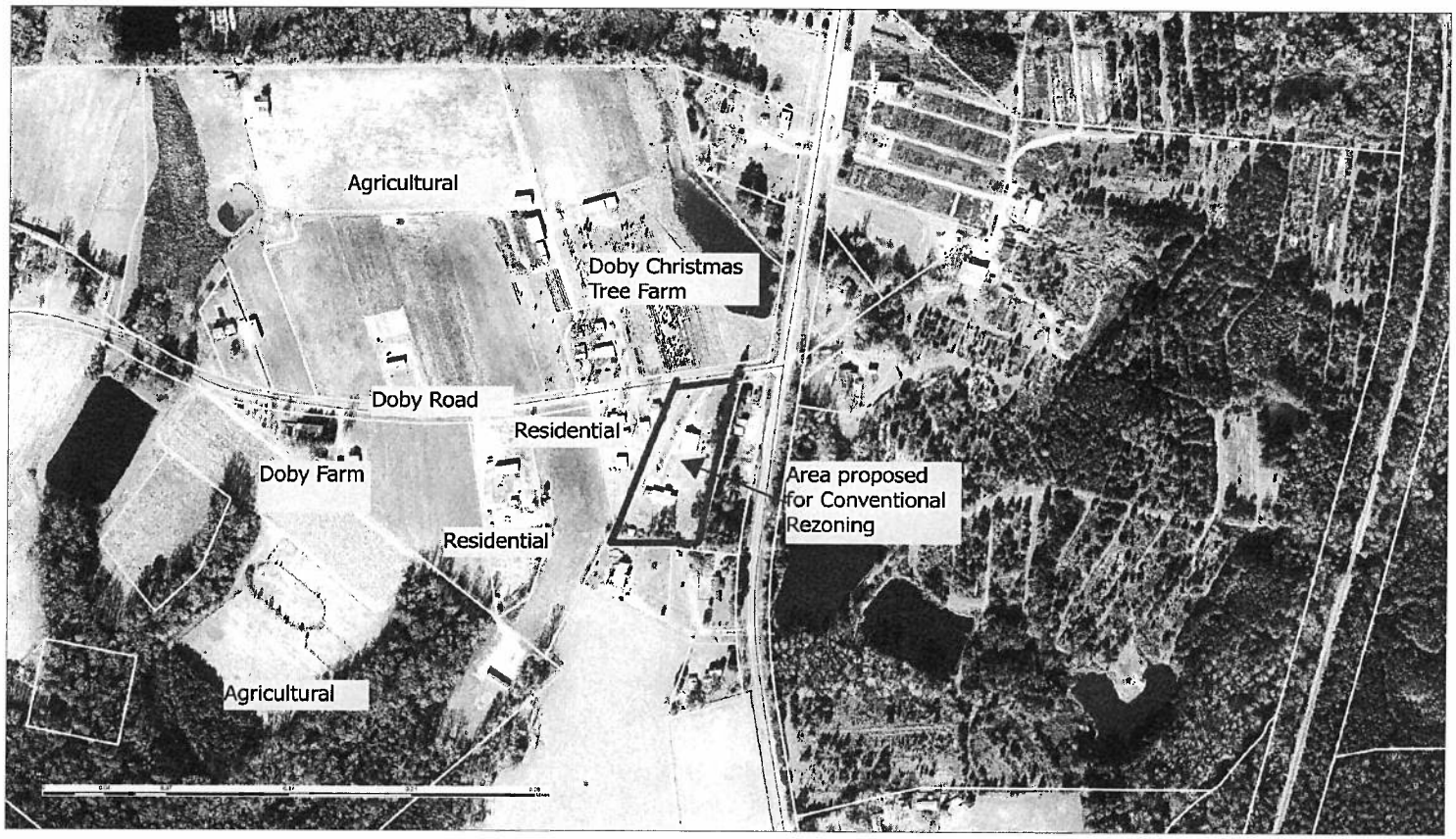
October 15, 2024


County of Moore
—North Carolina—
Conventional Rezoning Request
B-1 to RA – ParID 00990314




Vicinity Map

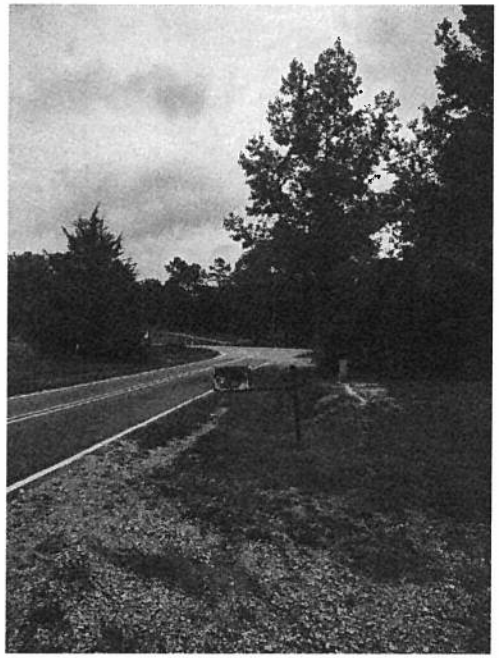
N


Agricultural
Doby Christmas Tree Farm
Doby Road
Residential
Doby Farm
Area proposed for Conventional Rezoning
Residential
Agricultural
N

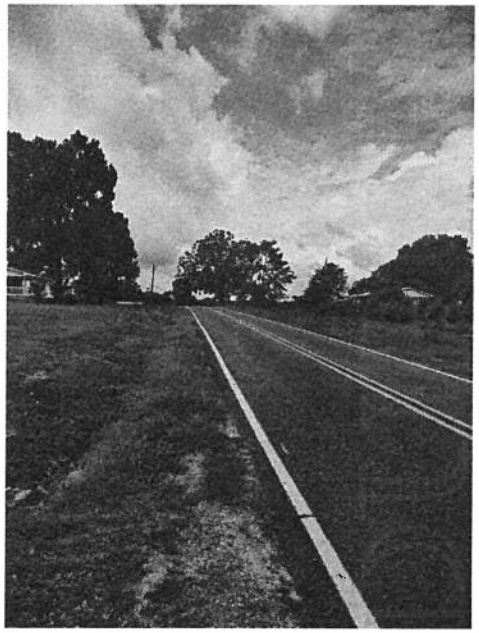
Land Use Map

# Background

- Total acreage- 2.59 acres
- Adjacent properties include- single family dwellings, agricultural uses
- Adjacent and surrounding parcels of the property are currently zoned RA & B-1.
  - Previous welding shop on site has closed – no longer commercial activity there.



View East Along Doby Road (intersects with US 1 Hwy)



View West along Doby Road

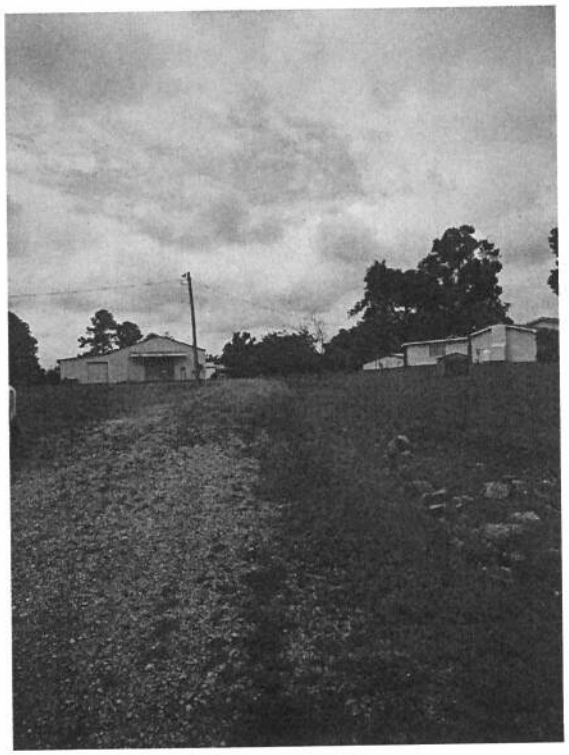


Adjacent parcel at US 1 Highway & Doby Road intersection

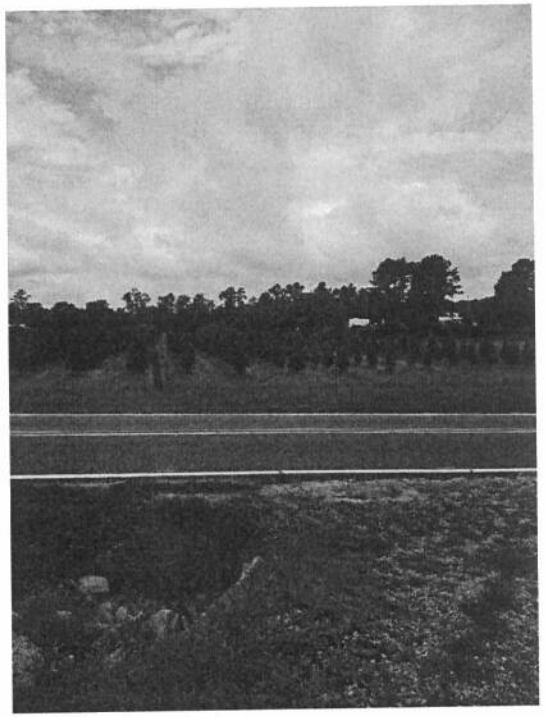
425

Facing Doby Road from house (back of previous welding shop)



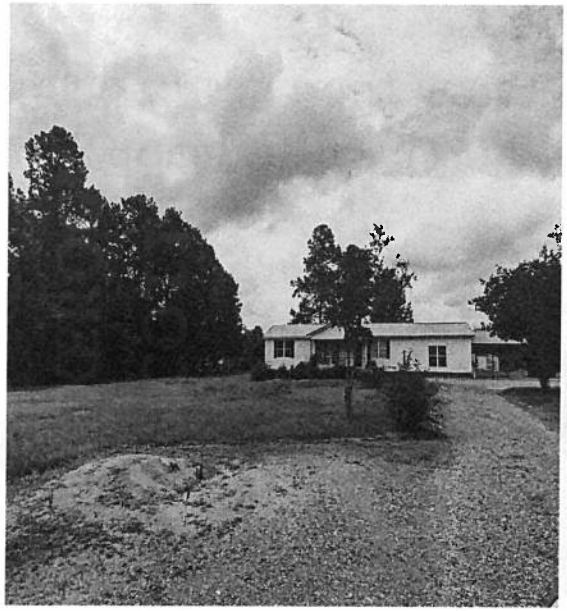


Long driveway from Doby Road to 129 Doby Road



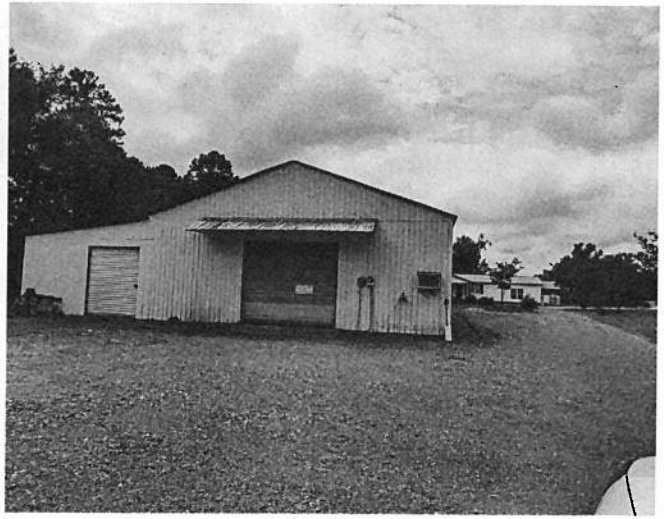
Doby Christmas Tree Farm across the street to end of Doby Road

# View of the Subject Property



Front of House at 129 Doby Rd

Front of previous welding shop in front of house at 129 Doby Road





View from 129 Doby Road facing Doby Road (neighbor to the left side)



Neighboring property on the left side of Doby Rd



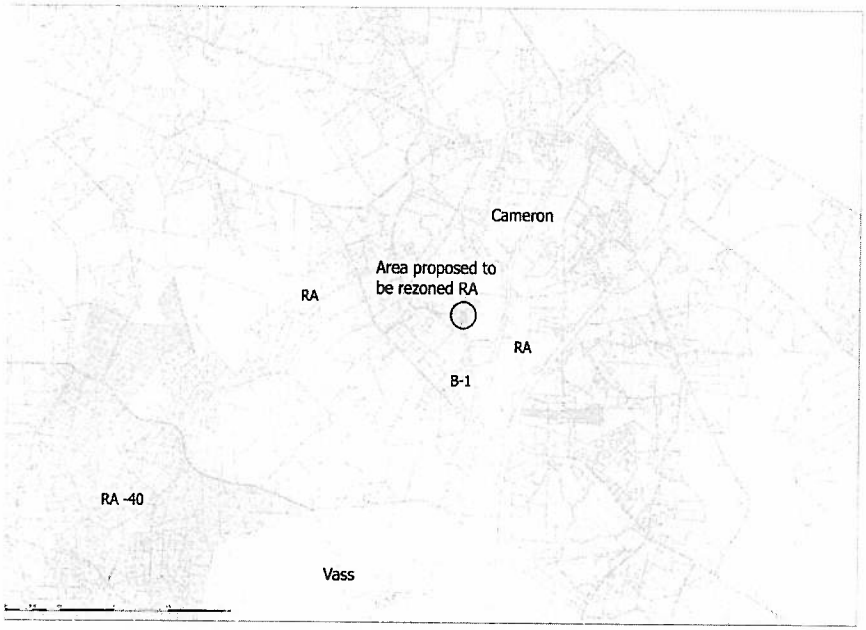
Neighboring property on the right side of Doby Rd

Immediate two adjoining parcels (left side of Doby Rd)



# Zoning District Compatibility

Adjacent properties are zoned RA & B-1 (with some small commercial business in operation)




Zoning Map

UDO states that RA is to to encourage the continuance of agricultural uses as well as to ensure that residential development of appropriate intensities that are consonant with the suitability of land, availability of public services, and that are compatible with surrounding development, will occur at appropriate densities to provide a healthful environment.

# Zoning District Compatibility

The requested rezoning to Rural Agricultural (RA) is consistent with the existing uses located along Doby Road including some residential and other rural agricultural uses.

- Currently zoned B-1,previously had a welding commercial business on site in accessory structure.
- Currently Neighborhood Business (B-1) zoning district has 47 allowable uses. (37 permitted by right)
- Currently Rural Agricultural (RA) has 52 allowable uses (15 permitted by right).
- Lower intensity land uses
- Larger lots provide rural ambiance and buffering for adjacent parcels.

- AGRICULTURAL USES
- RESIDENTIAL USES
- COMMERCIAL USES
- EDUCATIONAL & INSTITUTIONAL USES
- RECREATION USES
- INDUSTRIAL USES

| ALLOWED IN NEIGHBORHOOD BUSINESS (B-1) | ALLOWED IN RURAL AGRICULTURAL (RA) |
|---|---|
| Agricultural Uses and Buildings | Agricultural Uses and Buildings |
| Group Care Facility (Special Use Permit) | Dwellings, Single Family |
| Nursing Home | Family Care Home (6 or less) |
| Kennels Overnight (CZ) | Manufactured Home |
| Pet Day Care, Grooming, Obedience Training | Manufactured Home Park (CZ) |
| Veterinary Clinic | Group Care Facility (CZ) |
| Commissary Kitchen | Nursing Home (Special Use Permit) |
| Dry Cleaning and Laundromat | Animal Shelter (CZ) |
| Office | Animal Training Facility, Military (CZ) |
| Small Appliance Repair Shop | Kennels Overnight (CZ) |
| Trade Contractor Office and Workshop (CZ) | Pet Day Care, grooming, Obedience Training (CZ) |
| Auction House | Veterinary Clinic (CZ) |
| Convenience Store | Bed and Breakfast (CZ) |
| Feed and Seed Sales | Commissary Kitchen |
| Florist | Convenience Store (Special Use Permit) |
| Flea Market (CZ) | Feed and Seed Sales (Special Use Permit) |
| Garden Center | Florist |
| Restaurant | Flea Market (Special Use Permit) |
| Retail | Brewery/Winery (Special Use Permit) |
| Car Wash & Detailing | Cemetery or Mausoleum, Commercial (Special Use Permit) |
| Commercial truck Wash (Special Use Permit) | Childcare Facility (Special Use Permit) |
| Parking lot as a Principal Use | College/ Business & Trade School (Special Use Permit) |
| Taxi Service (CZ) | Government Facility |
| Vehicle, Auto Parts, Tires, Farm Equipment, Boat, RV-Sales, Rental or Service | Museum / Art Gallery (Special Use Permit) |
| Vehicle Service Station (Gas Stations) | Religious Institution (Special Use Permit) |
| Vehicle Wrecker Service (CZ) | Security Training Facility (Special Use Permit) |
| Massage & Bodywork Therapy | School, Elementary/Middle/High (Special Use Permit) |
| Cemetery or Mausoleum, Commercial | Airport, Public or Private (Special Use Permit) |
| Childcare Facility | Airstrip, Small Private (Special Use Permit) |
| Funeral Home with Crematorium | Assembly Hall (CZ) |
| Government Facility | Camp or Care Center |
| Museum /Art Gallery | Campground, Public and Private |
| Religious Institution | Camp, Recreation Day |
| School, Elementary/Middle/High | Civic, Social Club, Lodge, Organization (Special Use Permit) |
| Airstrip, Small Private | Neighborhood Park |

- AGRICULTURAL USES
- RESIDENTIAL USES
- COMMERCIAL USES
- EDUCATIONAL & INSTITUTIONAL USES
- RECREATION USES
- INDUSTRIAL USES

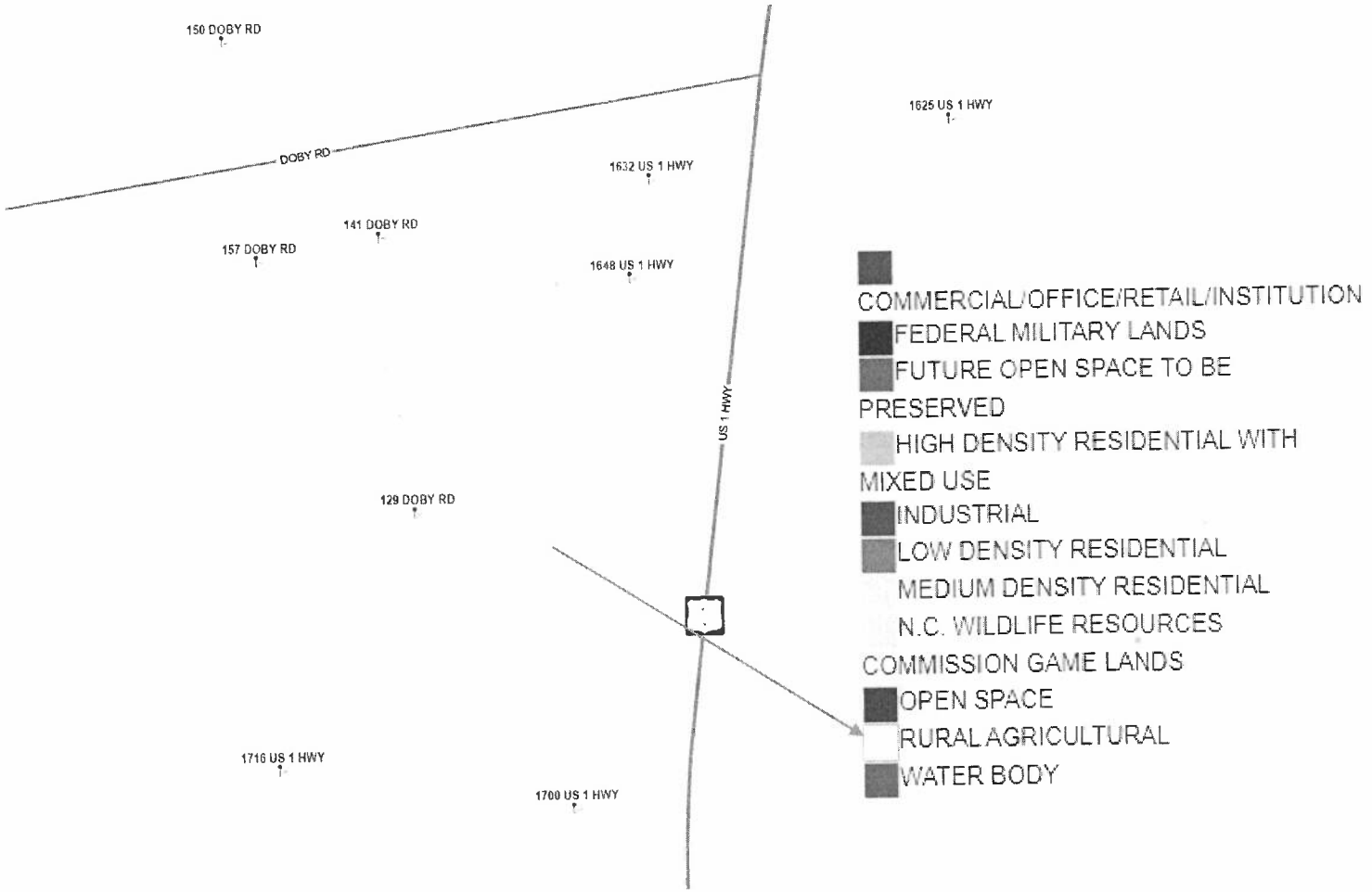
| ALLOWED IN NEIGHBORHOOD BUSINESS (B-1) | ALLOWED IN RURAL AGRICULTURAL (RA) |
|---|---|
| **Civic, Social Club, Lodge, Organization** | **Recreation, Low Impact Outdoor** |
| **Neighborhood Park** | Recreation, High Impact Outdoor (CZ) |
| Recreation, Indoor (Special Use Permit) | Shooting Range, Indoor (CZ) |
| **Recreation, Low Impact Outdoor** | Shooting range, Outdoor (CZ) |
| **Manufacturing & Sales Pottery** | Zoo / Petting Zoo (CZ) |
| **Public & Private Utility Facilities** | **Manufacturing & Sales Pottery** |
| **Antenna Collocation, Major** | Contractors Storage Yard and Office (CZ) |
| **Antenna Collocation, Minor** | Freight Terminal (CZ) |
| **Small Wireless Facility** | **Public & Private Utility Facilities** |
| **Telecommunications Tower, Minor** | Antenna Collocation, Major (Special Use Permit) |
| Mini-Warehouse Self-Storage (CZ) | **Antenna Collocation, Minor** |
| Debris Management Facility (CZ) | Small Wireless Facility (Special Use Permit) |
| | Telecommunications Tower, Major (CZ) |
| | Telecommunications Tower, Minor (Special Uses Permit) |
| | Warehousing or Distribution Center (CZ) |
| | Debris Management Facility (CZ) |
| | Mining / Quarry Operation (CZ) |

# Consistency with 2013 Moore County Land Use Plan

- The future land use map identifies the property as Rural Agricultural Classification. The requested zoning to RA is compatible with this classification.

- Primary use of the land is to support rural residential life associated with agricultural uses and other rural activities.

# Moore County Future Land Use Map



# Consistency with the 2013 Moore County Land Use Plan Continued

- Approval of Rezoning to RA would make the parcel more compatible with Future Land Use Map.

- RA offers lower intensity land uses, which are more compatible with the existing surrounding properties than the existing district of B-1 when comparing to the Future Land Use Map.

# Recommendation

Staff recommends the Moore County Board of Commissioners make two separate motions:

**Motion #1:** Make a motion to adopt the attached Board of Commissioners Land Use Plan Consistency Statement (**Consistent or Inconsistent**) and authorize the Chairman to execute the document as required by North Carolina General Statute 160D-605.

**Motion #2:** Make a motion to **Approve** or **Deny** the Conventional Rezoning of one parcel of approximately 2.59 acres, located at 129 Doby Rd, and further described as Parcel ID 00990314 in Moore County tax records, from Neighborhood Business (B-1) to Rural Agricultural (RA). The parcel is owned by Ruby C. Howard Revocable Trust of 2024 per Deed Book 6169, Page 254.

**Agenda Item:** 10.C.
**Meeting Date:** October 15, 2024

**MEMORANDUM TO THE MOORE COUNTY BOARD OF COMMISSIONERS:**

| | |
|---|---|
| **FROM:** | Debra Ensminger, Planning Director |
| **DATE:** | 10/02/2024 |
| **SUBJECT:** | Planned Development Conditional Rezoning Request: Rural Agricultural (RA) to Planned Development Conditional Zoning (PD-CZ) |
| **PRESENTER:** | Debra Ensminger, Planning Director |

**REQUEST:** A request for a Planned Development Conditional Rezoning of three (3) parcels of approximately 395.67 acres located on Leach Road, owned by Jordan Two, LLC, per Deed Book 5072, Pages 207-282 and further described as ParID 00010343, ParID 00010342 and ParID 00010337 in Moore County tax records, from Rural Agricultural (RA) to Planned Development Conditional Zoning (PD-CZ) for an automotive entertainment facility. The potentially affected properties are located on Leach Road and surrounding properties.

Public notification consisted of publishing a legal notice in the local newspaper for two consecutive weeks, notification by certified mail to adjacent property owners, and placing public hearing signs on the property.

**BACKGROUND:** Northeastern side of the subject properties has been used for timbering, while the remaining is mostly undisturbed and has prevalent tree canopy and vegetation. A Phase 1 historical study has been completed showing an existing cemetery located on the property outside of the development area. Adjacent properties include single-family dwellings, agricultural land, and wooded areas.

The proposed rezoning site is on Leach Road between Tarry Church Road and NC Highway 24-27. The vision of Uwharrie Motorsports Park & Resort is to provide a unique opportunity for Northern Moore County by providing a high-end sports entertainment facility that will benefit local drivers and spectators and those traveling from throughout the country. The project is intended to attract car enthusiasts and owners of unique cars who will buy 'memberships,' allowing access to 'garage condominiums' where they can store cars. These 'garage condominiums will also have a small accessory living area intended for short overnight stays or rest time between racing sessions. Uwharrie Motorsports Park & Resort is not just about high-speed thrills. It's a project that respects and preserves the natural environment.

**WATERSHED:**
The proposed development area lies within a WS-IIIP area. This allows 24% built-upon area (up to 70% with SNIA approval). There are existing streams, floodplains and wetlands located on the subject parcels. A Planned Development conditional zoning district must meet all standards applicable for development within a watershed overlay district.

Wetland impacts are intended to be minimal and will be coordinated with the United States Army Corp of Engineers (USACE) and the North Carolina Department of Environmental Quality (NCDEQ).

There are no woodpecker habits on the subject parcels and no other endangered species exist on the site.

**ORDINANCE STANDARDS: SECTION 3.18. ADDITIONAL STANDARDS FOR PLANNED DEVELOPMENT (PD-CZ) CONDITIONAL ZONING DISTRICTS:**

The proposed request must meet the following ordinance standards: The (PD-CZ) district is established and intended to encourage innovative and unified land planning and site design concepts that support economical and efficient use of land, creative design, a high quality of development, and a better built environment. There is a Planned Development document (PD -CZ) document that outlines the master plan, including exhibits. **Land shall be classified into a planned development conditional zoning district only in accordance with the procedures and requirements set forth in this Ordinance for establishing a planned development conditional zoning district.** Subject property is currently +/- 395.67 acres, zoned RA, and is to be rezoned PD-CZ.

**MASTER PLAN REQUIRED**

Establishment of a planned development conditional district requires a master plan to be submitted and approved as part of the application to establish the district. A master plan shall address the following:

1. The general location of individual development areas, identified by land use(s) and/or development density or intensity;
   - o ParID 00010343,00010342, and 00010337. **See Exhibit VIII / Section 4.3.2 PD-CZ Master Plan / Terms & Conditions**
2. The general configuration and relationship of the principal elements of the proposed development, including general building types;
   - o Uses on the property may be mixed within the development or within individual buildings to promote a mixture of uses throughout the development. Uses are intended to compliment the operational needs for a motorsports park & resort. In general, dimensional standards for the development, including building height, buffers, setbacks, and landscaping will follow the standards of the UDO. **See Exhibit VIII / Sections 5.1/ 5.2 /5.3/ 5.5.4 - PD-CZ Master Plan / Terms & Conditions**
3. The acreage, types and mix of land uses, number of residential units (by use type), non-residential floor area (by use type), residential density, and non-residential intensity. See Exhibit VIII / Section 5.3 – PD-CZ Master Plan / Terms & Conditions
   - o Garage Condominium with Accessory Dwelling –These units are garages with a second-story mezzanine level. These units will vary in size throughout the property. The mezzanine area would accommodate short overnight stays and provide a place to rest during race/driving days. The mezzanine area will be equipped with restrooms and a kitchen area may be provided. Per the State of North Carolina building code, these units are considered dwelling units or sleeping units in which a significant portion of the space includes a nonresidential use that is operated by a tenant which is classified and considered a Live/Work unit. Building construction will meet all state of NC building code requirements.
   - o Garage Condominium – These units will be garage space that can be rented or owned. These units will provide areas to work on and store vehicles for racing.

4. A development phasing plan that identifies the general sequence or phases in which the district is proposed to be developed, if phasing is proposed;
   - **See Exhibit IX / Section 7.0 - PD-CZ Master Plan / Terms & Conditions**

5. The dimensional standards for lots applicable in each development area of the district; No lots.
   - **See Exhibit VIII**

6. The general location, amount, and type of open space (whether designated for active or passive recreation).
   - **See Exhibit VIII / Section 5.5.2 - PD-CZ Master Plan / Terms & Conditions**

7. The location of environmentally sensitive lands, wildlife habitat, and resource protection lands;
   - **See Exhibit V**
   - **See Exhibit VIII**
   - **Sections 4.1.3/ 4.1.5/ 5.4.1 - PD-CZ Master Plan / Terms & Conditions**

8. The on-site transportation circulation system, including the general location of all public and private streets, existing or projected transit service, pedestrian, and vehicular circulation features, and how they will connect with existing and planned systems;
   - **See Exhibit VIII Sections 4.2.1/ 5.5.1 PD-CZ Master Plan / Terms & Conditions**

9. The general location of on-site potable water and wastewater facilities, and how they will connect to existing systems;
   - **See Exhibit VIII / Section 4.2.3 PD-CZ Master Plan / Terms & Conditions**

10. The general location of on-site stormwater management facilities, and how they will connect to existing public systems; and
   - **Sections 4.2.2 / 5.5.10 - PD-CZ Master Plan / Terms & Conditions**

11. The general location of all other on-site public facilities serving the development, including but not limited to parks, schools, bus shelters, and facilities for fire protection, police protection, EMS, and solid waste management.
   - **See Exhibit VIII**

**TERMS AND CONDITIONS STATEMENT**

In addition to a master plan, an application for the establishment of a planned development conditional zoning district shall include a terms and conditions statement. The document shall incorporate by reference or include, but not be limited to:

**A statement of planning objectives for the district; Section 2.2- PD-CZ Master Plan / Terms & Conditions** - Uwharrie Motorsports Park & Resort will provide a unique opportunity for Northern Moore County by providing a high-end sports entertainment facility that will benefit local drivers, spectators and those traveling from throughout the country. The project is intended to attract car enthusiasts and owners of unique cars who will buy 'memberships,' allowing access to 'garage condominiums' where they can store cars. These 'garage condominiums' will also have a small accessory living area intended for short overnight stays or rest time between racing sessions. Membership will also allow for a certain amount of track time per year. The track/racing course will consist of a 3-mile loop that will act as a road course and can be set up to accommodate multiple types of racing, from carts to other kinds of racing vehicles. The track is intended to be FIA (Fédération

Internationale de l'Automobile) certified. While membership is a necessary function of the overall operation, public use and enjoyment opportunities will also be provided. A clubhouse will be located centrally within the track area, and a centrally located bar/restaurant will be open to the public, providing views of the track and racing sessions. Opportunities to host public special events such as concerts, auto shows & auctions, markets, festivals, and marathons will also be provided. The public may also attend special race events or view race team training sessions. An opportunity for local high school or college students with a passion for auto mechanics or engineering to receive hands-on training in the auto and racing industry may also be provided. Uwharrie Motorsports Park & Resort is not just about high-speed thrills. It's a project that respects and preserves the natural environment.

- **Phasing - Section 7.0 - PD-CZ Master Plan / Terms & Conditions**
- This project is projected to have a 5-year build-out. It is intended that Phase 1 will be built immediately and will include the three-mile driving circuit, main clubhouse, corporate and infield condos, entrances into the facility, as well as any required parking, infrastructure, and utilities associated with the driving circuit and facilities. Phases 2 & 3 are intended to add additional condo units and could occur concurrently with Phase 1 or at a later date. These phases may be built out of order dependent on market demand/needs. Architectural drawings and Building permits for structures located within each Phase may be submitted individually.
- **Section 2.3 - PD-CZ Master Plan / Terms & Conditions**
- The applicant is Autoport. Autoport will be the eventual owner of the property and will manage the property and business post-construction.

2. **The degree of consistency between the proposed planned development master plan and the applicable aspects of the County's Adopted Comprehensive Land Use Plan;**
   - **Section 4.3.1- PD-CZ Master Plan / Terms & Conditions**
   - The proposed PD-CZ development is consistent with Moore County's Future Land Use Plan and promotes its objectives. The Future Land Use Plan has designated the property as Industrial.
   - **Section 5.5.2 - PD-CZ Master Plan / Terms & Conditions**
   - The development area will be surrounded by untouched natural areas, acting as a buffer to neighboring parcels. A significant portion, at least 30%, of the development will be open space, much of which will remain undisturbed.
   - **Section 5.5.4 - PD-CZ Master Plan / Terms & Conditions**
   - A 100' buffer/setback area will be maintained along the property boundary, ensuring a respectful separation between the development and adjacent properties.

3. **All conditions related to approval of the application.**
   - Any future conditions related to the approval of this application through recommendations added by the Planning Board and required by the Board of Commissioners will happen at those meetings.

4. **How transportation, potable water, wastewater, stormwater management, and other infrastructure will be provided to accommodate the proposed development;**
   - **Section 7.0 - PD-CZ Master Plan / Terms & Conditions** - Phase 1 will include the three-mile driving circuit, main clubhouse, corporate and infield condos, entrances into the facility, as well as any required parking, infrastructure, and utilities associated with the driving circuit and facilities.

- **Section 5.5.5 - PD-CZ Master Plan / Terms & Conditions** - Utilities - There are no existing water or gravity sewer lines within the development. The Applicant and project engineer researching multiple options to provide water to the site. For all options, it is anticipated that an elevated storage tank will be needed at the resort to provide the required volume and pressure of water. Options being explored include installing wells or tying into existing water infrastructure and extending water mains to the project site. There is an existing 10" water main along Spies Road, operated by the Town of Robbins, that could be a possible connection point. Existing water infrastructure in the area that may serve the property includes the Town of Robbins, the Town of Star, and the Town of Biscoe. Initial conversations and analysis have been completed but the preferred water service option has not been identified at this time. There are a couple of operations related to sewer service. The first option is an on-site pump station that would pump west to either the Town of Biscoe or the Town of Star through a force main. A preliminary review of existing sewer infrastructure indicates that an existing pump station southwest of the site could be the potential point of connection. This plan depends on determining whether there is enough capacity in the Town of Biscoe or the Town of Star's wastewater treatment plant facilities to accept the resort's flow. Another option under discussion is routing the force main east and connecting it to the town of Robbins' existing gravity sewer, which is located at the intersection of Highway 24 and Highway 705.
- An underground communication line exists along Leach Road. There is also an existing overhead power line along Leach Road. All new electric and telephone/cable lines will be run underground.
- All drives and parking areas will remain private and will be maintained by the Applicant.
- **Section 5.5.1 - PD-CZ Master Plan / Terms & Conditions -Ingress/Egress Points** - Three entrances into the development are being proposed. All ingress/egress points into the development will be from Leach Road. Roadways adjacent to the development are governed by the NCDOT.
- Ingress/egress connection to these streets. All proposed ingress/egress points require NCDOT approval. A Traffic Impact Analysis (TIA) will be prepared and any improvements, if necessary, must be approved by NCDOT. The Applicant will be responsible for the installation cost of any required improvements.
  - Timmons Group, the projects civil engineer, will conduct a traffic impact analysis (TIA) to determine the impacts associated with the proposed Uwharrie Motorsports resort. The proposed development will be constructed in Moore County and is assumed to include two full-movement site access connections to Leach Road. Assumed study area intersections include the following:
    - Griffin Farm Road/ Spies Road
    - Griffin Farm Road/ Cochran Road
    - Leach Road / Site Access 1
    - Leach Road / Site Access 2
    - Leach Road / Tarry Church Road
    - Browers Mill Road / Tarry Church Road
    - NC-24/27 / Tarry Church Road

Study area intersections will be analyzed during the NCDOT required AM and PM peak hours. Scoping meeting will be conducted with NCDOT and all NCDOT standards and procedures will be followed. Similar racetrack traffic information will be shared.

- **Parking** – Parking will be provided as required in the UDO. Sizes of parking spaces and aisles will follow the standards as described in the UDO. The number of parking

spaces may exceed the minimum required number and may include overflow parking areas to accommodate parking needs for special events and spectators.

- **Sidewalks** – Sidewalks shall be provided as needed within the development to provide for pedestrian circulation between proposed buildings and public spaces. Additional paths may be provided for access to track viewing areas or other public spaces.
- **Section 5.5.6 - PD-CZ Master Plan / Terms & Conditions- Lighting** - Street, parking lot, and internal lighting will be designed in conformance with the requirements of Section 7.8Q in the Moore County UDO. The driving course/racetrack is intended for daytime use only and will not require heavy illumination for night driving/racing sessions. Lighting in the track area may be provided only as needed for security and safety measures. The small kart track area may have nighttime activities and racing, including public access. Lights may be provided that will meet the County's maximum lighting standards. Any lighting for this facility will be directed down and toward the track to prevent off-site light spills. All lighting will be LED lighting and shall minimize glare hazards and exterior illumination as described in the UDO.
- **Section 5.5.11 - PD-CZ Master Plan / Terms & Conditions - Noise** – A detailed report has been provided by Driven International describing the noise mitigation measures, methodology, and strategy that will be implemented for the racetrack as Exhibit XII. Noise controls will be put in place to comply with internation guidelines. This includes utilizing noise monitoring technologies around the track and on individual vehicles to measure noise output. Maximum permitted noise levels shall be strictly enforced and constantly monitored to ensure that cars comply. In addition, earthen berms and sound walls will be added in critical areas to reduce the noise levels traveling off-site significantly. Noise reducing elements will be studied and analyzed during the detailed track design to minimize noise around the track. The main track will not be lit or operated at night. The kart track may be used for evening events and is open to the public. This area may have evening racing and has been located along Leach Road to minimize the noise impact on adjoining properties. This track will also be studied along with the rest of the noise strategy, and mitigation will be provided if necessary.
- **Section 5.5.7 - PD-CZ Master Plan / Terms & Conditions - Signage** - Creating a consistent character for the signs in the Planned Development (PD) area is essential to maintain consistency throughout the development and enhance the aesthetic character, while providing adequate signage to identify areas within the development. Signage will reflect the architectural character within the development. Signage will follow the standards as described in Section 7.15. Additional signage may be provided within the development for building identification and wayfinding purposes.
- Multi-Tenant Monument Signs – Signage located at each entrance location along Leach Road will follow the standards for multi-tenant signs as defined in section 7.15 of the UDO. These 'Multi-Tenant Monument' signs are intended to identify the overall development. In addition, these signs may identify a limited number of areas or functions within the development area. The place identifier, "Uwharrie Motorsports Park & Resort" or its logo does not count toward the overall sign area for these 3 signs.
  - Sign dimensions will follow the multi-tenant sign standards per section 7.15 of the UDO:
    - Maximum sign height = 20'
    - Sign Area = 100 Square Feet
  - Signs may have uplighting or be internally lit. All up lights must be shielded from view and directed toward the sign only.
- **Section 5.3 - PD-CZ Master Plan / Terms & Conditions - Land Use and Potential Development-**

| LANDUSE | TOTAL |
|---|---|
| Garage Condominiums with Accessory Dwelling (see description above) | 165 units |
| Garage Condominiums (see description above) | 120 units |
| Clubhouse Facility | Square footage to be determined during site planning |
| Drivers Lounge | |
| Café/Diner/Restaurant | |
| Driving School | |
| Event Spaces | |
| Office Space for facility operations | |
| Meeting Spaces | |
| Retail Store | |
| Parks & Recreation spaces | |
| Dog Park | |
| Pickleball Courts | |
| Jogging Paths / Walking Trails | |
| Viewing Terraces/Event Lawn/ Amphitheater | |

5. **The provisions related to environmental protection and monitoring;**
   - **Section 5.5.2 - PD-CZ Master Plan / Terms & Conditions -Open Space** - A minimum of 118.7 acres (30%) of open space shall be provided within the development. Open space will be calculated as defined by the UDO and may include amenity areas, gathering spaces, and natural undisturbed areas.
   - **Section 4.1.1 - PD-CZ Master Plan / Terms & Conditions - Prevalent Tree Canopy and Vegetation** - The existing tree canopy and vegetation can be seen in the aerial photographs of the property included in the existing conditions map (see Exhibit IV). Much of the property has been previously used as a timber forest and has been previously cleared. This is particularly noticeable in the aerial photographs in the northeastern portion of the property where no prevalent tree canopy exists. Tree canopy and vegetation will be further identified as required during the site plan permitting process.
   - **Section 4.2.2 / 5.5.10 - PD-CZ Master Plan / Terms & Conditions - Storm Water Management** - Drainage facilities will be in areas deemed appropriate for the development and will be designed by a certified engineer. Stormwater may be controlled and collected in wet ponds, dry ponds, or stored in underground facilities. The locations of such facilities will be provided with the detailed engineering and grading plans. Stormwater must be maintained on the overall property to meet Moore County, NC Department of Environment and Natural Resources (NCDENR), NC Division of Water Quality (NCDWQ) and any other stormwater regulations. Adequate stormwater control must be in place (regional facility) or designed as part of each phase of development.
   - The proposed development area lies within a WS-IIIP protected watershed district established by NCDEQ. The project will comply with all state and local standards for storm water management and utilize stormwater control measures and engineered storm water facilities as required. Wetland impacts are intended to be minimal and will be coordinated with the United States Army Corp of Engineers (USACE) and the North Carolina Department of Environmental Quality (NCDEQ).

- There is no woodpecker habitat on the property and no other endangered species exist on the site. Much of the property has been previously used as a timber forest and has been previously cleared.
- Section 5.4.2 PD-CZ Master Plan / Terms & Conditions - Phase 1 historical study has been completed for the site. No historical structures are on the site, but an existing cemetery is located on the property outside the development area.

6. **The range of potential principal and accessory uses. Only those principal and accessory uses that are identified as allowable may be included within a planned development conditional zoning district application;** and

- **Section 5.3 - PD-CZ Master Plan / Terms & Conditions**

- **Proposed Principal Uses:** (Subject to Specific Use Standards in Table of Uses CH 6)

1. Agricultural Uses and Buildings (Not in a Bona Fide Farm)
2. Hotel and Motel
3. Office
4. Trade Contractor Office and Workshop
5. Convenience Store
6. Restaurant
7. Retail
8. Car Wash or Auto Detailing
9. Parking Lot as a Principal Use
10. Vehicle, Auto Parts, Tires, Farm Equipment, Boat, RV-Sales, Rental or Service
11. Vehicle Service Stations (Gas Stations)
12. Bar/Tavern
13. College/Business & Trade School
14. Museum/Art Gallery
15. Assembly Hall
16. Civic/Social Club, Lodge, Organization
17. Neighborhood Park
18. Recreation, Indoor
19. Recreation, Low Impact Outdoor
20. Recreation, High Impact Outdoor
21. Public and Private Utility Facilities
22. Antenna Collocation, Major
23. Antenna Collocation, Minor
24. Small Wireless Facility
25. Telecommunications Tower, Major
26. Telecommunications Tower, Minor
27. Mini-Warehouse (self service)

- **Section 5.5.8 - PD-CZ Master Plan / Terms & Conditions**

- **Proposed Accessory Uses:**(Subject to Specific Use Standards in Table of Uses CH 6)

1. Accessory Dwelling Located within Non-Residential Building
2. Carport or Garage
3. Personal Workshop / Storage Building
4. Automatic Teller Machine (ATM)
5. Accessory Swimming Pool

6. Cemetery, Family
7. Amateur Radio and Receive Oly Antennas
8. Solar Collectors, On-Site Use

o **Section 5.5.9 - PD-CZ Master Plan / Terms & Conditions**

o **Proposed Temporary Uses**: (Subject to Specific Use Standards in Table of Uses CH 6)

1. Construction Office, temporary
2. Drop-In Childcare Facility
3. Itinerant Merchant
4. Land Clearing
5. Real Estate Office, Temporary
6. Temporary Events (Special Event) these may include community gatherings, open-air markets, car shows, concerts, and auctions. The required Temporary event permit must be obtained from Moore County prior to any event.

**7. Any other provisions the Board of Commissioners determines are relevant and necessary to the development of the PD-CZ in accordance with applicable standards and regulations.**

**COMPATIBILITY ALONG DISTRICT BOUNDARIES**

Development along the perimeter of a PD district shall be compatible with adjacent existing or proposed development outside the district. Where there are potential issues of land use compatibility, the planned development master plan shall provide for transition areas at the edges of the PD district that provide for appropriate buffering and/or ensure a complementary character of uses. Determination of complementary character shall be based on densities/intensities, lot size and dimensions, building height, building mass and scale, hours of operation, exterior lighting, siting of service areas, or other aspects identified by the Board of Commissioners.

o Applicant is proposing to meet or exceed the landscape standards within the Moore County UDO per Chapter 7. Landscape buffers are not required within a planned development; however, the Applicant will provide additional areas of landscape buffers and setbacks along the property boundary. A 100' setback and buffer will be provided along the property boundary. The 100' buffer is intended to be undisturbed with existing vegetation to remain. No setbacks or buffers will be provided within the development.

o Applicant is proposing that street, parking lot, and internal lighting will be designed in conformance with the requirements of Section 7.8Q in the Moore County UDO. The driving course/racetrack is intended for daytime use only and will not require heavy illumination for night driving/racing sessions. Lighting in the track area may be provided only as needed for security and safety measures. All lighting will be LED lighting and shall minimize glare hazards and exterior illumination as described in the UDO.

o Applicant is proposing that Driven International will provide studies on noise produced during racing/driving sessions and any mitigation measures needed to control appropriate noise levels for adjacent properties. The track will not be operated at night.

**SITE PLAN REVIEW**

1. The planned development master plan may take the form of a generalized concept plan for development that provides a general indication of building and site feature location, or it may be configured to the level of detail associated with site plans and construction drawings depicting exact building placement, location and profile of public infrastructure, and

configuration of site features like parking, landscaping, and similar elements.
2. In cases where the master plan is more general or conceptual in nature, the development proposed in the planned development designation shall also undergo site plan review.
3. In cases where the master plan is detailed and meets the minimum requirements for a site plan in the opinion of the Board of Commissioners, the applicant may request, and the Board of Commissioners may grant, an exemption from subsequent site plan review.
4. If a site plan review exemption is granted by the Board of Commissioners, the proposed development shall fully comply with the development configuration depicted in the planned development master plan. Failure to comply with the approved master plan configuration shall require an amendment of the planned development application.
5. Regardless of the level of detail included in the master plan, the Administrator shall review and comment on the master plan prior to consideration of the planned development conditional rezoning district application by the Planning Board.

**COMMUNITY MEETING:**

The required community meeting was conducted at Robbins First Baptist Church, 651 E Hemp Street, Robbins, NC, on Thursday May 16, 2024, from 4:00 - 6:00 PM. Adjacent property owners were notified by certified return receipt mail, sent on Wednesday, May 1, 2024. Please refer to the attached report for more details.

**PLANNED DEVELOPMENT CONDITIONAL ZONING (PD - CZ)**

A planned development conditional zoning district is a negotiated zoning district that may or may not be consistent with an existing conventional zoning district. A planned development district application may propose a unique range of allowable uses, unique dimensional requirements, or other deviations and reductions from otherwise generally applicable standards in this Ordinance. A planned development conditional district requires the approval of a planned development master plan and statement of terms and conditions that details how development in the planned development district will be configured or will operate. Planned development conditional zoning districts are subject to the standards in Section 3.18, which were mentioned and answered earlier in this report.

Specific additional conditions applicable to the rezoning request may be proposed by the applicant, the Planning Board, or Board of Commissioners. Only those conditions mutually approved by the county and the applicant may be incorporated into the permit requirements. If a proposed condition is unacceptable to the owner, the petition can be withdrawn, and the proposed rezoning cannot go forward. Likewise, if a condition is unacceptable to the Board of Commissioners, the petition can be denied and there is no rezoning.

Per NCGS 160D-703(b), conditions and site-specific standards shall be limited to those that address the conformance of development and use of the site to County ordinances and officially adopted plans and those that address the impacts reasonable expected to be generated by the development or use of the site.

**ZONING DISTRICT COMPATIBILITY**

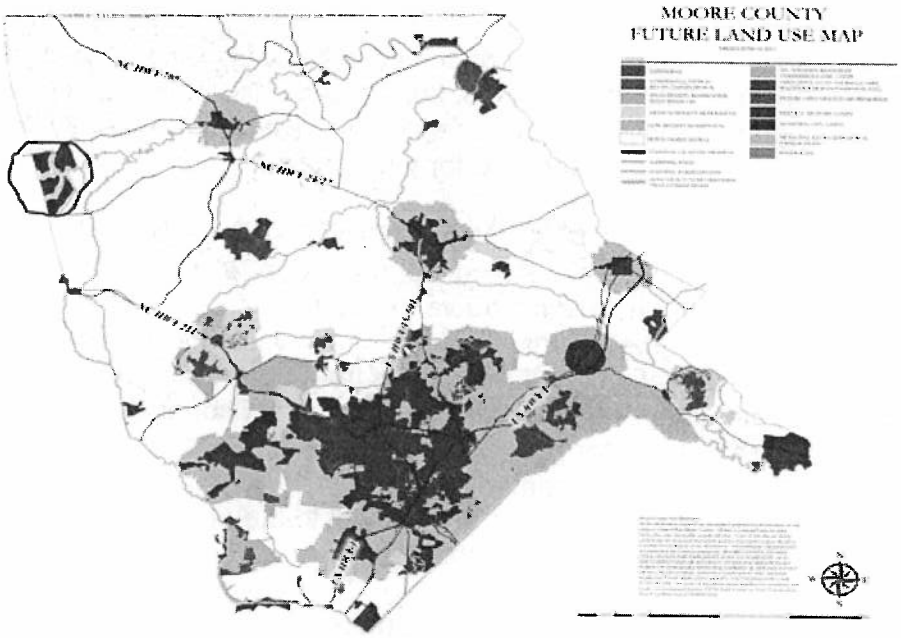
Due to the enormous size of the development and increased surrounding buffers, and very specific nature of proposed conditions, the requested rezoning to Planned Development Conditional Zoning (PD-CZ) is consistent with the existing uses located along Leach Road including residential and other rural agricultural uses. The surrounding area is zoned RA. Currently, this is predominately undisturbed land except for some that has been used for timbering, which would expand to the remaining trees and acreage in the future. The applicant is proposing a large 100-foot buffer of trees and landscaping, which would minimize potential

nuisances to the surrounding community. The proposed development and requested uses would be much less intense that most industrial uses that fall within the more intense industrial zoning districts like production and waste related services categories. The applicant will be financing the installation of required utility infrastructure for the development. Any study findings, i.e.: (TIA, noise results, stormwater etc) that are not ready and available at the time of the Public Hearing will be required to be submitted through commercial permit review process along with all plans for final approval.

**CONSISTENCY WITH THE 2013 MOORE COUNTY LAND USE PLAN**

The consistency statement will be created after the conclusion of the Public Hearing.

**MOORE COUNTY FUTURE LAND USE MAP**




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**PLANNING BOARD RECOMMENDATION:**

The Planning Board met on September 19, 2024, and voted 4-2 the requested rezoning was consistent with the Moore County Land Use Plan (Tyler Brady, Ron Jackson, Tucker McKenzie, and John McLaughlin in favor, Joe Garrison and Ray Daly opposed).

The Planning Board voted to recommend denial of the rezoning request. A motion was made for approval of the request with recommended added condition of operating hours 9am to 6pm Monday through Saturday and 11am to 5pm on Sundays for the main track. The board voted 4-2 (Tyler Brady, Joe Garrison, Ray Daly, and John McLaughlin opposed, Tucker McKenzie and Ron Jackson in favor).

**FINANCIAL IMPACT:** No financial impact to the County's FY 2024-2025 budget.

**IMPLEMENTATION PLAN:** Hold a Public Hearing on October 15, 2024, at 5:30 p.m.

**RECOMMENDATION SUMMARY:** Staff recommends the Board of Commissioners make two separate motions:

**Motion #1**: Make a motion to adopt the Board of Commissioners Land Use Plan Consistency Statement (Consistent or Inconsistent) and authorize the Chairman to execute the document as required by North Carolina General Statute 160D-605.

**Motion #2**: Make a motion to Approve or Deny the Planned Development Conditional Rezoning of three (3) parcels of approximately 395.67 acres located on Leach Rd., owned by Jordan Two, LLC, per Deed Book 5072, Pages 207- 282 and further described as ParID 00010343, ParID 00010342 and ParID 00010337 in Moore County tax records, from Rural Agricultural (RA) to Planned Development Conditional Zoning (PD-CZ) for an automotive entertainment facility.

**ATTACHMENTS:**

1. Exhibit I - Submitted Conditional Rezoning Application
2. Exhibit II - Site Location Map
3. Exhibit III - Community Meeting Report from Applicant
4. Exhibit IV-Existing Conditions Aerial Imagery
5. Exhibit V - Existing Conditions-Wetlands/Floodplain/Topography
6. Exhibit VI - Existing Conditions - Soils
7. Exhibit VII - Adjacent Property Owners
8. Exhibit VIII - Conceptual Master Plan
9. Exhibit IX - Phasing Plan
10. Exhibit X - Proof of Ownership
11. Exhibit XI - Conceptual Building Plans
12. Exhibit XII - Driven International Noise Strategy
13. PD Master Plan-Terms & Conditions Statement
14. Zoning Map
15. Future Land Use Map
16. Deed Book 5072, Pages 207-282
17. Pictures of Property
18. 2024 Community Meeting Report from Moore County Planning Staff
19. Presentation Submitted by the Applicant

County of Moore
Planning and Inspections

Inspections/Permitting: (910) 947-2221
Planning: (910) 947-5010
Fax: (910) 947-1303

# Conditional Rezoning Application

| | | | |
|---|---|---|---|
| Application Date: June 17, 2024 | | | |
| Address of Property: North of Leach Road and South of Spies Road | | | |
| Applicant: Autoport | | Phone: 919-423-1971 | |
| Applicant Address: 1425 Yardley Drive | City: Wake Forest | St: NC | Zip: 27587 |
| Owner: Jordan Two, LLC | | Phone: 910-439-6121 | |
| Owner Address: PO Box 98 | City: Mount Gilead | St: NC | Zip: 27306 |
| Current Zoning District: RA | Proposed Zoning District: PD-CZ | | |
| Current Use(s): Vacant | Proposed Use(s): Automotive Entertainment Facility | | |

Proposed rules, regulations, condition(s) for the proposed district that address the impacts expected to be generated by the development or use of the site:

Refer to Text and Exhibits included with the application

Statement of reasonableness of the proposed conditional zoning. The statement shall include, but not be limited to the following:

1. The conditional rezoning compatibility with the County Land Use Plan and other adopted plans of the County.
2. The conditional rezoning compatibility with the existing land uses on abutting and neighboring tracts.
3. The benefits and detriments of the conditional rezoning for the subject property, neighboring properties and the surrounding community.

Refer to Text and Exhibits included with the application

I (We), the undersigned, certify that all statements furnished in this application are true to the best of my (our) knowledge, and do hereby agree to follow all reasonable requests or information as designated by the County of Moore Zoning Administrator. If Applicant is not owner of property or has joint ownership must provide notarized statement of acknowledgement of submittal.

Jordan TWD, LLC
By: Autoport, LLC — 6/10/24
Applicant/Owner Signature — Date

Applicant/Owner Signature — 06-12-24
Date

Office Use Only:

PAR ID: 00010337, 00010342, 00010343

Received By — 6/17/24
Date




**Site Location Map** (NOT TO SCALE)

**EXHIBIT II**

EXHIBIT 11 - COMMUNITY MEETING REPORT FROM APPLICANT

KOONTZJONESDesign
LAND PLANNING | LANDSCAPE ARCHITECTURE

## NEIGHBORHOOD MEETING

DATE: May 16, 2024

PROJECT: Uwharrie Motorsports Park & Resort

LOCATION: Robbins First Baptist Church
651 E Hemp Street
Robbins, NC 27325

ATTENDEES: Bob Koontz, Koontz Jones Design, PLLC
Michael Morse, Autoport
Kristi Boughter, Autoport
Natalie Hawkins, Moore County Economic Development Partnership
Debra Ensminger, Moore County Planning
Danielle Orloff, Moore County Planning

An informal Neighborhood Meeting was held on Thursday May 16, from 4:00 pm to 6:00 pm at the First Baptist Church in Robbins located at 651 Hemp Street in Robbins. The owner and project team held this meeting with the adjoining property owners to present the project and solicit feedback on the preliminary plans and concepts for the proposed project. All parcel owners adjacent to the proposed development were notified by letter (see attached copy of the letter and mailing receipts) ten (10) days prior to the meeting date.

The meeting was informal in nature to allow adjoining property owners the opportunity to drop by at their convenience to review preliminary plans and ask questions of the development team. No formal presentation was provided. Drawings of the conceptual master plan and buildings were provided for review by the property owners. A list of the attendees has been provided with this application. Moore County Planning Staff will provide a report detailing the neighborhood meeting.

140 APPLECROSS RD | SUITE B
PINEHURST, NC 28374
P: 910.684.8487
www.koontzjones.com

PROJECT LUXURY COMMUNITY MEETING 5/16/202-

| Name | Address | Email Address |
|---|---|---|
| Sherri McNeill | 440 Lethlough Rd, Robbins NC 27325 | sherrihallmeneill@gmail.com |
| Lance Maulden | 661 E Hemp St | lance.maulden9x@gmail |
| KEVIN STEWART | PO BOX 1018 ROBBINS | kistewart666@hotmail.com |
| Katie Dunlap | 766 Tarry Church Rd | star NC KMDunlap766@ |
| Gene & Dorothy Shutt | 418 Owl Farm Rd, Star | dfshutt@gmail.com gmail.com |
| Mary Frances Hall | 5023 Spies Rd, Star | |
| Joe Freeman | 553 Bruce Hill Rd LS NC | M.stetson@stylist.com |
| ETHEL Robbins | 4600 TALC MINE RD SEAGROVE, N.C. 27341 | |
| Jerry & Sue Freeman | 4803 Spies Rd Star NC 27356 | |
| Mickey Brown | PO Box 602, Robbins, NC | mickey@thigpenjewelers.com |
| Barbara Britt | 236 Britt Rd Star NC | plbritt57@gmail.com |
| Brandon Britt | 196 Britt Rd Star NC | brittfarm910@gmail.com |
| Keith Robbins | 530 Adams Rd Seagrove | KLRobbins@rtmc.net |
| Clint Mack | 135 Smathers Dr. West End | |

453

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1. Article Addressed to:

Lundee William Amos
5011 Laurinda Drive
Greensboro, NC 27410

9590 9402 8186 3030 7621 70

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0315 06

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X Lundee Amos ☐ Agent ☐ Addressee

B. Received by (Printed Name) Lundee Amos
C. Date of Delivery

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If YES, enter delivery address below: ☐ No

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Sink More LLC
PO Box 736
Biscoe, NC 27209

9590 9402 8186 3030 7620 33

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0316 43

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A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) FRAY ALLEN
C. Date of Delivery 5/7/24

D. Is delivery address different from item 1? ☐ Yes
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Lloyd R & Ethel F Robbins
Revocable Living Trust
460 Talc Mine Road
Seagrove, NC 27341-9596

9590 9402 8186 3030 7620 26

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0316 50

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A. Signature
X Ethel Robbins ☐ Agent ☐ Addressee

B. Received by (Printed Name)
C. Date of Delivery 5/4/24

D. Is delivery address different from item 1? ☑ Yes
If YES, enter delivery address below: ☐ No

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1. Article Addressed to:

Brandon Lee Britt
196 Britt Road
Star, NC 27356

9590 9402 8186 3030 7621 25

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0315 51

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) Brandon Lee Britt | C. Date of Delivery 5/6/2024

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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Chris R Reynolds
Priscilla B Reynolds
PO Box 521
Star, NC 27356

9590 9402 8186 3030 7620 19

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0316 67

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) Priscilla Reynolds | C. Date of Delivery 5/6/24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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1. Article Addressed to:

Mitchell Darrell Hall
5019 Spies Road
Star, NC 27356

9590 9402 8186 3030 7621 56

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0315 20

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A. Signature
X [signature] ☑ Agent ☐ Addressee

B. Received by (Printed Name) Cathy McElroy | C. Date of Delivery 5/6/24

D. Is delivery address different from item 1? ☐ Yes
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1. Article Addressed to:

Ruby L Brown
PO Box 849
Carthage, NC 28327

9590 9402 8186 3030 7620 02

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0316 74

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X [signature] ☐ Agent ☐ Addressee

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CARTHAGE, NC 28327
MAY 6 2024

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Donald & Cynthia Miller
Justin & Victoria McLeod
2350 Tarry Church Road
Biscoe, NC 27209

9590 9402 8186 3030 7620 71

2. Article Number (Transfer from service label)
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A. Signature
X Cynthia Miller ☐ Agent ☐ Addressee

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5/3

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Richard S Freeman
Dorothy F Shutt
410 Owl Farm Road
Star, NC 27356

9590 9402 8186 3030 7620 57

2. Article Number (Transfer from service label)
9589 0710 5270

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A. Signature
X Gene Shutt ☑ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery
5-3-24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☑ No

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456

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1. Article Addressed to:

Jordan Two LLC
PO Box 98
Mount Gilead, NC 27306

9590 9402 8186 3030 7620 64

2. Article Number *(Transfer from service label)*
9589 0710 5270 0659 0316 12

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X Darrell Nance ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* Darrell Nance
C. Date of Delivery 5-3-24

D. Is delivery address different from item 1? ☐ Yes
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1. Article Addressed to:

Terry W Freeman
Virginia W Freeman
4803 Spies Road
Star, NC 27356

9590 9402 8186 3030 7621 49

2. Article Number *(Transfer from service label)*
9589 0710 5270 0659 0315 37

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X Terry Freeman ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* Terry Freeman
C. Date of Delivery 5-3-24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☑ No

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1. Article Addressed to:

Parker Lee Britt Jr & Wanda Brewer
& Other
760 Leach Road
Star, NC 27356

9590 9402 8186 3030 7620 95

2. Article Number *(Transfer from service label)*
9589 0710 5270 0659 0315 82

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* Parker Britt
C. Date of Delivery 5-4-24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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☐ Collect on Delivery Restricted Delivery
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

457

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

William Parker Britt II
760 Leach Road
Star, NC 27356

9590 9402 8186 3030 7621 01

2. Article Number *(Transfer from service label)*
9589 0710 5270 0659 0315 75

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X Parker Britt ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* Parker Britt II C. Date of Delivery 5-4-24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☑ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

---

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Parker Lee Britt Jr & Wanda Brewer
236 Britt Road
Star, NC 27356

9590 9402 8186 3030 7620 40

2. Article Number *(Transfer from service label)*
9589 0710 5270 0659 0316 36

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* Parker Britt II C. Date of Delivery 5-4-24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☑ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

Mail
Mail Restricted Delivery
00)

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

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**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Jamie W Goins
614 Leach Road
Star, NC 27356

9590 9402 8186 3030 7621 18

2. [illegible]
9589 0710 5270 0659 0315 68

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X ☐ Agent ☑ Addressee

B. Received by *(Printed Name)* [illegible] C. Date of Delivery 5-3-24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☑ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

458

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Roderick D & Pamela G Humbertson
644 Leach Road
Star, NC 27356

9590 9402 8186 3030 7623 09

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0319 95

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X Rodrick D Humbertson ☐ Agent ☒ Addressee

B. Received by (Printed Name) Roderick Humbertson
C. Date of Delivery 5-3-24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Harry Est Lamonds
136 Saunders Road
Troy, NC 27371-8366

9590 9402 8186 3030 7621 32

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0315 44

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X Cheryl Lamonds ☐ Agent ☐ Addressee

B. Received by (Printed Name)
C. Date of Delivery 5/3/24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Edward Phillips
Tammy Phillips
686 Leach Road
Star, NC 27356

9590 9402 8186 3030 7621 63

2. Article Number (Transfer from service label)
9589 0710 5270 0659 0315 13

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X Tammy Phillips ☐ Agent ☒ Addressee

B. Received by (Printed Name) Tammy Phillips
C. Date of Delivery 5-3-24

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☒ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

459

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mary F Hall
5023 Spies Road
Star, NC 27356

9590 9402 8186 3030 7623 23

2. Article Number (Transfer from service label)

9589 0710 5270 0865 9 0319 88

PS Form 3811, July 2020 PSN 7530-02-000-9053

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature
X Cathy Mabry
☑ Agent
☐ Addressee

B. Received by (Printed Name) Cathy Mabry
C. Date of Delivery 5/6/24

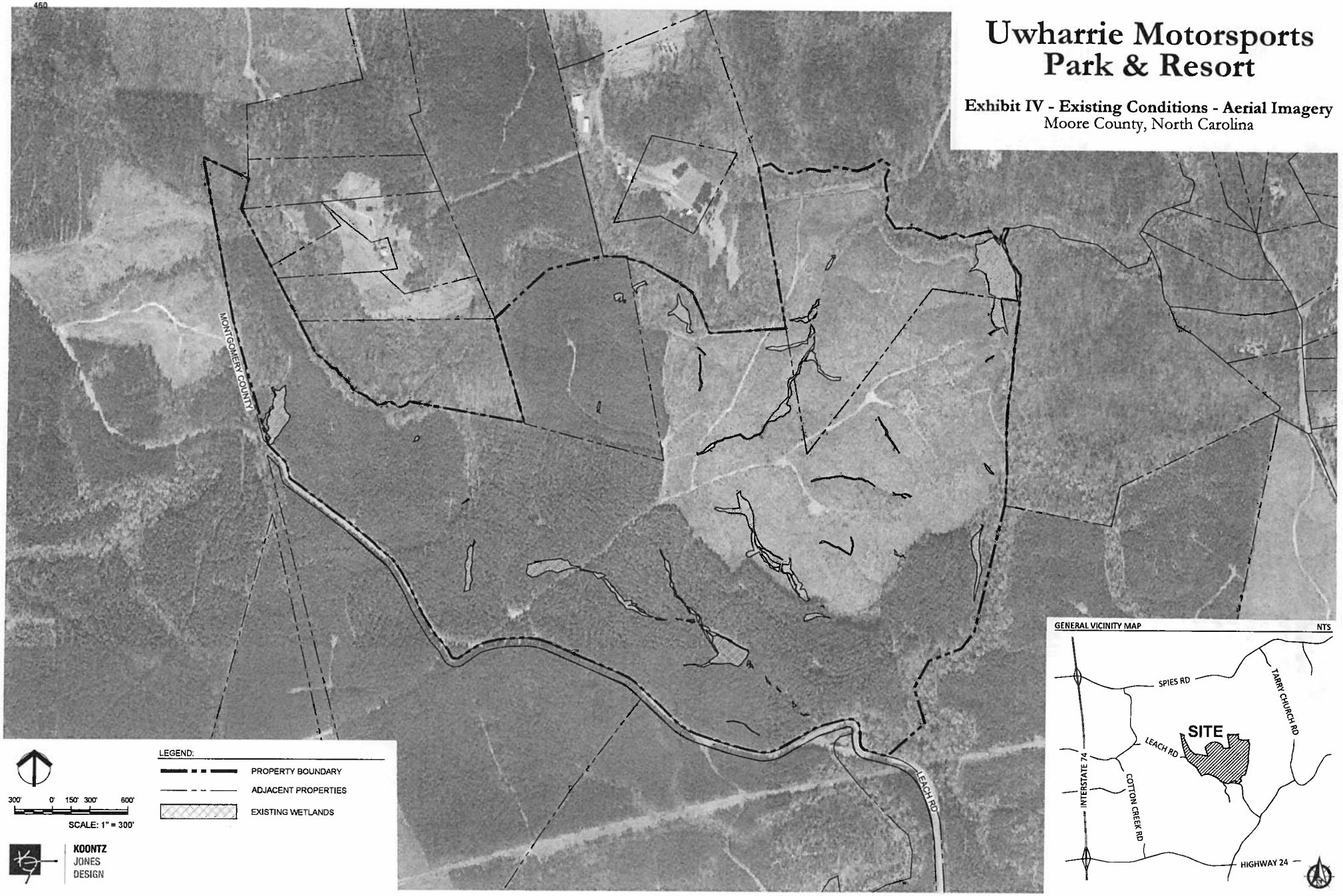
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☑ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery
- ☐ Collect on Delivery Restricted Delivery
- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

Domestic Return Receipt

# Uwharrie Motorsports Park & Resort

**Exhibit IV - Existing Conditions - Aerial Imagery**
Moore County, North Carolina




LEGEND:
- PROPERTY BOUNDARY
- ADJACENT PROPERTIES
- EXISTING WETLANDS

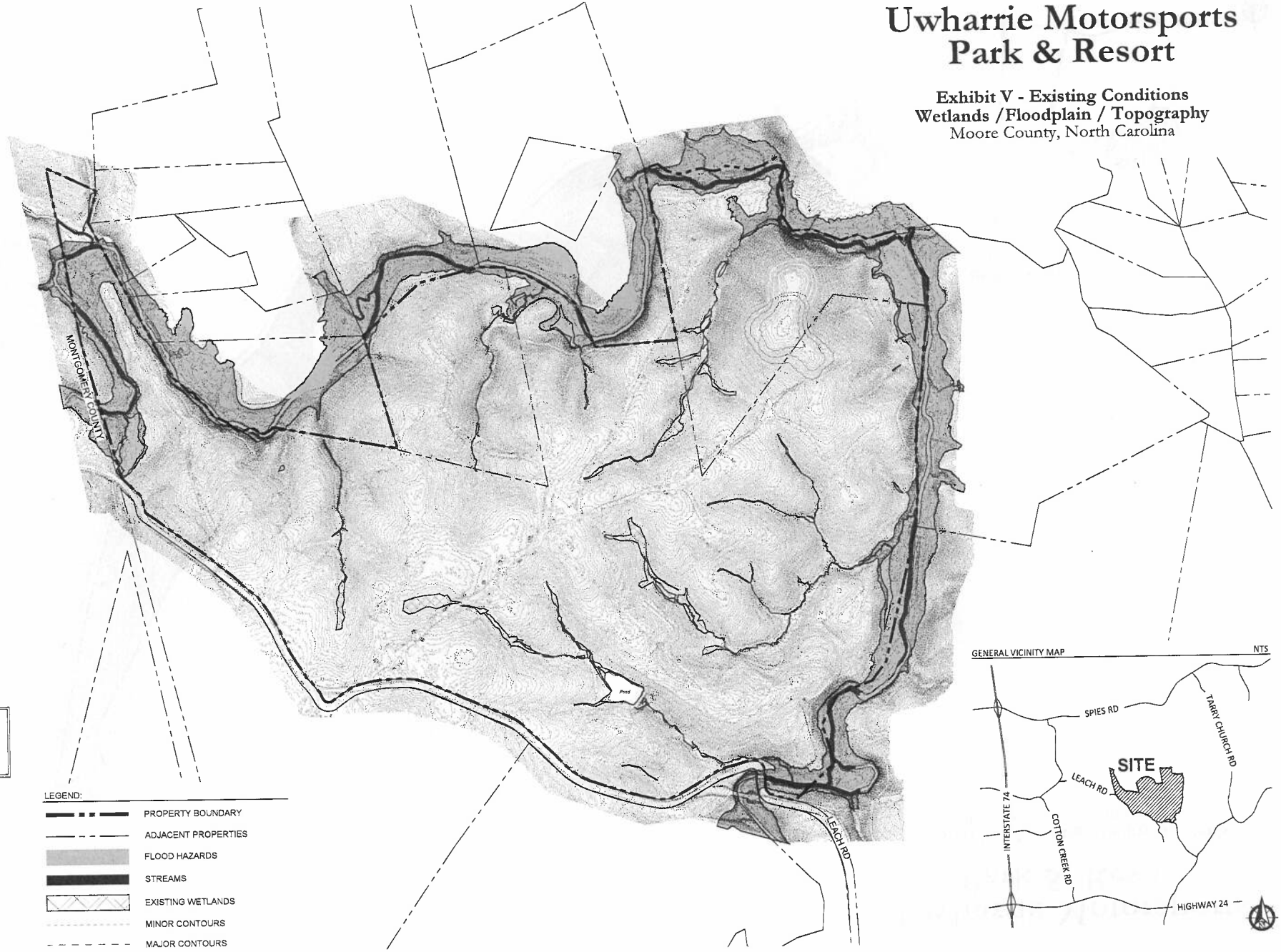
300' 0' 150' 300' 600'
SCALE: 1" = 300'

KOONTZ JONES DESIGN

GENERAL VICINITY MAP NTS

# Uwharrie Motorsports Park & Resort

**Exhibit V - Existing Conditions**
**Wetlands /Floodplain / Topography**
Moore County, North Carolina




WATERSHED INFORMATION

BASIN: CAPE FEAR
STREAM: BEAR CREEK (CPF)
TYPE: WS-IIIP

THIS PROPERTY IS NOT IN A HIGH QUALITY WATERSHED

300' 0' 150' 300' 600'

SCALE: 1" = 300'

KOONTZ JONES DESIGN

LEGEND:

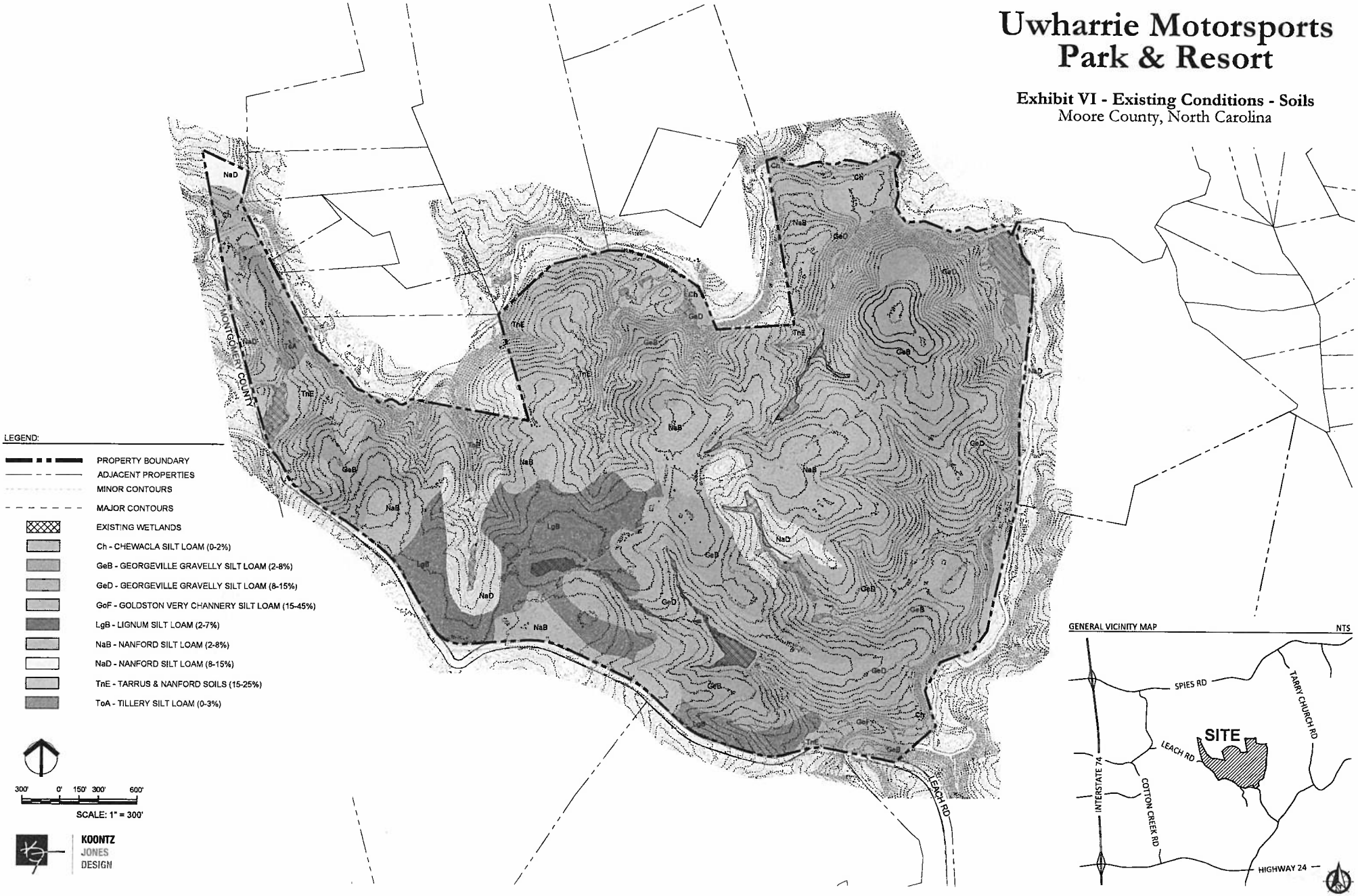
- PROPERTY BOUNDARY
- ADJACENT PROPERTIES
- FLOOD HAZARDS
- STREAMS
- EXISTING WETLANDS
- MINOR CONTOURS
- MAJOR CONTOURS

GENERAL VICINITY MAP NTS

# Uwharrie Motorsports Park & Resort

## Exhibit VI - Existing Conditions - Soils

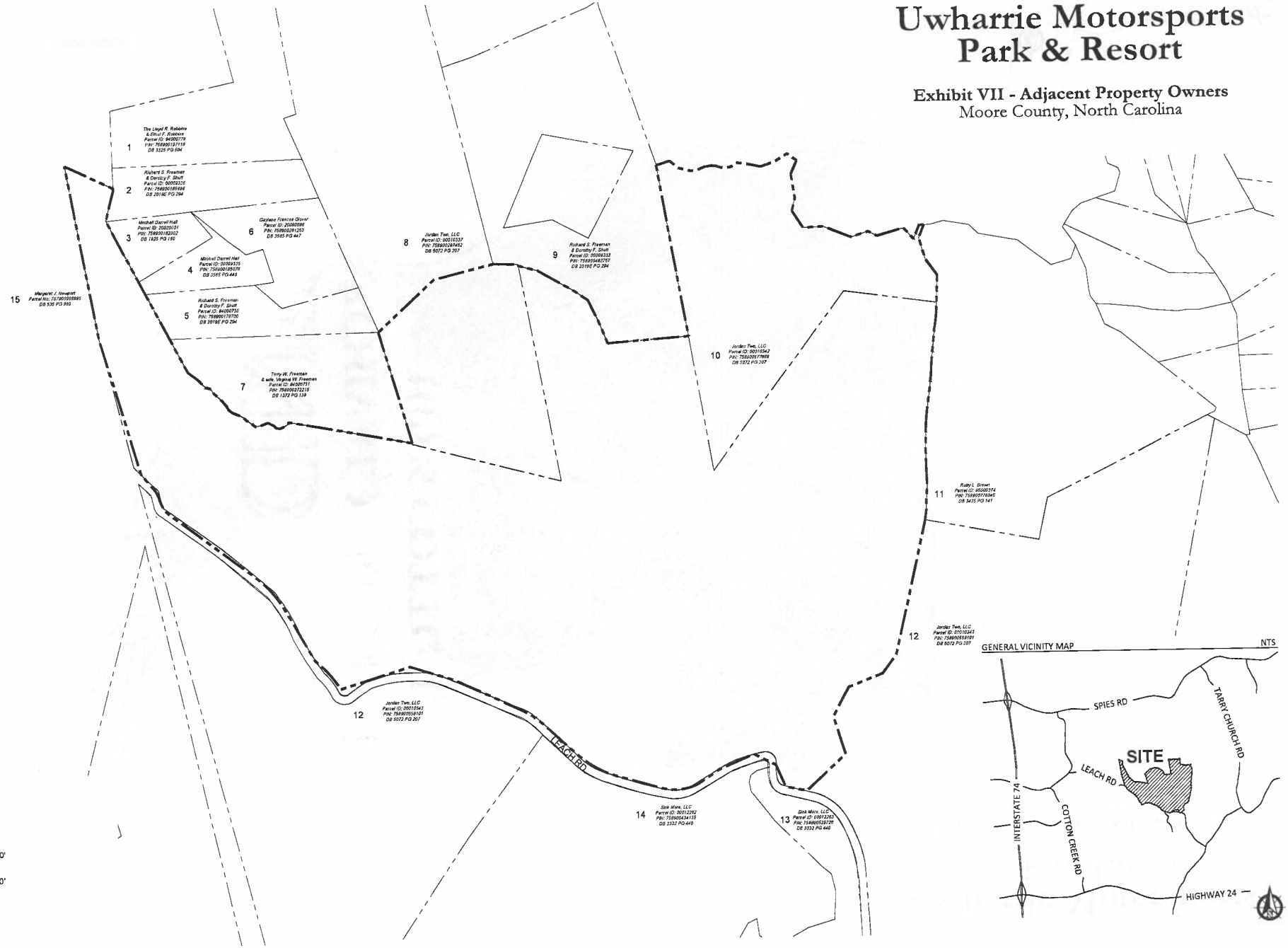
Moore County, North Carolina



# Uwharrie Motorsports Park & Resort

## Exhibit VII - Adjacent Property Owners

Moore County, North Carolina



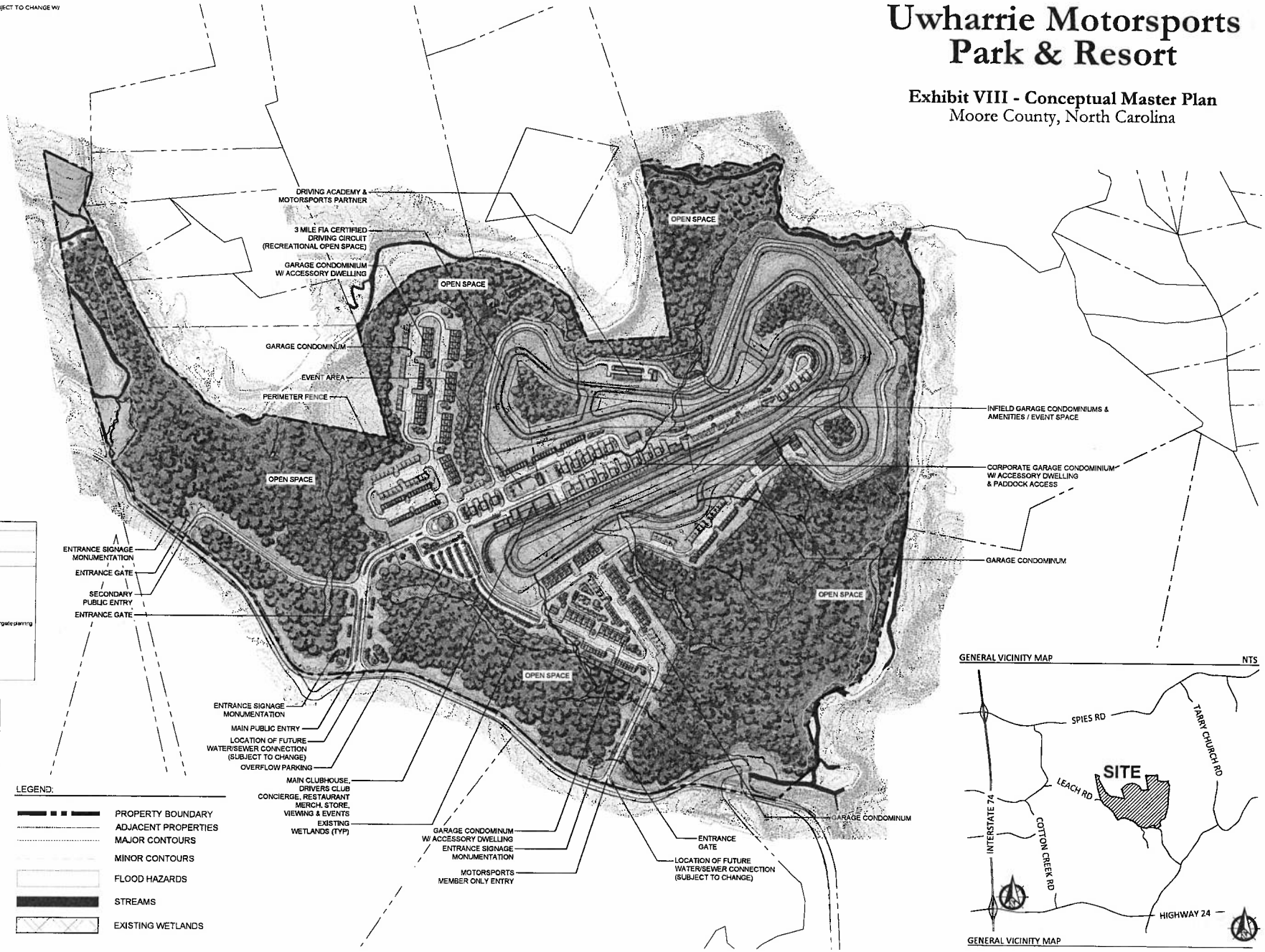

KOONTZ JONES DESIGN

NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE W/ DETAILED DESIGN AND ENGINEERING

# Uwharrie Motorsports Park & Resort

## Exhibit VIII - Conceptual Master Plan

Moore County, North Carolina




| LANDUSE | TOTAL |
|---|---|
| Garage Condominiums with Accessory Dwelling (see description below) | 165 units |
| Garage Condominiums (See description below) | 120 units |
| Clubhouse Facility | Square footage to be determined during site planning |
| Driver's lounge | |
| Cafe/Diner/Restaurant | |
| Driving School | |
| Event Spaces | |
| Office space for facility operations | |
| Meeting Spaces | |
| Retail Store | |
| Parks and recreation spaces | |
| Dog Park(s) | |
| Walking Trails | |
| Jogging Paths | |
| Pickleball Courts | |
| Viewing Terraces | |
| Event Lawn | |

**WATERSHED INFORMATION**

BASIN: CAPE FEAR
STREAM: BEAR CREEK (CPF)
TYPE: WS-III/P

THIS PROPERTY IS **NOT** IN A HIGH QUALITY WATERSHED

LEGEND:

- PROPERTY BOUNDARY
- ADJACENT PROPERTIES
- MAJOR CONTOURS
- MINOR CONTOURS
- FLOOD HAZARDS
- STREAMS
- EXISTING WETLANDS

300' 0' 150' 300' 600'

SCALE: 1" = 300'

KOONTZ JONES DESIGN

GENERAL VICINITY MAP NTS

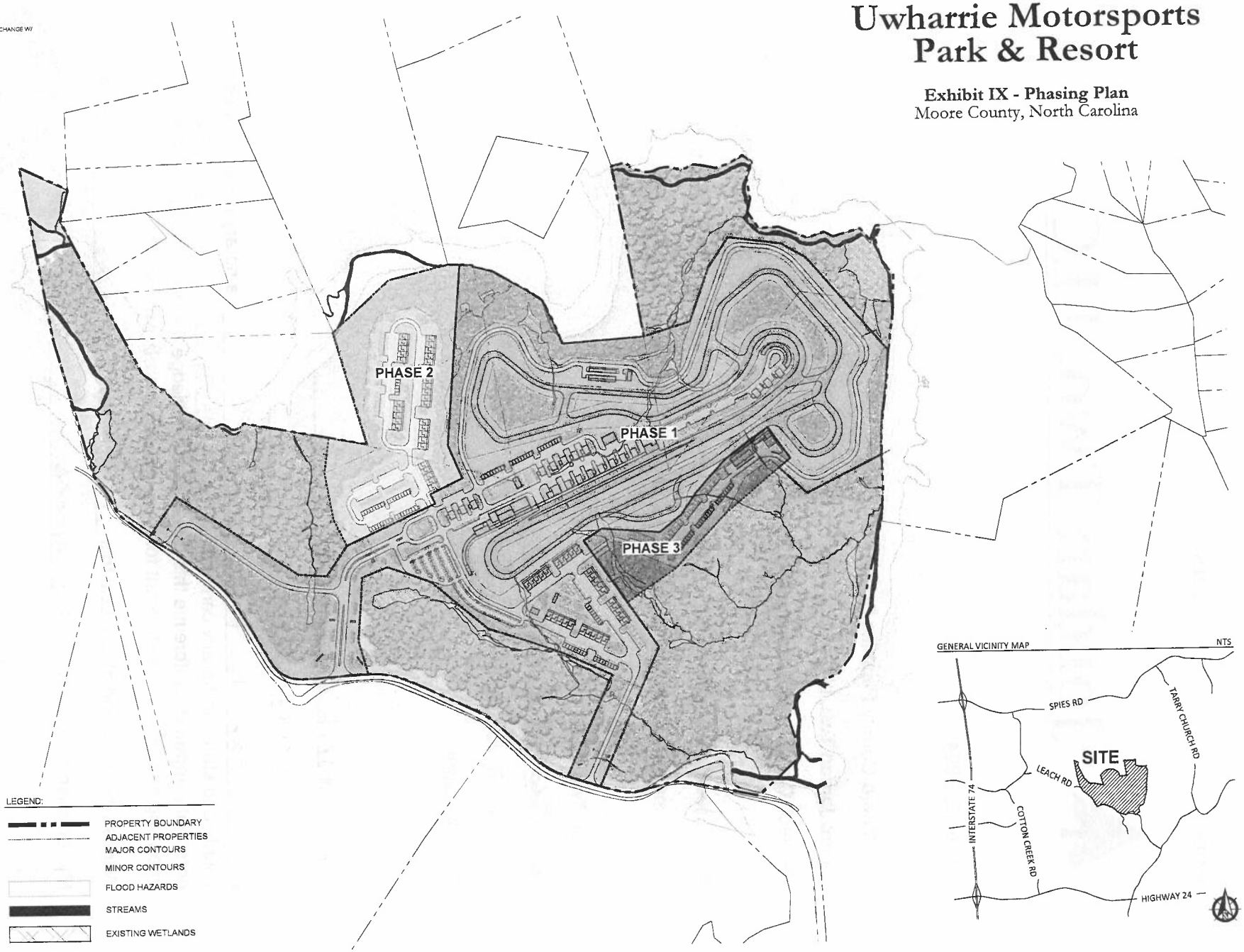



GENERAL VICINITY MAP

NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE W/ DETAILED DESIGN AND ENGINEERING

# Uwharrie Motorsports Park & Resort

**Exhibit IX - Phasing Plan**
Moore County, North Carolina



# Jordan Two, LLC

June 12, 2024

To: Moore County Planning Board

From: Jordan Two, LLC.

Subject: Conditional Rezoning Application – Auto Port Project

By this letter, Jordan Two, LLC. consents to the request from Auto Port, USA to re-zone approximately 400 acres in Moore County from current zoning RA to PD-CZ.

Jordan Two, LLC.

By: Robert B. Jordan

Robert B. Jordan, IV

Title: Manager

State of North Carolina

County of Montgomery

I, Susan L. Huneycutt, a notary public for ~~said~~ Stanly county and state, do hereby certify that Robert B Jordan IV, manager personally appeared before me this day and acknowledge the due execution of the foregoing and annexed instrument for the purposes therein expressed.

Witness my hand and official seal this 12th day of June, 2024.

My commission expires: 09/22/2026

Susan L Huneycutt

Notary Public

SUSAN L HUNEYCUTT NOTARY PUBLIC STANLY COUNTY, NC

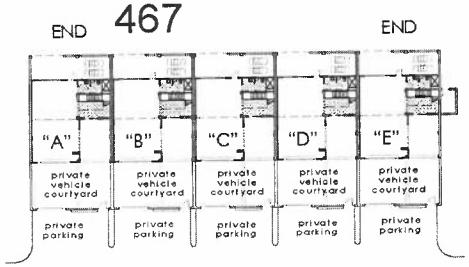
Jordan Two, LLC • PO Box 98 • Mt. Gilead, NC 27306 • Phone (910) 439-6121 • Fax (910) 439-8105

(SEE FOLLOWING PAGES FOR INDIVIDUAL UNIT INFO)

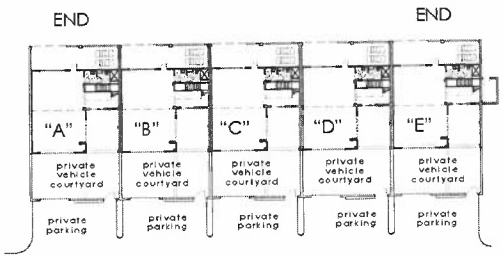
# EXHIBIT XI - CONCEPTUAL BUILDING PLANS

autoport CAR CONDOS

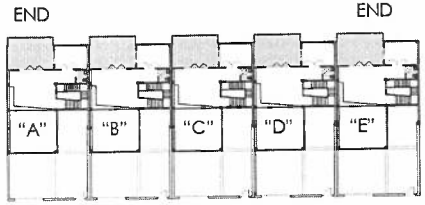
467




grade level



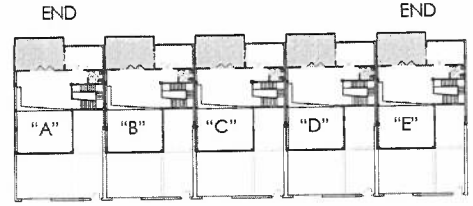

grade level




mezzanine level

## 5 Unit Luxury Car Condo Building

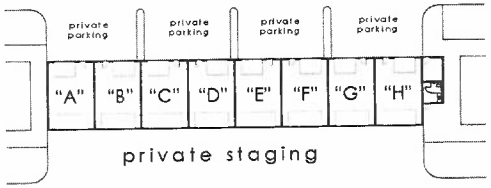
10,525 sf conditioned garage/mezzanine areas
100 sf of Sprinkler Riser Rm.




mezzanine level

## 5 Unit Premium Car Condo Building

11,755 sf of garage/mezzanine areas.
100 sf of Sprinkler Riser Rm.




grade level

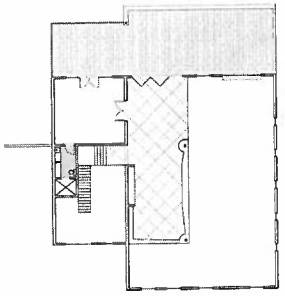
## 8 Bay Driver's Garage Building

6,048 sf of Garage Area
175 sf of Restroom/Sprinkler Riser Rm.

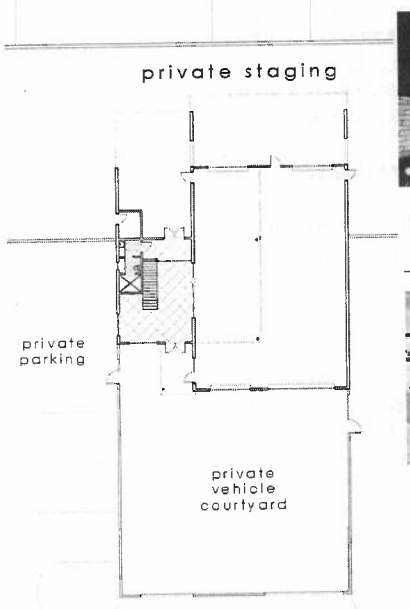
| UNIT TYPE BREAKDOWN: | |
|---|---|
| Sponsor Partner Condo: (proprietary plans TBD) | 2 |
| Opulent Condos: (direct paddock access) | 9 |
| Opulent Condos: | 9 |
| Premium Condo (end unit) | 24 |
| Premium Condo (internal) | 36 |
| Luxury Condo (end unit) | 34 |
| Luxury Condo (internal) | 51 |
| Driver's Garage Condos | 112 |
| TOTAL CAR CONDOS | 277 |

## The Opulent Car Condo Building

SINGLE TENANT:
3,600 sf of Garage Area
1,437 sf of Mezzanine Area



mezzanine level




grade level











ALL SQUARE FOOTAGES APPROXIMATE AND SUBJECT TO CHANGE.

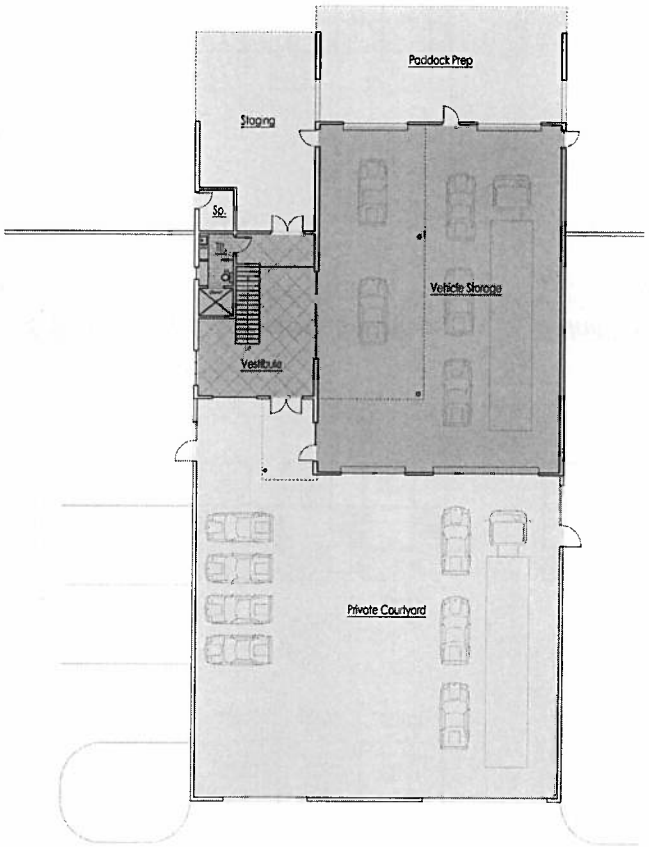
UWHARRIE
MOTORSPORTS PARK & RESORT



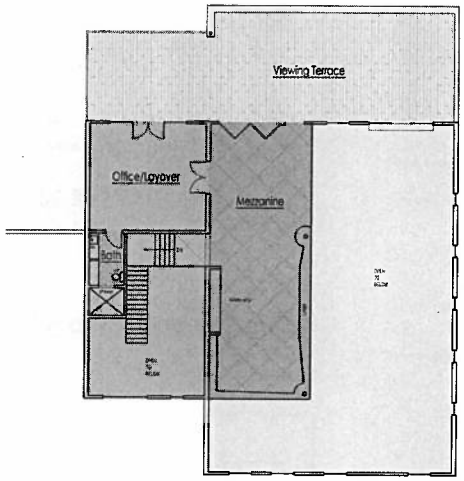




MAIN PADDOCK




Grade - Garage Level




Mezzanine - Viewing Level

***SQUARE FOOTAGE:***
(subject to change)

3,600 SF:
Fully Conditioned Vehicle Storage.

1,467 SF:
Mezzanine Flex Space

1,000 SF:
Upper Level Viewing Terrace

2,000 SF:
Vehicle Courtyard/Corrals (approx.)

## *VEHICLE STORAGE CAPACITY: 30+*

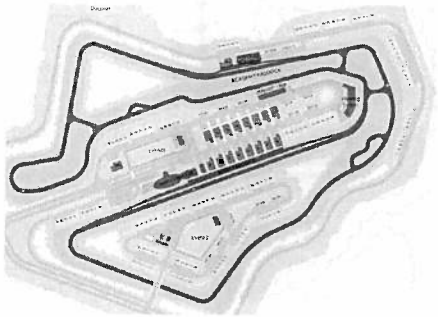
***STANDARD FEATURES:***

-Fully Conditioned Vehicle Storage
- Workshop Ventilation System
- Dedicated Exterior Courtyard (square footages tbd)
-Full bath/shower facilities
-Studio Kitchenette
-Integral Passive Solar Design
-Fully Conditioned Mezzanine
-Fire rated office/layover room
-Heated Slabs
-Viewing Terrace w/Track view
-Golf Cart Storage (2 carts)

-DIRECT MAIN PADDOCK ACCESS - (units TBD)
-PRIORITY MAIN PADDOCK ACCESS -(units TBD)

***AVAILABLE UPGRADES:***

-Multi-level vehicle lifts for extra storage
-Smart Home Packages
-Finish Upgrade Packages
-Electrical Charging Station
-Canopy Covers at Private Courtyards
-Simulator & Gaming Platform Play Area



Site Locations

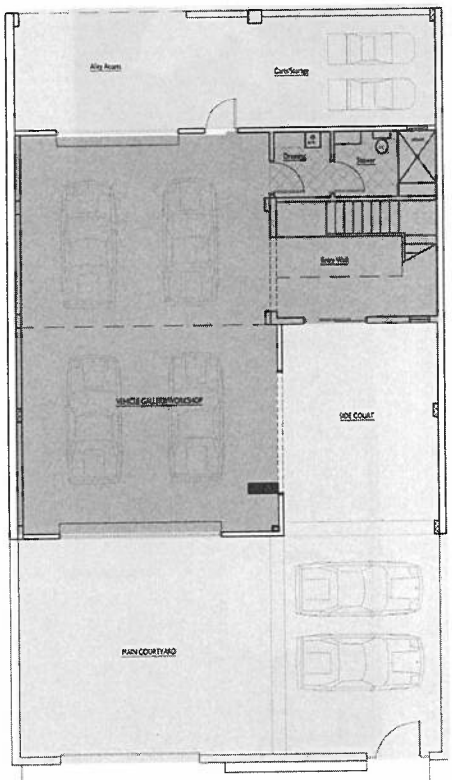
autoport

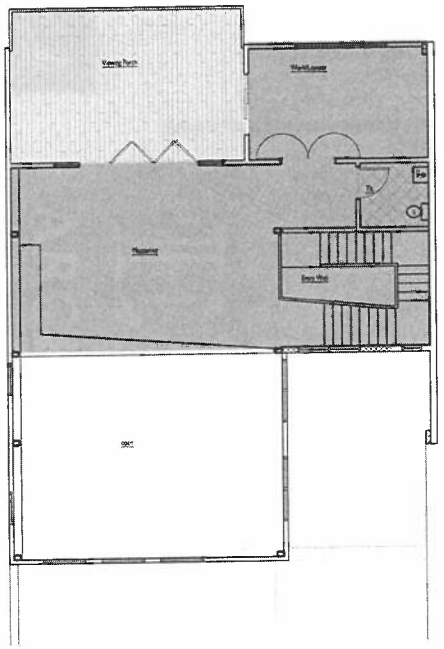
UWHARRIE
MOTORSPORTS PARK & RESORT

the OPULENT CONDO

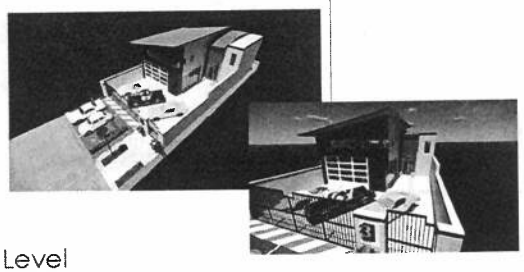
all terms, designs, services & information contained herein are subject to change.

469





Mezzanine - Viewing Level



Grade - Garage Level

***SQUARE FOOTAGE:***
(subject to change)

1,350 SF:
Fully Conditioned Vehicle Storage.

920 SF:
Mezzanine Flex Space.

250 SF:
Upper Level Viewing Terrace.

1,600 SF:
Vehicle Courtyard/Corrals (approx.).

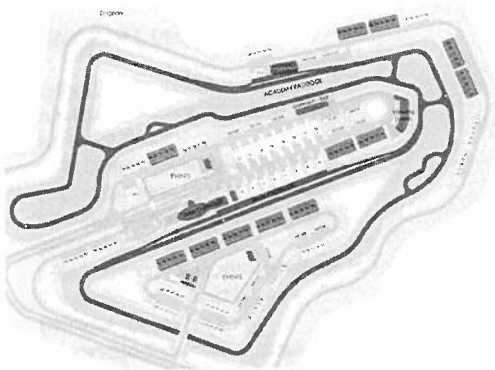
**VEHICLE STORAGE CAPACITY: 15+**

***STANDARD FEATURES:***

Fully Conditioned Vehicle Storage -
Full Ventilation for Workshop Spaces -
Dedicated Exterior Courtyard -
(square footages tbd)
Full bath/shower facilities -
Studio Kitchenette -
Integral Passive Solar Design -
Fully Conditioned Mezzanine -
Fire rated office/layover room -
Heated Slabs -
Viewing Terrace w/Track view -
Golf Cart Storage (2 carts) -

***AVAILABLE UPGRADES:***

Multi-level vehicle lifts for extra storage -
Smart Home Packages -
Finish Upgrade Packages -
Electrical Charging Station -
Canopy Covers at Private Courtyards -
Simulator & Gaming Platform Play Area -



Site Locations

the PREMIUM CONDO

autoport

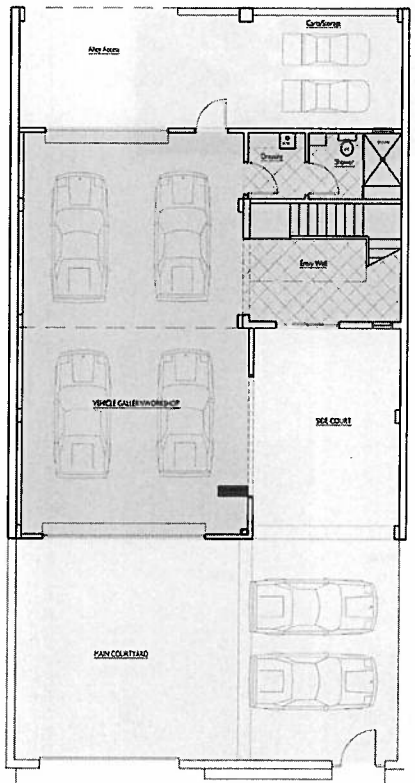
UWHARRIE
MOTORSPORTS PARK & RESORT

all terms, designs, services & information contained herein are subject to change.

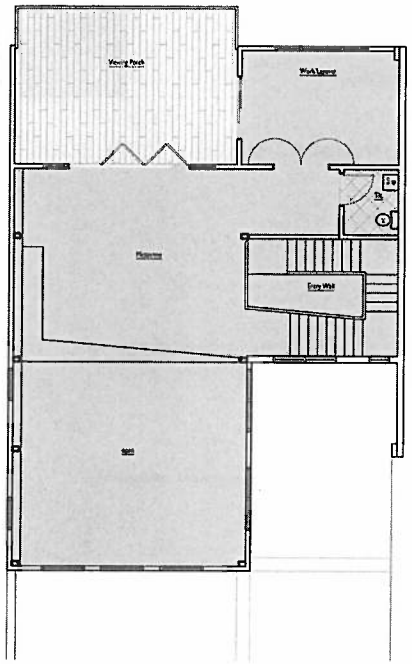
470

## VEHICLE STORAGE CAPACITY: 10+

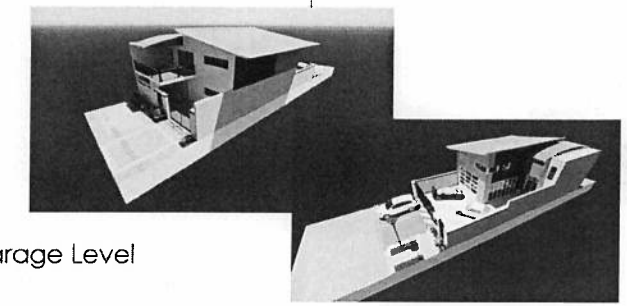
the LUXURY CONDO



Grade - Garage Level



Mezzanine - Viewing Level



***STANDARD FEATURES:***

Fully Conditioned Vehicle Storage -
Dedicated Exterior Courtyard -
(square footages tbd)
Full bath/shower facilities -
Fully ventilated workshop spaces -
Studio Kitchenette -
Integral Passive Solar Design -
Fully Conditioned Mezzanine -
Fire rated office/layover room -
Heated Slabs -
Viewing Terrace w/Track view -
Golf Cart Storage (2 carts) -

***AVAILABLE UPGRADES:***

Multi-level vehicle lifts for extra storage -
Smart Home Packages -
Finish Upgrade Packages -
Electrical Charging Station -
Canopy Covers at Private Courtyards -
Simulator & Gaming Platform Play Area -

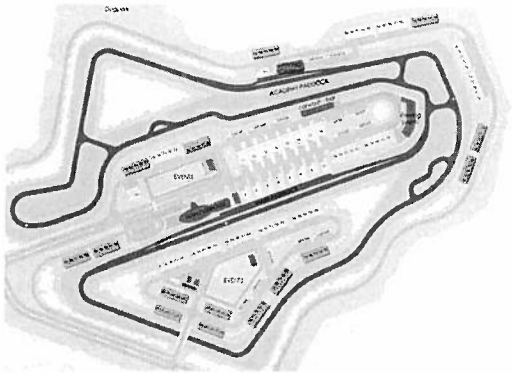
***SQUARE FOOTAGE:***
(subject to change)

1,200 SF:
Fully Conditioned Vehicle Storage.

809 SF:
Mezzanine Flex Space

200 SF:
Upper Level Viewing Terrace

1,400 SF:
Vehicle Courtyard/Corrals (approx.)



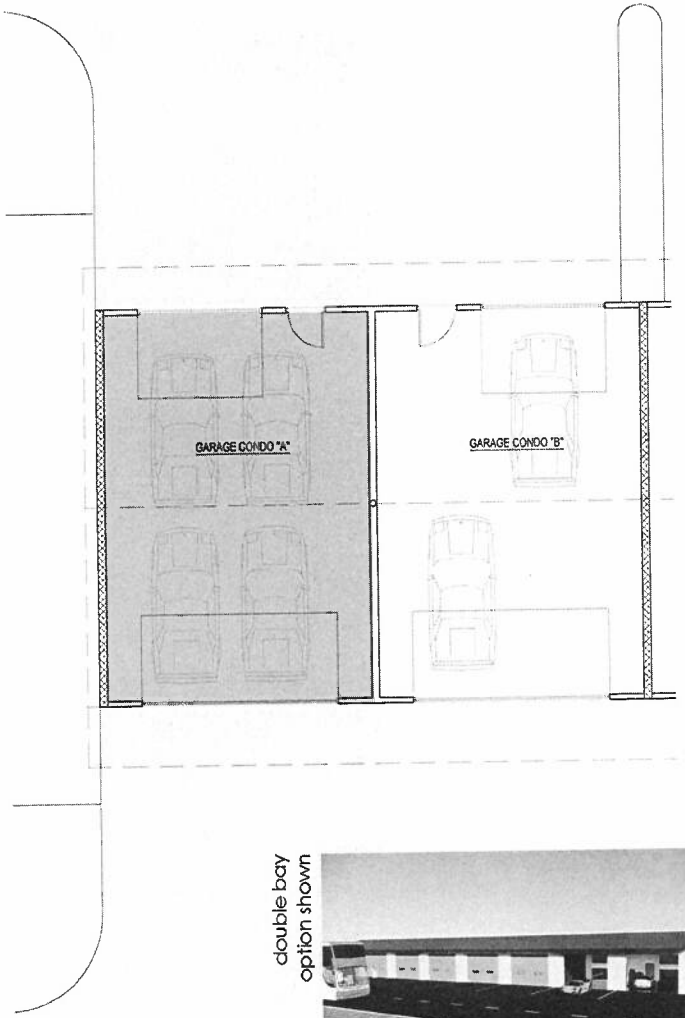
Site Locations

autoport

UWHARRIE
MOTORSPORTS PARK & RESORT

all items, designs, services & information contained herein are subject to change.

# 471

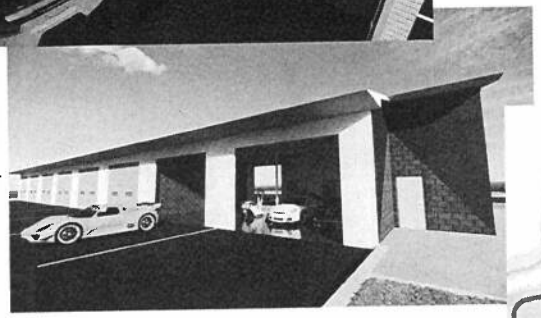



Grade - Garage Level



double bay option shown





double bay option shown

## VEHICLE STORAGE CAPACITY: 4+

***STANDARD FEATURES:***

Fully Conditioned Vehicle Storage -
Dedicated Exterior Parking/Staging -
(square footages tbd)
Shared Private Restroom facilities -
Fully Ventilated Workshop Spaces -
Integral Passive Solar Design-
Heated Slabs-

***AVAILABLE UPGRADES:***

Multi-level vehicle lifts for extra storage-
Smart Home Packages-
Finish Upgrade Packages-
Electrical Charging Station-
Canopy Covers at Exterior Staging-

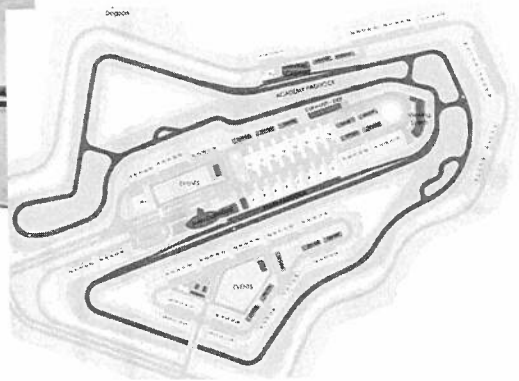
***SQUARE FOOTAGE:***
(subject to change)

756 SF:
Fully Conditioned Vehicle Storage.

DOUBLE BAY OPTION (while available)
1,512 SF:

Restroom facilities (shared per bldg.)

800 SF of dedicated exterior parking/staging



Site Locations

the Driver's Garage

autoport

UWHARRIE
MOTORSPORTS PARK & RESORT

all items, designs, services & information contained herein are subject to change.

Driven. | Hydrock SPLtrack

# Preliminary Noise Strategy

Uwharrie Motorsports Park & Resort

Document Ref: L177-DRVN-00-GEN-RP-00-0-01
Revision: P02
Date: 2 August 2024

Prepared by Driven International with support from Hydrock SPL Track

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Reviewed by: Ben Willshire

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# 1 Introduction and Purpose

## 1.1 Overview

This study, produced by Driven International with the support of Hydrock SPL Track, provides an initial review of potential noise mitigation techniques that could be applied during the design, construction and operation of the proposed Uwharrie Motorsports Park & Resort, utilising systems provided by Hydrock SPL Track.

Hydrock SPL Track have installed noise control systems at various major motorsport venues. They design and manufacture the industry standard drive-by noise monitoring system for motorsport, and with Driven International, the two companies have worked together on several projects over the past 7 years, assisting new and existing circuits with noise related matters.

With most new circuits this pertains to local authority approvals and implementing noise management plans. Joint motorsport project experience pertaining to local authority submissions includes Lake Torrent (N.Ireland), Bicester Motion (UK), Oro Station (Canada), Lebanon International Autodrome (Beirut) and an International Kart Track in the Americas.

Between the track design capabilities of Driven and the noise expertise at Hydrock SPL Track, we are able to provide a purpose-built environmental modelling platform for evaluation of design, ongoing review and reporting of noise. The Hydrock SPL Track cloud-based real-time data platform also serves to log and manage feedback from the community and to provide an information repository for stakeholders.

## 1.2 Project Background

Uwharrie Motorsports Park & Resort is planned to be a new circuit located in North Carolina, approx. 60 miles from the city of Charlotte, and approx. 65 miles from the city of Raleigh. It will be a unique motorsport and automotive destination in Moore County, a region renowned for its world-class golf and recreation facilities.

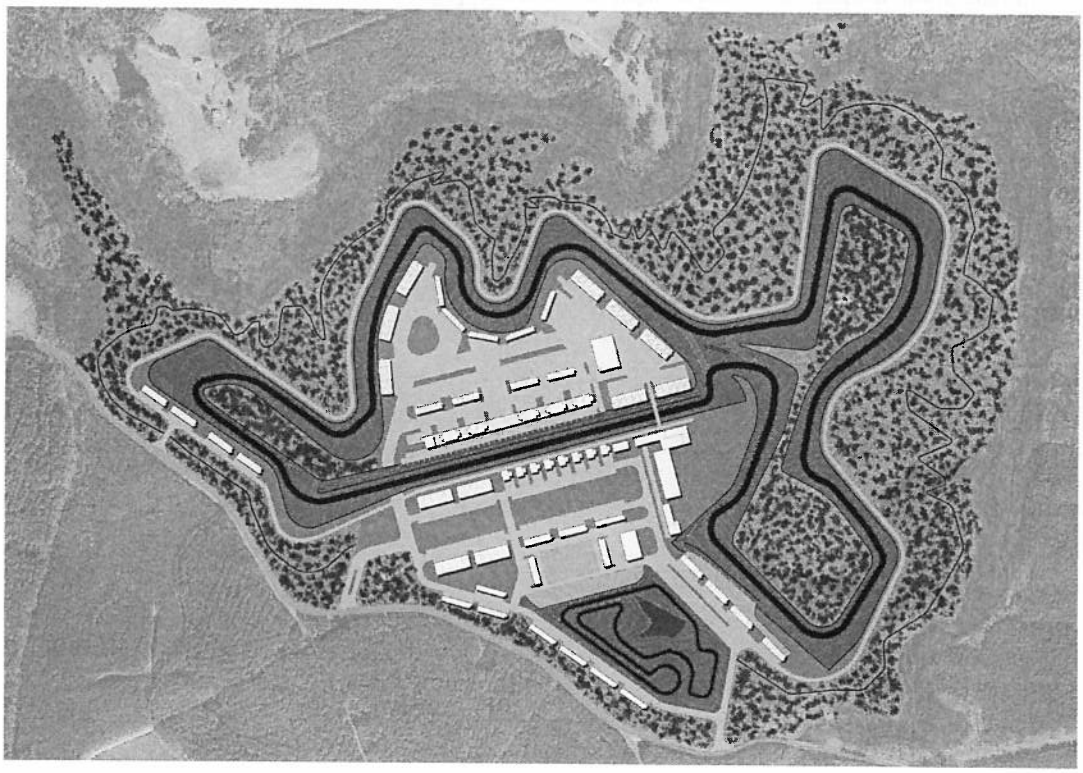


*Figure 1 Pre-concept sketch for Uwharrie Motorsports Park & Resort*

A pre-concept design for the project and site has been created by the client and Driven International (Figure 1), which will form the basis of this study

The venue will not be exclusively for members only, as the venue will have facilities open to the public and the local community. As well as the statement road course, there will be a kart track and driver training facilities for educating drivers of all levels, both members and public. There will also be event spaces and a community centre for gatherings, with participation being a foundational element of the development. For members, a standalone clubhouse will offer spectacular views over the track, with a comprehensive car condo development will offer relaxing spaces to enjoy for family and friends.

## 1.3 Expected Activities and Offerings

Focusing on the road course as the primary attraction of the venue, there will be a variety of activities held which will primarily be for road-legal cars, such as track days, member driving sessions, driving experiences provided by the circuit, track / venue hire, typically using cars which are quieter than race-prepared cars.

If the circuit achieves FIA homologation, as currently planned, the circuit could operate race events which would help to promote the venue as the leading motorsport destination for the region. As such, our noise mitigation suggestions include for these rarer occurrences to help reduce noise impact.

The exact use cases for the road course, kart track and driver training areas are to be defined at a later stage, however there are some typical activities that can be expected:

**Public Driving / Track Days / Member Driving Sessions**

- Year-round, across weekdays and weekends, with availability shown through a publicly accessible calendar.
- Non-competitive sessions, typically ranging from 2-4 hours.
- Up to approx. 26 cars on track at once on the full circuit (fewer if running split circuit configurations).
- Drive-by-noise testing in place, with drivers using their own vehicles.

**Driving Experiences / Corporate Days**

- Year-round, across weekdays and weekends.
- Could range from high-end saloon cars (BMW M3) to sports cars (Jaguar F-Type) or GT supercars (Porsche 911).
- Perfect for presents, or for team building, and bespoke events can be organised to cater for larger groups.
- Sessions typically ranging from 2-4 hours.
- Up to approx. 26 cars on track at once on the full circuit (fewer if running split circuit configurations).
- Drive-by-noise testing in place, with drivers using a vehicle from the circuit's own fleet.

**Driving School / Tuition**

- Year-round, across weekdays and weekends, with availability shown through a publicly accessible calendar.
- Sessions typically ranging from 2-4 hours.
- Up to approx. 25 cars on track at once on the full circuit (fewer if running split circuit configurations).
- Drive-by-noise testing in place, with drivers using a vehicle from the circuit's own fleet.

**Exclusive Track Hire**

- Typically available once per week (not weekends).
- Whether it's a member searching for private track time or a business hosting a corporate day, the track can be hired and tailored to their needs.
- Sessions typically ranging from 4 hours (half day) to 8 hours (full day).
- Drive-by-noise testing in place, with drivers expected to be using their own vehicles.

**Testing**

- Typically available once per week / every other week (not weekends).
- Open 'free practice' time for teams and drivers looking for an opportunity to test their race cars.

- Sessions typically ranging from 4 hours (half day) to 8 hours (full day).
- Up to approx. 26 cars on track at once on the full circuit (fewer if running split circuit configurations) but can have more drivers in the group.
- Drive-by-noise testing in place, with drivers using their own vehicles.

**League Racing / Smaller Championships**

- Approx. 1-2 events per month (could be mid-week or a weekend).
- Likely to be 1 day events.
- Up to approx. 26 cars on track at once on the full circuit but can have more competitors for different races.
- Drive-by-noise testing in place, with drivers using their own vehicles.

**Race Meetings / Larger Championships**

- Approx. 1 event per month / every other month on a weekend.
- Likely to be 2-3 day events.
- Up to approx. 26 cars on track at once on the full circuit but can have more competitors for different races.
- Drive-by-noise testing in place, with drivers using their own vehicles.

## 1.4 Mitigation Approach

With professional input during the design, planning and operation of the venue, noise concerns can be overcome as demonstrated by many other operating track venues.

Environmental noise control at motorsport facilities requires a multi-disciplined process as described below.

- Modelling and evaluation at the planning stage
- The design and implementation of noise mitigation features from the outset
- Public consultation and information exchange
- Developing an agreed calendar of events / operational noise limits
- Real-time noise monitoring
- Enforcement and reporting
- Ongoing Review

At planning stage, it is important to be able to visualise the likely impact of a range of uses on the circuit. Hydrock SPL Track noise mapping software allows different permutations to be evaluated, and the software is verified by its history of use at other circuits and a wealth of comparative data.

Once the circuit is operational, the Hydrock SPL Track real-time drive-by monitoring system provides all the tools required to measure moderate and enforce noise controls. Demonstration of the system in action is available online.

# 2 Virtual Baseline, Benchmark Standards and Methodologies

As a start point to our noise analysis, we have identified potential sensitive receptors along with the Client which are used in this initial study. We propose these are investigated further at a later stage through more detailed noise models.




*Figure 2 Receptor locations identified for modelling*

## 2.1 Ambient Noise

Existing ambient noise on the site may vary due to weather conditions and traffic density, therefore we propose a background survey is undertaken at key receptors over a 7-10 day period to record existing noise levels. The baseline levels can then be used to compare against our virtual noise models, which data suggests is within +/- 3db of real world recordings.

### 2.1.1 Learnings from experience

Several years of experience and data collected from other international circuits has shown that, for neighbourhood receptors, façade impact levels from motorsport activity have the following effects:

- An increase of up to +6dB above ambient (daytime) level at neighbourhood receptors is generally acceptable and does not attract complaints.
- An increase of more than +7dB above ambient (daytime) level may be acceptable but it likely to attract some complaints. Mitigation may be required at the higher end of this threshold.
- An increase of more than +12dB above ambient (daytime) level is likely to attract complaints and is usually only acceptable for a limited number of days per year (i.e. published infrequent racing events).

We feel the virtual model that we have already undertaken could serve as a useful discussion tool for engaging with local authorities to agree on a survey method for measuring baseline noise on the site (to which our track model can then be compared against) and identifying and confirming receptor locations to record and model noise data.

## 2.2 Benchmarks and Reference Standards

There are no globally adopted universal standards for motorsport noise, however there are a number of useful references. For the purposes of demonstrating best practice, we can refer to the following with regard to relevant benchmarks, noise measurement and mitigation practices.

### 2.2.1 Decibel guide examples

As a general guide, the following noise decibel readings apply to every day sounds:

- **0 dB** The faintest sound we can hear
- **30 dB** A quiet library or in a quiet location in the country
- **45 dB** Typical office space. Ambience in the city at night
- **60 dB** Cafe courtyard at lunch time
- **70 dB** The sound of a car passing on the street
- **80 dB** Loud music played at home
- **90 dB** The sound of a truck passing on the street
- **100 dB** The sound of a rock band
- **115 dB** Limit of sound permitted in industry
- **120 dB** Deafening

### 2.2.2 Motorsport circuit experience

Hydrock SPL Track has been monitoring continuously at Silverstone, Brands Hatch, Snetterton, Donington Park, Mallory Park, Bedford Autodrome and Oulton Park for several years and has amassed a huge volume of data from a variety of track days, race events and vehicles. This has been used to inform the development of a noise modelling software platform specifically for the assessment of motor sport circuits.

Hydrock SPL Track's modelling system is in process of ongoing improvement and verification against real world data. The system is used for the comparison of real data and predicted modelling on a daily basis. The company's drive-by monitoring system is in use at all the above circuits and is used for the management of competitors and participants. Real-time neighbourhood meters are used to verify neighbourhood sound levels. All meters integrate with the predictive models to demonstrate compliance.

## 2.3 Pre-Operational Methodologies

### 2.3.1 Modelling software

There is no commercially available software suitable for modelling motorsport noise. Hydrock SPL Track has developed a bespoke modelling platform for motorsport noise assessment, which Driven International frequently use to assess circuits at pre-development phase.

The models factor the number and type of vehicles, the polar noise footprint of each vehicle, acceleration/deceleration points on the track and all of the expected environmental elements such as buildings, landscape and topography are included within the noise model inputs. These have been modelled based on drawings and information supplied by the Client. Vehicle noise propagation is assessed in relation to dBLAFmax drive-by measurements.

## 2.4 Operational Management

### 2.4.1 Drive-by management

Hydrock SPL Track introduced a standardised drive-by management system in 2007 using dBLAFmax measurement criteria. Drive-by noise management has transformed the noise management process for many global race circuits, making them compliant with local authority requirements and largely appeasing resident concerns. It has also played a major role in

educating motorsport participants and promoting a responsible attitude to noise. Drive-by management has been established as the most effective method of managing sound emanating from motorsport circuits.

Such systems have been instrumental in helping motorsport venues to remain open and providing transparency on noise recording across all stakeholders involved in the operation and regulatory monitoring of noise at tracks.

In the UK, the method has been standardised as a dBLAFmax measurement taken by a microphone located 1.5 metres above ground level and 20 metres from the centreline of the track. It is capable of determining the lateral position of the vehicle relative to the track, hence compensation for distance can be applied to measurements.

A measurement is stored when the vehicle touches the sensor cable and the resulting measurement exceeds the drive-by threshold for the session. A positive condition triggers a camera to photograph the vehicle and, if transponders are fitted to vehicles, the identity of the driver can be collected via RFID. The incident is packaged and appears on the moderation screen, usually located in race control. Incidents are stored and reviewed as required by circuit policy.

### 2.4.2 Compliance

Compliance with drive-by limits is the responsibility of the circuit operator. Experience has shown that this can be a difficult experience at first, but customers learn that control is necessary for the amenity of neighbours and after a short while drive-by is accepted. The impact of a very small number of vehicles exceeding the drive-by limit is greater than one might imagine. Not only are environmental levels higher than expected but the noise profile of the site becomes intermittent and disproportionately disturbing. Even one vehicle circulating at high noise levels within a group can trigger noise complaints, therefore immediate attention to removing non-compliant vehicles from the track is essential.

Conversely, the effect of increasing or decreasing the number of vehicles is relatively small. Assuming all are compliant, the number of vehicles can be doubled for an environmental increase of only 3dB, or the drive-by limit could be increased by 3dB if the circuit was only half occupied.

# 3 Noise Modelling

## 3.1 Summary of Models and Receptor Levels

### 3.1.1 Overview

The modelling exercise has now been applied to the Uwharrie Motorsports Park & Resort pre-concept sketch. Models have been prepared for 3 drive-by level conditions:

- 89dB track day cars (sports cars with road legal sports exhausts)
- 95dB track day cars (Caterham, Ariel Atom, or similar)
- 107dB race cars (current F1 turbocharged cars)

In each case the prevailing weather for summer and winter operation has been considered, resulting in 6 simulations overall.

8 receptor locations have been identified in collaboration with the Client, ranging from ones in adjacent plots next to the site through to those further away. A summary table of the impact level at all 8 receptors, across all 6 models, is shown below and that is followed by diagrams and further information regarding how the models were curated.

### 3.1.2 Impact level readings

| | 26x **89dBLAFmax** | | 26x **95dBLAFmax** | | 26x **107dBLAFmax** | |
|---|---|---|---|---|---|---|
| | **Summer** | **Winter** | **Summer** | **Winter** | **Summer** | **Winter** |
| **[R1] Receptor** | 59dB | 54dB | **65dB** | **60dB** | **77dB** | **72dB** |
| **[R2] Receptor** | 35dB | 30dB | 41dB | 36dB | 53dB | 48dB |
| **[R3] Receptor** | 27dB | 28dB | 33dB | 34dB | 45dB | 46dB |
| **[R4] Receptor** | 25dB | 20dB | 31dB | 26dB | 43dB | 38dB |
| **[R5] Receptor** | 0dB | 0dB | 0dB | 0dB | 8dB | 6dB |
| **[R6] Receptor** | 14dB | 14dB | 20dB | 20dB | 32dB | 32dB |
| **[R7] Receptor** | 8dB | 16dB | 14dB | 22dB | 26dB | 34dB |
| **[R8] Receptor** | 57dB | 53dB | **63dB** | 59dB | **75dB** | **71dB** |

*Colour key, intended for visual differentiation: 0-9 dB, 10-19dB, 20-29dB, 30-39dB, 40-49dB, 50-59dB,* ***60-69dB, 70-79dB.***

### 3.1.3 Explanation of readings

**Background and methodology**

Given the rural location of the venue, there is insufficient existing data to conduct a comprehensive desktop study of background noise levels to establish baseline ambient data. The area's natural features, including dense tree cover and the presence of a creek, can significantly influence ambient noise levels and these factors are variable and not well-documented, making it challenging to establish a precise baseline. As a result, the noise levels shown in this modelling represent the direct impact of the track itself at those receptors, rather than being factored in with pre-existing environmental noise. These do not factor in extra mitigation methods such as sound walls or berms to reduce the impact, so these levels can be viewed as a relatively high exposure scenario.

**Understanding the decibel levels**

Decibels, the standard unit for measuring sound, are logarithmic in nature which means they represent cumulative energy rather than being a simple linear scale. For example, if two identical sound sources are combined, the resulting noise level would only increase slightly (e.g. 50dB + 50dB would equal 53 dB). Meanwhile, for the sound to be perceived as twice as loud, a 10dB increase is required necessitating a 10x increase in the number of noise sources.

This means that changes in the number of vehicles on track can have varying effects on perceived noise. Doubling the number of cars may lead to a more continuous, droning sound which can be less disruptive than fewer, more sporadic, louder noises.

**Noise impact relative to background levels**

In this assessment, a reading of 0 dB indicates no measurable noise impact is attributable to the track itself at that receptor. To accurately gauge the impact, a background noise survey is essential where microphones would be placed in various locations to measure existing ambient noise levels.

In a quiet rural setting with no significant road traffic or industrial activity, baseline noise levels may be expected to be around 30-35dB. Any noise level at or below this range would likely be inaudible and, therefore, not impactful. Meanwhile, noise levels reaching 70dB would be significantly higher than typical background levels and therefore have a noticeable impact.

## 3.2 Noise Model Diagrams

The diagrams on the following pages show the Uwharrie Motorsports Park & Resort pre-concept sketch and the resulting noise level impact at the identified receptors which have been modelled. These are examples built solely for the purpose of illustration to demonstrate our modelling technique.

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100% COTTON

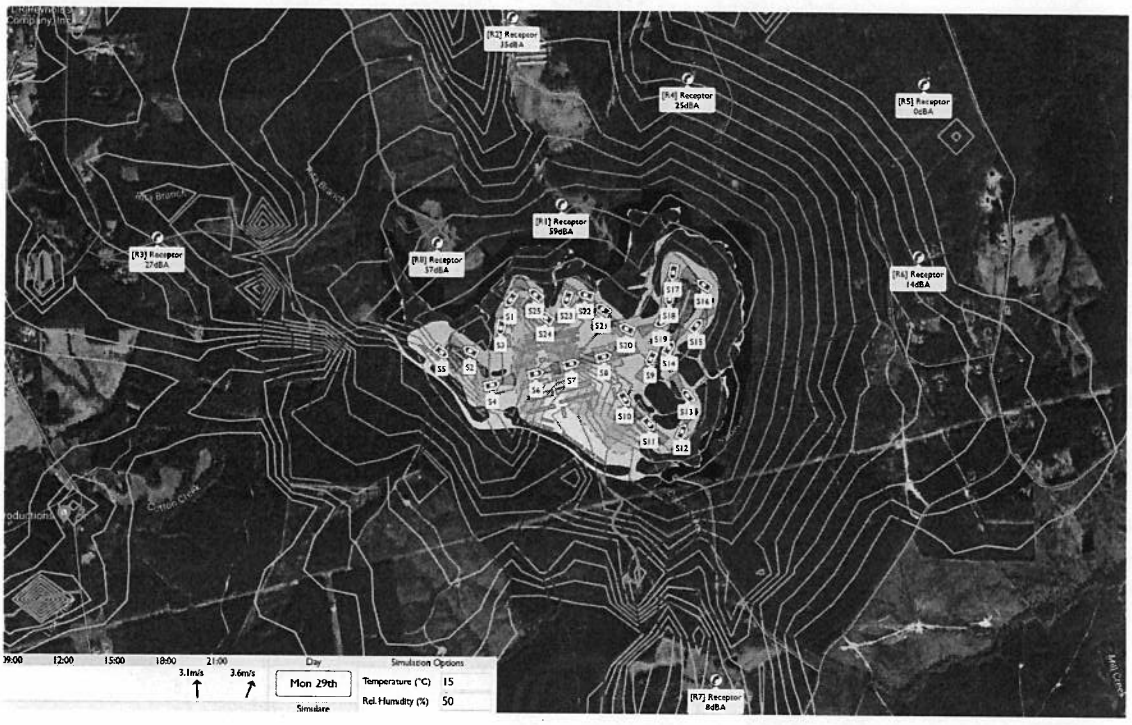



*Figure 3 Diagram showing 26x cars at 89dBLAFmax receptor levels, during summer*

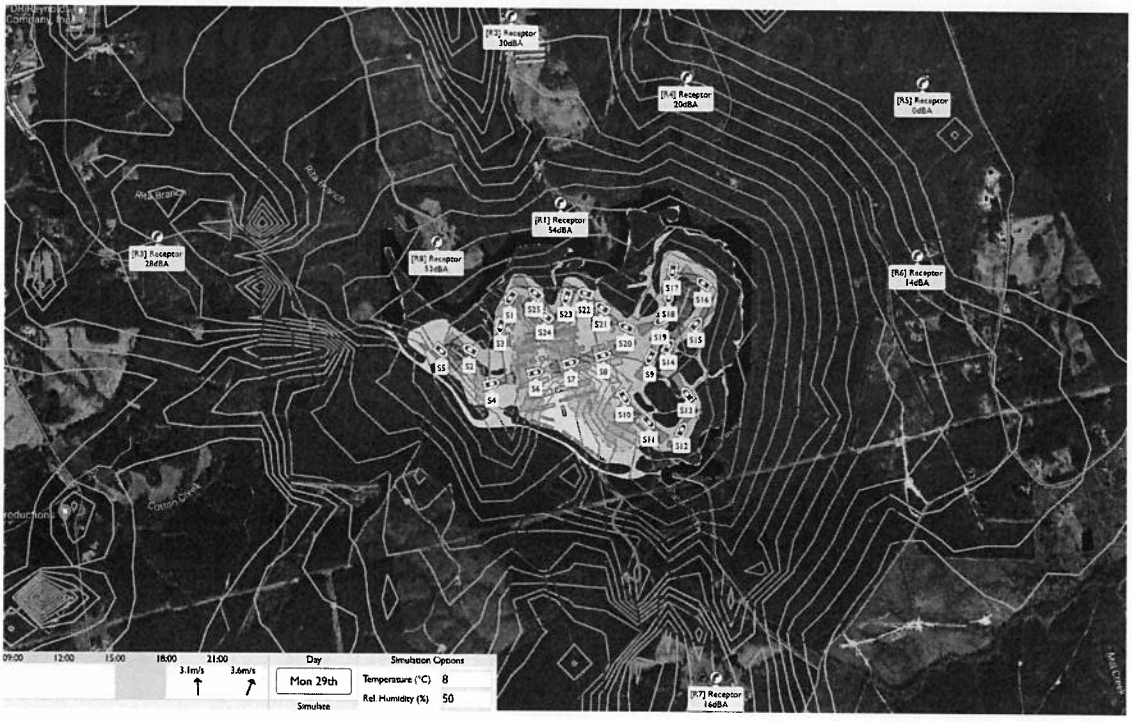



*Figure 4 Diagram showing 26x cars at 89dBLAFmax receptor levels, during winter*

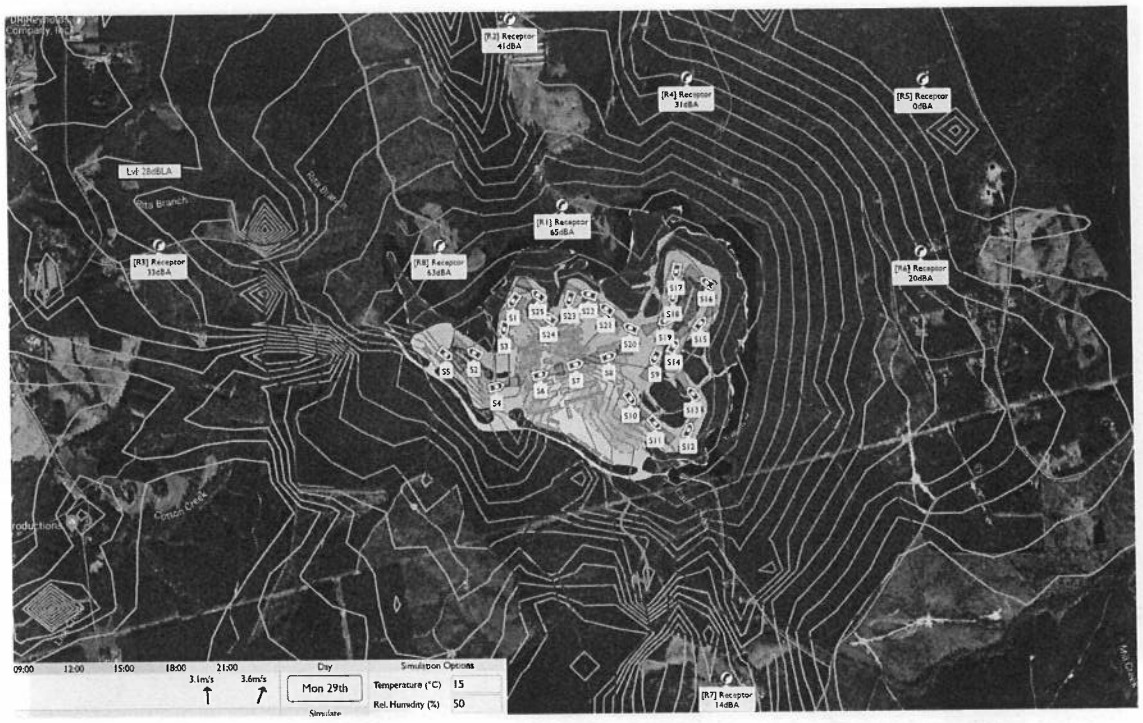



Figure 5 Diagram showing 26x cars at 95dBLAFmax receptor levels, during summer

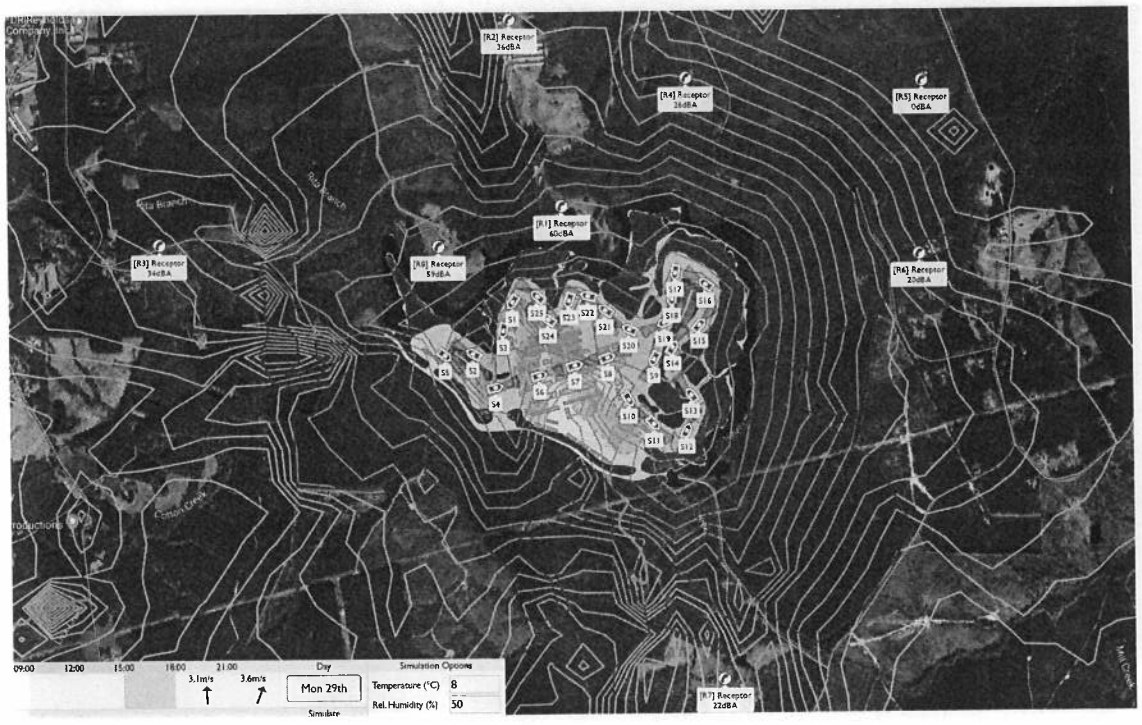



Figure 6 Diagram showing 26x cars at 95dBLAFmax receptor levels, during winter

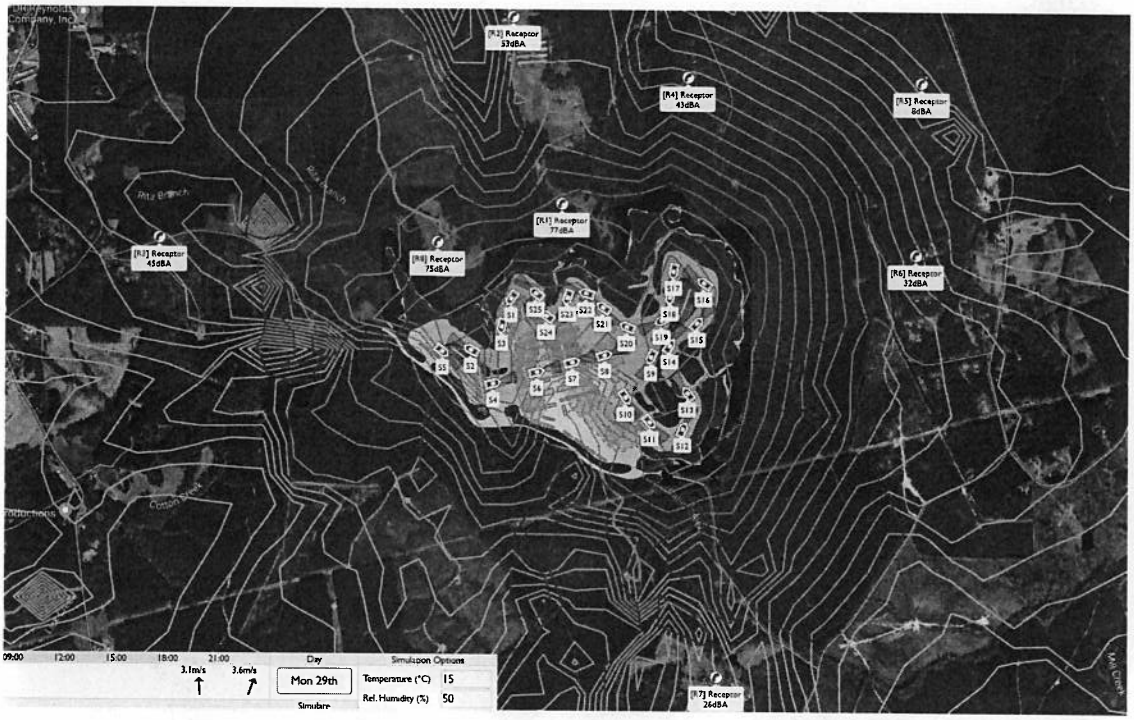



*Figure 7 Diagram showing 26x cars at 107dBLAFmax receptor levels, during summer*

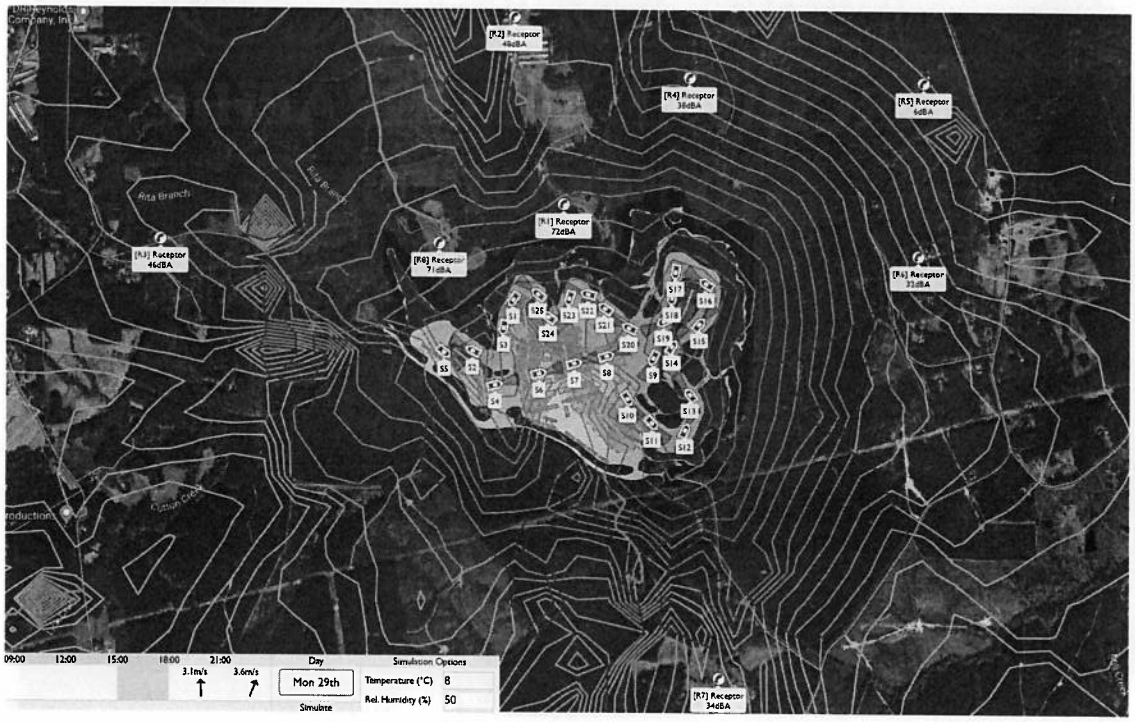



*Figure 8 Diagram showing 26x cars at 107dBLAFmax receptor levels, during winter*

## 3.3 Analysis

The models take into account basic physical surrounds on the site, such as a buildings of varying sizes and heights and the natural surroundings of the area including trees of different heights and groupings.

**Track Days**

The Receptor figures for each model shows a level based upon the vehicles being set to a 60% duty cycle, which means 60% of the period measurement on track. Motorsport activities are usually measured in 30 minute periods for the purpose of community noise assessment. Track day sessions are typically 20 minutes long with some stoppages, and a 5-10 minute turnaround for group activities. Therefore the active track time tends to be about 60% of each 30 minute period.

**Race Events**

Racing sessions are longer, however, there does tend to be much longer gaps between races compared with the standard process of track day operations.

**Test Days**

Test days have shorter track times and usually fewer cars which spend a lot of time in the paddock being tuned and adjusted. Statistically, UK circuits (e.g. Silverstone) report about half of all high noise days as having full noise track time of less than 1 hour in the day.

## 3.4 Baseline Noise Measurement

Typically, our approach to measuring baseline noise would be as follows, subject to agreement with the local authorities. We welcome an open discussion on the best methodology for baseline noise measurements.

- Hydrock SPL Track or a certified local acoustician to undertake baseline survey recordings at pre-agreed receptor locations. The surveyor will liaise with the council prior to agreeing to take these existing noise baseline surveys to agree on the amount and location of receptor locations. Typically, this may be 3-5 receptor locations, usually in what might be deemed to be the most sensitive locations that would be subject to noise complaints.
- We propose each measurement should ideally be taken commencing at 09:00 and finishing 18:00 for an agreed number of consecutive days (typically circa 2 weeks). If there is an unrepresentative local sound source (e.g temporary highway works which increases localised traffic density) the measurement must be rescheduled as we wish to obtain a realistic noise recording. The sound level meter should be type approved to BS-EN61672-3 Class 1 and should be mounted on a tripod 1.5m from ground level at least three metres from any building or obstruction.
- Weather conditions will be logged for each measurement. Hydrock SPL Track or a certified local acoustician will measure temperature, humidity, wind speed and wind direction. A national weather service database can be used for this purpose providing it returns traceable data. Please note that measurements will not be valid if the wind speed is above 7m/s (25KM/h) due to noise interference, so in that case the measurement session must be rescheduled. We shall also take a photograph of the meter in position at each measurement location.
- Through evaluating the results of the noise model, the track layout, placement of buildings, earth banks and planting can be refined and considered to further mitigate noise outbreak.
- Prior to opening, a Noise Management Plan will be written and published online provide clear operational statement on behalf of the circuit operator. This document describes the method of monitoring and enforcement that will be applied on a day to day basis, such as;
    - Drive-by-monitoring and noise checks on vehicles.
    - Calendar of events with agreed noise operating limits (dependent on results of noise model study and agreement with local authorities) on either certain days or times.
    - The relationships and responsibilities between the stakeholders. It describes the reporting procedure process of consulting with, and providing information for, the local community.

# 4 Noise Management Measures

## 4.1 Pre-Operational Measures

To further limit noise levels at the Receptor locations, and to fall in target with the maximum recommended increase at receptor levels for day-to-day operations, further mitigation is recommended as explained herein.

### 4.1.1 Noise berms

One option for noise mitigation is the use of earth banks or 'noise berms' which can be grassed or vegetated to fit in with the site and surrounding natural landscape.

Driven's recommendation would be that these could be in the region of 3-4 metres in height, and this would help to reduce the noise levels further at the Receptors outside the site. Noise berms should be as steep as is practical and as close to the source of the noise as possible, maximise the mitigating effect. Vegetation on top of the embankments or as part of the landscaping between or around track areas can also be used to supplement the noise mitigating effects. The addition of vegetation could also be used to introduce shape to spectator viewing areas.

### 4.1.2 Acoustic screening



*Figure 9 - Earth bank and noise screening at Mallory Park Circuit, UK*

Further acoustic screening can be added either at ground level or at the top of an earth bank to provide an enhanced level of acoustic protection in key locations around the site. Acoustic fences come in a range of sizes and styles, which are typically seen on the side of major highways in populated areas.

Where space for an earth embankment is limited, acoustic fencing can offer a more compact solution, which can also offer other benefits such as space for advertising or signage relating to the venue. The disadvantage of acoustic screening is typically relating to the cost of installation and maintenance, but also the visual impact the structures would have on the surroundings if used on the perimeter. Through implementation of additional acoustic screening, it is typically expected that reductions of 5-6 dB can be made on noise levels experienced at the receptors.

## 4.2 Post-Operational Measures

### 4.2.1 Noise monitoring drive-by system

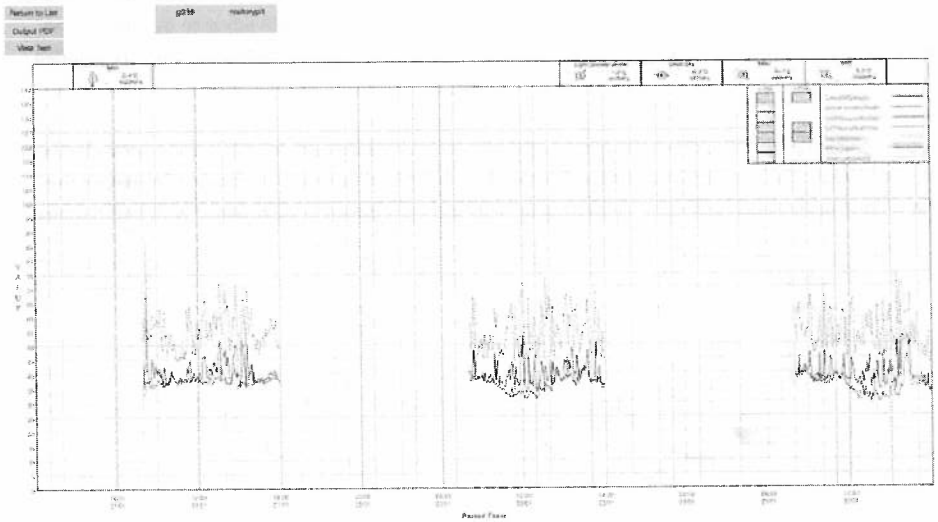


*Figure 10 Drive-by noise monitoring system outputs, in use at other UK motorsport venues*

Accurate monitoring of vehicles on the circuit is critically important to the execution of a noise management plan.

Hydrock SPL Track's monitoring console is designed to enable the circuit operator to identify non-compliant vehicles with the shortest possible delay. The moderation interface provides instant noise measurement corrected for weather conditions and supported by video evidence. The moderator is able to categorise the measurement at the push of a button and trigger actions to ensure compliance.

Drive-by noise monitoring has transformed the noise management process for many global race circuits, making them compliant with local authority requirements and largely appeasing resident concerns. It has also played a major role in educating motorsport participants and promoting a responsible attitude to noise.

Such systems have been instrumental in helping motorsport venues to remain open and providing transparency on noise recording across all stakeholders involved in the operation and regulatory monitoring of noise at tracks. The results of both drive-by and community monitoring must be available on demand. The Hydrock SPL Track platform provides this facility to authorised users. Reports include a complete range of noise metrics and weather information.

### 4.2.2 Operational noise management plans

A commonly used method for mitigating the impact of noise from motorsport venues around the world is a 'noise management plan'. Such plans set out measures to limit the negative impacts of noise on the surroundings by:

- Agreeing limits on the frequency and noise level of activities on the site.
- Providing controls by which track activity is checked and monitored and communicated to the wider community.

Variation of track session times including periods of respite (i.e lunch break down-time) can be helpful in reducing noise impact and the number of days of used could be restricted for high noise sessions (competition events).

Regulation of vehicles via a real-time drive-by noise control system is fundamentally important. This exists as a well-developed method at several circuits and is becoming more understood by regulators and competitors alike. The system provides the only effective method to prevent unusually noisy vehicles from using the circuit and provides a permanent record of enforcement.

### 4.2.3 Review and consultation

Regular reviews of data are very important to ensure that noise management procedures are being followed.

It is also important that the community is confident that the system is working correctly, hence demonstration of compliance using circuit noise data is fundamental. The community must be informed about circuit activity in advance by means of an online calendar or by other means if short notice changes to schedule occur, particularly when high noise days are planned.

### 4.2.4 Static noise checks

In addition to the drive-by monitoring system, part of the proposed operational measures would also include noise checks on vehicles prior to entering the circuit. This would be undertaken during any sanctioned events to check vehicles before they enter the track. This test is done using hand-held noise measuring devices and undertaken in accordance with international guidelines.

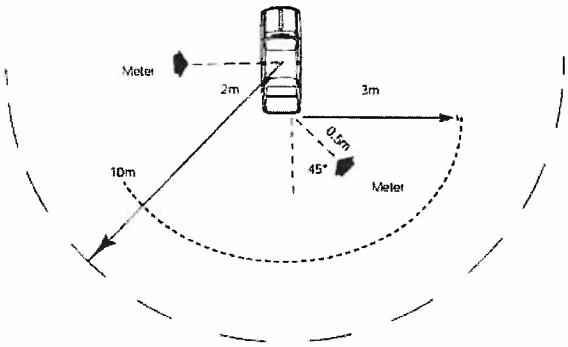



*Figure 11 Static noise test as per Motorsport UK guidelines*

# 5 Summary

## 5.1 Overview of Key Points

- Receptor [R1] and Receptor [R8] are the two closest to the site (approx. 0.3 mi away) and do not have particularly dense trees separating them from the site, and therefore the impact at each are considerably higher than the other receptors modelled.
- The maps for all scenarios show that areas of dense trees have a considerable effect on mitigating noise impact, and receptors set further back behind that separation show far more minimal readings (Receptor [R5], Receptor [R6], Receptor [R7]).
- The site is relatively isolated in relation to more populated residential areas, but there are some individual dwellings nearby which should be considered, such as the locations of the two receptors nearest the site. Methods such as installing noise fencing, building earth banks and preserving trees in key areas will help to mitigate the impact in these critical areas, as will operational controls.
- Methods like these have helped other circuits to manage noise to satisfactory levels, such as Mallory Park in the UK, which is located approx. 0.3 miles from a populated village.
- A high percentage of road course use will be member track sessions / public driving / track days and driving experiences / corporate days (quieter engine noise). For a smaller percentage of time, there may be race cars that will use the facility for private testing or competition days, which will be pre-published in advance.
- The noise models account for activity on the road course only, though there are additional driving facilities included in the pre-concept sketch including a kart track and driver training area. Assuming the vehicles used there will not be louder than those on the road course, the noise levels should not be higher as a result due to similar vehicle activity from the same site location.
- Noise controls will be put in place to comply with international guidelines. This includes measurement of vehicle noise including static vehicle tests and drive-by vehicle tests.
- Noise from motorsport facilities need not be a problem in the community if effective planning and management processes are followed. Providing that the available technologies are applied and enforced, effective compliance with noise regulations can be achieved.
- Public consultation and communication with the local authorities is critically important, as lack of information gives rise to suspicion and doubt on the part of the community which can in turn lead to confrontation.
- We look forward to the opportunity of progressing the pre-concept sketch into a fully considered masterplan, taking into account learnings from this noise study during the next stages of design, and we welcome feedback on our approach outlined to date, in particular:
    - Principles and overall approach
    - Background survey methodology
    - Receptor location measurement and modelling
    - Agreement on target +Db levels at any particularly sensitive receptors

# PD MASTER PLAN - TERMS & CONDITIONS STATEMENT

## CONDITIONAL REZONING – PLANNED DEVELOPMENT

# UWHARRIE MOTORSPORTS PARK & RESORT

MOORE COUNTY, NORTH CAROLINA

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August 2, 2024

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**Exhibits**

Exhibit I Moore County Conditional Rezoning Application
Exhibit II Site Location Map
Exhibit III Neighborhood Meeting Sign-In Sheet and Report
Exhibit IV Existing Conditions – Aerial Imagery
Exhibit V Existing Conditions – Wetlands/Floodplain/Topography
Exhibit VI Existing Conditions – Soils
Exhibit VII Adjacent Property Owners
Exhibit VIII Conceptual Master Plan
Exhibit IX Phasing Plan
Exhibit X Proof of Ownership
Exhibit XI Conceptual Building Plans
Exhibit XII Driven International Noise Strategy

## 1.0 PURPOSE

The purpose of this Conditional Rezoning application is to:

- Rezone +/- 395.67 acres of land currently zoned as Rural Agricultural (RA) to a Planned Development – Conditional
- Establish the permitted uses, density, standards, and conditions under which the subject property shall be developed.

The County's conditional rezoning application form is included as Exhibit I, and the required items, per Chapter 12, Conditional Rezoning, of Moore County's Unified Development Ordinance (UDO), are included in this document. The zoning for this property shall consist of all standards and conditions contained in this document.

The proposed PD-CZ development is consistent with Moore County's Future Land Use Plan and promotes its objectives. The Future Land Use Plan has designated the property as Industrial.

## 2.0 PROJECT OVERVIEW

### 2.1 Location

The proposed project described in this application is geographically located in northwest Moore County on the north side of Leach Road. The property's western boundary falls on the county line between Moore and Montgomery counties. A site location map showing the site and immediate surroundings is included in Exhibit II. The proposed parcel is within the Moore County limits, with the closest communities being Robbins, Biscoe, & Star (Montgomery County). Primary vehicular access to the site would be from Leach Road via Tarry Church Road and NC Highway 24/27.

### 2.2 Vision

Uwharrie Motorsports Park & Resort will provide a unique opportunity for Northern Moore County by providing a high-end sports entertainment facility that will benefit local drivers, spectators, and those traveling throughout the country. The project is intended to attract car enthusiasts and owners of unique cars who will buy 'memberships,' allowing access to 'garage condominiums' where they can store cars. These 'garage condominiums' will also have a small accessory living area for short overnight stays or rest between racing sessions. Membership will also allow for a certain amount of track time per year. The track/racing course will consist of a 3-mile loop that will act as a road course and can be set up to accommodate multiple types of racing, from carts to other kinds of racing vehicles. The track is intended to be FIA (Fédération Internationale de l'Automobile) certified.

While membership is a necessary function of the overall operation, public use and enjoyment opportunities will also be provided. A clubhouse will be located centrally within the track area, and a centrally located bar/restaurant will be open to the public, providing views of the track and racing sessions. Opportunities to host public special events such as concerts, auto shows & auctions, markets, festivals, and marathons will also be provided. The public may also attend special race events or view race team training

sessions. An opportunity for local high school or college students with a passion for auto mechanics or engineering to receive hands-on training in the auto and racing industry may also be provided.

Uwharrie Motorsports Park & Resort is not just about high-speed thrills. It's a project that respects and preserves the natural environment. The development area will be surrounded by untouched natural areas, acting as a buffer to neighboring parcels. A significant portion, at least 30%, of the development will be open space, much of which will remain undisturbed. A 100' buffer/setback area will be maintained along the property boundary, ensuring a respectful separation between the development and adjacent properties.

A detailed description of the development program, conditions, and standards is included in Section 5.0 of this document.

### 2.3 Applicant and Project Team

The applicant is Autoport. Autoport will be the eventual owner of the property and will manage the property and business post-construction. Consultants currently include Koontz Jones Design, PLLC (Land Planner), Timmons Group (Civil & Traffic Engineers, Environmental), Driven International (Racetrack and Driving Course Design)

### 2.4 Compliance

All development within the site must adhere to the approved standards and conditions stated in this document. The conditions and requirements in this document that vary from the Moore County Unified Development Ordinance (UDO) shall supersede the UDO. Before the issuance of a building permit and the start of any construction, a preliminary plan for the area of development must be submitted and approved per the requirements of Chapter 12 of the UDO. All development and building permits are subject to all local, state, and federal permitting guidelines, rules, and regulations. To the extent this document does not otherwise establish a development standard, the UDO standard in effect at the time of an application will apply.

### 2.5 Neighborhood Meeting

Per the requirements of Chapter 12, a required neighborhood meeting was held at the Robbins First Baptist Church on May 16th, 2024, to facilitate the exchange of information and solicit public input from adjoining property owners. The "Neighborhood Meeting Sign-In Sheet and Report" (Exhibit III) is included in this application. Additional meetings may be held at the applicant's discretion.

## 3.0 CONDITIONAL REZONING APPLICATION- See Exhibit I

## 4.0 EXISTING CONDITIONS

### 4.1 Existing Natural Features

#### 4.1.1 Prevalent Tree Canopy and Vegetation

The existing tree canopy and vegetation can be seen in the aerial photographs of the property included in the existing conditions map (Exhibit IV). Much of the property has been previously used as a timber forest and has been

previously cleared. This is particularly noticeable in the aerial photographs of the northeastern portion of the property, where no prevalent tree canopy exists. Tree canopy and vegetation will be further identified as required during the site plan permitting process.

#### 4.1.2 Orchards or Other Agricultural Groves

The property has been used previously and is currently a timber forest.

#### 4.1.3 Streams, Wetlands and Floodplain

The proposed development area lies within a WS-IIIP-protected watershed district established by NCDEQ. The project will comply with all state and local standards for stormwater management and utilize stormwater control measures and engineered stormwater facilities as required. Exhibit V shows existing streams, floodplains, and wetlands. Wetland impacts are intended to be minimal. Any impacts will be coordinated and permitted with the United States Army Corp of Engineers (USACE) and the North Carolina Department of Environmental Quality (NCDEQ).

#### 4.1.4 Topographic Features

The Existing Conditions Map—Wetlands and Topographic Information, found in Exhibit V, includes a topographic map with a one (1') foot contour interval.

#### 4.1.5 Unique Land Formations, Endangered/Threatened Species

No woodpecker habitat is on the property, and no other endangered species exist on the site. Much of the property has been previously used as a timber forest and has been previously cleared.

All development and building permits within the site are subject to all Local, State, and Federal permitting guidelines, rules, and regulations. Additional studies will be conducted as required for permitting.

### 4.2 Existing Man-made Features

#### 4.2.1 Streets, Roads, Parking, or Other Structures

No existing streets, roads, sidewalks, walkways, or associated drainage structures exist on the site. All proposed egress and ingress locations to the site are to be located off of Leach Road.

#### 4.2.2 Storm Water Facilities and Structures

There are no stormwater facilities or structures on the site. As required, new stormwater facilities will be provided.

#### 4.2.3 Utilities

Water – There are no existing water lines within the development. The developer and project engineer are working with local municipalities to determine an appropriate connection and path for a water line extension.

Sewer – There are no existing gravity sewer lines within the development. The developer and project engineer are working with local municipalities to determine if there is an opportunity to connect to and extend an existing line. It is intended that the project will use septic drain fields for waste disposal.

Electric—An overhead power line exists along Leach Road. In addition, a transmission line and easement run just South of the property. Electric power is available for the site, and all new electric lines will be installed underground.

Telephone/Cable – An underground communication line exists along Leach Road

#### 4.2.4 Buildings, Structures, Signs and Historical Structures

A Phase 1 historical study has been completed for the site. No historical structures are on the site, but an existing cemetery is located on the property and outside the development area.

### 4.3 Existing Legal Features

**4.3.1 Zoning Information** - The subject property is currently zoned Rural Agriculture (RA). The +/- 395.67-acre parcel is to be rezoned to PD-CZ and is subject to the requirements in this document. The property is designated as Industrial in the County's Future Land Use Plan.

**4.3.2 Ownership Information** – The area to be rezoned is located within portions of three (3) existing parcels. Copies of the corresponding recorded deed evidencing ownership are provided as Exhibit X.

| Tract | Owner | Deed Book | Page Number(s) | Parcel ID |
|---|---|---|---|---|
| 1 | Jordan Two, LLC | 5072 | 207 | 00010343 |
| 2 | Jordan Two, LLC | 5072 | 207 | 00010342 |
| 3 | Jordan Two, LLC | 5072 | 207 | 00010337 |

**4.3.3 Adjacent Parcel information** - The adjacent parcel owners, zoning, use, PINs, and Parcel ID numbers are listed on the Adjacent Property Owners found in Exhibit VII.

## 5.0 DEVELOPMENT CONDITIONS

### 5.1 Development Program

The development may include many of the uses included in the PD-CZ zoning district.

Uses on the property may be mixed within the development or within individual buildings to promote a mixture of uses throughout the development. The uses are intended to complement the operational needs of a motorsports park and resort. Section 5.3 includes a list of the permitted uses for the property. These uses have

been derived from Chapter 6: Table of Uses in the UDO. Uses not intended for the property have been removed from the list.

### 5.2 Development Standards

The development's dimensional standards, including building height, buffers, setbacks, and landscaping, will follow the UDO standards unless other standards are included in this document. Standards identified explicitly within this document that exceed or modify the UDO standards shall govern the development of the property and be vested upon approval of the PD-CZ.

### 5.3 Permissible Uses

Uses listed below shall be permitted within the development. These uses have been derived from Chapter 6: Table of Uses in the UDO. All uses included are permitted uses within PD-CZ zoning. Uses not intended for the property have been removed from the list. Permitted uses include the following (subject to specific use standards in the Table of Uses in Chapter 6 of the UDO):

1. Agricultural Uses and Buildings (Not in a Bona Fide Farm)
2. Hotel and Motel
3. Office
4. Trade Contractor Office and Workshop
5. Convenience Store
6. Restaurant
7. Retail
8. Car Wash or Auto Detailing
9. Parking Lot as a Principal Use
10. Vehicle, Auto Parts, Tires, Farm Equipment, Boat, RV-Sales, Rental or Service
11. Vehicle Service Stations (Gas Stations)
12. Bar/Tavern
13. College/Business & Trade School
14. Museum/Art Gallery
15. Assembly Hall
16. Civic/Social Club, Lodge, Organization
17. Neighborhood Park
18. Recreation, Indoor
19. Recreation, Low Impact Outdoor
20. Recreation, High Impact Outdoor
21. Public and Private Utility Facilities
22. Antenna Collocation, Major
23. Antenna Collocation, Minor
24. Small Wireless Facility
25. Telecommunications Tower, Major
26. Telecommunications Tower, Minor
27. Mini-Warehouse (self-service)

In addition to the information and uses above, a Table showing the land use and potential development options and totals is below.

| LANDUSE | TOTAL |
|---|---|
| Garage Condominiums with Accessory Dwellings (see description below) | 165 units |
| Garage Condominiums (See description below) | 120 units |
| Clubhouse Facility | Square footage to be determined during site planning |
| Driver's Lounge | |
| Café/Diner/Restaurant | |
| Driving School | |
| Event Spaces | |
| Office space for facility operations | |
| Meeting Spaces | |
| Retail Store | |
| Parks and recreation spaces | |
| Dog Park(s) | |
| Walking Trails | |
| Jogging Paths | |
| Pickleball Courts | |
| Viewing Terraces | |
| Event Lawn | |
| Amphitheater | |

All uses designated above, other than both types of Garage Condominiums (described below), will be accessory to the overall resort. While some uses will be for members only, many are intended to be open to the public.

- Garage Condominium with Accessory Dwelling – These units are garages with a second-story mezzanine level. These units will vary in size throughout the property. The mezzanine area would accommodate short overnight stays and provide a place to rest during race/driving days. The mezzanine area will be equipped with restrooms, and a kitchen area may be provided. Per the State of North Carolina building code, these units are considered dwelling units or sleeping units in which a significant portion of the space includes a nonresidential use operated by the tenant which is classified and considered a Live/Work Unit. Building construction will meet all state of NC building code requirements.
- Garage Condominium—These units will be garage spaces that can be rented or owned. They will provide areas to work on and store vehicles for racing.

## 5.4 Treatment of Onsite Natural and Man-Made Features

**5.4.1 Natural Features** - Existing streams, floodplains, and wetlands are shown in Exhibit V. Wetland impacts are intended to be minimal. Any impacts will be coordinated and permitted with the United States Army Corp of Engineers (USACE) and the North Carolina Department of Environmental Quality (NCDEQ). There are also no endangered species located on the property.

**5.4.2 Man-Made Features** – No existing prevalent structures are located within the development area. An existing cemetery is located on the property and outside the development area.

## 5.5 Additional Design Conditions

The following additional development standards will control development on the site:

### 5.5.1 Vehicular & Pedestrian Circulation and Parking

Ingress/Egress Points - Three entrances into the development are being proposed. All ingress/egress points into the development will be from Leach Road. The North Carolina Department of Transportation (NCDOT) governs roadways adjacent to the development. Ingress/egress connection to these streets. All proposed ingress/egress points require NCDOT approval. A TIA will be prepared, and any improvements, if necessary, must be approved by NCDOT. The Applicant will be responsible for the installation cost of any required improvements.

Timmons Group, the project's civil engineer, will conduct a traffic impact analysis (TIA) to determine the impacts associated with the proposed Uwharrie Motorsports Resort. The proposed development will be constructed in Moore County and is assumed to include two full-movement site access connections to Leach Road. Assumed study area intersections include the following:

- Griffin Farm Road / Spies Road
- Griffin Farm Road / Cochran Road
- Leach Road / Site Access 1
- Leach Road / Site Access 2
- Leach Road / Tarry Church Road
- Browers Mill Road / Tarry Church Road
- NC-24/27 / Tarry Church Road

Study area intersections will be analyzed during the NCDOT-required AM and PM peak hours. The TIA will be completed according to NCDOT standards and procedures. The NCDOT will confirm project assumptions in a scoping meeting prior to the onset of the study.

In addition, Timmons Group has evaluated and counted traffic at similar race tracks during peak events to gauge the traffic for their impact analysis. This

information will be provided to NCDOT to clarify the amount of traffic anticipated for peak events that may be held on the property.

Parking – Parking will be provided as required in the UDO. The sizes of parking spaces and aisles will follow the standards described in the UDO. The number of parking spaces may exceed the minimum required number and may include overflow parking areas to accommodate parking needs for special events and spectators.

Sidewalks—Sidewalks shall be provided as needed within the development to facilitate pedestrian circulation between proposed buildings and public spaces. Additional paths may be provided for access to track viewing areas or other public spaces.

### 5.5.2 Open Space

A minimum of 118.7 acres (30%) of open space shall be provided within the development. Open space will be calculated as defined by the UDO and may include amenity areas, gathering spaces, and natural undisturbed areas.

### 5.5.3 Architectural Standards

All proposed architecture will follow the standards as described in the UDO. Building permits must be approved by the county before any construction.

### 5.5.4 Landscaping, Setbacks, and Buffering

Landscape standards will meet or exceed the requirements of the Moore County UDO per Chapter 7.

Buffers and Setbacks - Landscape buffers are not required within a planned development; however, The Applicant will provide additional areas of landscape buffers and setbacks along the property boundary. A 100' setback and buffer will be provided along the property boundary. The 100' buffer is intended to be undisturbed, with existing vegetation to remain. No setbacks or buffers will be provided within the development.

### 5.5.5 Utilities

Water & Sewer—There are no existing water or gravity sewer lines within the development.

Water - The Applicant and project engineer are researching multiple options to provide water to the site. For all options, it is anticipated that an elevated storage tank will be needed at the resort to provide the required volume and pressure of water. Options being explored include installing wells or tying into existing water infrastructure and extending water mains to the project site. There is an existing 10" water main

along Spies Road, operated by the Town of Robbins, that could be a possible connection point. Existing water infrastructure in the area that may serve the property includes the Town of Robbins, the Town of Star, and the Town of Biscoe. Initial conversations and analysis have been completed but the preferred water service option has not been identified at this time.

Sewer - There are a couple of options related to sewer service.

The first option is an on-site pump station that would pump west to either the Town of Biscoe or the Town of Star through a force main. A preliminary review of existing sewer infrastructure indicates that an existing pump station southwest of the site could be the potential point of connection.

This plan depends on determining whether there is enough capacity in the Town of Biscoe or the Town of Star's wastewater treatment plant facilities to accept the resort's flow.

Another option under discussion is routing the force main east and connecting it to the Town of Robbins' existing gravity sewer, which is located at the intersection of Highway 24 and Highway 705.

Electric—An overhead power line exists along Leach Road. In addition, a transmission line and easement run just South of the property. Electric power is available for the site, and all new electric lines will be installed underground.

Telephone/Cable – An underground communication line exists along Leach Road

### 5.5.6 Lighting

Street, parking lot, and internal lighting will be designed in conformance with the requirements of Section 7.8Q in the Moore County UDO. The driving course/racetrack is intended for daytime use only and will not require heavy illumination for night driving/racing sessions. Lighting in the track area may be provided only as needed for security and safety measures.

The small kart track area may have nighttime activities and racing, including public access. Lights may be provided that will meet the county's maximum lighting standards. Any lighting for this facility will be directed down and toward the track to prevent off-site light spills.

All lighting will be LED lighting and shall minimize glare hazards and exterior illumination as described in the UDO.

### 5.5.7 Signage

Creating a consistent character for the signs in the PD area is essential to maintain consistency throughout the development and enhance the aesthetic

character while providing adequate signage to identify areas within the development. Signage will reflect the architectural character within the development. Signage will follow the standards as described in Section 7.15. General signage locations are indicated on Exhibit VIII – Conceptual Master Plan. Additional signage may be provided within the development for building identification and wayfinding purposes.

Multi-Tenant Monument Signs – Signage at each entrance location along Leach Road will follow the standards for multi-tenant signs as defined in section 7.15 of the UDO. These standards are defined below.

- These 'Multi-Tenant Monument' signs are intended to identify the overall development. In addition, these signs may identify a limited number of areas or functions within the development area. The place identifier, "Uwharrie Motorsports Park & Resort," or its logo does not count toward the overall sign area for these three signs.
- Sign dimensions will follow the multi-tenant sign standards per section 7.15 of the UDO:
  - Maximum sign height = 20'
  - Sign Area = 100 Square Feet
- Signs may have uplighting or be internally lit. All uplights must be shielded from view and directed toward the sign only.

### 5.5.8 Accessory Uses

Accessory dwellings and uses may be incorporated within the development. Accessory uses listed below shall be permitted within the development. These uses have been derived from Chapter 6: Table of Uses in the UDO. Permitted accessory uses include the following (subject to specific use standards in the Table of Uses in Chapter 6 of the UDO):

1. Accessory Dwelling Located within Non-Residential Building
2. Carport or Garage
3. Personal Workshop / Storage Building
4. Automatic Teller Machine (ATM)
5. Accessory Swimming Pool
6. Cemetery, Family
7. Amateur Radio and Receive-only Antennas
8. Solar Collectors, On-Site Use

### 5.5.9 Temporary Uses/Special Events

Temporary uses such as construction trailers, including but not limited to construction and sales offices, may be installed during construction. Other temporary uses may include special events such as community gatherings, open-air markets, car shows, concerts, and auctions. The appropriate permits must be obtained from Moore County for any temporary uses or special events.

Permitted temporary may uses include the following (subject to specific use standards in Table of Uses in Chapter 6 of the UDO):

1. Construction Office, Temporary
2. Drop-In Child Care Facility
3. Itinerant Merchant
4. Land Clearing
5. Real Estate Office, Temporary
6. Temporary Events (Special Event)

### 5.5.10 Storm Water Management and Water Quality Management

The proposed development area lies within a WS-IIIP-protected watershed district established by NCDEQ. The project will comply with all state and local standards for stormwater management and utilize engineered stormwater control measures as required. Exhibit V shows existing streams, floodplains, and wetlands. Wetland impacts are intended to be minimal. Any impacts will be coordinated and permitted with the United States Army Corp of Engineers (USACE) and the North Carolina Department of Environmental Quality (NCDEQ).

Drainage facilities will be located in areas deemed appropriate for the development and will be designed by a certified engineer. Stormwater may be controlled and collected in wet ponds, dry ponds, or stored in underground facilities. The locations of such facilities will be provided with detailed engineering and grading plans. Stormwater must be maintained on the overall property to meet Moore County, NCDENR, NCDWQ, and any other stormwater regulations. Adequate stormwater control must be in place (regional facility) or designed for each development phase.

### 5.5.11 Noise

A detailed report has been provided by Driven International describing the noise mitigation measures, methodology, and strategy that will be implemented for the racetrack as Exhibit XII. Noise controls will be put in place to comply with international guidelines. This includes utilizing noise monitoring technologies around the track and on individual vehicles to measure noise output. Maximum permitted noise levels will be strictly enforced and constantly monitored to ensure that cars comply. In addition, earthen berms and sound walls will be added in critical areas to reduce the noise levels traveling off-site significantly. Noise-reducing elements will be studied and analyzed during the detailed track design to minimize noise around the track.

The main track will not be lit or used for evening racing. The kart track may be used for evening events and is open to the public. This area may have evening racing and has been located along Leach Road to minimize the noise impact on adjoining properties. This track will also be studied along with the rest of the noise strategy, and mitigation will be provided if necessary.

## 6.0 Statement about Dedication of Streets and Facilities

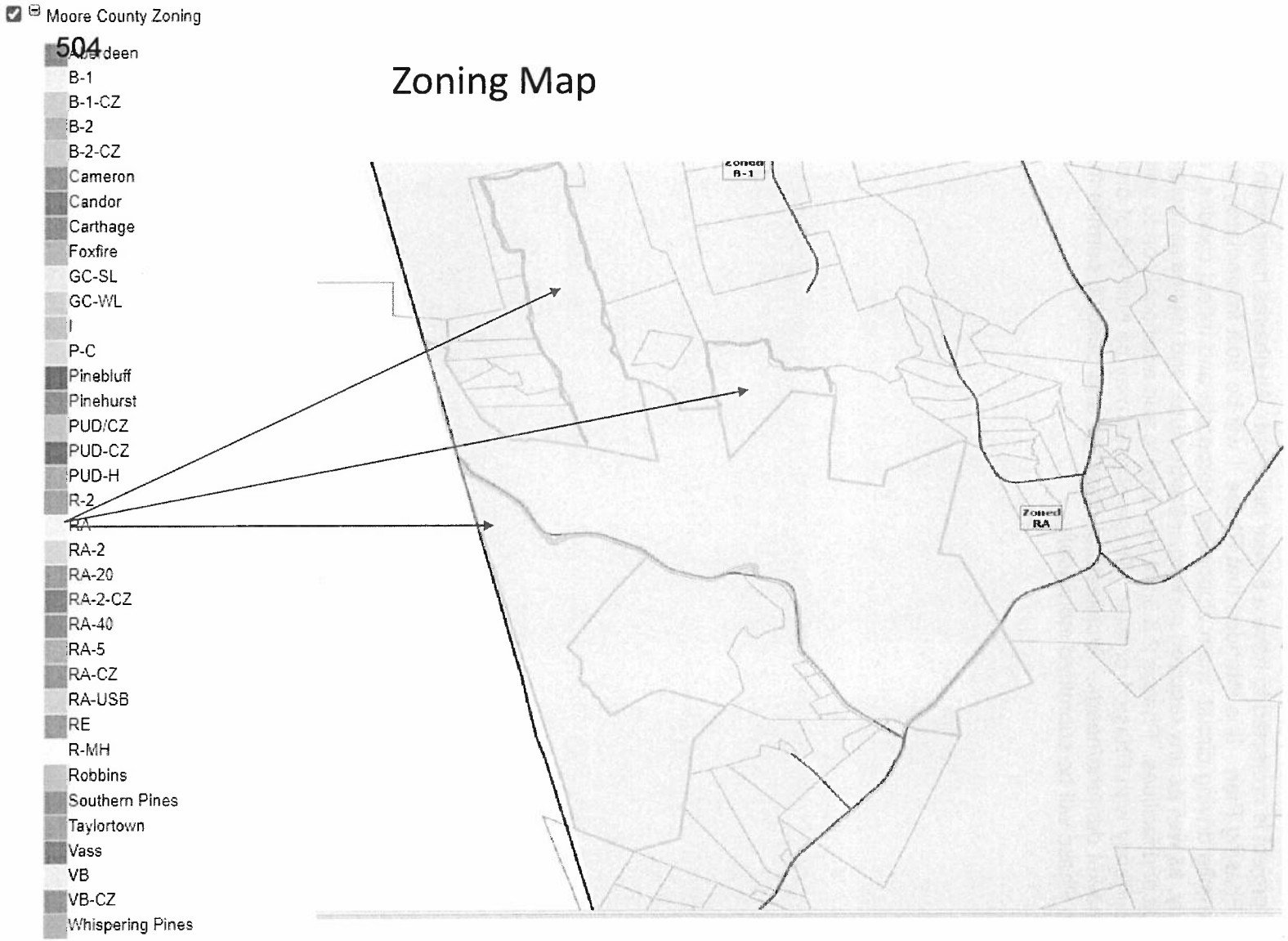
All drives, parking areas, and facilities will remain private and maintained by the Applicant.

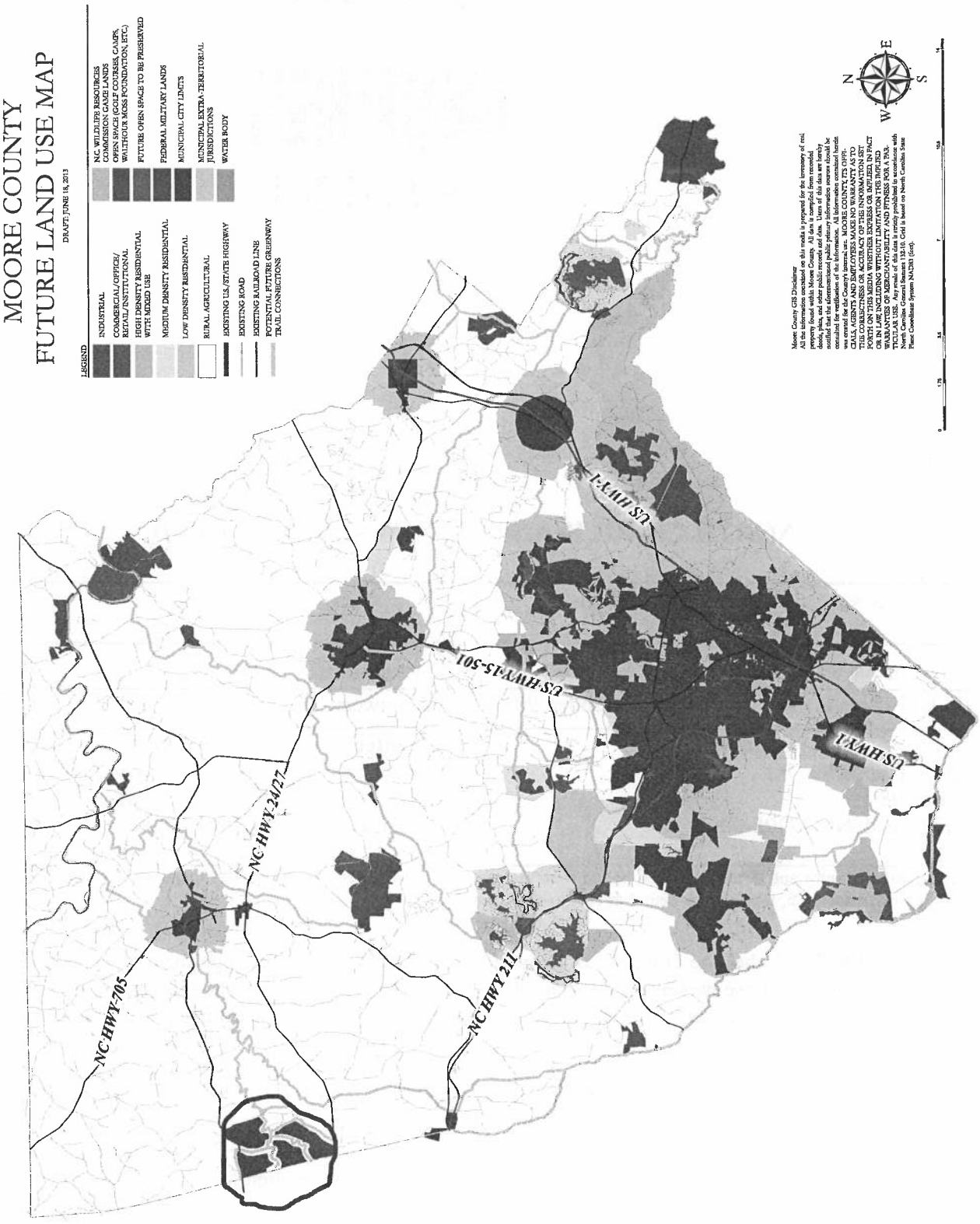
## 7.0 Phasing

This project is projected to have a 5-year build-out. All phases have been labeled on Exhibit IX - Phasing Plan. It is intended that Phase 1 will be built immediately and will include the three-mile driving circuit, main clubhouse, corporate and infield condos, entrances into the facility, as well as any required parking, infrastructure, and utilities associated with the driving circuit and facilities. Phases 2 & 3 are intended to add additional condo units and could occur concurrently with Phase 1 or later. These phases may be built out of order and dependent on market demand/needs. Architectural drawings and Building permits for structures within each Phase will be submitted individually.

504

# Zoning Map




MOORE COUNTY
FUTURE LAND USE MAP
DRAFT, JUNE 18, 2013
LEGEND
INDUSTRIAL
COMMERCIAL/OFFICE/
RETAIL/INSTITUTIONAL
HIGH DENSITY RESIDENTIAL
WITH MIXED USE
MEDIUM DENSITY RESIDENTIAL
LOW DENSITY RESIDENTIAL
RURAL AGRICULTURAL
EXISTING US/STATE HIGHWAY
EXISTING ROAD
EXISTING RAILROAD LINE
POTENTIAL FUTURE GREENWAY
TRAIL CONNECTIONS
NC WILDLIFE RESOURCES
COMMISSION GAME LANDS
OPEN SPACE (GOLF COURSES, CAMPS,
WALTHOUR MOSS FOUNDATION, ETC.)
FUTURE OPEN SPACE TO BE PRESERVED
FEDERAL MILITARY LANDS
MUNICIPAL CITY LIMITS
MUNICIPAL EXTRA-TERRITORIAL
JURISDICTIONS
WATER BODY
Moore County GIS Disclaimer
All the information contained on this media is prepared for the inventory of real property found within Moore County. All data is compiled from recorded deeds, plats, and other public records and data. Users of this data are hereby notified that the aforementioned public primary information sources should be consulted for verification of the information contained on this media. No warranty was created for the County's internal use. MOORE COUNTY, ITS OFFICIALS, AGENTS AND EMPLOYEES MAKE NO WARRANTY AS TO THE CORRECTNESS OR ACCURACY OF THE INFORMATION SET FORTH HEREIN, EXPRESSED OR IMPLIED, AND NO PERSON MAY RELY ON ANY SUCH INFORMATION FOR ANY PURPOSE. THERE ARE NO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. Any resale of this data is strictly prohibited in accordance with North Carolina General Statute 132-10. Grid is based on North Carolina State Plane Coordinate System NAD83 (feet)
N
E
S
W
0
1.75
3.5
7
10.5
14
US HWY 1
US HWY 15-501
US HWY 1
NC HWY 24/27
NC HWY 211
NC HWY 705

506

FOR REGISTRATION REGISTER OF DEEDS
Judy D. Martin
Moore County, NC
December 21, 2018 04:18:55 PM
Book 5072 Page 207-282
FEE: $270.00
INSTRUMENT # 2018017945



INSTRUMENT # 2018017945

Prepared by:
Robert M. Friesen, Esq.
Robbins May & Rich LLP
No Title Exam By Drafting Attorney

Return To:
Robert M. Friesen, Esq.
Robbins May & Rich LLP
120 Applecross Road
Pinehurst, North Carolina 28374

# NORTH CAROLINA SPECIAL WARRANTY DEED

Excise Tax: -$0-

Parcel Identifier No._____ Verified by _____ County on the ____ day of_____, 20___
By: _____

Brief description for the Index: Jordan Timberlands, Inc. Land (Moore County)

THIS DEED made this ____ day of December, 2018, by and between

| Grantor | Grantee |
|---|---|
| Jordan Timberlands, Inc.<br>P.O. Box 98<br>Mount Gilead, NC 27306-0098 | Jordan Two, LLC<br>P.O. Box 98<br>Mount Gilead, NC 27306-0098 |

The designation Grantor and Grantee as used herein shall include said parties, their heirs, successors, and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

WITNESSETH, that the Grantor, as a capital contribution and in exchange for membership interests in Grantee, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all those certain lots or parcels of land situated in Moore County, North Carolina and more particularly described as follows:

See "Exhibit "A" attached and incorporated by reference hereto.

Subject and together with utility easements, other easements and restrictive covenants that are enforceable against or a benefit to the properties, if any, and to the lien for ad valorem property taxes for the current year to be prorated at closing.

The properties herein conveyed do not include the primary residence of a Grantor.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And the Grantor covenants with the Grantee, that Grantor has done nothing to impair such title as Grantor received, and Grantor will warrant and defend the title against the lawful claims of all persons claiming by, under or through Grantor, except for the exceptions noted above.

IN WITNESS WHEREOF, this instrument is executed (a), if by individuals, by hereunto setting their hands under seal by adoption of the word "SEAL" appearing next to the individuals' names or signatures, (b), if by a corporation, by the duly authorized officers, directors or shareholders of the corporation on its behalf under seal by adoption of the facsimile seal printed hereon for such purpose or, if an impression seal appears hereon, by affixing such impression seal or by adoption of the word "SEAL" appearing next to the name of the corporation or the signatures of the officers, directors or shareholders, (c), if by a partnership, by the duly authorized partners of the partnership on its behalf under seal by adoption of the word "SEAL" appearing next to the name of the partnership or the signatures of the partners or (d), if by a limited liability company, by the duly authorized members or managers on its behalf under seal by adoption of the word "SEAL" appearing next to the name of the limited liability company or the signatures of the members or managers, on the day and year first above written.

[Signature Page to Follow]

JORDAN TIMBERLANDS, INC.

_____ (SEAL)
By: Robert B. Jordan, III, President

---

STATE OF North Carolina
COUNTY OF Montgomery

I certify that the following person personally appeared before me this day and acknowledged to me that the following person voluntarily signed the foregoing document for the purpose stated therein and in the capacity indicated:

| Name | Capacity |
|---|---|
| Robert B. Jordan, III | President |

☑ I have personal knowledge of the identity of the principal;
☐ I have seen satisfactory evidence of the principal's identity, by a current state or federal identification with the principal's photograph in the form of a _____; or
☐ A credible witness has sworn to the identity of the principal

Witness my hand and official stamp or seal on this the 20 day of December, 2018.

SUSAN L HUNEYCUTT NOTARY PUBLIC STANLY COUNTY NC

Susan L Huneycutt
Notary Public

Print notary name: Susan L. Huneycutt
*(notary name must be exactly as on notary seal)*

My commission expires: 09/21/2021

*[affix notary seal, which must be fully legible]*

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TRACT 9030
MONTGOMERY & MOORE COUNTIES

TRACT #9030 - Page 1

IN MONTGOMERY COUNTY AND MOORE COUNTY
Known as "Shamburger Tract"

TRACT 4:

Jordan Lumber and Supply, Inc. lands located about three (3) miles east of Biscoe, on both sides of North Carolina Highway 27, predominantly on the north side, said tract of land lying in Bensalem Township, Moore County and in Biscoe Township, Montgomery County, North Carolina, said tract lying on the waters of Cotton, Cabin, and Hill Creeks being bounded by Britt, Bailey, Roy Garner, Cochran, L. G. DeWitt, Shelton Freeman, C. G. Buie, Lamond, Grady Allen, Dowd and others being described as follows:

BEGINNING at an iron pipe with a light wood stake, oak, pine and hickory pointers, said pipe being located South 12-41 East about 454 feet from the centerline of North Carolina Highway 27, said beginning corner also being the southwest corner of the Jordan "Salvation Army" tract recorded in Deed Book 352 at Page 281, Moore County Registry, running thence from the beginning with the Salvation Army tract line North 12-41 West 3353.4 feet crossing North Carolina 27 and North Carolina Secondary Road 1281 to a light wood stake with pine and oak pointers, a common corner of Roy Garner and the Salvation Army tract; thence with their common line South 45-58 East 2169.75 feet recrossing North Carolina Secondary Road 1281 to a light wood stake with pine, maple and red oak pointers, a corner of Roy Garner and the Salvation Army tract; thence with their line North 25-29 East 3043.94 feet to an iron pipe in a rock pile with white oak pointers a corner of Roy Garner, Salvation Army tract, and the southeast corner of the Jordan "Shamburger Tract" recorded in Book 290 at Pages 8 and 13, in the Moore County Registry; thence with the Garner and Shamburger tract line North 65-15 West 737.22 feet to a light wood stake with oak and pine pointers on the east side of North Carolina Secondary Road 1281 (graded); thence with Britt and the Shamburger tract line crossing the road North 54 West 400.5 feet to a light wood stake in a rock pile, a corner of Britt and the Shamburger tract; thence as their line North 87-25 West 1914.0 feet crossing North Carolina Secondary Road 1400 to a stake in a field; thence

TRACT #9030 - Page 8

In Moore County and Montgomery County.
Known as "Shamburger Tract"

with the Shamburger Tract line North 60 West 728.64 feet to a corner at the confluence of Cabin Creek and a branch, the southwest corner of the Shamburger tract and the easternost corner of Jordan's "Cochran Tract" recorded in Book 315 at Page 237, Moore County Registry; thence with Jordan's Cochran tract line South 39 West 887.04 feet to a light wood stake at a stump hole with pointers; thence with the Cochran line South 10-10 West 692.34 feet to a light wood stake with dogwood pointers; thence with the Cochran tract line South 09-15 West 1233.54 feet to a light wood stake with pointers; thence with the Cochran tract line South 73-30 West 743.16 feet to an iron stake with pointers; thence with the Cochran tract line South 77 West 640.53 feet to a light wood stake with pointers; thence with the Cochran Tract line North 23-30 West 1858.56 feet to a light wood stake on the east bank of Cabin Creek; thence down the various courses of the creek North 36-35 East 47.19 feet, North 13-30 East 86.13 feet, North 24-20 West 59.6 feet, North 45-15 West 103.6 feet, North 14-35 East 157.08 feet, North 0-45 East 154.01 feet, North 73-15 East 78.87 feet, South 76-20 East 102.3 feet; North 69-10 East 83.16 feet, North 30-50 East 122.76 feet, North 34-15 East 102.96 feet to a corner at the confluence of Cabin Creek and a branch; thence up the various courses of the branch North 29-10 West 160.71 feet, North 2-40 West 148.69 feet, North 39-30 West 146.19 feet, North 24-20 West 156.42 feet, North 70-30 West 111.93 feet, North 22-45 West 138.6 feet, North 56-30 West 132.0 feet, North 7-05 West 62.04 feet to a corner in the branch, the most westerly corner of the Cochran Tract and a corner in the east line of the Jordan 98 acre tract; thence with the 98 acre tract line South 37-15 West 235.42 feet to a light wood stake with pointers; thence with the 98 acre tract line South 7 East 302.61 feet to a light wood stake; thence with the 98 acre tract line South 76-10 West 719.4 feet to a light wood stake with pointers; thence with the 98 acre tract line North 18-20 West 379.5 feet to a lightwood stake, a corner of the Jordan "United States Forest Service Tract" recorded in Book 168 at Page 779, Montgomery County Registry; thence with the United States Forest Service tract line North 86-34 West 181.5 feet to a light wood stake with

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TRACT #9030 -Page 3-

In Moore County and Montgomery County.
Known as "Slumburger Tract"

pointers; thence with the United States Forest Service tract line South 28-51 West 1318.7 feet to an iron pipe near a pine stump with pine pointers; thence with the United States Forest Service tract line South 52-06 West 961.47 feet to a light wood stake with pine pointers; thence with the United States Forest Service tract line North 30-49 West 2179.64 feet to a concrete monument in a rock pile with pine, black jack pointers; thence with the United States Forest Service tract line North 61-01 East 1046.35 feet to a light wood stake with maple and pine pointers; thence North 25-34 East 1108.13 feet to a light wood stake with oak pointers; thence with the United States Forest Service tract line North 61-01 East 1175.16 feet to a light wood stake, the northeast corner of the United States Forest Service tract and a corner of the Jordan "98 Acre Tract"; thence with the 98 acre tract line North 11-30 West 313.5 feet to a lightwood stake with pointers, a corner of Jordan's "Dawkins Tract", the northwest corner of Jordan's 98 acre tract and the westmost corner of the Jordan's "Dunn Tract"; thence with the Dawkins tract line South 63-59 West 321.81 feet to a rock pile with hickory, red oak and gum pointers; thence with Dawkins line North 29-01 East 2047.59 feet to a rock pile with dogwood and oak pointers in the Moore County and Montgomery County lines; thence with the County line, the Dawkins' tract line, and a line of the Cochran Estate North 7-46 West 2834.09 feet crossing North Carolina Secondary Road 1400 and Cotton Creek (three times) to a rock pile with sourwood and oak pointers a corner of L. C. DeWitt and the Dawkins tract; thence with their line South 66-25 East 409.36 feet to an iron stake on the east side of a woods road with pine pointers, a corner of the Dawkins tract and Shelton Freeman; thence with Freeman and the Dawkins line South 17-30 West 182.85 feet to a stake with pointers; thence with Freeman and Dawkins South 25-46 East 183.91 feet to an iron bar on the north bank of Cotton Creek; thence down the various courses of the creek South 23-38 East 251.32 feet, South 35-14 East 159.47 feet, South 10-42 East 210.42 feet, South 39-46 East 187.88 feet, South 5-22 East 171.4 feet, South 21-56 East 196.55 feet,

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TRACT #9030 --Page 4

In Moore County and Montgomery County.
Known as "Shamburger Tract".

South 62-16 East 162.0 feet South 47-27 East 161.42 feet, South 19-38 East 136.8 feet, North 85-33 East 120.83 feet, South 42-28 East 198.78 feet, North 55-33 East 194.0 feet to a stake on the southeast bank of the creek, a corner of Freeman and the Dawkins tract; thence as their line, South 73-16 East 1574.44 feet to a stake with pine pointers, a corner of O. O. Dula, Dawkins, and Jordan's Shamburger tract; thence with the Shamburger tract line with Dula South 74-30 East 481.47 feet to a stake with pine pointers near an old woods road; thence with the Shamburger and Dula line North 7 West 1604.46 feet to a stake on the south bank of Cotton Creek; thence down the various courses of the creek South 52-11 East 191.0 feet, South 62-55 East 206.07 feet, South 41-54 East 157.0 feet, South 12-31 East 155.7 feet, South 41-13 East 124.89 feet, North 67-13 East 17.88 feet to a corner in the creek; thence with Shamburger tract line South 15 East 66.0 feet to a light wood stake with dogwood pointers; thence with the Shamburger line North 86-15 East 633.6 feet to a light wood stake with pointers; thence with the Shamburger line and Lamond South 06 East 1030.93 feet to a lightwood stake; thence with Shamburger and Lamond North 40 East 1640.1 feet to a stake; thence with Shamburger and Lamond South 80 East 660.0 feet to a corner on the west bank of Cabin Creek; thence up the various courses of the creek South 74 East 36.3 feet, South 3-45 East 227.04 feet, South 1-10 West 233.98 feet, South 21-25 West 183.48 feet, South 06 East 120.78 feet, South 0-10 East 144.54 feet, South 6-40 East 177.54 feet, South 8-20 West 264.0 feet, to a stake on the east bank of the creek; thence with the Shamburger line South 83-15 East 71.28 feet to a stake on a branch; thence with Shamburger South 11 West 405.9 feet to a stake; thence with Shamburger South 74-20 East 730.62 feet to a pine knot in a rock pile on the south bank of a branch; thence with Shamburger North 14-35 East 326.70 feet to a rock pile with pointers; thence with Shamburger North 66-50 East 1405.8 feet to a pipe in a rock pile on the north edge of a woods road; thence with Shamburger South 13-10 West 2403.72 feet to a lightwood stake in a rock pile with gum and elm pointers; thence with Shamburger South 79 East 328.68 feet to a

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TRACT #9030 - Page 5

In Moore County and Montgomery County.
(Known as "Shamburger Tract")
corner; thence with Shamburger South 23-30 East 1800.48 feet crossing North Carolina Secondary Road 1281 to a tall iron pipe with oak pointers, a corner of the Shamburger tract, Grady Allen and the northeast corner of Jordan's Salvation Army Tract; thence with the Salvation Army tract line and Grady Allen South 84-41 East 1188.22 feet to an iron pipe with pine pointers; thence with the Salvation Army tract line and Grady Allen South 35-10 East 1385.04 feet to an iron stake with pine pointers; thence with the Salvation Army tract line North 47-09 East 1458.96 feet to an iron stake with pine and oak pointers; thence with the Salvation Army tract line South 18-19 East 1155.37 feet to an iron stake in a rock pile with oak and pine pointers; thence with the Salvation Army tract line as it crosses Hill Creek South 85-21 East 660.3 feet to an iron pipe in a rock pile with maple and oak pointers; thence with the Salvation Army tract line South 74-47 East 134.47 feet to an iron pipe with dogwood and oak pointer, a corner of the Dowd Estate and the Salvation Army tract; thence with their line South 4-58 West 2186.64 feet to a rock pile; thence with the Salvation Army tract line South 5-08 West 672.73 feet to an iron pipe in a rock pile, with pine, hickory, and oak pointers; thence with the Salvation Army tract line North 85-28 West 2469.35 feet crossing Hill Creek to an iron stake in a rock pile; thence South 9-45 East 727.3 feet to an iron pipe with a light wood stake, white oak and pine pointers; thence with the Salvation Army tract line South 70-56 West 4973.97 feet crossing North Carolina Highway 27 to the BEGINNING, containing 1928.24 acres more or less.

THE FOREGOING TRACTS ARE EXCEPTED FROM THE ABOVE DESCRIPTION:

1. That certain tract of land containing 4 acres, more or less, located in Bensalem Township, Moore County, North Carolina, and bounded now by lands owned by persons as follows: North by Jordan Lumber Company; East by State Topsoil Road #1400, South by Jordan Lumber Company, and West by Jordan Lumber Company; said tract lying approximately 4 miles East from the town of Biscoe and more specifically described as follows: BEGINNING at an iron stake located in the western right of way line of State Topsoil Road #1400, said iron stake being approximately 540 feet Northwest of the point where Jordan Lumber Company's line crosses said right of way of said road, and runs thence as and with the said right of way line of State Topsoil Road #1400 North 30 West 650 feet to an iron stake; thence turning and leaving said road South 69 West 268 feet to an iron stake; thence South 30 East 650 feet to an iron stake; thence North 69 East 268 feet to the point of beginning, according to a plat prepared by C. H. Blue, May, 1974.

2. One acre graveyard described in Deed Book 244 at Page 68, Moore County Registry.

3. The land on which is located the Leach graveyard, said exception to include an area of land, the outside boundary to be determined by measuring twenty-five (25) feet in each direction from the nearest grave.

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In Moore County and Montgomery County.
(Known as "Shamburger Tract")

EXCEPTIONS: – continued:

4. That certain tract containing 31.572 Acres, more or less, conveyed to John H. Richardson et ux by deed recorded in Book 534, Page 102, to which deed reference is made for metes and bounds description.

5. That certain tract containing 145.868 Acres, more or less, conveyed to John H. Richardson by deed recorded in Book 511, Page 710, to which reference is made for metes and bounds description.

6. That certain tract containing 1.82 acres, more or less, conveyed to John Davis by deed recorded in Book 534, Page 367, Moore County Registry, to which reference is made for metes and bounds description.

7. That certain tract containing 5.102 acres, more or less, conveyed to James E. Moore et ux by deed recorded in Book 534, Page 370, Moore County Registry, to which deed reference is made for metes and bounds description.

8. Right of Way to Carolina Power and Light Company covering approximately 7.28 acres, as recorded in Deed Book 529, Page 166, Moore County Registry.

9. Boundary Line Agreement between Jordan Lumber & Supply, Inc., John H. Richardson et ux, and Parker Lee Britt et ux recorded in Deed Book 560, Page 909, Moore County Registry, dated 3/10/87.

10. Boundary Line Agreement between Cochran Estates, Inc. and Jordan Lumber & Supply, Inc. dated 12/17/84 recorded in Deed Book 528, Page 263, Moore County Registry, and Deed Book 215, Page 769, Montgomery County Registry.

11. Easements to Carolina Power & Light Company appearing in Book 86, Page 544 and 547, and Book 88, Page 323 and 358, Moore County Registry, which includes a 30 foot right of way for a tower transmission line easement.

11. Easement to Carolina Power & Light Company appearing in Book 167, Page 252, Moore County Registry.

12. Mineral rights excepted as described in instrument recorded in Deed Book 92, Page 8, and Deed Book 315, Page 237, Moore County Registry.

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(Known as Lamonds Tract) PARCEL #9010 - Page 8

BENSALEM TOWNSHIP, MOORE COUNTY, STATE OF NORTH CAROLINA (Known as Lamonds Tract)

Located on the waters of Cabin Creek and Cotton Creek, being approximately three-fourths of a mile East of the Montgomery-Moore County line. Adjoining the lands of Harry Lamonds, Robert Freeman and Jordan Lumber & Supply, Inc. BEGINNING on a point in the centerof Cotton Creek and in and old West line of the tract of which this is a part, said.beginning being South 07 degrees 14 minutes 37 seconds East 80.58 feet from an old corner on a hillside North of said Cotton Creek, being also just East of a horseshoe-like bend in said creek; running thence as the old line South 07 degrees 14 minutes 37 seconds East 1233.79 feet to an old pine knot corner of Jordan Lumber & Supply, Inc. (formerly Leach lands); thence continuing as the said ola line South 05 degrees 36 minutes 29 seconds East 1031.63 feet to an old pine stake with oak and southwood pointers, approximately 150.00 feet south of an old road, also a corner of Jordan Lumber & Supply, Inc.; thence as subthax old line of the tract of which this is a part North 40 degrees 41 minutes 44 seconds East 1642.75 feet to an old pine stake with hickory pointer on the east side of a hill; thence as another old line of the tract of which this is a part South 78 degrees 26 minutes 44 seconds East 685.10 feet to a point in the center of Cabin Creek; thence as the center of said Cabin Creek North 04 degrees 16 minutes 30 seconds East 203.04 feet, North 26 degrees 32 minutes 44 seconds West 145.51 feet, North 12 degrees 59 minutes 40 seconds West 155.09 feet, North 17 degrees 56 minutes 08 seconds East 58.88 feet to the center of the confluence of the waters of Cotton Creek and Cabin Creek; thence up Cotton Creek its various courses as traced from USDA aerial map and as shown on a plat prepared by Leach M. Johnson, under the supervision and direction of J. Lyman DeHarry, RLS, dated September, 1974, a copy of which is attached to deed.recorded in Book 396, Page 128, Moore County Registry, to the point of beginning, containing 2,095,751 square feet or 48.11 acres as calculated by the Double Meridian Distance Method.

For title reference see deed from X. F. Russell et ux to Harry Lamonds. See deed from Harry Lamonds et ux to Jordan Lumber & Supply, Inc, dated June 16, 1973, recorded in Deed Book 396, Page 128, Moore County Registry.

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TRACT 9033
MONTGOMERY & MOORE COUNTIES

(Known as DeWitt Tract) TRACT #9033

In Star Township, Montgomery County, and in Sheffield Township, Moore County.

TRACT 1: Being located in Star Township, Montgomery County and Sheffield Township, Moore County, North Carolina, and more particularly described as follows:
All that certain tract of land containing eight hundred fifty-one and one-tenth (851.1) acres, more or less, (328.1 acres of which is in Montgomery County, North Carolina), known as the Capel lands of Moore and Montgomery Counties, State of North Carolina, approximately 2 miles East of the Town of Star on both sides of the main line of Norfolk Southern Railway extending from Raleigh to Charlotte, and on both sides of Public Highway extending from Star to Robbins, bounded now or formerly by the Lemmonds lands, the Jordan lands, the Kennedy lands, the Williams lands, the Callicutt lands, and the Spencer lands on the North; the Freeman lands, the Davis lands, the Owens lands, on the East; the Melton lands, the Hamilton lands, the Williams lands, the Thomas lands, the Cochran lands, the Dunn lands, the Allen lands on the South; the Dunn lands, and the Allen lands on the West. Said tract of land being more particularly described according to plat prepared by A. L. McNeill, Surveyor, in October and November 1945, said map being recorded in Montgomery County Map Book No. 2 at Page 54, as follows:
BEGINNING at a stake in Star Township, Montgomery County, 25 feet North of the Center of Norfolk Southern Railway, a corner of Davis and Allen, said stake being 2,581.6 feet South 87 degrees 30 minutes West from the beginning corner of a 12.4 acre tract of land sold by W. C. Capel and wife, Rose Capel, to Mrs. Laura Ellen Jordan, by deed dated January 28, 1946, and recorded in the office of the Register of Deeds of Montgomery County, North Carolina, in Book 93 at Page 53, and runs thence South 54 degrees 30 minutes East 302.4 feet to a stake in the head of Cattail Branch; thence with the line of Cattail Branch about South 78 degrees East 1,460 feet, more or less, to a lightwood stake, oak pointers in Cattail Branch; thence North 50 degrees 05 minutes East 429 feet to a stake; thence North 55 degrees 05 minutes East 528 feet to a stake; thence North 59 degrees 05 minutes East 173 feet to a stake in the center line of Norfolk Southern Railway track; thence with the center line of Norfolk Southern Railway track North 87 degrees 30 minutes East crossing Moore-Montgomery County line 1,475 feet to a stake in the center line of said tract; the East corner of said tract sold by William Capel and wife, Rose R. Capel, to Mrs. Laura Ellen Jordan; thence South 71 degrees 40 minutes East 1,632.5 feet to a stake in rock pile, pine and oak pointers; thence North 1 degree 30 minutes East 525 feet to a stake in the center line of Norfolk Southern Railway track; thence North 1 degree 30 minutes East 1,606.1 feet to a stake, passing stake in rock pile in line; thence South 85 degrees 50 minutes East 2,805 feet to a lightwood stake; thence North 13 degrees 10 minutes East 1,300 feet to a lightwood stake oak pointers; thence South 8 degrees 15 minutes East 1,666.5 feet to a stake, oak pointers; thence North 83 degrees 30 minutes East crossing public road and railroad 2,664.4 feet to a stake in rock pile, oak pointers; thence South 7 degrees 30 minutes East 2,763 feet to a lightwood stake, oak pointers; thence South 82 degrees 40 minutes West 2,626.8 feet to a lightwood stake, oak pointers; thence North 7 degrees 05 minutes West 660 feet to a lightwood stake, oak and pine pointers; thence South 82 degrees 45 minutes West 3,395.7 feet to a lightwood stake by rock, oak and dogwood pointers, West of Opossum Branch; thence South 7 degrees 55 minutes East 2,623.3 feet to a stake, oak pointers; thence South 81 degrees 30 minutes West 772.5 feet to a stake, oak and pine pointers; thence South 82 degrees 40 minutes West crossing Moore-Montgomery County line 1,267 feet to a stake in rock pile, oak, hickory and sourwood pointers; thence North 2 degrees 30 minutes West 1,035 feet to a lightwood stake, post oak and pine pointers; thence North 83 degrees 25 minutes West crossing Cattail Branch at approximately 900 feet in all 1,452 feet to a stake in rock pile, oak and hickory pointers; thence South 22 degrees 25 minutes West 44 feet to a stake, oak pointers; thence North 78 degrees 25 minutes West 990 feet to a stake, pine, oak and maple pointers; thence South 58 degrees 30 minutes West 2,310 feet to a stake by three hickory pointers; thence North 1 degree 30 minutes East 3,960 feet to the point of Beginning, containing 851.1 acres, more or less, according to survey and plat thereof made by A. L. McNeill, County Surveyor of Richmond County, North Carolina, in October and November, 1945, which said plat is duly recorded in Montgomery County Registry,

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(DeWitt Tract) TRACT NO. 49033 (Page 2)

STAR TOWNSHIP, MONTGOMERY COUNTY, AND SHEFFIELD TOWNSHIP, MOORE COUNTY in Map Book No. 2 at Page 54, to which map book for a more particular description of this property herein described reference is made and by said reference said map is made a part hereof as fully and to the same extent as if attached hereto, EXCEPT for that part shown on said map which has been heretofore conveyed to Mrs. Laura Ellen Jordan, recorded in Deed Book 95 at Page 53 of the Montgomery County Registry.

THIS CONVEYANCE IS MADE SUBJECT to the right of way across said land of Norfolk Southern Railway and highway purposes.

For title reference see deed recorded in Book 230, Page 303, Moore County Registry; Book 113 at Page 426, Montgomery County Registry; see also the Twelfth Tract described in a deed from L. G. DeWitt et al to Sunny Slope Farms, Inc., dated June 30, 1959, and duly recorded in the Montgomery County Registry in Book 114 at Page 249, and Moore County Registry in Book 232 at Page 48.

EXCEPTIONS:

(1) Right of way to Randolph Electric Membership Corporation for maintenance, dated 4/11/46, recorded in Book 179, Page 249.

(2) 50.02 Acres sold to Pioneer Southern by deed dated 5/20/87 recorded in Deed Book 226, Page 131, Montgomery County Registry.

(3) Right of way to Maggie Dunn dated 1986 recorded in Deed Book 220, Page 377, Montgomery County Registry.

(4) Right of way to Maggie Dunn dated 10/13/81 recorded in Deed Book 230, Page 377, Montgomery County Registry.

(4) Right of way to Carolina Power & Light Company dated 11/14/88 recorded in Deed Book 234, Page 390, Montgomery County Registry.

(5) Right of way to Carolina Power & Light Company dated 1/30/87 recorded in Deed Book 224, Page 519, Montgomery County Registry.

(6) Right of Way of Norfolk Southern Railroad as set out after description.

(7) Right of way of public highway extending from Star to Robbins, N. C.

(8) 0.76 of an acre as described in Deed Book 721, Page 134, Moore County Registry, to which reference is made for metes and bounds description.

(9) 100.82 Acres as described in deed recorded in Book 721, Page 134, Moore County Registry, to which deed reference is made for description.

Title References:

See deed from L. G. DeWitt et ux to Jordan Lumber & Supply, Inc. recorded in Deed Book 232, Page 48, Montgomery County Registry. (Description shows approximately 328.1 acres in Montgomery County and the balance in Moore County.
See Deed Book 403, Page 359, Moore County Registry.
See Map Book 2, Page 54, Montgomery County Registry.

EXCEPTION: (continued from above)
(10) Except 4 Acres +- conveyed to D. R. Reynolds Company 5/19/93 by deed recorded in Book 275, Page 120, Montgomery County Registry.

12.

Tract 9033 – Page 3

(1) BEGINNING at a stake and pointer a corner of lot No. 2, in the legal line; thence as that line North 13 West 31 chains to Capel's corner; thence North 78 East 2 chains and 25 links to a stake and pointers, near the east side of a branch; thence South 22 East 22.75 chains to a lightwood stump by two hickory pointers; thence North 80 East 2.50 to a stake by a pine pointer; thence South 10 East 7.70 to a stake and pointer, a corner of Lot No. 2; thence as that line reversed South 78 West crossing a branch 7 chains to the beginning, containing 14 acres, more or less.

For title reference see Book 116 at Page 607, Moore County Registry.

(2) A tract or parcel of land lying and being in Star Township, Montgomery County, North Carolina, being a portion of the "DeWitt Tract" of the Jordan Timberlands, Inc. property located east of Griffin Farm Road, more particularly described as follows:
BEGINNING at a 1 inch iron pipe found at the southeast corner of the EPI Organics, Inc. property (Deed Book 248 Page 646) and being a common corner with the "DeWitt Tract" of the Jordan Timberlands, Inc. property (Deed Book 380 Page 612), and being at the north side of a 60 foot strip reserved by Jordan Timberlands, Inc., and also being N 2° 07' 06" W 60.33 feet from a concrete monument; thence along a line with the EPI Organics, Inc. property N 1° 39' 11" W 935.15 feet to a 1 inch iron pipe found at the northeast corner of the EPI Organics, Inc. property and being another common corner with the Jordan Timberlands, Inc. property, and also being S 89° 55' 14" E 1428.55 feet from a PK nail found in the center of the Griffin Farm Road; thence along a new line with the Jordan Timberlands, Inc. property S 89° 55' 14" E 400.00 feet to a 3/4 inch iron rebar set on a new corner within the Jordan Timberlands, Inc. property; thence along another new line with the Jordan Timberlands, Inc. property S 1° 33' 19" E 978.70 feet to a 3/4 inch iron rebar set on a new corner of the Jordan Timberlands, Inc. property and being on the north side of the aforementioned 60 foot strip reserved by Jordan Timberlands, Inc.; thence along a line generally along the north side of the 60 foot strip N 83° 43' 53" W 403.59 feet to the BEGINNING, containing 8.78 acres, more or less, as shown on a plat for Pioneer Southern, Inc. dated March 3, 2000 by Thomas J. Fields, PLS-2906 which is attached hereto and made a part hereof by reference the same as if fully set out herein.

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Tract 9033- Page 4

Lying on both sides of Cotton Creek.
BEGINNING at a stake 3 oak pointers, and runs South 14 East 43 chains to a blackjack corner, 2 post oaks and pine stump pointers; thence North 76 East 3.37 chains to a stake, 2 dogwoods and 2 oak pointers; thence South 14 East 10 chains to a stake, pine pointers; thence South 12 East 39 chains to a stake, post oak, pine and white oak pointers; thence North 76 West 17.50 chains to a red oak hickory and post oak pointers; thence North 16 West 13 chains to Cotton Creek, sapls, ash and gum pointers; thence North 22 West 26.50 chains to a hickory corner, post oak and white oak pointers; thence North 68 East 1.50 chains to a stake, red oak, dogwood pointers; thence North 10 West 21.50 chains to a stake 2 pine pointers; thence South 80 West 2 chains to a pine, 2 hickory pointers; thence North 22 West 22.75 chains to a stake white oak and two ash pointers, thence North 78 East 20 chains to the beginning, containing 163 acres, more or less, and known as the Mark A. Allen one hundred sixty three acre tract.

For title reference see Deed Book 126 at Page 248 and Deed Book 139 at Page 310, Moore County Registry.

THERE IS EXCEPTED FOR THE FOREGOING DESCRIPTION, THE FOLLOWING DESCRIBED TRACT:

Adjoining the lands of John Holder, Fuller Williams and others.
BEGINNING on a stake on the North bank of Cotton Creek, with two poplar pointers and running thence North 12 West with John Holder's and C. G. Bule's line 14 chains; thence with their line North 14 West 10 chains to a stake, John Holder's corner, also C. G. Bule's corner; thence South 76 West 3.57 chains to a stake, Bule's corner also Fuller Williams corner; thence South 12 East 23 chains to the North bank of Cotton Creek; thence up the North bank of Cotton Creek 3.5 chains to the Beginning, containing 8 acres, more or less.

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Tract 9033 Page 5

THERE IS EXCEPTED from Tract 9033 that 4.00 acres described in deed to D.R. Reynolds Co., Inc. recorded July 8, 1997 in Book 339 Page 34, Montgomery County Registry.

THERE IS EXCEPTED from Tract 9033 that 0.55 acre described in deed to Elwood Preslar and Crystal D. Burr recorded February 25, 2000 in Book 390 Page 308, Montgomery County Registry.

THERE IS EXCEPTED from Tract 9033 that 8.78 acres described in deed to John C. Willis et ux recorded June 2, 2000 in Book 395 Page 681, Montgomery County Registry.

THERE IS EXCEPTED from Tract 9033 that 3.65 acres described in deed to D.R. Reynolds Co., Inc. recorded March 28, 2006 in Book 559 Page 753, Montgomery County Registry.

TRACT 9055
MOORE & CHATHAM COUNTIES

TRACT NO. 9055

MOORE COUNTY

CHATHAM COUNTY

(Known as Buchanan Tract)

MOORE AND CHATHAM County, North Carolina, (the "Premises") and more particularly described as follow-

See Addendum attached hereto and made a part hereof marked "Exhibit A" for metes and bounds description of the lands herein conveyed.

SUMMARY OF
Tracts First, Second, Third and Fourth Tracts in Moore and Chatham Counties are as follows:

| | | |
|---|---|---|
| Moore County, Deep River Township | | 966.50 Acres +- |
| Moore County, Deep River Township | | 20.00 Acres +- |
| Moore County, Deep River Township | | 578.17 Acres +- |
| Chatham County, Gulf Township | | 479.80 Acres +- |
| EXCEPT SALES AS FOLLOWS: | | |
| Book 472, Page 205, Chatham County | -287.31 A.+- | |
| Book 471, Page 757, Moore County | -261.90 A.+- | |
| Book 499, Page 861, Moore County | -295.08 A.+- | |
| Book 520, Page 550, Moore County | -348.50 A.+- | |
| Approximate balance of acreage remaining after exceptions in Tracts First through Fourth--Moore County | | 659.19 Acres +- |
| Chatham County | | 272.49 Acres +- |

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TRACT NO. 9055

MOORE COUNTY
CHATHAM COUNTY
"EXHIBIT A" (Page 1)

FIRST TRACT: Two tracts of land located in Deep River Township, Moore County, North Carolina and more particularly described as follows:

FIRST PARCEL: BEGINNING at a concrete marker and three pronged dogwood tree at the head of a branch on the north side of a road leading from Carthage, N.C., to Carbonton, N.C.; thence down said branch as it meanders North 18 degs. 10 mins. W. 278 feet; thence North 11 degs. 50 mins. West 306 feet; thence North 5 degs. 14 mins. East 123.5 feet; thence North 26 degs. 30 mins. West 453 feet; thence North 11 degs. 30 mins. West 346 feet; thence North 13 degs. 00 mins. West 140 feet to a concrete marker, and there leaving said branch; thence North 03 degs. 37 mins. West 980 feet to a concrete marker in another branch; thence down said branch as it meanders North 45 degs. 06 mins. East 187.0 feet; thence North 33 degs. 00 mins. East 74.3 feet to a point in Haw Branch and thence up said branch as it meanders North 50 degs. 15 mins. West 370 feet; thence South 81 degs. 30 mins. West 120 feet; thence North 50 degs. 02 mins. West 161 feet; thence North 37 degs. 25 mins. West 105 feet; thence North 12 degs. 00 mins. West 209 feet; thence North 37 degs. 35 mins. West 101 feet; thence North 34 degs. 50 mins. East 104 feet; thence North 11 degs. 50 mins. West 236 feet; thence North 13 degs. 30 mins. East 103 feet; thence North 58 degs. 10 mins. West 295 feet; thence North 58 degs. 30 mins. West 275 feet; thence North 18 degs. 20 mins. West 343 feet; thence North 36 degs. 35 mins. West 115 feet; thence North 82 degs. 15 mins. West 110 feet; thence North 21 degs. 15 mins. West 135 feet; thence North 14 degs. 00 mins. West 170 feet to a concrete marker and there leaving said Haw Branch; thence South 57 degs. 35 mins. West 603 feet to a concrete marker; thence South 40 degs. 15 mins. West 331 feet to a concrete marker; thence North 87 degs. 30 mins. West 660.7 feet to a concrete marker; thence North 5 degs. 35 mins. East 1447 feet to a concrete marker; thence North 84° 25 mins. West 737 feet to a concrete marker; thence North 10 degs. 45 mins. West 808 feet to a concrete marker; thence North 7 degs. 17 mins. East 2100 feet to a concrete marker in the Moore-Chatham County line; thence with said county line South 87 degs. 10 mins. East 1657 feet to a concrete marker and there leaving said county line; thence South 6 degs. 50 mins. West 646.2 feet to a concrete marker; thence South 86 degs. 10 mins. East 1229 feet to a concrete marker; thence North 3 degs. 27 mins. East 722.2 feet to a concrete marker in the Moore-Chatham County line; thence partly with County line and with Line Creek South 87 degs. 10 mins. East 5381.2 feet to a concrete marker at the mouth of Line Creek and on the bank of Deep River; thence with the bank of Deep River upstream as it meanders South 31 degs. 05 mins. West 315 feet; thence South 25 degs. 45 mins. West 392 feet; thence South 1 deg. 05 mins. West 245 feet; thence South 3 degs. 55 mins. West 210 feet; thence South 29 degs. 20 mins. East 135 feet; thence

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TRACT NO. 9055.

MOORE COUNTY
CHATHAM COUNTY

"EXHIBIT A" (Page 2)

South 25 degs. 19 mins. East 115 feet; thence South 20 degs. 25 mins. East 100 feet; thence South 40 degs. 00 mins. East 130 feet; thence South 51 degs. 40 mins. East 240 feet; thence South 62 degs. 55 mins. East 170 feet to a concrete marker on the bank of Deep River at the mouth of Haw Branch; thence leaving the river bank and up Haw Branch as it meanders South 19 degs. 30 mins. West 177.8 feet; thence South 31 degs. 20 mins. West 141.3 feet; thence North 37 degs. 10 mins. West 243.2 feet; thence South 82 degs. 15 mins. West 126 feet; thence South 37 degs. 10 mins. West 123 feet to a concrete marker and there leaving Haw Branch; thence South 6 degs. 25 mins. West 1005 feet to a concrete marker; thence North 84 degs. 25 mins. West 912 feet to a concrete marker in Haw Branch; thence up said branch South 40 degs. 10 mins. West 260 feet; thence North 86 degs. 30 mins. West 180 feet; thence South 20 degs. 45 mins. West 302 feet; thence South 69 degs. 30 mins. West 129 feet to a concrete marker and there leaving said branch; thence South 2 degs. 15 mins. East 3495 feet to a concrete marker; thence North 84 degs. 25 mins. West 1744.5 feet to the point of BEGINNING, and containing 966.6 acres, more or less.

SECOND PARCEL: BEING all of that certain tract or parcel of land containing 20 acres, more or less, bounded by the lands of Weaver, Evans and Tyson and being the same land conveyed by mortgage executed by W. H. Elkins and wife to John Washburn under date of May 23, 1925, and recorded in Book of Mortgages 43, at page 130, Moore County Registry; which said mortgage was foreclosed November 30, 1934, as more by reference in Sales Book 2, page 241, in the office of the Clerk of Superior Court and the property conveyed by Mary Washburn , Admx of John Washburn to Fred Jeffries by deed dated February 15, 1935, and recorded in Book 121, page 111, Moore County Registry; and conveyed by Fred Jeffries et ux, to Mary Washburn by deed dated March 20, 1935; and recorded in Book 121, page 192, Moore County Registry and conveyed by Mrs. Mary Washburn, Widow, to Ralph Washburn by deed dated August 6, 1951, and recorded in Book 171, page 91, Moore County Registry and conveyed by Ralph Washburn and wife, to John D. Lynch et als by deed recorded in Book 226, at page 556, Moore County Registry, and conveyed by John D. Lynch et als to Babcock Enterprises, Inc., By deed dated November 30, 1967, and recorded in Book 308; page 64 Moore County Registry to which deeds and mortgages reference is hereby made for a more perfect description.

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TRACT NO. 9055

Moore County
Chatham County

"EXHIBIT A" - (Page 3)

EXCEPTIONS: ----- MOORE COUNTY PROPERTY (SEE Book 499, Page 861)

TRACT 1:

Located in Deep River Township, Moore County, North Carolina, containing 299.08 acres, more or less, more particularly described on a plat of the same entitled, "Parkway Farm", surveyed and prepared by James L. Wright, Registered Land Surveyor, License-1418, dated March 29, 1983, said plat being recorded in Plat Cabinet Z, Slide 310 of the Moore County Registry.
There is reserved to Jordan Lumber & Supply, Inc. one-half (50%) of all minerals, ores, oils, gases and stone of every sort, kind and description in, under and upon the above conveyed premises.
There is also reserved to Jordan Lumber & Supply, Inc. and excepted from this conveyance for a period of one year from the date hereof that certain timber designated in the Agreement executed by the parties hereto on the same date as the execution of this deed.

TRACT 2:

Located in Deep River Township, Moore County, North Carolina, and being a permanent easement for a water line thirty (30) feet in width, extending fifteen (15) feet on each side of the center of the water line when it is permanently installed, said permanent easement being located as follows: Beginning at a point in the west right-of-way of North Carolina Secondary Road 1622 where it intersects Haw's Branch (which is an east line of Tract 1, described above) and runs thence along Haw's Branch in a general northeasterly direction approximately 2600 feet to the point where Haw's Branch intersects Deep River. The precise location of the water line must be within one hundred (100) feet to either side of Haw's Branch. During the construction period the grantee shall undertake to located the water line as near to Haw's Branch as good engineering requirements will allow.

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TRACT NO. 9055

Moore County
Chatham County

Book 451, Page 613: "Exhibit A" (Page 4)

THIRD TRACT: Deep River Township, Moore County

BEGINNING at Lambert's corner in Hancock's line, said corner being in a proposed road and being indicated by an axle witness located South 87 degrees 37 minutes East 100 feet therefrom; and running thence with the proposed road North 0 degrees 35 minutes West 3,718.63 feet to a concrete marker at Haw Branch, the Babcock Lumber Company line; thence down Haw Branch North 71 degrees 09 minutes East 129 feet; thence North 30 degrees 24 minutes East 392 feet; thence South 84 degrees 51 minutes East 100 feet; thence North 41 degrees 22 minutes East 268.34 feet to a concrete monument; thence leaving Haw Branch and running South 82 degrees 56 minutes East 916.80 feet to a concrete monument; thence North 7 degrees 44 minutes East 1791.48 feet to a concrete monument at Haw Branch; thence down Haw Branch courses and distances as follows: North 38 degrees 49 minutes East 123 feet; thence North 83 degrees 54 minutes East 126 feet; thence South 25 degrees 31 minutes East 243.2 feet; thence North 30 degrees 55 minutes East 141.3 feet; thence North 20 degrees 55 minutes East 183.5 feet to the point where Haw Branch empties into Deep River; thence up Deep River cable and distances as follows: South 62 degrees 49 minutes East 290.35 feet; thence South 51 degrees 08 minutes East 300.10 feet; thence South 36 degrees 44 minutes East 226.85 feet; thence South 34 degrees 58 minutes East 752.50 feet; thence South 42 degrees 36 minutes East 321.80 feet; thence South 43 degrees 58 minutes East 323.40 feet; thence South 53 degrees 42 minutes East 566.10 feet; thence South 45 deg. 47 minutes East 189.80 feet; thence South 31 degrees 09 minutes East 167.55 feet; thence South 32 degrees 30 minutes East 368.80 feet; thence South 31 degrees 21 min. East 402.93 feet; thence South 25 degrees 27 minutes East 252.00 feet; thence South 29 degrees 46 minutes East 232.30 feet; thence South 23 degrees 51 min. East 162.51 feet; thence South 19 degrees 28 minutes East 201.50 feet; thence South 23 degrees 18 minutes East 208.00 feet; thence South 10 degrees 45 min. East 993.45 feet; thence South 33 degrees 41 minutes East 89.90 feet; thence South 22 degrees 31 minutes East 446.85 feet; thence South 18 degrees 39 minutes East 331.85 feet; thence South 6 degrees 26 minutes East 379.33 feet; thence South 23 degrees 00 min. West 349.40 feet; thence South 39 degrees 38 min. West 289.10 feet; thence South 28 degrees 59 min. West 155.90 feet; thence South 33 degrees 47 minutes West 342.30 feet; thence South 30 degrees 46 minutes West 259.05 feet; thence South 24 degrees 47 minutes West 508.68 feet to a corner with the Lambert land; thence North 49 degrees 33 minutes West 1612.73 feet to a brown stone north of fence corner; thence North 87 degrees 37 minutes West 3,533.17 feet to the point of BEGINNING, containing 370.17 acres, more or less, and shown on map prepared by Lacy H. Johnson, RLS, based on survey completed November 3, 1967, entitled "W. C. Tyson Land" and recorded in map Book 8, Page 33, Moore County Registry.

A portion of the foregoing tract having been conveyed to W. C. Tyson by deed from Samuel Lord, Jr. Refaree, recorded in Book 72, page 501, and by deed from Nancy H. Irby et al recorded in Book 2, page 305, Moore County Registry, and the remainder having been conveyed to W. C. Tyson by deed from Eli F. Craven recorded in Book 306, page 494, and by deed from C.A. Craven and wife recorded in Book 306, page 293, Moore County Registry, the title thereafter vesting in Mae Tyson and W.A. Tyson as the heirs of W. C. Tyson who died intestate on February 27, 1927, and thereafter vesting solely in Mae Tyson as the heir of W. A. Tyson, who died intestate August 9, 1959.

The above tract of land was conveyed to P. K. Buchanan and wife, Martha I. Buchanan by deed from Mae Tyson dated January 2, 1968, and recorded in Book 306, page 390, and by deed from K. E. White et ux dated January 8, 1968, and recorded in Book 306, page 392, Moore County Registry.

THERE IS EXCEPTED from the foregoing property that certain 251.90 acres tract deeded to Ernest C. Watkins appearing in Deed Book 333, Page 252 of the Moore County Registry.

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TRACT NO. 9055
Moore County
Chatham County

"Exhibit A" (Page 6)

FOURTH TRACT: One tract of land located in Gulf Township, Chatham County, North Carolina and more particularly described as follows:

BEGINNING at a cedar stake in the old County line and the line of Babcock Lumbar Company, a corner of the J.F. Martindale lands; thence as the old County line and the line of Babcock Lumbar Company, North 86 degs. 45 mins. West 8745 feet to a stake; thence North No degs. 15 mins. West 990 feet to a stake; thence South 86 degs. 45 mins. East, 3696 feet to a stake; thence North 2 degs. 15 mins. East 1225 feet to a stake; thence as the Mashburn line, North 67 degs. 45 mins. East 3750 feet to a point where the old line intersects the center of the highway; thence as the center of the highway, the following courses: South 54 degs. 45 mins. East, 840 feet; South 40 degs. 15 mins. East, 1478 feet and South 63 degs. 30 mins. East, 1171 feet to a point in the center of the Highway (iron in line 23.6 feet from center of highway); thence as the Martindale line South 33 degs. 45 mins. West 2263.6 feet to the point of BEGINNING, containing 479.8 acres, more or less.

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TRACT NO. 9035
Moore County
Chatham County

"Exhibit A" (Page 6)

EXCEPTIONS - Moore County ---- 348.50 Acres +- (See Deed Book 520, Page 550)
Chatham County -- 207.31 Acres +- (See Deed Book 472, Page 705)

Lying and being in Deep River Township, Moore County and Gulf Township, Chatham County, North Carolina, South of North Carolina Highway 42 and West of North Carolina Secondary Road 1621 and southwest of Carbonton, more particularly described as follows:

BEGINNING at a tack set in cross tie between four (4) sixty (60) inch culverts in a branch and under the Southern Railroad tracks, being South 45 degrees 16 minutes 58 seconds West 4,913.57 feet from a P-K nail set in the centerline of the railroad tracks and Secondary Road 1621, thence with eleven (11) lines up the branch
(1) North 32 degrees 39 minutes 07 seconds West 175.33 feet to a point,
(2) North 37 degrees 21 minutes 30 seconds East 184.00 feet to a point,
(3) North 9 degrees 18 minutes 30 seconds West 236.00 feet to a point,
(4) North 16 degrees 01 minutes 30 seconds East 103.00 feet to a point,
(5) North 55 degrees 38 minutes 30 seconds West 295.00 feet to a point,
(6) North 65 degrees 58 minutes 30 seconds West 275.00 feet to a point,
(7) North 15 degrees 48 minutes 30 seconds West 303.00 feet to a point,
(8) North 34 degrees 03 minutes 30 seconds West 115.00 feet to a point,
(9) North 79 degrees 43 minutes 30 seconds West 110.00 feet to a point,
(10) North 18 degrees 43 minutes 30 seconds West 175.00 feet to a point,
(11) North 11 degrees 28 minutes 31 seconds West 170.80 feet to a concrete marker found on the west bank of the branch and just north of an old road bed; thence South 80 degrees 58 minutes 07 seconds West 599.64 feet to a concrete marker found on the north side of said road bed; thence South 41 degrees 34 minutes 28 seconds West 331.49 feet to a concrete marker found; thence North 89 degrees 37 minutes 36 seconds West 669.27 feet to a concrete marker found in a flat; thence North 7 degrees 18 minutes 44 seconds East 1446.45 feet to a concrete marker found on the west side of a small ridge; thence North 82 degrees 59 minutes 28 seconds West 736.47 feet to a concrete marker found on the east side of a small ridge; thence North 0 degrees 37 minutes 39 seconds East 812.64 feet to a concrete marker found; thence North 7 degrees 17 minutes 31 seconds East 2195.40 feet to a concrete marker found and supposed to be on the Moore and Chatham County line; thence with said line North 86 degrees 28 minutes 13 seconds West 2349.68 feet to a 1 inch pipe found in a stone pile; thence North 0 degrees 30 minutes 45 seconds East 1169.66 feet to a lighter knot found in a stone pile near a fence corner with witnesses; thence South 83 degrees 25 minutes 14 seconds East 3736.90 feet to a pipe found; thence North 1 degree 50 minutes 03 seconds East 1205.82 feet to a pipe found in an old stone pile; thence North 67 degrees 56 minutes 29 seconds East 1148.54 feet to a new set 5/8 inch rebar about 2.0 feet south of a small branch, with new witnesses; thence down said branch and Line Branch with five (5) new lines:
(1) South 36 degrees 53 minutes 27 seconds East 361.20 feet to a point,
(2) North 86 degrees 30 minutes 37 seconds East 278.67 feet to a point,
(3) South 24 degrees 05 minutes 06 seconds East 147.73 feet to a point,
(4) South 62 degrees 30 minutes 10 seconds East 302.84 feet to a point,
(5) South 35 degrees 57 minutes 54 seconds East 930.27 feet to a new set 3/4 inch rebar about 7.0 feet southwest of Line Branch; thence with three (3) new lines:
South 34 degrees 51 minutes 38 seconds West crossing a 3/4 inch rebar in a road at 842.66 feet, continuing for a total distance of 1351.72 feet to a new set 3/4 inch rebar just north of a small branch; thence crossing the County Line.
South 1 degree 06 minutes 10 seconds East 1960.02 feet to a new set 3/4 inch rebar in a logging road; thence South 34 degrees 05 minutes 08 seconds East 1075.13 feet to a point in the centerline of the railroad tracks, being about 2301.09 feet southwest of the P-K nail in the intersection of said railroad and Secondary Road 1621; thence with the centerline of said railroad tracks three (3) lines:
(1) South 44 degrees 14 minutes 26 seconds West 328.37 feet to a point,
(2) South 42 degrees 50 minutes 52 seconds West 871.45 feet to a point,
(3) South 32 degrees 09 minutes 04 seconds West 1403.92 feet to the Beginning, containing 556.81 acres, more or less, as surveyed for Fairway Farm by James L. Height, R.L.S., in January through June, 1984.

This being a portion of the land in the deed from P. K. Buchanan and wife, Martha I. Buchanan, to Jordan Lumber & Supply, Inc dated February 16, 1981, recorded in Chatham County in Deed Book 440 at Page 696 and Moore County in Deed Book 471 at Page 743.

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TRACT 9060
MOORE COUNTY

TRACT #9060

MOORE COUNTY

CARTHAGE TOWNSHIP

FIRST TRACT: BEGINNING at an iron stake at an old well on the North West side of State Road #1261, said stake being a corner of the Dowd Tract Lot #3 found in Map Book 7, page 36, Moore County Registry and running thence North 11 degs. 28 mins. 41 secs. West 513.49 feet to an iron pipe, thence with Dowd line North 42 degs. 3 mins. 44 secs. East 367.15 feet to an iron pipe in a rock pile, said pipe being a corner of the J. Newton Land and Albemarle Paper Company Land, thence with this line South 56 degs. 10 mins. 46 secs. East 1517.34 feet to an oak tree, thence South 75 degs. 12 mins. 29 secs. West 230.85 feet to an iron stake, thence with the Sullivan and Baker line South 1 deg. 5 mins. 35 secs. East 1301.96 feet to an iron stake corner of Bethlehem Church property, thence with Bethlehem Church line South 86 degs. 45 mins. 7 secs. West 65.62 feet to an iron pipe found in State Road #1261, thence with State Road #1261 North 20 degs. 55 mins. 28 secs. West 894.36 feet, thence North 29 degs. 54 mins. 35 secs. West 397.76 feet continuing with said road North 58 degs. 53 mins. 41 secs. West 180.32 feet, thence North 66 degs. 6 mins. 45 secs. West 404.37 feet, thence with said road North 73 degs. 19 mins. 50 secs. West 61.05 feet to a stake in road, said stake being a corner of Lot #3 Dowd Tract, thence with Dowd line North 11 degs. 28 mins. 41 secs. West 14.98 feet to the BEGINNING, and containing 26,963 acres, more or less.

For title reference see "First Tract" in deed from Claude D. Cagle et ux to Jordan Lumber & Supply, Inc. dated 8/23/82 recorded 8/27/82 at 12:04 PM in Book 491, Page 777, Moore County Registry.

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TRACT 9072
MOORE COUNTY

TRACT 9072

(Page 1 of 2)

Carthage Township,

Moore County, North Carolina and more particularly described as follows:

A tract or parcel of land lying and being in Carthage Township, Moore County, North Carolina, on both sides of Highway 24 and 27 and both sides of SR 1665, more particularly described as follows:

BEGINNING at a point under the bridge which is on Highway 24 and 27 and a point in McLendon's Creek; thence up the Creek with three (3) lines South 58° 37' 05" West 481.80 feet to a point in said Creek and a point under the old bridge on old Highway 74; thence South 25°.37'09" West 99.00 feet to a point in said Creek; thence South 42°07'09" West 250.80 feet to a point in said Creek; thence leaving the Creek North 71°52'51" West 209.88 feet to a stake; thence South 72°22'09" West 615.72 feet to a stake; thence North 67° 07'51" West 267.96 feet to a stake; thence South 69°21'53" West 636.87 feet to a cedar fence post; thence generally with the fence North 2°35'45" East 2193.39 feet to a 5/8 inch galvanized pipe found on the south side of Highway 24 & 27; thence with the south side of said Highway North 58°28'35" West 1033.90 feet to a wood fence post on the south side of said highway; thence crossing the Highway and SR 1665, North 12°33'35" West 388.79 feet to a one inch pipe found in a stone pile on the north side of the old road bed; thence crossing the SR North 87°55'25" East 377.92 feet to an angle iron found on the south side of said SR; thence with said SR North 64° 21'07" East 491.36 feet to a new set railroad spike set in the centerline of said SR; thence generally with an old road bed North 85°08'28" East 536.72 feet to a new set 3/4 inch rebar in the old road bed; thence North 42°49'14" East 99.00 feet to a new set 3/4 inch rebar in an old road bed; thence South 10° 15'45" East 244.20 feet to a new set 3/4 inch rebar; thence North 47 deg. 39'08" East 1030.00 feet to a new set 3/4 inch rebar; thence crossing said SR North 17° 22'40" West 1680.00 feet to a 3/4 inch iron pipe found with witnesses; thence North 55°00'00" West 760.98 feet to a stake; thence North 44°00'00" West 357.72 feet to a stake; thence North 23° 30'00" West 437.58 feet to a stake; thence North 34° 45'00" West 295.01 feet to a stake; thence North 49°45'00" West 627.00 feet to a stake; thence North 44°30'00" West 201.30 feet to a stake; thence North 41°00'00" East 1894.20 feet to a stake; thence South 27° 03'20" East 1801.69 feet to a 1½ inch galvanized pipe found in a stone pile next to a lighter knot; thence South 23°41'35" East 2776.90 feet to a new set 3/4 inch rebar, located 36.08 feet north of said SR; thence crossing said SR South 11°01'59" East 3680.10 feet to a point in said McLendon Creek; thence up the Creek with three (3) lines South 34° 46'01" West 76.41 feet to a point in said Creek; thence South 69°07'09" West 132.00 feet to a point in said Creek; thence North 86° 32'51" West 498.80 feet to the beginning, containing 334.61 acres, more or less.

This being the remainder of the land in the deed from A. W. Cagle to M. G. Boyette et al dated 21 June 1932 and recorded in Deed Book 113, Page 307 and all of the land in the deed from Mary McKeithen Clegg and wife of the late W. R. Clegg to M. G. Boyette and wife, Katherine Boyette dated 6 April 1945 and recorded in Deed Book 142, Page 333, Moore County Registry.

The above described tract of land is shown on a map entitled "Survey for Jordan Lumber and Supply, Inc., Boyette Tract", drawn under the supervision of James L. Wright, Registered Land Surveyor, dated 27 February 1984 and reference is hereby made to said map for a more particular description of the tract of land hereinabove described.

THERE IS EXCEPTED FROM THE ABOVE TRACT THE FOLLOWING:

EXCEPTION 1:

1.3 Acres +- as described in deed to Ernest Haywood recorded in Book 785, Page 165.

EXCEPTION 2:

4.28 Acres +- as conveyed to Gary L. Bowles by deed recorded in Book 532, Page 929.

EXCEPTION 3:

0.14 Acres conveyed to Jerry Glenn Bowles 5/31/85 (as trade for parcel in Book 532, Page 920) by deed recorded in Book 532, Page 917, Moore County Registry.

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TRACT 9072

(Page 2 of 2)

Moore County, North Carolina and more particularly described as follows: Carthage Township.

Beginning at an angle iron found about 37.5 feet south of North Carolina Secondary Road 1665, the southeast corner of the Continental Can Land, Jordan Lumber & Supply, Inc. and the Lot #1 Block "C" of the Colin Spencer's Development, thence with the old line South 87 degrees 55 minutes 23 seconds West 211.79 feet to a P-K nail set in the old line and in the centerline of said Secondary Road; thence with the centerline three (3) lines:
(1) North 72 degrees 35 minutes 34 seconds East 33.15 feet to a P-K nail set;
(2) North 76 degrees 55 minutes 22 seconds East 45.09 feet to a P-K nail set;
(3) North 80 degrees 01 minutes 05 seconds East 95.12 feet to a P-K nail set, a point in the old line; thence with said line South 53 degrees 41 minutes 38 seconds East 51.34 feet to the beginning, containing 0.08 acres, more or less, as shown on a plat as parcel "B" surveyed for Jordan Lumber & Supply, Inc. and Jerry Bowles Exchange dated May 18, 1985 by James L. Wright RLS, a copy of which is attached hereto and made a part hereof by reference the same as if set out herein.

This being all of the land southeast of the centerline of Secondary Road 1665 of Lot #1 Block "C" of Colin Spencer's Development Plat Book 4, Page 148.

2.5

TRACT 9086
MOORE COUNTY

TRACT 9086

MOORE COUNTY

CARTHAGE TOWNSHIP

PERSON TRACT (also including BRADY, A. L. FLIRCHUN and J. F. FLIRCHUN TRACTS

Lying and being in Carthage Township, Moore County, North Carolina, northwest of the Town of Carthage, and bounded as follows, viz:

BEGINNING at an iron stake and pointers in the center of an old abandoned road, Troy Parks corner, being the northernmost corner of this tract; thence S. 56 E. 30.2 chains; thence S. 40 E. 14.5 chains; thence S. 41 E. 21.5 chains; thence S. 30-45 E. 0.36 chains; thence leaving the old abandoned road S. 76-15 E. 3.32 chains; thence N. 13-30 E. 11.23 chains; thence S. 55 E. 11.61 chains; thence N. 13-30 E. 5.52 chains; thence S. 59 E. 1.02 chains; thence S. 29 E. 10.12 chains; thence S. 66 E. 15.9 chains; thence S. 0-30 W. 27.64 chains; thence S. 59 E. 0.0 chains; thence S. 37-45 E. 10.0 chains to an iron stake and pointers on the northwest edge of a State road; thence S. 21-30 W. 12.0 chains; thence S. 4 W. 5.7 chains; thence S. 9-30 W. 13.0 chains; thence S. 11-30 E. 11.34 chains; thence S. 37 E. 5.89 chains; thence N. 73-30 W. 4.0 chains; thence N. 56 W. 4.47 chains; thence N. 20-45 W. 51.0 chains; thence N. 31-45 W. 9.0 chains; thence S. 62-W 14.06 chains; thence N. 25-45 W. 26.97 chains; thence S. 41 W. 20.7 chains; thence along another old abandoned road the following courses and distances: S. 44-30 E. 3.09 chains, S. 49-45 E. 9.5 chains; S. 34-45 E. 4.47 chains, S. 23-30 E. 6.63 chains, S. 44 E. 5.42 chains, and S. 58 E. 11.53 chains to an iron stake and pointers; thence S. 76-15 W. 19.0 chains; thence N. 7-30 W. 6.30 chains; thence N. 86-30 W. 14.46 chains; thence S. 4 W. 23.05 chains; thence S. 61-45 E. 28.33 chains to an iron stake and pointers on the southeast side of the State road; thence along said side of the road S. 65-30 W. 7.46 chains; thence along the northern line of the Spencer Subdivision N. 61-15 W. 55.65 chains to an iron stake and pointers in Tracy Parks line; thence N. 15-30 W. 29.0 chains; thence N. 63-30 W. 3.41 chains to an iron stake and pointers on the bank of Richlands Creek; thence down the run of Richlands Creek N. 35-30 E. 3.8 chains and N. 21 E. 8.4 chains; thence N. 44 E. 24.5 chains to an iron stake and pointers in an old abandoned road; thence along the center line of said old abandoned road the following courses and distances: N. 34-30 W. 1.83 chains, N. 21-45 W. 5.95 chains, N. 47-30 W. 4.75 chains, N. 58-30 W. 8.62 chains to an iron stake and pointers in the center of said old abandoned road; thence N. 29 E. 5.37 chains; thence N. 57-45 W. 5.6 chains; thence N. 47-30 E. 33.65 chains; thence N. 36-30 W. 26.2 chains; thence N. 2 E. 13.7 chains; thence S. 49-30 E. 19.15 chains; thence N. 14 W. 16.6 chains to the place of BEGINNING; containing 981.0 acres according to plat by C. W. Ruesum, R.L.S., dated September 1950 entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. - Person Tract 1112-339L" and recorded in Plat Book 5, Page 64, Moore County Registry. See also two deeds from Lena P. Fowler to her five children conveying the above lands, said two deeds being dated December 30, 1969 and recorded in Book 324, Pages 372 and 374, respectively, Moore County Registry.

Also all right, title and interest of Grantors in and to that easement for access to the above tract reserved in that deed from Colin G. Spencer, Jr., Trustee of the Colin G. Spencer, Sr. Family Trust, to James Newton Morgan and wife, in deed dated October 15, 1984, and recorded in Book 525, Page 472, Moore County Registry.

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TRACT 9087
MOORE COUNTY

TRACT 9087

MOORE COUNTY

CARTHAGE TOWNSHIP

CAGLE TRACT (ALSO KNOWN AS KELLY TRACT)

LYING AND BEING in Carthage Township, Moore County, North Carolina, located on both sides of N. C. Highway 127 and being about 2-1/2 miles northwest of the Town of Carthage, and bounded as follows, viz: BEGINNING at a point in the center of N. C. Highway 127 where the run of Killetts Creek flows under the bridge; runs thence S. 49-10 W. 11.88 chains; thence S. 20-50 W. 11.14 chains; thence S. 82-15 W. 7.23 chains to a point in the run of Killetts Creek; thence along the run of Killetts Creek the following courses and distances: S. 10-30 W. 2.2 chains, S. 30-30 E. 2.73 chains, S. 22-15 E. 5.0 chains, S. 19-15 E. 6.1 chains, S. 0-30 W. 3.0 chains, S. 37-00 W. 6.36 chains; N. 82-30 W. 5.4 chains; N. 70-45 W. 2.0 chains, S. 12-00 W. 2.50 chains, S. 17-15 E. 2.5 chains, S. 35-00 E. 4.55 chains, S. 63-00 E. 6.0 chains, S. 15-45 E. 2.50 chains, S. 35-30 W. 3.2 chains and S. 24-00 W. 5.0 chains to an iron stake and pointers on the bank of said Creek; thence N. 88-15 W. 20.7 chains; thence N. 2-30 E. 1.4 chains; thence N. 55-15 W. 8.9 chains; thence N. 78-00 W. 22.5 chains to an iron stake and pointers on the bank of Lick Branch; thence down the run of Lick Branch N. 41-15 W. 3.53 chains, N. 18-30 E. 4.4 chains, N. 13-00 W. 3.56 chains, and N. 13-30 E. 2.5 chains to an iron stake on the bank of the branch; thence along the line of Halifax Paper Co., N. 75-45 W. 9.23 chains and N. 9-30 W. 27.3 chains to an iron stake and pointers on the bank of McLendons Creek; thence along the run of McLendons Creek the following courses and distances: N. 30 E. 2.33 chains, N. 40-30 E. 2.0 chains, N. 35 W. 2.45 chains, N. 7 E. 3.0 chains, N. 28-45 W. 4.55 chains, N. 85 E. 3.8 chains, S. 68 E. 2.0 chains, N. 75-30 E. 6.0 chains, S. 16-45 E. 3.4 chains, S. 7-30 W. 4.2 chains, S. 57 E. 4.32 chains, N. 2-30 E. 3.1 chains, N. 84-15 E. 3.56 chains, S. 43 E. 2.5 chains and N. 49 E. 4.0 chains to an iron stake and pointers on the bank of said creek; thence leaving said creek N. 68-45 E. 15.75 chains; S. 69-15 E. 4.06 chains; N. 70-15 E. 9.32 chains; S. 74 E. 3.10 chains to an iron stake on the bank of McLendons Creek; thence along the run of McLendons Creek N. 40 E. 3.8 chains, N. 23-30 E. 1.5 chains; N. 48-30 E. 7.3 chains, S. 89 E. 6.8 chains, N. 67 E. 2.0 chains, N. 45 E. 7.0 chains, S. 40 E. 3.0 chains, N. 51 E. 3.75 chains, and S. 62 E. 4.1 chains to an iron stake and pointers on the bank of said creek; thence along Provost's line S. 26-15 W. 10.42 chains; thence along Old Plank Road S. 65-15 E. 16.0 chains to an iron stake and pointers on the bank of Killetts Creek; thence along the run of Killetts Creek S. 28-30 W. 4.77 chains to the point of BEGINNING.

EXCEPTING, HOWEVER, from the above tract a 1 acre tract, more or less, conveyed by Colin G. Spencer and wife to Luther R. Cagle by deed recorded in Book 155, Page 5, Moore County Registry, said tract being described on the plat referred to below as follows: BEGINNING at the center of the intersection of old N. C. Highway 427 and new N. C. Highway 127; thence along the center of the old Highway N. 60 W. 1.5 chains, N. 71 W. 1.5 chains, N. 75 W. 1.5 chains, N. 78-30 W. 1.5 chains, N. 83 W. 1.5 chains, N. 87 W. 1.5 chains, and N. 80 W. 1.5 chains to a point where a culvert passes under the Highway; thence N. 28 E. 3.47 chains to a point in the center of the new Highway where a culvert passes under said Highway; thence along the center of the new Highway S. 57-30 E. 6.0 chains, S. 62 E. 1.5 chains; and S. 64 E. 2.50 chains to the center of said intersection.

The above tract containing a net acreage of 489.3 according to a plat by C. W. Ruggum, R.L.S., dated March 1958 and entitled "Continental Can Company, Inc., - Colin G. Spencer, Sr. Lands - Cagle Tract" and recorded in Plat Book 5, Page 61, Moore County Registry.

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Tract 9087

THERE IS EXCEPTED from Tract 9087 portions of land described in a Fee Simple Deed to Department of Transportation recorded November 24, 2008 in Book 3491 Page 303, Moore County Registry.

THERE IS EXCEPTED from Tract 9087 that 20.14 acres as described in deed to Chatham Lumber Company recorded November 10, 2003 in Book 2436 Page 239, Moore County Registry.

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Tract No. 9088
Moore County

TRACT 9088

MOORE COUNTY

CARTHAGE TOWNSHIP

MCNEILL TRACT

Lying and being in Carthage Township, Moore County, North Carolina, on both sides of Killetts Creek, about 2 miles southwest of the Town of Carthage, and bounded as follows, viz:

BEGINNING at the confluence of Killetts Creek with Cabo Branch, said point likewise being a corner of the Deahl Tract #1; thence along the line of the Deahl tract S. 30-15 E. 5.33 chains and N. 81-30 E. 6.62 chains; thence S. 21-45 E. 16.66 chains; thence along Seawell's line S. 45 E. 22.46 chains; thence N. 79-45 E. 18.6 chains; thence along Frye's line S. 5-30 E. 19.27 chains; thence S. 38-30 W. 5.35 chains; thence S. 6 E. 3.28 chains; thence N. 87-30 W. 14.86 chains; thence S. 3-45 E. 5.45 chains; thence S. 10-30 E. 6.15 chains; thence S. 6-30 W. 5.3 chains; thence along Williamson's line S. 84-45 W. 17.46 chains; thence along Harris' line N. 78-45 W. 33.42 chains; thence N. 15 E. 3.9 chains; thence N. 72-45 E. 8.33 chains; thence N. 17-15 W. 50.33 chains to the run of Cabo Branch; thence down the run of Cabo Branch S. 87 E. 6.44 chains, N. 45 E. 3.92 chains, N. 59 E. 4.77 chains; and N. 35-15 E. 8.06 chains to the point of BEGINNING; containing 322.0 acres according to plat by C. W. Russum, R.L.S., dated January 1956 entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. Tract #112-3390 (U. S. Deahl No. 1 & McNeill Tracts)"; and recorded in Plat Book 5, Page 66, Moore County Registry.

Said plat reflects a 15 foot wide access road, the center line of which runs as follows: BEGINNING at a stake in the line (the call for which is N. 87-30 W. 14.86 chains), said stake being located 3.2 chains from the western terminus of said line; thence crossing under a power line S. 3-45 W. 3.2 chains; thence S. 46-30 E. 2.5 chains; thence S. 59 E. 4.0 chains; thence S. 44-30 E. 4.0 chains to a point in the center of a state road.

BUT SAVING AND EXCEPTING 36.54 acres conveyed by Colin G. Spencer, Sr. and Wife, Lena Spencer, to the Town of Carthage by deed dated April 4, 1964, and recorded in Book 274, Page 93, reference to said deed being had for a metes and bounds description of the property herein excepted. See Book 274, Page 99, Moore County Registry, in which Continental Can Company, Inc., conveyed to the Town of Carthage its leasehold interest in the 36.54 acres herein excepted.

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Tract No. 9090
Moore County

~~TRACT 9090~~ Tract 9090
MOORE COUNTY
CARTHAGE TOWNSHIP

MERIDIAN TRACT (also including BARRETT TRACT #2)

Lying and being in Carthage Township, Moore County, North Carolina, on both sides of Richlands Creek, and being about 6 miles west of the Town of Carthage, bounded as follows, viz:

BEGINNING at an iron stake and pointers, corner with Bryo and Kennady, said stake being the southernmost corner of the 51.5 acre Barrett tract conveyed to Colin G. Spencer by deed recorded in Book 139, Page 447, Moore County Registry; thence along Kennedy's line N. 37-30 W. 32 chains to an iron stake and pointers on the bank of Richlands Creek; thence N. 46-30 E. 14.02 chains to an iron stake and pointers; thence N. 50 W. 39.04 chains; thence S. 41-15 W. 3.59 chains; thence N. 41-30 W. 4.15 chains; thence N. 57-45 W. 6.06 chains; thence S. 41-30 W. 11.14 chains; thence N. 71-15 W. 7.52 chains; thence N. 30-30 E. 12.67 chains; thence N. 78. E. 44.08 chains; thence N. 29-30 W. 35.53 chains; thence S. 67 E. 7.92 chains; thence along the run of Spring Branch the following courses and distances: S. 39 E. 2.5 chains; S. 72 E. 2.3 chains, S. 43 E. 3.45 chains, S. 59-30 E. 2.5 chains, S. 17 E. 4.5 chains, S. 11 W. 5.6 chains, S. 6-30 W. 3.0 chains, S. 55 E. 2.25 chains, S. 44 E. 2.0 chains, S. 19 E. 3.5 chains, S. 24-30 E. 4.25 chains, S. 67 E. 3.5 chains, S. 4 W. 2.0 chains, S. 65 E. 1.5 chains, S. 17-30 E. 2.0 chains, S. 5 W. 2.0 chains, S. 85 E. 1.25 chains, S. 14-30 E. 1.75 chains, and S. 20 E. 2.0 chains; thence S. 39 E. 12.9 chains to an iron stake and pointers on the Bank of Richlands Creek thence N. 88 E. 5.05 chains; thence S. 14-45 W. 21.73 chains; thence S. 10-55 W. 33.3 chains to the point of BEGINNING; containing 277.0 acres according to plat by C. W. Russum, R.L.S., dated February 1950 and entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. Tract" and recorded in Plat Book 5, Page 60, Moore County Registry.

TOGETHER with all of the right, title and interest of Grantors in and to a 45 foot wide access easement conveyed to Colin G. Spencer, Jr., Trustee, and Continental Hopewell Woodlands, Inc., by Bowater North America Corporation by instrument dated March 8, 1984, and recorded in Book 527, Page 467, Moore County Registry.

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Tract 9090 Page 2

THERE IS EXCEPTED from Tract 9090 that 25.6 acres as described in deed to Gifford H. Fisher et ux recorded February 28, 1996 in Book 1153 Page 420, Moore County Registry.

THERE IS EXCEPTED from Tract 9090 that 17.6 acres as described in deed to Ramsey G. Fisher Trust et al recorded February 28, 1996 in Book 1153 Page 422, Moore County Registry.

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TRACT 9091
MOORE COUNTY

TRACT 9091
MOORE COUNTY
CARTHAGE TOWNSHIP

STEWART TRACT

Lying and being in Carthage Township, Moore County, North Carolina, being about 3-1/2 miles northeast of the Town of Carthage, North Carolina, bounded as follows, viz:

BEGINNING at an iron stake and pointers on the bank of McLendon's Creek, Pressley's corner, same being the northernmost corner of this tract; thence S. 5-130 E. 6.41 chains; S. 52 E. 8.10 chains; S. 56-30 E. 11.33 chains; S. 21-15 E. 3.75 chains; S. 74-15 E. 12.9 chains; thence along C. T. Sinclair's line S. 31-45 W. 37.67 chains; thence N. 62-30 W. 6.0 chains; thence N. 50-30 W. 4.96 chains; thence S. 35-45 W. 2.1 chains; thence N. 62 W. 10.63 chains to an iron stake on the bank of McLendons Creek; thence down the run of McLendons Creek, a traverse line running as follows: N. 49 E. 1.75 chains, N. 61 E. 5.34 chains, N. 9 E. 3.18 chains, N. 31 E. 2.88 chains, N. 6-45 E. 3.18 chains, N. 33 W. 2.13 chains, N. 67-15 W. 4.17 chains, N. 43-45 W. 3.86 chains, N. 28-30 W. 2.13 chains, S. 77-30 E. 3.0 chains; N. 54-30 E. 4.1 chains, N. 18-30 W. 2.42 chains N. 52-45 W. 4.45 chains, S. 43-30 W. 3.78 chains, N. 52 W. 2.88 chains, N. 47-30 E. 3.42 chains, N. 56-30 E. 2.35 chains, N. 9-15 W. 5.45 chains, N. 30 E. 4.4 chains, N. 25-30 E. 2.58 chains, N. 83-15 W. 3.72 chains and N. 41-15 E. 5.9 chains to the point of BEGINNING; containing 119.0 acres according to plat by C. W. Runeum, R.L.S., dated November 1958 entitled "Continental Can Company, Inc. — Colin G. Spencer, Sr. Stewart Tract; and recorded in Plat Book 6, Page 26, Moore County Registry.

EXCEPTIONS:

Stewart Tract 119 acres

1. This property does not adjoin a public road but there is an access road shown on plat recorded in Plat Book 6, Page 26.

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TRACT 9091 & 9092
MOORE COUNTY

MOORE COUNTY TRACT NO. 9091

CARTHAGE TOWNSHIP

SULLIVAN TRACT

Lying and being in Carthage Township, Moore County, North Carolina, about 5 miles north from the Town of Carthage, and bounded as follows, viz:

BEGINNING at an iron stake in the bank of Rocky Branch, said stake a corner of Frank Clegg's land and being the westernmost corner of this tract; thence down the run of Rocky Branch N. 28-30 E. 7.82 chains, N. 55-15 E. 11.96 chains, and N. 87-30 E. 4.1 chains; thence along A. Crimtman's line S. 50 E. 10.54 chains; thence S. 50 E. 23.45 chains to an iron stake and pointers on the bank of McLendons Creek; thence along the run of McLendons Creek the following courses and distances: S. 53 W. 2.0 chains, N. 42 W. 2.0 chains, S. 50-30 W. 4.3 chains, S. 8 E. 2.1 chains, S. 14-30 W. 2.1 chains, S. 16-30 W. 2.61 chains; S. 48-30 E. 6.6 chains, S. 50-30 W. 2.2 chains, N. 64-15 W. 2.30 chains, S. 81 W. 3.11 chains, and S 41-15 W. 2.6 chains to an iron stake and pointers; thence along John Kelly's line N. 58 W. 24.9 chains; thence N. 61-15 W. 6.5 chains; thence N. 62-30 W. 7.67 chains to the point of BEGINNING, containing 76.0 acres according to plat by C. W. Ruesum, R.L.S., entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. - Sullivan Tract" and recorded in Plat Book 6, Page 27, Moore County Registry.

TRACT 9092

MOORE COUNTY

CARTHAGE TOWNSHIP

McAULEY TRACT

Lying and being in Carthage Township, Moore County, North Carolina, about 4 miles north of the Town of Carthage, and bounded as follows, viz:

BEGINNING at an iron stake and pointers, the southwest corner of this tract, Stewart's corner; thence along Stewart's line S. 82-45 E. 16.76 chains; thence along Currie's line S. 85-15 E. 16.50 chains; thence along Cagle's line N. 6-30 E. 7.72 chains, S. 87-30 E. 16.0 chains, and N. 1-45 E. 4.49 chains; thence along McRae's line N. 89-15 W. 15.59 chains; thence N. 6 E. 22.03 chains; thence along F. L. Knight's line N. 81-45 W. 17.09 chains and N. 81-30 W. 17.12 chains; thence S. 4-45 W. 36.30 chains along Stewart's line to the point of BEGINNING; containing 125.7 acres according to plat by C. W. Ruesum, R.L.S., dated November 1958 entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. McAuley Tract" and recorded in Plat Book 6, Page 31, Moore County Registry.

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Tract 9092 Page 2

THERE IS EXCEPTED from Tract 9092 that 1.00 acre to Donald Roy Spencer in deed recorded March 28, 2006 in Book 2997 Page 56, Moore County Registry.

34.

TRACT 9093
MOORE COUNTY

MOORE COUNTY TRACT 89093

CARTHAGE TOWNSHIP

RUSK-HAZENHILL TRACT :

Lying and being in Carthage Township, Moore County, North Carolina, about 2 miles north of the Town of Carthage and lying on both sides of the old County Home road, bounded as follows, viz:

BEGINNING at an iron stake and pointers, the northeast corner of this tract; thence S. 23-30 W. 14.6 chains; thence S. 0 E. 12.34 chains; thence N. 87 W. 6.54 chains; thence S. 19-30 W. 18.30 chains; thence S. 27-30 W. 7.10 chains; thence S. 14-45 W. 11.27 chains; thence N. 49-30 W. 15.21 chains; thence N. 22-15 E. 3.09 chains; thence N. 70 E. 4.05 chains; thence N. 19-30 W. 2.97 chains; thence N. 66-15 E. 4.21 chains; thence N. 21 E. 3.77 chains; thence N. 80 W. 2.1 chains; thence N. 0-15 E. 2.73 chains; thence N. 00 W. 3.2 chains; thence N. 0-15 E. 4.44 chains; thence N. 83 W. 6.46 chains; thence N. 5-45 E. 3.52 chains; thence N. 15-15 E. 4.54 chains; thence N. 60-30 W. 2.54 chains; thence S. 34-15 W. 5.34 chains; thence S. 10-15 E. 5.66 chains; thence S. 67-45 E. 2.06 chains; thence S. 22-15 W. 0.5 chains; thence N. 67-45 W. 10.96 chains; thence S. 24-15 W. 5.98 chains; thence N. 88 W. 9.94 chains; thence N. 9-30 W. 14.9 chains; thence N. 27-45 E. 32.77 chains; thence S. 63-15 E. 6.5 chains; thence S. 29-15 W. 23.20 chains; thence S. 60-30 E. 14.00 chains; thence N. 34-30 E. 11.15 chains; thence N. 31 E. 15.72 chains; thence S. 60-45 E. 22.06 chains to the BEGINNING; containing 176.3 Acres according to plat by C. W. Rusnum, R.L.S. dated October 1950 entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. Tract." and recorded in Plat Book 5, Page 67, Moore County Registry.

Also all of the right, title and interest of Grantors in and to those three tracts of land conveyed to Colin G. Spencer, Jr., Trustee of the Colin G. Spencer Family Trust, by Colin G. Spencer, Jr., et al by Correction Deed recorded in Book 439, Page 947, Moore County Registry, reference to said correction deed being had for an accurate description of the tracts described therein by metes and bounds.

THERE IS EXCEPTED from the above property Lots Nos. 54, 55, 56, 57 and 58 in Block "A" as shown on a survey dated December 6, 1960, by W. H. McLaughlin, Surveyor, conveyed by Colin G. Spencer, Jr., Trustee of the Colin G. Spencer Family Trust, to Garland W. Howdy by deed dated December 17, 1969, and recorded in Book 458, Page 496, Moore County Registry.

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TRACT 9094
MOORE COUNTY

TRACT 9094.

MOORE COUNTY

CARTHAGE TOWNSHIP

WILLIAMSON TRACT

Lying and being in Carthage Township, Moore County, North Carolina, on both sides of Court House Branch being about 1 mile west of the Town of Carthage and bounded as follows, viz:

BEGINNING at an iron stake a short distance north of Court House Branch, Seawell's corner, the northwest corner of this tract; thence N. 65 E. 3.38 chains; thence along Hurley's line S. 73-15 E. 13.0 chains and S. 81-30 E. 7.92 chains to an iron stake near the bank of Court House Branch; thence S. 57-30 E. 13.23 chains; thence S. 0-30 W. 5.98 chains; thence N. 54-30 W. 13.1 chains; thence S. 76-30 W. 3.41 chains; thence S. 20-45 E. 3.64 chains; thence S. 64-30 E. 11.38 chains; thence S. 39 E. 3.66 chains to an iron stake on the southwest side of a State road; thence crossing the road S. 07-15 E. 2.23 chains to a monument; thence crossing the road again S. 0-30 W. 8.92 chains; thence N. 60-30 W. 2.85 chains; thence N. 60 W. 2.26 chains; thence N. 68-30 W. 10.83 chains; thence S. 21-30 W. 3.75 chains; thence N. 70-15 W. 20.05 chains; thence N. 80-30 W. 1.65 chains; thence N. 0-30 E. 20.84 chains to the BEGINNING, containing 68.2 acres according to plat by C. W. Russum, R.L.S., dated January 1980 entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. Tracts 1112-339L (Williamson Tract); and recorded in Plat Book 5, Page 62, Moore County Registry.

BUT SAVING AND EXCEPTING from the above tract an easement for a sewer line 20 feet in width conveyed by Colin G. Spencer, Sr. and wife, Lena F. Spencer, and Continental Can Company, Inc., to the Town of Carthage, dated March 1, 1965 and recorded in Book 279, Page 576, Moore County Registry; reference to said deed of easement being had for an accurate description of the easement conveyed.

For chain of title to the above tracts of land see Short Lease Agreement from Colin G. Spencer, Sr. and wife, Lena Fowler Spencer, to Continental Can Company, Inc., dated February 25, 1959, and recorded in Book 230, Page 346, Moore County Registry. See also Deed in Trust from Lena F. Spencer, et al, to Colin G. Spencer, Jr., Trustee, dated December 23, 1974, and recorded in Book 390, Page 308, Moore County Registry.

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TRACT 9095
MOORE COUNTY

TRACT 9095

MOORE COUNTY

CARTHAGE TOWNSHIP

SHAW TRACT

Lying and being in Carthage Township, Moore County, North Carolina, on both sides of Crawley Creek, being about 4 miles north of the Town of Carthage, North Carolina, and abounded as follows, viz:

BEGINNING at a stake and pointers on the bank of Crawley Creek, near the confluence of Crawley Creek and East Crawley Creek; thence S. 42 E. 5.4 chains; thence S. 47 E. 5.0 chains; thence S. 1-15 W. 9.56 chains; thence S. 87 E. 9.9 chains; thence S. 78 E. 15.0 chains; thence S. 11 W. 10.2 chains; thence S. 86 W. 11.45 chains; thence S. 7-45 W. 6.45 chains; thence N. 87-30 W. 11.6 chains; thence S. 2 W. 5.0 chains; thence N. 88 W. 5.5 chains; thence S. 22-30 E. 29.07 chains; thence S. 80 W. 10.0 chains; thence S. 10-30 E. 17.95 chains; thence S. 58-45 W. 10.0 chains; thence S. 75-15 W. 5.9 chains to an iron stake and pointers on the bank of Crawley Creek; thence down the run of Crawley Creek the following courses and distances: N. 43 E. 1.20 chains, N. 26 E. 2.00 chains, N. 17 E. 2.70 chains, N. 1-30 E. 1.98 chains, N. 5-30 E. 2.88 chains, N. 76 W. 2.58 chains, N. 52 W. 3.60 chains, N. 54 W. 1.30 chains, N. 23-30 W. 2.42 chains, N. 7-30 W. 1.02 chains, N. 69 W. 2.14 chains, N. 39-30 W. 2.71 chains, N. 11-30 W. 2.74 chains, N. 67 W. 2.26 chains, N. 4-30 W. 3.1 chains, N. 4 E. 2.26 chains, N. 35-30 W. 3.67 chains, N. 10 W. 3.75 chains, N. 1-30 E. 4.0 chains, N. 74 E. 4.5 chains, N. 7 E. 4.6 chains, N. 22-30 E. 6.0 chains N. 8 E. 3.0 chains, N. 40 E. 4.5 chains, N. 30 E. 3.2 chains, N. 37 E. 4.0 chains to an iron stake and pointers on the bank of said creek; thence N. 64-15 W. 31.56 chains; thence N. 33-45 E. 17.66 chains; thence S. 78-30 E. 28.75 chains to the point of BEGINNING; containing 251.0 acres according to plat by C. W. Russum, R.L.S., entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. land & Shaw Tract" and recorded in Plat Book 5, Page 60, Moore County Registry.

TOGETHER with the access easement referred to in that deed from T. N. Fields, widower, to Colin G. Spencer, said deed being dated July 19, 1946, and recorded in Book 151, Page 179, Moore County Registry.

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Tract 9095 Page 2

THERE IS EXCEPTED from Tract 9095 that 6.93 acres to Elizabeth Jane Henderson as described in Deed Book 2453 Page 195, Moore County Registry.

TRACT 9097
MOORE COUNTY

Moore County — Tract No. 9097
Pikers & Deep River Townships — Rush-Tyndall Tract #1 (Page 1 of 3)

Lying and being in Pikers and Deep River Townships, Moore County, North Carolina, about 7 miles north of Carthage, and bounded as follows, viz:

BEGINNING at an iron stake in a public road, being a corner of the 8 acre track conveyed by John Dowdy, Widower, to Colin G. Spencer by deed dated November 20, 1952 recorded in Book 173, Page 454, Moore County Registry; runs thence N. 24-30 W. 3.9 chains; thence N. 20 E. 4.2 chains; thence N. 87-45 W. 20.5 chains; thence N. 10-45 E. 15.9 chains; thence N. 57 W. 20.4 chains; thence N. 20-15 E. 23.42 chains; thence S. 27 W. 2.55 chains; thence S. 40 W. 2.55 chains; thence N. 60-30 W. 29.0 chains; thence N. 67-30 W. 10.7 chains; thence N. 70 W. 1.65 chains; thence N. 65-15 W. 11.18 chains; thence N. 69-30 W. 43.72 chains to an iron stake near a spring; thence N. 5 W. 4.66 chains; thence S. 85 E. 11.1 chains; thence S. 80-15 E. 3.0 chains; thence S. 72-45 E. 20.5 chains; thence N. 55-30 E. 3.3 chains; thence N. 15-30 E. 3.5 chains; thence S. 30 E. 1.45 chains; thence S. 50 E. 1.44 chains; thence N. 84 E. 4.5 chains; thence S. 0-15 W. 1.4 chains; thence S. 16-45 E. 3.14 chains; thence S. 11-40 E. 9.33 chains; thence N. 62-15 E. 14.44 chains; thence N. 16 E. 10.0 chains; thence along run of branch S. 85 E. 3.3 chains; S. 14-30 E. 4.50 chains; N. 69 E. 5.6 chains; S. 17 E. 6.5 chains; S. 46 E. 6.0 chains; S. 48 E. 5.5 chains; S. 6 E. 3.6 chains; thence S. 6-30 W. 3.36 chains; thence N. 21 E. 6.06 chains; thence S. 48-45 E. 16.5 chains; thence S. 49-15 E. 2.23 chains; thence S. 3-30 W. 4.5 chains; thence S. 46-45 W. 4.95 chains; thence S. 54 E. 5.58 chains; thence S. 76-30 E. 10.42 chains; thence N. 72-30 E. 1.7 chains; thence N. 19 E. 13.38 chains; thence N. 24-30 E. 2.9 chains; thence N. 34-45 E. 8.56 chains; thence S. 18-30 E. 11.8 chains; thence N. 44-10 E. 5.6 chains; thence N. 48-30 E. 27.4 chains; thence S. 23-30 W. 27.54 chains; thence S. 23 W. 8.92 chains; thence S. 21 W. 3.9 chains; thence S. 22-30 E. 30.36 chains; thence S. 59 E. 3.68 chains; thence N. 69 E. 4.73 chains; thence N. 40-30 W. 15.15 chains to the point of BEGINNING; containing 463.7 acres according to plat by C. W. Russum R.L.S., dated April 1959 entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. Tract - Plaids Tract" and recorded in Plat Book 5, Page 63, Moore County Registry.

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TRACT 9092

MOORE COUNTY

CARTHAGE TOWNSHIP

(Page 36 of 73)

MUSE-FIELDS TRACT II (Also known as GRANT TRACT)

Lying and being in Carthage Township, Moore County, North Carolina, northeast of the Town of Carthage, and bounded as follows, viz:

BEGINNING at an iron stake in the Parker line the southwest corner of this tract; thence N. 22-45 E. 8.65 chains to an iron stake; thence S. 63-45 E. 20.6 chains to an iron stake; thence S. 24-15 W. 7.23 chains to an iron stake; thence N. 56-45 W. 19.0 chains to an iron stake; thence N. 67-30 W. 10.65 chains to the point of BEGINNING; containing 13.5 acres according to plat by C. W. Russum, R.L.S., dated November 1958 entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. - Grant Tract" and recorded in Plat Book 6, Page 24, Moore County Registry.

HAYES TRACT

Lying and being in Deep River Township, Moore County, North Carolina, about 5 miles north of Carthage, and bounded as follows, viz:

BEGINNING at an iron stake just west of the Cole's Mill Road, and runs thence N. 27-15 E. 25.63 chains to an iron stake and pointers on the bank of Line Branch; thence up the run of said branch N. 89 E. 1.29 chains, S. 86-30 E. 3.50 chains, S. 69-30 E. 1.51 chains, N. 40-15 E. 46 chains, S. 76-30 E. 2.54 chains, and S. 79 E. 3.62 chains to an iron stake and pointers on the bank of said branch; thence S. 21 E. 24.75 chains to an iron stake and pointers; thence W. 84-15 W. 13.95 chains to the point of BEGINNING; containing 12.0 acres according to plat by C. W. Russum, R.L.S., dated October 1958 entitled "Continental Can Company, Inc. - Colin G. Spencer, Sr. Tracts" and recorded in Plat Book 6, Page 30, Moore County Registry.

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Tract 9097 (Page 3 of 3)

THERE IS EXCEPTED from Tract 9097 that 0.84 acre as described in deed to Fred L. Brown et ux recorded December 31, 2002 in Book 2152 Page 516, Moore County Registry.

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TRACT 9098
MOORE COUNTY

TRACT 9098
MOORE COUNTY
RITTERS TOWNSHIP

HASTY TRACT (ALSO KNOWN AS CHESTNUT RIDGE TRACT)

Lying and being in Ritters Township, Moore County, North Carolina, about 11 miles north of the Town of Carthage, and bounded as follows, viz:

BEGINNING at an iron stake, Thompson's corner in Warren's line; runs thence along Thompson's line N. 4-E 25.35 chains; thence along Seawell's line S. 86-15 E. 4.8 chains, N. 46-30 E. 4.79 chains, N. 51-45 E. 5.16 chains, and N. 70-45 E. 29.68 chains; thence along A. L. Johnson's line S. 19-30 E. 2.50 chains to a point in the center of the State Road; thence along the center of said road S. 86 W. 4.94 chains and S. 41-20 W. 14.0 chains; thence leaving the road S. 51-45 W. 10.44 chains; thence S. 9-45 W. 6.81 chains; thence S. 15-30 W. 2.45 chains; thence N. 86 W. 5.05 chains; thence S. 7 W. 7.47 chains; thence S. 3-45 W. 3.05 chains; thence E. 86-45 E. 4.7 chains to a point in the center of said road; thence S. 7-30 W. 2.58 chains; thence N. 85-15 W. 18.0 chains to the point of BEGINNING; containing 66.7 acres according to plat by C. W. Ruseum, R.L.S., dated November 1958 entitled "Continental Can Company, Inc. - Colin C. Spencer, Sr. - Hasty Tract #112-339L" and recorded in Plat Book 6, Page 29, Moore County Registry.

LESS AND EXCEPTING:
Being the approximately 0.05 acre portion of the Hasty Tract described in Deed Book 607, Page 121 of the Moore County Registry which lies east of the right-of-way of Putnam-Glendon Rd. And being the property conveyed by Jordan Timberlands, Inc. to John Stuart Rowley and wife, Emily Marie Rowley in Book 4957, Page 309, Moore County Registry.

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TRACT 9102
MOORE COUNTY

PARCEL #9102

Carthage Township, Moore County, North Carolina:

Beginning at an iron stake beside a lightwood stake in a drain with pointers as shown on the map hereinafter referred to; and also being the common corner of the lands of Catawba Timber Company, Ross Tyson, the 6.25 acre tract described in Book 234, page 42, Moore County Registry, and the 35.8 acres described in Book 210, Page 225, Moore County Registry, all of which are shown on said map, and running thence with said Tyson Tract; South 27° 17' West, 660 feet to an iron stake; thence North 61° 43' West, 165 feet to an iron stake; thence North 27° 17' East, 330 feet to an iron pin; thence North 61° 43' West 495 feet to an iron pin near a large oak tree; thence North 27° 17' East, 330 feet to an iron pin; thence South 61° 43' East 660 feet to an iron stake, the beginning point; thence North 33° 1.5' East, 652.21 feet to an iron pin; thence South 83° 13.7' East, 329.53 feet to an iron pin; thence as the run of Duck Branch, South 73° 7.3' East, 208.22 feet; North 77° 22.5' East, 209.84 feet and South 78° 15.2' East, 135.23 feet to an iron bar, maple pointers on north bank of Duck Branch; thence North 10° 28.3' East, 361.74 feet to iron pin in rock pile; thence South 67° 10.7' East, 614.93 feet to an iron pin about one foot west of a fence and hickory pointers; thence South 24° 86' West, 264 feet to an iron pin; thence South 48° 38' East, 1108.46 feet to an iron pin on Southeast bank of Rocky Branch; thence as the run of Rocky Branch in a southwest direction approximately 1600.90 feet to an iron pin on the northwest bank of Rocky Branch; thence North 54° West 456.01 feet to an iron pin, dogwood and oak pointers; thence North 52° 45' West, 1295.91 feet to the point of beginning, containing 62.85 acres, and comprised of three tracts of land of 6.25 acres, 20.8 acres, and 35.8 acres.

The above description is taken from a map of said land entitled "Map for Charles Atkins" dated April 11, 1980, by C. H. Blue and Associates, which map is recorded in Plat Cabinet 2, Slide 76, Moore County Register of Deeds Office.

The Grantor hereby conveys and assigns to grantee the right of ingress and egress on that 15-foot easement from State Road No. 1640 to the property above described, said easement being shown and described on a map by C. E. Russum, RLS, recorded in Map Book 6, Page 27, Moore County Registry.

Derivation: Being that same property conveyed to Boise Cascade Timberlands-Southeast by deed recorded in Book 463, Page 67, Registry of Deeds for Moore County, North Carolina.

Derivation: Being that same property conveyed to Boise Cascade Corporation by Boise Cascade Timberlands-Southeast by deed dated October 14, 1988, and recorded November 28, 1988, in Book 00635, Page 00337, Registry of Deeds for Moore County, North Carolina.

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TRACT 9108
MOORE COUNTY

PARCEL #9108

or successors, and assigns the parcel(s) of land by ... County, North Carolina, in ... Carthage ... Township, adjoining the lands of ... and others, and more particularly described as follows:

BEGINNING at a stake and corner known as Julius Glasscocks corner, near or on the bank of Courthouse Branch, on the south side, also Mrs. Laura Lang's corner and Colin Spencer's corner, and runs thence S 21-45 E 20.31 ch. to a stake and pointers on the north side of an old road; thence S 45 E with Colin Spencer's line, 22.46 ch. to a stake and pointers; thence N 79-45 E as another of Colin Spencer's lines, 9.3 ch. to a stake; thence N 6-30 E 25.5 ch. to a stake corner; thence N 88-30 W 1.65 ch. to a stake; thence N 0-30 E 20.84 ch. as another of Colin Spencer's lines to a stake, also Colin Spencer's corner; thence S 88 W 8.5 ch. to a stake on the Courthouse Branch; thence down the various courses of the branch to the BEGINNING, being Lot #6 of the division of the home tract of A. H. McNeill's estate, containing 104 acres more or less.

The above tract is the identical property conveyed by Charles A. Hostetler, Commissioner to Felix Baker and wife Mae D. Baker by deed dated March 30, 1966 recorded in Book 289, page 611, Moore County Registry. See also deed dated May 3, 1966 recorded in Book 290, page 393, Moore County Registry.

Reference is further made to plat by Thomas J. Matthews dated May 1970 entitled "Map Showing Property of Continental Can Company, Inc. Felix Baker Tract 549-131" for a more detailed description of the tract hereby conveyed, which plat reflects the tract to contain 117.6 acres.

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TRACT 9112
MOORE COUNTY

TRACT 59112

JORDAN LUMBER & SUPPLY, INC.

certain lot or parcel of land situated in the City of ..... Sheffield ..... Township, ..... Moore ..... County, North Carolina and more particularly described as follows:

Being that 63 acres tract more particularly described on the map prepared by Thomas J. Wields, RLS-2906, on November 5, 1990, entitled, "Jordan Lumber and Supply, Inc.-The Onie Morgan Tract near N.C. Secondary Road 1403, Sheffield Township, Moore County, North Carolina", the original of which map is recorded in Plat Cabinet 5 at Slide 7 in the office of the Register of Deeds of Moore County, N.C., to which reference is made for a detailed description.

For title reference see Deed Book 750, Page 263, Moore County Registry.

There is also conveyed a right of way for ingress and egress more particularly described in Book 781, Page 985.

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TRACT 9113
MOORE COUNTY

PARCEL #9113

certain lot or parcel of land situated in the City of ..... Sheffields ..... Township, Moore ..... County, North Carolina and more particularly described as follows:

Beginning at a stake in the mouth of the flat ground branch two dogwood pointers, running thence down grade Wolf Creek one chain and 25 links to Peter Hare line by stake by two white oak pointers; thence as said line South 30 E. 6 chains to a stake in the run of the oat field branch red oak, maple, ash pointers, beginning corner of one hundred and fifteen acre survey granted Jotsul to Ruben Greenan; thence as it S. 30 E. 32 chains and 60 links to a stake by two red oak and a pine on David Alinon's line; thence as his line S. 13 chains to Alison's corner, thence as Alison's other line W. 31 chains to Neill McLeod's line; thence as it N. 24 W. 27 chains to his corner; thence down the various courses of the aforesaid flat ground branch to the beginning containing one hundred and seventeen acres, more or less.

There is also conveyed that thirty(30) feet wide easement described below:

A tract or parcel of land lying and being in Sheffield Township, Moore County, North Carolina, being a 30 foot strip of the Webster Davis property located along North Carolina Secondary Road 1403, more particularly described as follows:

BEGINNING at a 3/4 inch iron pipe found as the southwest corner of the Onnie Morgan Tract (Deed Book 329 Page 39) and a common corner with the Beulah Parks property (Deed Book 127 Page 69), being S 63°11'13" W 449.73 feet from a 19 inch dead hickory tree, another common corner between the Onnie Morgan Tract and the Beulah Parks property, thence a line with the Parks property and continuing with the H.A. Freeman property (Deed Book 127 Page 59)

S 82°51'05" W crossing an axle next to an iron fence post at 1461.36 feet, said axle being a common corner between Webster Davis and H.A. Freeman, and continuing for a total distance of 1348.64 feet to a point in the center of North Carolina Secondary Road 1403, being N 17°27'33" E 3136.46 feet from the intersection of North Carolina Secondary Road 1403 with North Carolina Secondary Road 1002, also being N 14°03'17" E 10.06 feet from a railroad spike in the center of North Carolina Secondary Road 1403; thence a line with the center of said road

N 14°03'17" E 32.18 feet to a point in the center of North Carolina Secondary Road 1403; thence a new line across the Webster Davis property

N 82°51'05" E 1513.96 feet to a point in the common boundary line between Webster Davis and the Onnie Morgan Tract, being S 44°40'36" E 258.17 feet from a 3/4 inch iron pipe in the Davis line; thence a line with the Davis and Morgan line

S 44°40'36" E 37.83 feet to the BEGINNING, containing 1.05 acres, more or less, as shown on a survey by Thomas J. Fields, RLS-2906.

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TRACT 9130
MOORE COUNTY

Tract 9130 -Page 1

MOORE COUNTY, CARTHAGE TOWNSHIP

Exhibit A

Tract 1 --

All that certain lot, track or parcel of land in Carthage Township, Moore County, North Carolina, situated about four miles northwest from the Town of Carthage, and adjoining lands owned or formerly owned by Mrs. Jane Sears Dowd, Jessie L. Sullivan, L. G. Cookman, John Beasley, and others, and State Highway No. 27 from Raleigh to Charlotte and being particularly described as follows:

Beginning at a stake in an old Road on the north side of Highway #27, running thence N. 80 W. 860 feet to a stake north of the highway; thence N. 75 W. crossing the highway 1900 feet to a stake and rocks on the south side of the highway; thence N. 20 E. 66.6 feet to the center of the highway; thence S. 46 W. 1850 feet to a stake in a branch, gum pointers; thence down the various courses of the branch N. 40 W. 1150 feet to a stake in the branch; thence S. 26½ W. 1188 feet to a stake in a drain; thence N. 28 W. 858 feet to a stake; thence S. 24-15 W. 1350 feet to a stake; thence S. 39 W. 264 feet to a stake; thence S. 37 W. 1437 feet to a stone; thence N. 28 W. 1518 feet to a stake; thence S. 50 W. 561 feet to a stone; thence S. 45 E. 1452 feet to a stone; thence S. 45 W. 231 feet to a stone; thence S. 10 E. 1221 feet to a stone; thence N. 84 E. 231 feet to a stone in a branch, pine pointers; thence S. 20 E. 891 feet to a stake, maple and dogwood pointers; thence S. 30 W. 726 feet to a stake on the bank of McLendon's Creek, iron wood, sweet gum and white oak pointers; thence down the various courses of the creek S. 72 E. 200 S. 56 E. 300 S. 70 E. 258 feet S. 15 W. 291 feet S. 61 E. 250 feet to the mouth of a ditch, running in to the creek from the south; thence leaving the creek S. 13 W. 660. feet to a stake; thence S. 11-30 W. 1670 feet to a stone; thence N. 71 E. 469 feet to a stake; thence S. 80 E. 459 feet; thence N. 75-15 E. 1500 feet to a stone; thence S. 13-30 E. 2397 feet to a stone; thence N. 76 E. 2300 feet to Lick Branch; thence down the various courses of said branch N. 75 E. 264 feet to an iron stake, gum pointers, a corner of Goodwin's Sears Land N. 35 E. 205 feet to a stone N. 35 E. 427 feet to a rock on the bank of Lick Branch in the old Salisbury Road, a corner of Lamy's land; thence as to branch N. 20 E. 630 feet N. 3 W. 362 N. 72 W. 156 N. 21 W. 122 N. 47 W. 167 feet N. 1 E. 700 feet N. 18½ E. 1150 feet to Spencer's corner of the Cagle farm N. 41 W. 250 feet N. 15 E. 330 feet N. 330 feet to Spencer's other corner; thence leaving the branch N. 76½ W. 500 feet to a stone; thence N. 12 W. 1837 feet to the bank of McLendon's Creek; thence down the various courses of the creek N. 132 feet N. 30 E. 255 feet N. 28 W. 150 feet N. 26 W. 452 feet S. 87

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Moore County, Carthage Township

E. 373 feet N. 33 E. 135 feet N. 71 E. 250 feet to Beasley's corner; thence leaving the creek N. 16 W. 231 feet, N. 61 W. 116.5 feet N. 0 W. 231 feet N. 20 E. 511.5 feet to a rock; thence N. 68 E. 683 feet to a stake; thence N. 50 W. 518 feet to a stake, Maple pointers; thence N. 16 W. 1132 feet to the beginning, containing 116½ 3/4 acres, more or less.

Saving and excepting from Tract 1 the following described properties, to wit:

Exception 1 -- All that certain tract or parcel of land lying and being situate in Carthage Township, Moore County, North Carolina, more particularly described as follows: Beginning at a point on the North side of Highway No. 27 at the Southwest corner of the Hoyette property; running thence along the Hoyette line N. 14° W. approximately 203 feet to the Person property; thence along the Person line N. 80° W. approximately 957 feet; thence N. 75° W. approximately 1110 feet to the North side of said Highway 27; thence along the North side of said Highway 27 S. 51° E. 800 feet; thence S. 70° 30' E. 1465 feet to the point of beginning; the same containing 8.2 acres, more or less, and being that portion of the Binneywood Tract of land lying and being on the North side of said Highway No. 27; and being a part of the identical real property conveyed unto the said party of the first part by deed of Ocie J. Cagle, et al, dated March 18, 1946, recorded in Book 143 at page 40, Moore Public Registry, reference to said deed being hereby made for greater certainty of description.

Exception 2 -- All that certain tract or parcel of land lying and being situate in Carthage Township, Moore County, North Carolina, more particularly described as follows: Beginning at a point in the H. Arnold Jackson property line which said point is N. 14° W. 946 feet from an iron stake on the South side of North Carolina Highway No. 27, said stake at said highway being a common corner for the Binneywood tract of land owned by Halifax Paper Company, Inc, and the property of H. Arnold Jackson; running thence along a new made line S. 25° E. 507.8 feet to an iron stake in said Jackson line; thence along said Jackson line N. 60° E. 515.8 feet; N. 73° E. 208.2 to an iron stake; thence continuing along said Jackson line N. 58° W. 276 feet; N. 58° W. 237 feet to the point of beginning; said tract containing 3.3 acres, more or less and being approximately triangular in shape and being a portion of the Binneywood Tract of land conveyed unto Halifax Paper Company, Inc. by deed of Ocie J. Cagle, et al, dated March 10, 1946, recorded in Book 143 at page 40, Moore Public Registry.

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EXCEPTION 3:

All that certain tract or parcel of land lying and being situate in Carthage Township, Moore County, State of North Carolina, known as the Person tract, and being more particularly described as follows:

Beginning at a point on the South side of Highway No. 27 at or near the Northwest corner of the Hennywood tract of land owned by Halifax Paper Company, Incorporated; running thence along the line of the Hennywood tract N. 20° E. 180 feet; thence S. 75° E. approximately 618 feet to said Highway No. 27; thence along said Highway No. 27 in a Westerly direction approximately 675 feet to the point of beginning; the same containing 1.3 acres, more or less, and being that portion of the Person land lying on the South side of said Highway No. 27 and which lies immediately to the North of the Northwest corner of the Hennywood tract.

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Tract 9130 – Page 4

THERE IS EXCEPTED from Tract 9130 all property lying on the West side of the creek, which runs through this tract. The approximate net acreage is 529.

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TRACT 9131
MOORE COUNTY

TRACT NO. 9131

In Greenwood Township, Moore County, North Carolina

A tract or parcel of land in Greenwood Township, Moore County, North Carolina, adjoining the lands now or formerly owned by R. H. Whitaker, Mrs. Howie, the heirs of C. G. Wadsworth and others, described by metes and bounds as follows:

BEGINNING at a stake on the east side of a small branch, the beginning corner of Lot No. 1; and running thence as its line N. 11 W. 17 chains to a stake in the center of the Cotton Road; second corner of Lot No. 1; thence as said road N. 65 W. 8 chains and 90 links to a stake in the center of said road, a corner of Lot No. 3; thence S. 29 chains and 75 links to a stake and pointer in the line of C. G. Wadsworth heirs; thence E. 43 E. 15 chains to a stake, pine and post oak pointers; thence N. 87 E. 6 chains and 60 links to a stake and pointers; thence N. 14 W. 21 chains to the beginning, containing 41.3 acres, more or less, as shown by a plat drawn by J. Chandler Bakes, Registered Surveyor, June 15, 1954; the same being Lot #1 in the division of the A. M. Yow lands.

The aforesaid property was conveyed to Halifax Timber Company by deed dated October 27, 1967 recorded in Book 304, at Page 573, in the office of the Register of Deeds of Moore County.

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TRACT 9132
MOORE COUNTY

TRACT NO. 9132

In Carthage Township, Moore County, North Carolina

All of that certain tract and parcel of land lying and being in Carthage Township, Moore County, North Carolina, adjoining the lands now or formerly belonging to H. T. Cobb, W. D. Kelly, Whitaker, Dunlap and others and more particularly described by Metes and Bounds as follows:

BEGINNING at an iron stake on or near the public road in the line of Dunlap; thence crossing said road with the line of W. D. Kelly, N. 34 deg. West 20.18 chs. to an iron stake; thence re-crossing said road and continuing along the line of Watson N. 83 Deg. E. 31.75 chs. to a stake, dogwood and maple pointers; thence S. 13 deg. W. 4.5 chs.; thence S. 48 deg. E. 17.75 chs. to a stake and maple pointers; thence crossing a road and continuing along the line of Cobb, S. 31 deg. E. 24 chs. to a stake, oak pointers; thence along the line of Whitaker and Dunlap N. 81 Deg. W. 27 chs.; thence along the line of Dunlap N. 84 deg. W. 22.20 chs. to the point and place of beginning containing 103 acres, more or less; and being the same and identical tract of land conveyed to E. T. Hall and wife Ruth A. Hall by Glenn R. Elliott and wife Doris R. Elliott under deed dated January 18, 1953 and recorded in the Moore County Registry in Deed Book 250 on page 468 to which record reference is hereby made.

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TRACT 9134
MOORE COUNTY

PARCEL #9134

JORDAN LUMBER & SUPPLY, INC.

Lying and being in Deep River Township, Moore County, North Carolina, more particularly described as follows:

Beginning at John Vick's corner and running thence S. 37 E. 5.37 chains to a stake, white oak; pine and post oak pointers; thence N. 12 E. 24.60 chains to a stake, hickory and red oak pointers; thence S. 79 W. 18.66 chains to P. Loves and N. H. Brady's corner of an old survey, stake, maple and hickory pointers; thence S. 13 W. 26.71 chains to a stake in John Vick's line; thence N. 54 E. 18 chains to the Beginning, containing 36 1/2 acres, more or less, being the same land conveyed by J. W. Brady to C. H. Harris by deed recorded in Book 85, Page 169 and conveyed by M. D. Brady and J. W. Brady by deed recorded in Book of Deeds 64, page 578, Moore County Registry.

Being the same property described in a deed dated January 2, 1952 from Colin G. Spencer and wife, Lena Fowler Spencer to Uriah S. Deahl, Jr. and wife, Elizabeth S. Deahl, recorded in Book 171, Page 358, Moore County Registry.

For title reference see deed to Jordan Lumber & Supply, Inc. recorded in Book 891, Page 437, Moore County Registry.

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TRACT 9135
MOORE COUNTY

PARCEL #9135

JORDAN LUMBER & SUPPLY, INC.

certain lot or parcel of land situated in the City of ..... BENSALEM ....., Township ..... MOORE ..... County, North Carolina and more particularly described as follows:

FIRST TRACT:

Being a portion of the McDonald Gillis Grant of 125 acres, the balance being now owned by A. H. Kelly, W. K. Kelly and Evander Kelly. BEGINNING at a corner of said grant, viz: A stake, two pine pointers; thence North ten chains to a stake having a red oak pine and post oak pointers; thence East twenty chains to a stake among two post oaks and a hickory pointers; thence South ten chains to a post oak in Hector McLean's line; thence as it West twenty chains to a second corner of fifty acres containing twenty acres, more or less. And being the same land conveyed on the eighth day of March, 1938 by Margaret Kelly to Bishop Leak and Mary Jane Leak. And being the home place of the late Columbus Morgan, where he resided during his life and where his widow and children now live.

SECOND TRACT:

BEGINNING at a stake and post oak pointers; corner of land owned or formerly owned by K.B. Kelly and J.A. Cole, running thence as Kelly's line South 85 East 16.20 chains to a stake; thence North 10.00 chains to a stake; thence East 20.00 chains to stake; thence South 3.50 chains to a stake; thence East 6.30 chains to a stake; thence North 6.63 chains to a stake; thence North 63 West 17.00 chains to a stake; thence North 25 East 21.50 chains to a stake; thence North 83 West 48.00 chains to a stake; thence South 8 West 7.00 chains to a stake; thence South 18 East 40.00 chains to the beginning, containing 156 acres, more or less.

For title reference see Deed Book 902, Page 241, Moore County Registry.

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TRACT 9140
MOORE COUNTY

PARCEL #9140

A certain parcel of land in Carthage Township, Moore County, North Carolina, USA, located at the intersection of NC Hwy 24 & 27 and NC Hwy 22, about 6 miles west of Carthage, being comprised of several tracts recorded in DB 302, P 13; DB 302 P 16; and DB 302, P 19 and a certain 21.4 acre parcel of unknown ownership at present but was part of the second tract of DB 1, P 125, dated 1844. Said 173.03 acre parcel having a boundary described as follows:

BEGINNING at a new PK nail set where the centerline of NC Hwy 24 & 27 crosses the center of Richland Creek, (said point being the northeast corner of a 1.95 acre parcel recorded in DB 302, P 19) and running thence as the road, N 65-39 W 540.28 feet to a new PK nail; thence N 16-28 W 2,478.57 feet, crossing NC Hwy 22, to an existing iron stake in the Fortson line; thence as the Fortson line, S 38-44 W 1,309.11 feet to a new iron pipe set in the centerline of the old Plank Road; thence as the old Plank Road, the following courses, S 56-17 E 193.36 feet, S 53-41 E 195.77 feet, S 51-55 E 193.88 feet, S 49-55 E 199.84 feet, S 45-41 E 197.11 feet, S 43-01 E 188.17 feet, S 42-47 E 199.07 feet, S 42-34 E 78.56 feet to a new iron pipe set in the old Plank Road, a corner with Stewart (DB 210, P 349); thence as the Stewart line, S 01-00 E 1,695.87 feet, crossing NC Hwy 24 & 27, to the center of Richland Creek; thence as the run of Richland Creek (upstream) the following courses, S 71-32 W 21.59 feet, N 66-50 W 134.42 feet, N 43-51 W 130.91 feet, N 83-51 W 48.98 feet, N 69-46 E 81.82 feet, N 29-49 W 69.78 feet, N 81-28 W 83.90 feet, N 40-28 W 114.28 feet, S 78-17 W 94.52 feet, N 81-23 W 344.69 feet, N 64-46 W 59.29 feet, S 84-26 W 73.98 feet, S 26-48 W 85.90 feet, S 81-22 W 86.87 feet, S 81-22 W 77.41 feet; N 66-17 W 80.90 feet, S 42-16 W 468.76 feet, E 31-57 W 173.07 feet, S 46-44 W 205.98 feet, S 51-20 W 184.07 feet; thence leaving Richland Creek with the line of Dowdy (DB 315, P 412), S 85-21 E 842.13 feet to a new iron pipe set in an old pine stump at a forked white oak pointer; thence S 27-26 W 214.62 feet to a new iron pipe set at an existing oak pointer; thence along a painted line, S 25-46 E 1,595.88 feet to a Brown stone monument marked with a "B"; thence N 32-08 E 1,888.49 feet to an existing iron pipe; thence N 26-11 E 150.40 feet; thence N 39-46 E 264.26 feet to an existing iron pipe; thence N 25-16 E 234.98 feet to an existing iron pipe; thence N 10-30 E 190.06 feet to an existing iron pipe; thence N 27-04 E 926.81 feet to an existing iron pipe set in stones on a hill overlooking Richland Creek, (the southwest corner of the 21.4 acre "owner unknown" tract referred to above; thence as the line of said 21.40 acre tract, S 28-00 E 944.68 feet to an existing iron pipe just across a small drain; thence N 25-45 E 1,161.16 feet to an iron stake at the south bank of Lick Branch, the southeast corner of the Wood 6.21 acre tract (DB 302, P 19); thence N 20-12 W 488.58 feet to a new PK nail set in the centerline of NC Hwy 24 & 27; thence as the center of said road, N 68-26 W 995.36 feet to the BEGINNING, containing 173.03 acres, more or less, according to a survey by Carl A. Samuelson, RLS, completed 26 April, 1993.

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Tract 9140 Page 2

THERE IS EXCEPTED from Tract 9140 that 28.70 acres as described in deed to Julie H. Cozort, Trustee, recorded January 31, 1997 in Book 1241 Page 157, Moore County Registry.

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TRACT 9142
MOORE COUNTY

TRACT 09142

JORDAN LUMBER & SUPPLY, INC.

certain lot or parcel of land situated in Benvalen Township, Moore County, North Carolina, and more particularly described as follows:

Beginning at a set iron pipe near a wire fence, said iron pipe being a common corner with J. McN. Kennedy and Paul Boone, being also located North 55 degrees 44 Mins West 1,059.17 Ft. from an existing iron stake and Control corner; thence South 32 degrees 46 Mins West (with the common line of Paul Boone in a direct line toward an existing iron stake in an old fence line near a ditch, a CONTROL CORNER located 1,111.97 Ft. from the point of beginning) to the point of intersection of said line with the center line of N.C.S.R. 1299, a Graded Road; thence generally Southwesterly with the center line of said Graded Road to the point of intersection of the center line of said road and the common line with Randy L. Boone (which common line extends from an existing iron stake in an old fence line near the ditch, a CONTROL CORNER, North 54 degrees 57 Mins West 1,476.46 Ft. to a set iron rod in the common line with Randy L. Boone and Lacy and Clara Brewer); thence along said common line of the Grantor and Boone to the said iron rod at an existing pine stake in stones with one pine pointer; thence North 33 degrees 25 Mins East 264.18 Ft. with the common line of Brewer and the Grantor to an existing iron pipe, a common corner with Williams; thence North 32 degrees 09 Mins East 829.87 Ft. across a wire fence to a set iron pipe in an old white oak stump hole; thence South 55 degrees 54 Mins East 1,475.76 Ft. to the point and place of beginning containing approximately 39.42 acres by EMD according to a "Survey for ELIAS MORGAN HEIRS" by Carl A. Samuelson, III RLS No. L-2787 dated August 7, 1989, a portion of which is attached hereto as "Exhibit 939188", and all of which is incorporated herein by reference.

This description is intended to and does convey all that property of the Grantor, as set forth in a deed from Lora B. Morgan dated Sept. 18, 1987 and filed at the Moore County Registry at Deed Book 573 Page 199, save and except that portion located South and/or East of the center line of NCSR 1299 as it exists on this date.

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TRACT 9152
MOORE COUNTY

JORDAN LUMBER & SUPPLY, INC.
Tract No. 9152

All that certain tract or parcel of land lying and situated in Sheffield Township, Moore County, North Carolina and being more particularly described as follows:

BEGINNING at a iron rebar set at the intersection of the southeast corner of the property of Robert Leon Britt and wife, Mary Lee Britt (now or formerly) as described in deed recorded in Book 336, Page 58 of the Moore County Public Registry, the southwest corner of the property described herein and the northerly line of the property of Jordan Lumber & Supply, Inc. (now or formerly) as described in deed recorded in Book 403, Page 359 of the Moore County Public Registry, and continuing along the easterly property line of the Britt property N. 05-30-52 E. 1157.16 feet to a quartz stone found; thence along the easterly property lines of Charles Lee Williams and wife, Sarah Jane Williams (now or formerly) as described in deed recorded in Book 405, Page 934 of the Moore County Public Registry, the easterly property line of George Winfred Williams and Dale Williams (now or formerly) as described in deed recorded in Book 366, Page 147 of the Moore County Public Registry and the easterly property line of Winfred Williams and Dale Williams (now or formerly) as described in deed recorded in Book 327, Page 40 of the Moore County Public Registry N. 05-29-46 E. 2721.57 feet to a point in the bed of Wolf Creek and passing through a lighter knot found on the south bank of Wolf Creek at 2711.57 feet; thence along the bed of Wolf Creek the following 26 courses and distances: (1) N. 72-33-03 E. 95.04 feet to a point, (2) N. 48-30-55 E. 166.64 feet to a point, (3) N. 52-25-33 E. 50.00 feet to a point, (4) N. 87-44-46 E. 177.63 feet to a point, (5) S. 86-50-50 E. 191.07 feet to a point, (6) S. 84-45-50 E. 52.44 feet to a point, (7) N. 65-10-11 E. 75.01 feet to a point, (8) N. 77-05-58 E. 81.33 feet to a point, (9) S. 42-10-51 E. 58.44 feet to a point, (10) S. 46-11-54 W. 99.54 feet to a point, (11) S. 28-54-13 W. 112.25 feet to a point, (12) S. 14-19-51 E. 82.68 feet to a point, (13) S. 00-00-15 W. 93.80 feet to a point, (14) S. 26-51-20 E. 83.68 feet to a point, (15) S2-26-33 E. 83.34 feet to a point, (16) S. 10-58-56 E. 125.72 feet to a point, (17) S. 30-12-53 E. 55.22 feet to a point, (18) S. 62-03-17 E. 56.91 feet to a point, (19) N. 17-25-39 E. 40.73 feet to a point, (20) N. 50-43-33 E. 26.53 feet to a point, (21) S. 34-52-35 E. 97.40 feet to a point, (22) S. 42-24-40 E. 53.81 feet to a point, (23) S. 42-48-20 E. 81.86 feet to a point, (24) S. 81-15-12 E. 233.15 feet to a point, (25) N. 63-08-57 E. 72.35 feet to a point and (26) N. 74-34-34 E. 57.85 feet to a point located in the westerly line of the property of Tracy Eldon Hussey and wife, Calla Jewel Hussey (now or formerly) as described in deed recorded in Book 280, Page 341 of the Moore County Public Registry; thence leaving the bed of Wolf Creek and continuing along the westerly line of the Hussey property S. 06-29-57 W. 3465.53 feet to an iron rebar set in the northerly line of the property of Jordan Lumber & Supply, Inc. (now or formerly) as described in deed recorded in Book 403, Page 359 of the Moore County Public Registry and passing through stones found on the south bank of Wolf Creek at 16.00 feet; thence along the northerly line of the Jordan Lumber & Supply, Inc. property N. 81-46-49 W. 1515.16 feet to the point and place of BEGINNING and containing approximately 134.41 acres as shown on survey prepared for Baptist Retirement Homes of North Carolina, Inc. by Thomas J. Fields, RLS-2906 dated April 19-27, 1994, reference to which is hereby made.

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TRACT 9164
MOORE COUNTY

JORDAN LUMBER & SUPPLY, INC.

Tract 9164

Carthage Township, Moore County, North Carolina, and more particularly described as follows:

All the certain tract of land containing eighty (80) acres, known as the "Peter W. Cockman Place" in Carthage Township, Moore County, North Carolina, located seven miles northwest from the Town of Carthage, and now in the possession of Peter W. Cockman; bounded on the North by the lands of J. W. Seawell; on the East by the lands of Jesse Dowdy and J. R. Cagle; on the South by the lands of W. L. Cockman and Richland Creek; on the West by the lands of D. A. McDonald Estate, R. L. Burns Estate and J. W. Seawell. Said tract of land is more particularly described according to a plat made by J. L. Cole, Surveyor on January 18, 192, as follows, to-wit: BEGINNING at the center of said Richland Creek in the line of D. A. McDonald and R. L. Burns, heirs, thence North 40 degrees West 14.25 chains to a stake, John Seawell's corner; thence North 85 East 6 chains to a stake; thence North 59 degrees East 1.69 chains to a stake; thence North 35 degrees West 17 chains to a stake and pointers in the line of J. W. Seawell; thence North 5A degrees East 25 chains crossing a locust ranch to a stake; thence South 24 degrees East 10 chains to Jesse Dowdy's corner; thence South 45 degrees East 22.75 chains to Richland Creek; thence with the various course of Richland Creek South 12 degrees West 7 chains; South 75 degrees West 19.50 chains and South 60 degrees West 6.5 chains to the Beginning, a copy of said plat now being on file with the Agent of the Land Bank Commissioner at Columbia, SC.

EXCEPTION:

Being in Carthage Township, Moore County, North Carolina, and situated 0.5 mile West of S. R. 1262 and surrounded by the Johnny Dowdy land and more particularly described as follows: BEGINNING at an iron pipe, a new corner, the same being common with the Johnny Dowdy land, the same also being located North 88 degrees 18.2 ' West 735.26 feet from an iron pipe, a reference corner, located 20' North of the center line of Richland Creek, said iron pipe being the reference corner for the Johnny Dowdy and Felton Cockman common corner in the Jesse Dowdy line; thence from the corner in the Jesse Dowdy line, thence from the Beginning, the following courses and distances from the Johnny Dowdy land as new lines: South 52 degrees 14.7" West 414.98' to an iron pipe; thence North 13 degrees 27.8' West 514.14' to an iron pipe; thence North 76 degrees 08.6' East 286.27' to an iron pipe; thence South 31 degrees 07.9' East 362.16' to the Beginning, containing 3.40 acres, more or less, as computed by the Double Meridian Distance Method and being a portion of the Dowdy Tract described in Deed Book 471, Page 491; Moore County Registry.

For reference see Deed Book 1153 Page 269, Moore County Registry.

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Tract 9164 Page 2

EASEMENT: An easement appurtenant to the hereinabove described tract or parcel of real property being an easement for ingress, egress and regress, over, across and along the existing easement in favor of Johnny S. Dowdy and his wife, Janice G. Dowdy, more particularly described in a deed dated February 8, 1983, appearing of record in Deed Book 471, at Page 493, and running between S.R. No. 1262 and the hereinabove described 80 acre tract or parcel of land.

RESERVATION: Grantors retain unto themselves, their heirs and assigns, an easement for ingress, egress and regress, over, across and along the easement hereinabove described and granted to the Grantees herein.

RESERVATION: Grantors reserve unto themselves, their heirs and assigns, an easement for ingress, egress and regress, over, across and along the existing dirt farm road situate upon the hereinabove described 80 acre tract or parcel of land, 20 feet in width and running between the easement hereinabove granted to the Grantees to the Dowdy family cemetery and thence to the J.C. Needham tract or parcel of land adjoining the real property hereinabove described.

RESERVATION: Grantors reserve unto themselves, their heirs and assigns, an easement for ingress, egress and regress, over and across the Dowdy family cemetery as presently existing on the hereinabove described 80 acre tract or parcel of land, for the purpose of access to and use and maintenance of the said cemetery or graveyard, said graveyard having been flagged or staked to the satisfaction of the parties hereto.

SUBJECT TO the right-of-way boundary of the Randolph Electric Membership Corporation distribution line situated on the hereinabove described 80 acre tract or parcel of real property.

62.

TRACT 9167
MOORE COUNTY.

Tract No. 9167

Carthage Township, Moore County, North Carolina:

BEGINNING at a stake, Ella Cole's corner, running thence S 11.30 E 1850 feet crossing stream from spring near residence to gum stake; thence S 62-30 E 1094 feet to stake, near VanCanon Spring; N 35.00 E 1200 feet to a stake; thence S 77-00 E 420 feet; thence N 5.00 E 745 feet; S 78.00 E 280 feet; thence S 87.00 E 429 feet S 78-00 E 859 feet to iron stake; thence N 10.00 E 2442 feet to an iron stake in Crawley Creek; thence with the Creek about 1800 feet to a stake in branch; thence 225 feet to stake in branch; thence S 14-00 E 390 feet to a stake; thence N 81-00 W 700 feet to a stake; S 5.00 W 820 feet to a stake; thence S 81.00 E 428 feet to a stake; thence S 14-00 E 792 feet to a stake; thence S 85-00 W 2640 feet to the BEGINNING, containing 181 acres, more or less. For further reference see Deed Book 436, at Page 97 and Deed Book 490, at Page 346 and the Estate of Laura McDuffie Cole having Moore County Estate File 79-E-330. Subject to an easement appearing of record in Deed Book 511 at Page 773, Deed Book 616, at Page 329, Deed Book 927; at Page 333, Deed Book 956 at Page 336 and Deed Book 1095, at Page 258.

EXCEPTION: There is excepted from the tract hereinabove described that certain 48.95 acre tract devised by the will of Laura McDuffie Cole as appears in Moore County Estate File 79-E-330 and as is more particularly described as follows:

A certain tract or parcel of land in Carthage Township, Moore County, North Carolina lying on both sides of and at the end of SR 1646 about 1/2 mile east of the intersection of SR 1646 and SR 1644, described as follows:

BEGINNING at an iron pipe, oak and maple pointers about 30 yards north of SR 1646, said iron pipe being a southwest corner of Laura Cole's 181 acre tract recorded in Map Book 7, at Page 17 in the Moore County Registry; running thence from the beginning as a southwest line of Laura Cole's 181 acre tract S 60°49' E 1078.83 feet crossing SR 1646 to an iron pipe and lightwood stake, oak pointers, the common corner of Laura Cole's 181 acre tract, Williams, Hattley and Continental Can Co.; thence as the common line of Laura Cole and the Continental Can Co. N 38°09' E 1163.24 feet to an iron pipe, pine pointer, the common corner of Laura Cole and Continental Can Co.; thence as a new line crossing the 181 acre tract N 54°20' W 2348.10 feet to a "T" iron and lightwood stake, pine pointer, the common corner of Cole, Cagle, Currie and William M. Barber; thence as the common line of Barber and Cole S 9°25' E 1920.84 feet to the BEGINNING, containing 48.95 acres, more or less, and being a portion of Laura M. Cole's 181 acre tract as shown on a plat recorded in Map Book 7, at Page 17 in the Moore County Registry.

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TRACT 9176
MOORE COUNTY

**Tract 9176**

In Deep River Township, Moore County, North Carolina.
Being all of Tract 1, containing 176.56 acres, more or less, as is more particularly shown on a plat entitled "Division of the J.L. Cagle Tract, Deep River Township, Moore County, NC.", prepared by Emmett S. Raynor, RLS, dated April 21, 1994 appearing of record in Plat Cabinet 5 at Slide 587 to which record reference is hereby made for a more complete description.

For title reference see Deed Book 1308 Page 193, Moore County Registry.

64

TRACT 9189
MOORE COUNTY

Tract 9189

In Sheffield Township, Moore County, North Carolina.
Being all of Tract No. 1 containing 101.99 acres and all of Tract No. 2 containing 12.28 acres as shown on that certain map or plat entitled "Survey for Chatham Lumber Co., Tracts 1 and 2 (Arnold Kennedy Lands), Sheffield Township, Moore County, North Carolina," dated April 12, 1998, prepared by L.M. Stewart Land Surveying of Vass, NC, a copy of said map or plat being recorded in Moore County Registry in Plat Cabinet 7, Slide 388, to which reference is hereby made and incorporated herein as if as fully set forth herein.

For title reference see Deed Book 1604 Page 532, Moore County Registry.

Tract No. 9201
Moore County

**EXHIBIT A**

Legal Description

BEING the following four parcels located in Moore County and more particularly described below:

**STREET TRACT (Parcel No. 1)**

Being all of a tract containing 1169.25 acres, more or less, as shown a plat thereof entitled "Street Tract" prepared by Daniel H. Gelbert, L-1194 and dated April 30, 1974 and recorded in Plat Cabinet 1, Slide 19, Moore County Registry

THERE IS EXCEPTED from the above described property that 1.566 acres described in Deed Book 3075, Page 289, Moore County Registry.

BEING all of Moore County Tax Parcel Number 868200055341

**B.T. PHILLIPS TRACT (Parcel No. 2)**

Being all of a tract containing 87.7 acres, more or less, as shown on a map thereof entitled "Map of Riegel Woodlands Corp Phillips Tract" and recorded in Map Book 4, Page 12, Moore County Registry.

BEING all of Moore County Tax Parcel Number 867200130939

**PURVIS TRACT (Parcel No. 3)**

Being all of a tract containing 46.74 acres, more or less, as shown on a plat thereof entitled "Michael G. Purvis" and recorded in Plat Cabinet 2, Slide 233, Moore County Registry.

BEING all of Moore County Tax Parcel Number 866200943663

**UPCHURCH TRACT (Parcel No. 4)**

Being all of a tract containing 90.00 acres, more or less, as shown on a plat thereof entitled "Upchurch Tract" and recorded in Plat Cabinet 2, Slide 230, Moore County Registry.

BEING all of Moore County Tax Parcel Number 866200913903

Tract 9201

Less and Excepting:

Tract 1:

That certain tract or parcel of land lying and being in the Deep River Township, Moore County, North Carolina containing 3.804 acres, more or less, and being more particularly described as follows:

BEGINNING at the iron rod adjacent a 16" Red Oak Tree on Jordan Timberlands, Inc. west property line being the southeast corner of Vernon and Virginia Davis property and the northeast corner of Betty Jean Crisp and Mary Agnes Callaway property; thence along the east property line of the Davis property, N 7°42'20" W. 590.79 feet to an iron rod; thence N 82°16'20" E. 187.12 feet to an iron rod set on the right of way of Glendon-Carthage Road (SR 1006); thence along Glendon-Carthage Road, S 28°21'40" E. 575.98 feet to an iron rod; thence S 74°43'12" W. 393.76 feet to the point of BEGINNING, containing 3.804 acres, more or less.

This tract being a part of that certain tract described as Tract No. 9201 and being a part of the Street and Upchurch Tracts as described in Book 4002 Page 261, Moore County Registry.

Tract 2:

Lying in Deep River Township, Moore County, North Carolina and being that 0.124 of an acre parcel of land shown on the survey map entitled "Exhibit A Property for Moore County", dated May 8, 2013, prepared by Lex A. Kelly, RLS (L-1726) and as shown on map recorded in Plat Cabinet 16, Slide 13 of the Moore County Registry.

TRACT 9202
MOORE COUNTY

Tract 9202-

MOORE COUNTY
TRACT NO. 1: Hancock-Raskob

(Page 1 of 6)

Bounded on the South by Deep River and lying on both sides of the following roades in Chatham County, N .C. Highway No. 42 and N. C. State Road No. 2303 and No. 2339. In Moore County, N. C. State Road No. 1619 and No, 1620.

BEGINNING at a concrete monument set n the South line of Lee Phillips' 100 acres, a corner with Manner and located about 100 yards West of the center of N. C. State Road No. 2303, said concrete monument further located North 9 degrees 46 mins. West 1,751.11 feet from a railroad spike in the centerline intersection of N. C. Highway No. 42 and State Road No. 2303, and running thence from the aforementioned concrete monument, the beginning corner, South 82 degrees 54 mins. East 1,702.30 feet crossing N. C. State Road No. 2303 to an iron pin in a pile of rocks (corner with Phillips and Fields); thence with a South line of Fields South 83 degrees 16 mins. East 2,311.49 feet to an iron pipe at a fence corner, a West corner of Clesman Willard; thence as the line of Willard South 9 degrees 01 min. West 776.49 feet with the fence to an iron pipe at a fence corner; thence South 81 degrees 10 mins. East 435.26 feet with the fence to an iron pipe at a fence corner; thence South 8 degrees 57 mins. West 519.00 feet with the fence to a concrete monument at a fence corner, a common corner with Willard and Hudie Powers and the Grantee; thence as the West line of Powers leaving the fence and continuing South 8 degrees 37 mins. West 1,176.09 feet to a lightwood stake in a pile of rocks, the Southwest corner of Hudie Powers; thence as the South line of Powers South 83 degrees 58 mins. East 928.03 feet to an iron pipe at a fence corner, the Southeast corner of Powers and a common corner with Powers and the Southwest corner of Willard; thence as the South line of Willard South 84 degrees 06 mins. East 745.44 feet to an iron pipe in the South line of Willard, the Northwest corner of Alton Powers' 1.1-acre tract recorded in Deed Book 280, Page 600, in the Chatham County Registry; thence as the West line of the 1.1-acre tract South 6 degrees 09 mins. West 315.87 feet to an iron stake about 5 feet Southwest of a power pole and in the North right-of-way line of N. C. Highway No. 42; thence as the North right-of-way line of said highway North 66 degrees 20 mins. East 190.45 feet to a concrete monument located 30 feet North of and normal to said Highway; thence as the East line of the original Dowd 48.75-acre lot crossing said Highway South 6 degrees 26 mins. West 69.85 feet to an iron pipe in the South right-of-way line of said highway, the Northeast corner of Southern Bell Telephone Company's 0.3-acre tract recorded in Deed Book 375, Page 218, in the Chatham County Registry; thence as the North line of said 0.3-acre tract and the South right-of-way line of said Highway South 65 degrees 55 mins. West 100.00 feet to an iron pipe, the Northwest corner of the said 0.3-acre tract in the South right-of-way (30' from the centerline) of said highway; thence as the West line of said 0.3-acre tract South 5 degrees 18 mins. West 150.00 feet to an iron pipe, the Southwest corner of the said 0.3-acre tract; thence as the South line of said 0.3-acre tract North 65 degrees 50 mins. East 100.00 feet to an iron pipe, the Southeast corner of the said 0.3-acre tract in the original Dowd line and in the West line of the Alton Powers Tract; thence as the West line of Powers South 9 degrees 38 mins. West 709.66 feet to an iron pipe, the Southwest corner of Powers and the Northwest corner of Clesman Willard in the original Dowd line; thence as the West line of Willard South 8 degrees 36 mins. West 877.58 feet to an iron pipe, the Southwest corner of Willard and the Northwest corner of Jack Brewer; thence as the West line of Jack Brewer and the East line of the original Tillman 140-acre tract South 7 degrees 43 mins. West 1,210.86 feet crossing N. C. State Road No. 2339 to an iron pipe in the Moore-Chatham County line; thence as the county line South 87 degrees 18 mins. East 1,503.11 feet crossing

Tract 9202 (Page 2 of 5)

State Road No. 1620 to a concrete monument set in the county line as the Northeast corner of the original 1,439-acre Haskob tract; thence as the East boundary of the original 1,439 Haskob tract South 0 degrees 09 mins. East 1,072.26 feet crossing N. C. State Road No. 1620 to a concrete monument set among three oak pointers; thence South 8 degrees 57 mins. East 1,650.05 feet to a concrete monument set West of a branch and North of a fence corner; thence South 82 degrees 16 mins. West 396.00 feet to a concrete monument; thence South 8 degrees 31 mins. East 773.04 feet to a concrete monument, a Northwest corner of Myrtle Chalmers; thence South 8 degrees 00 mins East 732.25 feet to a concrete monument set between a pine and oak pointer, the Southwest corner of Myrtle Chalmers; thence South 9 degrees 13 mins. East 1,450.56 feet crossing N. C. State Road No. 1619 to a concrete monument set in an extension of a North line of Harden; thence as an extension of Harden's line North 84 degrees 09 mins. East 139.90 feet to an iron pipe with pointers well marked and painted (Harden's corner); thence as a West line of the Harden tract South 6 degrees 57 mins. West 4,340.98 feet to an iron pipe on the North bank of Deep River East of the mouth of a creek emptying into Deep River; thence up Deep River the following courses and distances: North 25 degrees 29 mins. West 887.48 feet, North 51 degrees 38 mins. West 990.57 feet, North 80 degrees 29 mins. West 1,240.90 feet, North 83 degrees 34 mins. West 1,659.21 feet, North 79 degrees 04 mins. West 569.27 feet, North 10 degrees 47 mins. West 117.70 feet, North 84 degrees 56 mins. West 978.61 feet, North 83 degrees 12 mins. West 1,061.07 feet, North 84 degrees 08 mins. West 536.88 feet, South 89 degrees 34 mins. West 735.15 feet and South 87 degrees 17 mins. West 267.47 feet to a concrete monument on the North bank of the river, a corner of the Glenn Cole Mill lot; thence with the Mill lot North 15 degrees 56 mins. West 425.93 feet to a concrete monument; thence North 86 degrees 54 mins. West with the Cole Mill lot 350.78 feet to a concrete monument; thence with the Mill lot again South 13 degrees 39 mins. East 429.08 feet to a concrete monument on the North bank of the river; thence up said Deep River South 81 degrees 05 mins. West 130.72 feet and South 58 degrees 40 mins. West 995.56 feet to a concrete monument on the North bank of the river; thence leaving the river and with the Dr. L. H. Paschal line North 4 degrees 41 mins. East 2,382.24 feet crossing N. C. State Road No. 1619 to an iron stake; thence with Dr. Paschal again South 84 degrees 19 mins. East 1,206.61 feet to an iron pipe; thence with Paschal again North 3 degrees 22 mins. East 371.17 feet to an iron axle; thence continuing with Paschal North 3 degrees 22 mins. East 210.0 feet to a concrete monument; thence with Paschal again North 84 degrees 19 mins. West 210.0 feet to a concrete monument; thence with Paschal again South 3 degrees 22 mins. West 210.0 feet to a concrete monument; thence with Paschal again North 84 degrees 19 mins. West 997.36 feet to a concrete monument; thence with Paschal again North 10 degrees 39 mins. East 174.48 feet to a concrete monument in the run of Rogers Creek; thence up the run of Rogers Creek as traversed the following calls and distances: North 44 degrees 21 mins. East 291.29 feet, South 74 degrees 03 mins. East 116.08 feet, North 73 degrees 05 mins. East 255.01 feet, South 76 degrees 05 mins. East 234.44 feet, North 24 degrees 06 mins. East 252.0 feet, North 0 degrees 52 mins. East 265.74 feet, North 20 degrees 28 mins. West 375.0 feet, North 59 degrees 03 mins. West 144.93 feet, North 29 degrees 12 mins. West 327.58 feet, North 12 degrees 58 mins. East 208.23 feet, North 22 degrees 39 mins. East 361.41 feet, North 41 degrees 27 mins. East 162.55 feet, North 74 degrees 30 mins. East 403.27 feet, North 53 degrees 39 mins. East 119.39 feet, North 89 degrees 18 mins. East 159.62 feet, North 68 degrees 37 mins. East 193.43 feet North 12 degrees 36 mins. West 172.85 feet, North 38 degrees 05 mins. West 233.75 feet, North 14 degrees 21 mins. West 206.79 feet, North 08 degrees 01 mins East 128.43 feet, North 31 degrees 37 mins. East 140.40 feet, North 30 degrees 54 mins. East 145.50 feet and North 31 degrees 19 mins. East 113.65 feet to a point in the run witnessed by an iron stake on the East bank;

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Tract 9202 (Page 3 of 5)

thence leaving Rogers Creek and with the Mims property line South 70 degrees 30 mins. West 1,250.83 feet to a concrete monument; thence North 2 degrees 24 mins. East 109.77 feet to an iron pipe; thence North 4 degrees 38 mins. East 219.96 feet to an iron pipe; thence North 8 degrees 11 mins. East 211.07 feet to a lightwood stake; thence South 85 degrees 07 mins. East 1,088.65 feet to the Run of Rogers Creek witnessed by an iron stake on the West bank; thence up the Run of Rogers Creek as traversed the following calls and distances: North 30 degrees 58 mins. West 412.76 feet; North 35 degrees 14 mins. West 175.44 feet, North 23 degrees 17 mins. West 183.19 feet, North 22 degrees 30 mins. East 216.15 feet, North 87 degrees 44 mins. East 77.03 feet, North 31 degrees 11 mins. East 525.09 feet, North 21 degrees 12 mins. East 430.62 feet, North 71 degrees 46 mins. East 325.92 feet, North 14 degrees 10 mins. East 319.36 feet, North 32 degrees 22 mins. East 271.65 feet, North 25 degrees 38 mins. East 174.21 feet, North 30 degrees 39 mins. East 158.63 feet and North 31 degrees 16 mins. East 190.09 feet to a point in the Run witnessed by an iron stake on the East bank and in the Moore County-Chatham County line; thence with the Moore-Chatham County line South 87 degrees 18 mins. East 754.27 feet to a concrete monument in the County Line; thence leaving the County Line North 08 degrees 29 mins. East with the Lane line 940.50 feet to a concrete monument; thence with Lane again North 80 degrees 48 mins. West 747.58 feet to a concrete monument; thence continuing North 80 degrees 48 mins. West 321.04 feet to an iron stake; thence with the Lane line again and beyond North 08 degrees 40 mins. East 1,780.95 feet to a concrete monument a corner with Benner; thence North 81 degrees 20 mins. West 477.50 feet crossing N. C. State Road No. 2303 to a concrete monument, a corner with Benner; thence with Benner again North 08 degrees 40 mins. East 3,046.00 feet crossing N. C. Highway No. 42 to the beginning, containing 2,400.52 acres more or less.

THERE IS EXCEPTED from the above described property that 530.31 acres as described in Deed Book 2769, Page 287, Moore County Registry, and also in that QuitClaim Deed in Book 3249, Page 525, Moore County Registry.

THERE IS ALSO EXCEPTED all lands from this tract lying within Chatham County, leaving a balance of approximately 1,264 acres.

See next page for additional exceptions.

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Tract 9202 (Page 4 of 5)

SAVING AND EXCEPTING FROM THE ABOVE TRACT THE FOLLOWING PARCELS.

CHATHAM COUNTY

1. M. C. Wills Heirs - One (1) acre parcel:

BEGINNING at an iron pin in the center of the payment of N. C. Highway No. 42, said pin being located South 50 degrees 06 mins. East 714.62 feet from the intersection of the centerline of N. C. Highway No. 42 and N. C. State Road No. 2303, running thence from the beginning pin with N. C. Highway 42, South 52 degrees 01 mins. East 176.50 feet to an iron pin in the centerline of said Highway; thence leaving the Highway South 13 degrees 09 mins. West 272.74 feet to a concrete monument; thence North 51 degrees 58 mins. West 176.63 feet to a concrete monument; thence North 13 degrees 09 mins. East 272.24 feet to the beginning, containing one acre more or less.

The above described tract and exception having been surveyed for Federal Paper Board Company, Inc. September 9, 1976 by C. H. Blue, Registered Land Surveyor, plat of which survey entitled Federal Paper Board Company, Inc. "Hancock-Raiford Tract" is recorded in Cabinet No. 1, Slide 95, Moore County Registry and Map Book 20, Page 37, Chatham County Registry.

2. Robert Marsh - One (1) acre parcel:

BEGINNING at station 96 of that certain Federal Paper Board Company, Inc. map revised October 6, 1986 and recorded in Plat Slide 86-84, Chatham County Registry showing the survey conducted by C. H. Blue, Registered Land Surveyor, thence North 08 degrees 40 mins. East 206.25 feet to station 109; thence South 80 degrees - 48 mins. East 214.50 feet to station 110; thence South 08 degrees - 40 mins. West 206.25 feet to station 111; thence North 80 degrees - 48 mins. West 214.50 feet to the beginning; being station 96.

MOORE COUNTY

1. John White, Jr. - One (1) acre parcel:

BEGINNING at station 105 of that certain Federal Paper Board Company, Inc. map revised August 8, 1986 and recorded in Plat Cabinet No. 3, Slide 246, Moore County Registry showing the survey conducted by C. H. Blue, Registered Land Surveyor, thence North 88 degrees - 38 mins. East 210 feet to station 106; thence South 01 degrees - 22 mins. East 210 feet to station 107; thence South 88 degrees - 38 mins. West 210 feet to station 108; thence North 01 degrees - 22 mins. West 210 feet to the beginning, being station 105.

2. Seven and four tenths (7.4) acre parcel lying West of Rogers Creek

BEGINNING at station 74 of that certain Federal Paper Board Company, Inc. map dated September 9, 1976 showing the survey conducted by C. H. Blue, Registered Land Surveyor thence South 70 degrees - 50 mins. West 1,250.83 feet to station 75; thence North 02 degrees - 26 mins. East 109.77 feet to station 76; thence North 04 degrees - 38 mins. East 210.96 feet to station 77; thence North 08 degrees - 11 mins. East 211.07 feet to station 78; thence South 85 degrees - 07 mins. East 1,088.65 feet to station 79; thence South 45 degrees East approximately 50 feet to the beginning, being station 74.

Leaving a balance of 2,590.22 net acres, more or less.

A plat of this tract entitled "Hancock-Raiford Tract" is recorded in Plat Cabinet 3, Slide 246, Moore County Registry, and Plat Slide 86-84, Chatham County Registry.

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Tract 9202

THERE IS EXCEPTED from Tract 9202 all properties lying within Chatham County, leaving an approximate net acreage of 1,264.

Tract 9315 Moore County

Being the second tract in Lot No 5 in the division of the W.R. Muse lands and being the second tract in the lot assigned to Ruby Fields, described and referred to as follows: Second Tract: Lying near Parkwood being that part of 100 acres granted to Jesse Upton in 1817, lying on the North Side of a branch as is indicated on the map of said division. Beginning at the second corner of the original 100 acre grant at or near a branch running thence North 33 chains and 84 links to a stake and pointers, thence North 52 West 24.32 chains, thence South 28 West 20 chains and 50 links to Chas Dowdy corner at the branch, thence down the various courses of said branch to the first station, containing by estimation 50 acres, more or less.

For further description of this tract of land, see the Report of Commissioners as filed in the office of Register of Deeds for Moore County on November 2, 1929 in Deed Book 107, Page 430. Also see Orders and Decrees Book 17, Pages 411 to 417 inclusive in office of Clerk of Superior Court for Moore County. See also Book 258, Page 79, Moore County Registry.

577

Tract 9355 Moore County

In Sheffield Township, Moore County, NC

TRACT ONE:
A tract of land located in Moore County, North Carolina, consisting of 130.125 acres +/- tract on that certain plat of survey by Cagle Surveys, Seagrove, NC title "Survey for Van Shamburger and Elizabeth Shamburger, Sheffield Township, Moore County, North Carolina, dated July 5, 1982," recorded August 2, 1982 in Plat Cabinet 2, Slide 268, Moore County Registry, to which reference is made for a more complete description and by said reference said plat is made a part hereof as if fully set out herein.

TRACT TWO:
A tract of land located in Moore County, North Carolina consisting of 81.906 acres +/- and more particularly described as Tract #3 as shown on that certain plat of survey by Cagle Surveys, Seagrove, NC title "Partial Survey and Division of Family Lands Among Family Members for JB Shamburger Heirs, Sheffield Township, Moore County, North Carolina, dated August 20, 2011," recorded September 20, 2011 in Plat Cabinet 15, Slide 450, Moore County Registry, to which reference is made for a more complete description and by said reference said plat is made a part hereof as if fully set out herein.

Tract 9356 Moore County

Lying and being in Sheffield Township, Moore County, North Carolina

Beginning at the mouth of the Persimmon branch and runs up its various courses 110 poles to a stake by cedar pt. Callicutt corner; thence with his line South & West 52 poles to a stake by P.O. & R.O. pts.; thence West 82 poles to a stake by B. jack pts.; thence North 8 East 38 poles; thence

**Tract 9375 Moore County**

Lying and being in Carthage Township, Moore County, North Carolina

BEGINNING on the top of the hill, east of the creek, and runs thence N 88-17-21 W 1207.80 feet; thence S 17-36-38 W 148.5 feet; thence N 80-00 W 1434.60 feet along an old fence line; thence N 1-45-35 E 760.75 feet; thence S 79-29-04 E 280.60 feet; thence S 84-22-14 E 429.00 feet with an old logging road; thence S 82-54-53 E 726.00 feet; thence N 72-08- 30 E 845.65 feet; thence S 22-52-05 E 1064.17 feet to the BEGINNING, containing 45.96 acres, more or less.

There is included that certain 20 foot wide easement for ingress, egress and regress as described in Deed Book 616, Page 229.

Less and Excepting:

Being Lot No. 3, containing 13.35 acres, as more particularly described on plat entitled "Recombination Survey for Ash-Leigh Woods, LLC", recorded in Plat Cabinet 17, Slide 702, Moore County Registry.

Tract 9390
Montgomery and Moore Counties
Montgomery PIN 7588 00 42 3667
Moore PIN-None

EXHIBIT A

Lying in Biscoe Township, Montgomery County, and Bensalem Township, Moore County:

Being all that 26.31 acres, as more particularly described on plat entitled "Boundary Survey for Jordan Timberlands, Inc.", recorded in Plat Cabinet G Slide 38-B, Montgomery County Registry, and in Plat Cabinet 17, Slide 769, Moore County Registry.

Being the all the property conveyed to Jordan Timberlands, Inc. in Deed Book 810, Page 568, Montgomery County Registry and Book 5001, Page 500, Moore County Registry.

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Tract 9391
Moore County

TRACT #1: 21 .3 ACRES - LRK #00001190

ALL OF THAT CERTAIN TRACT OR LAND LOCATED IN CARTHAGE TOWNSHIP, MOORE COUNTY, NORTH CAROLINA CONTAINING 21.3 ACRES, MORE OR LESS, AND MORE PARTICULARLY SHOWN ON THE PLAT OF SURVEY, PREPARED BY J. S. MCNEILL, REGISTERED SURVEYOR, DATED OCTOBER 1968, RECORDED IN THE RECORDED OF MOORE COUNTY IN PLAT BOOK 8, PAGE 53 WHICH PLAT IS INCORPORATED INTO THIS DESCRIPTION BY REFERENCE THERETO AND TO WHICH PLAT REFERENCE IS MADE FOR A METES AND BOUNDS DESCRIPTION OF SAID LAND.

TRACT #2: 99 ACRES-LRK #00001200

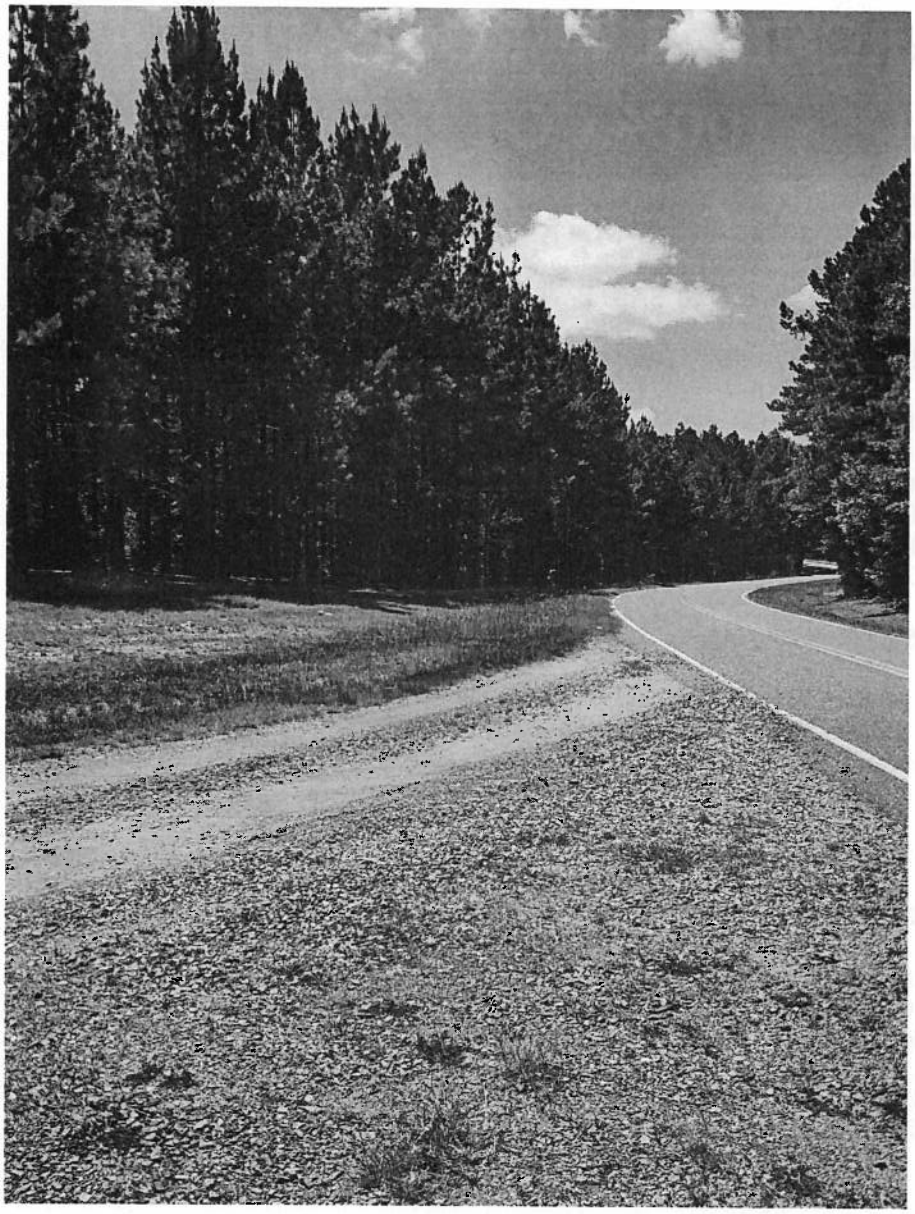
ALL THAT CERTAIN TRACT OR LAND LOCATED IN CARTHAGE TOWNSHIP, MOORE COUNTY, NORTH CAROLINA, CONTAINING 99 ACRES, MORE OR LESS, AND MORE PARTICULARLY SHOWN ON THE PLAT OF SURVEY, PREPARED BY C. H. BLUE, REGISTERED SURVEYORS, DATED APRIL 25, 1961, WHICH PLAT IS INCORPORATED INTO THIS DESCRIPTION BY REFERENCE THERETO AND TO WHICH PLAT REFERENCE IS MADE FOR A METES AND BOUNDS DESCRIPTION OF SAID LAND.

TRACT #3: 25 ACRES-LRK # 00001211

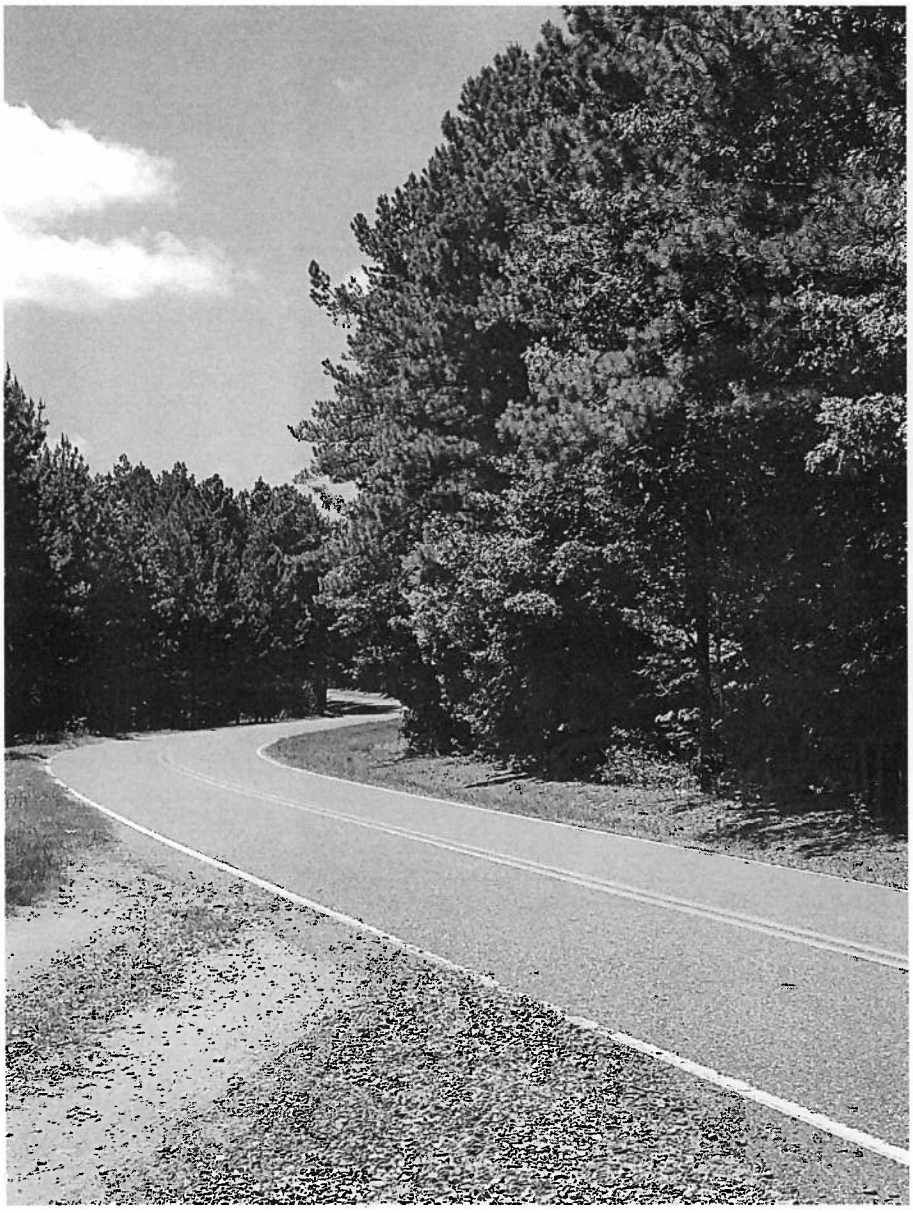
ALL THAT CERTAIN TRACT OR LAND LOCATED IN CARTHAGE TOWNSHIP, MOORE COUNTY , NORTH CAROLINA , CONTAINING 25 ACRES , MORE OR LESS, AND MORE PARTICULARLY SHOWN ON THE PLAT OF SURVEY , PREPARED BY R .H . MARETT, REGISTERED SURVEYOR, DATED AUGUST 31, 1960, WHICH PLAT IS INCORPORATED INTO THIS DESCRIPTION BY REFERENCE THERETO AND TO WHICH PLAT REFERENCE IS MADE FOR METES AND BOUNDS DESCRIPTION OF SAID LAND.

TRACT #4: 737 ACRES-LRK #00001212

ALL THAT CERTAIN TRACT OR LAND LOCATED IN CARTHAGE TOWNSHIP, MOORE COUNTY, NORTH CAROLINA, CONTAINING 737 ACRES, MORE OR LESS, AND MORE PARTICULARLY SHOWN ON THE PLAT OF SURVEY PREPARED BY C. H. BLUE, REGISTERED LAND SURVEYOR, DATED MAY 22, 1921, WHICH PLAT IS INCORPORATED INTO THIS DESCRIPTION BY REFERENCE THERETO AND TO WHICH PLAT REFERENCE IS MADE FOR METES AND BOUNDS DESCRIPTION OF SAID LOT.







**COMMUNITY MEETING REPORT**

**Thursday May 16, 2024, 4:00 p.m. – 6:00 p.m.**

**Planned Development Conditional Rezoning (PD-CZ) of three (3) parcels of approximately 395.67 acres located on Leach Road (ParID 00010343, ParID 00010342 and ParID 00010337)**

**Community Members Present:** 14

**Applicant's Representative Present:** Bob Koontz, Koontz Jones Design, PLLC
Michael Morse, Autoport
Kristi Boughter, Autoport
Natalie Hawkins, Moore County economic Development Partnership

**Planning Staff Present:** Planning Director, Debra Ensminger, Senior Planner-Danielle Orloff,

The community meeting was held at the First Baptist Church in Robbins, located at 651 Hemp Street. The doors opened at 4:00 pm to allow for the community to come and see the displays and project information. Some of the adjacent property owners were in attendance, as well as members of the community. The meeting was attended by the applicant, applicant's representatives, planning staff and fourteen (14) community members. Mr. Koontz explained that there were stations set up with displays of the project and the applicant would explain the project and answer any questions from the community. The displays included drawings of the conceptual master plan and buildings for the project. The meeting had a very informal format to allow and encourage questions and interaction.

List of those notified of the Community Meeting (certified mailings to adjacent properties):

| | |
|---|---|
| WILLIAM AOS LUNDEE | RUBY BROWN |
| SINK MORE, LLC | DONALD & CYNTHIA MILLER<br>JUSTIN & VICTORIA MCLEOD |
| LLOYD R & ETHEL F ROBBINS REVOCABLE LIVING TRUST<br>BRANDON LEE BRITT<br>CHRIS R & PRISCILLA B REYNOLDS<br>DARRELL HALL MITCHELL<br>WILLIAM PARKER BRITT II<br>JAMIE GOINS<br>HARRY EST LAMONDS<br>MARY F HALL | RICHARD S FREEMAN DOROTHY F SHUTT<br>JORDAN TWO LLC<br>TERRY W & VIRGINIA W FREEMAN<br>PARKER LEE BRITT & WANDA BREWER<br>PARKER LEE BRITT & WANDA BREWER<br>RODERICK D & PAMELA G HUMBERTSON<br>EDWARD & TAMMY PHILLIPS |

Submitted by,

Danielle Orloff, CZO
Senior Planner
Moore County Planning and Inspections

# Uwharrie Motorsports Park – Planned Development Conditional Zoning (PD-CZ)

MOORE COUNTY, NORTH CAROLINA

PLANNING BOARD MEETING

SEPTEMBER 19, 2024

APPLICANT:

AUTOPORT

KOONTZJONESDesign
LAND PLANNING | LANDSCAPE ARCHITECTURE

588

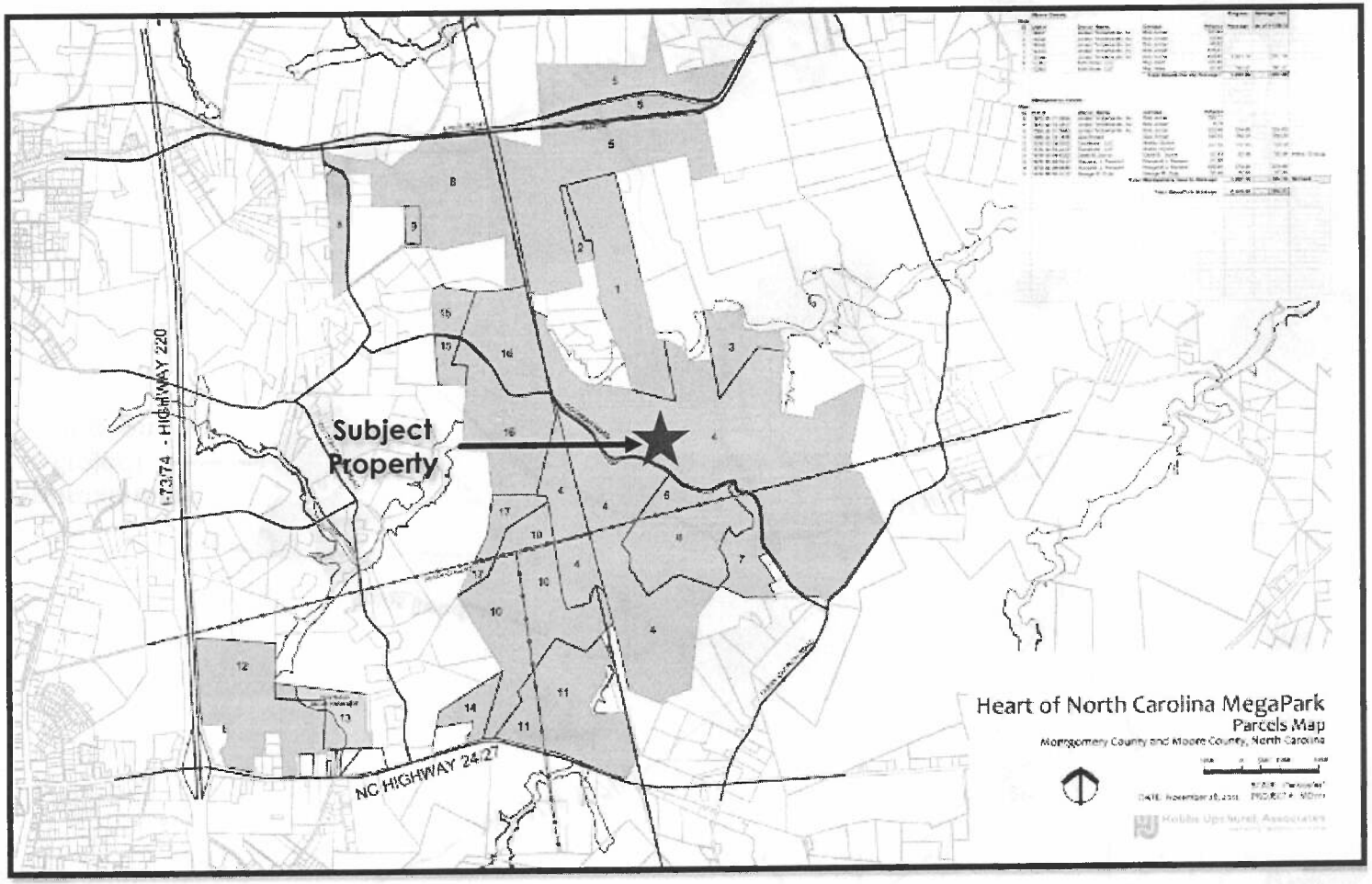
# Site Context



589

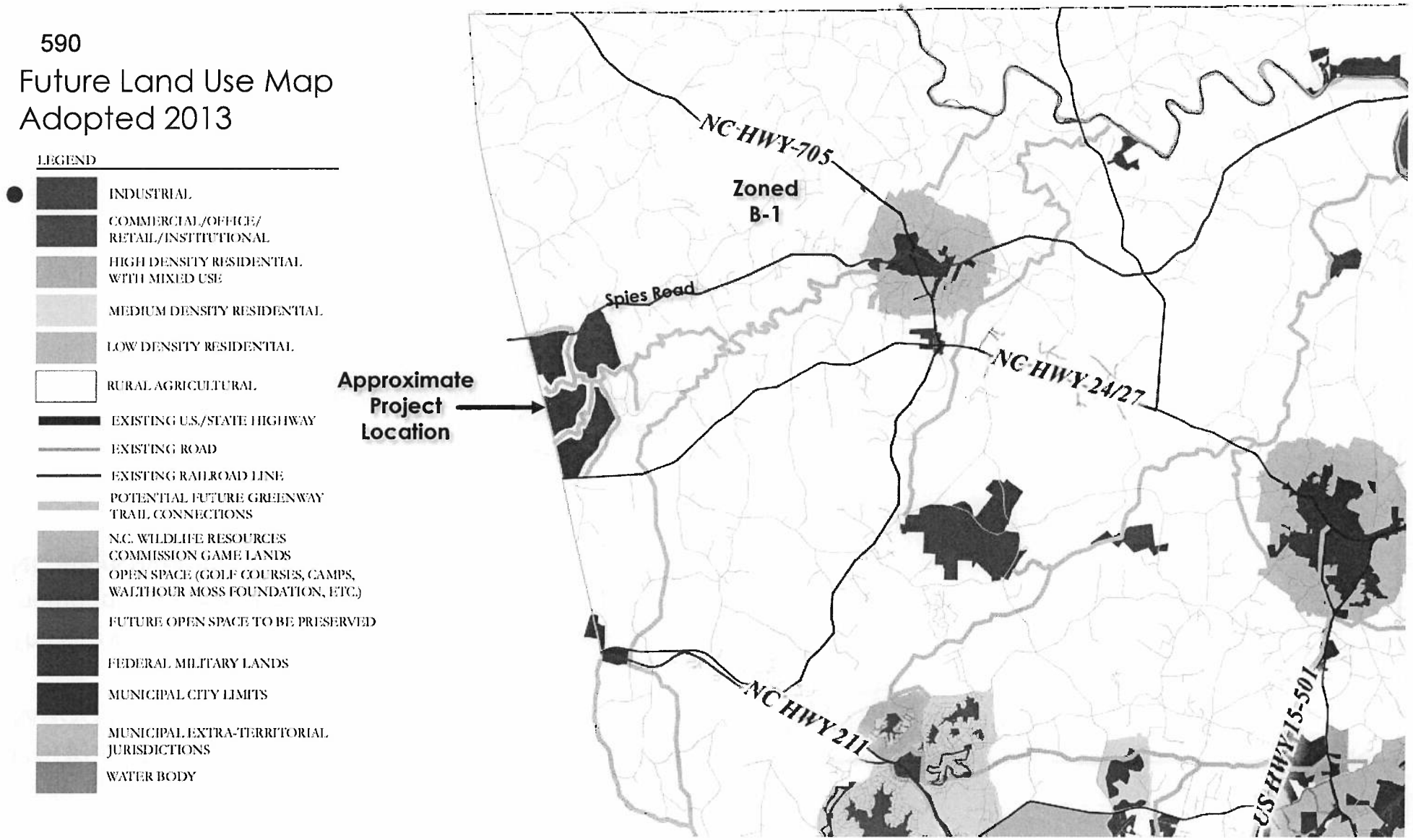
# Heart of NC Mega Park

The site was previously included in the **Heart of NC Mega Park**



590

# Future Land Use Map
# Adopted 2013



591

# Existing Zoning



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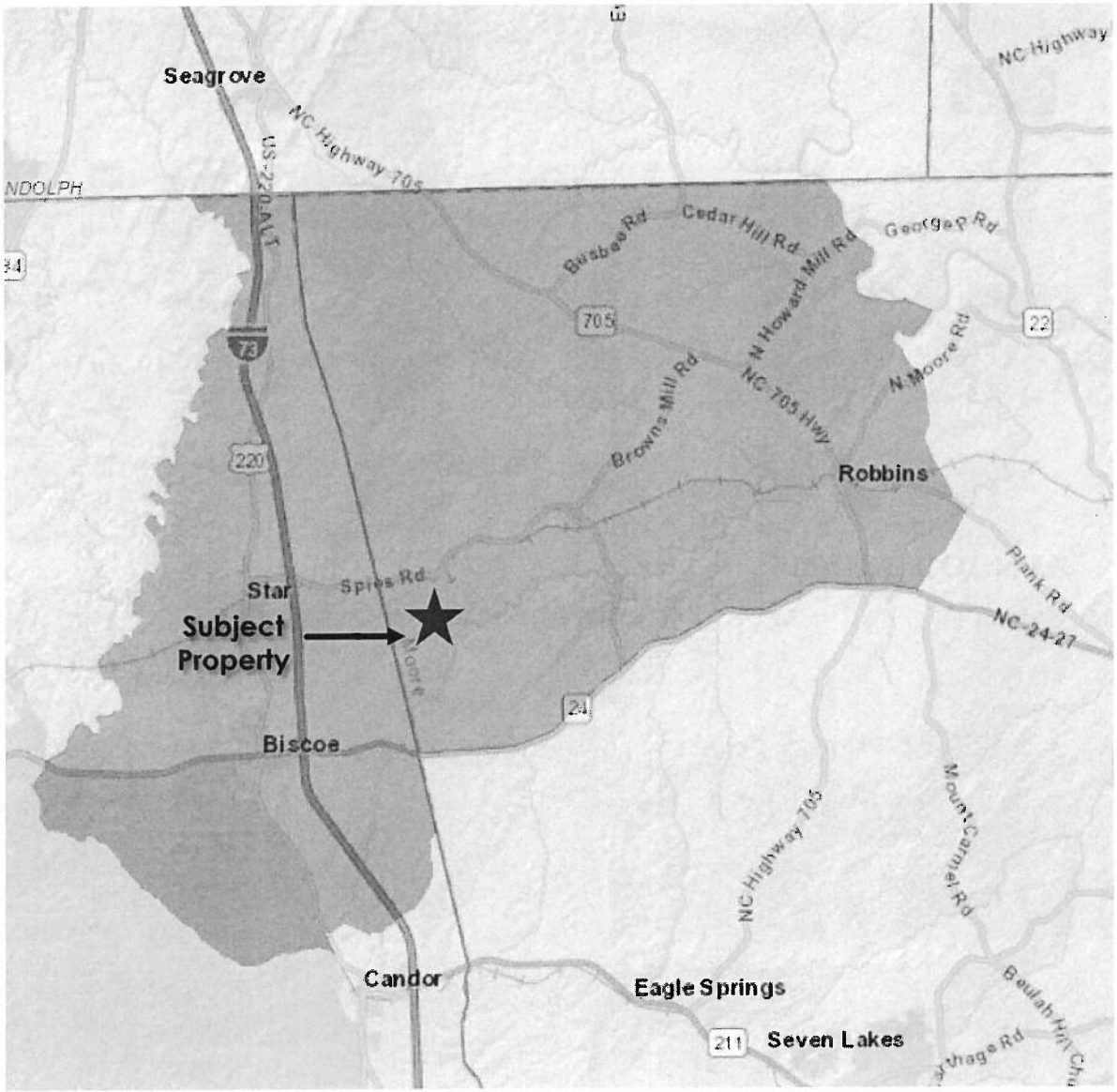
# Opportunity Zone

The project is in an **Opportunity Zone,** an area designated by the State of NC and the U.S. Secretary of the Treasury to attract capital investment & jobs that raise income levels in economically distressed areas

- Family income less than 80% of Area Median Income (AMI)

**Opportunity Zone**

The project is not requesting any tax incentives related to the site's inclusion in the **Opportunity Zone.**



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# Conditional Rezoning Request for PD-CZ

1. Request a mixture of uses on the site consistent with a motorsports park

## Permissible Uses

1. Agricultural Uses and Buildings (Not in a Bona Fide Farm)
2. Hotel and Motel
3. Office
4. Trade Contractor Office and Workshop
5. Convenience Store
6. Restaurant
7. Retail
8. Car Wash or Auto Detailing
9. Parking Lot as a Principal Use
10. Vehicle, Auto Parts, Tires, Farm Equipment, Boat, RV-Sales, Rental or Service
11. Vehicle Service Stations (Gas Stations)
12. Bar/Tavern
13. College/Business & Trade School
14. Museum/Art Gallery
15. Assembly Hall
16. Civic/Social Club, Lodge, Organization
17. Neighborhood Park
18. Recreation, Indoor
19. Recreation, Low Impact Outdoor
20. Recreation, High Impact Outdoor
21. Public and Private Utility Facilities
22. Antenna Collocation, Major
23. Antenna Collocation, Minor
24. Small Wireless Facility
25. Telecommunications Tower, Major
26. Telecommunications Tower, Minor
27. Mini-Warehouse (self-service)

**All uses requested are permitted uses in the PD-CZ district under Chapter 6 of the UDO.**

# Conditional Rezoning Request for PD-CZ

1. The proposed use of High-Impact Outdoor Recreation is **currently permitted by right in the Industrial (I) Zoning District** and is **consistent with the industrial designation in the Moore Co. Future Land Use Map and text of the Land Use Plan.**

**PRINCIPAL USE TABLE**

P = Permitted by-Right
S = Requires Special Use Permit
Z = Permitted in Conditional Zoning District
A = Allowed in PD District
O = Not Permitted

| Principal Use Type | Zoning Districts [1] | | | | | | | | | | | | | | | | Specific Use Standards | Bldg. Code Class. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | RA | RA-20 | RA-40 | RA-2 | RA-5 | RA-USB | RE | GC-SL | GC-WL | PC | B-1 | B-2 | VB | I | MF-CZ | PD-CZ | | |
| Recreation, High Impact Outdoor | Z | • | • | • | • | • | • | • | • | • | • | • | Z | P | • | A | 8.91 | A-5 |

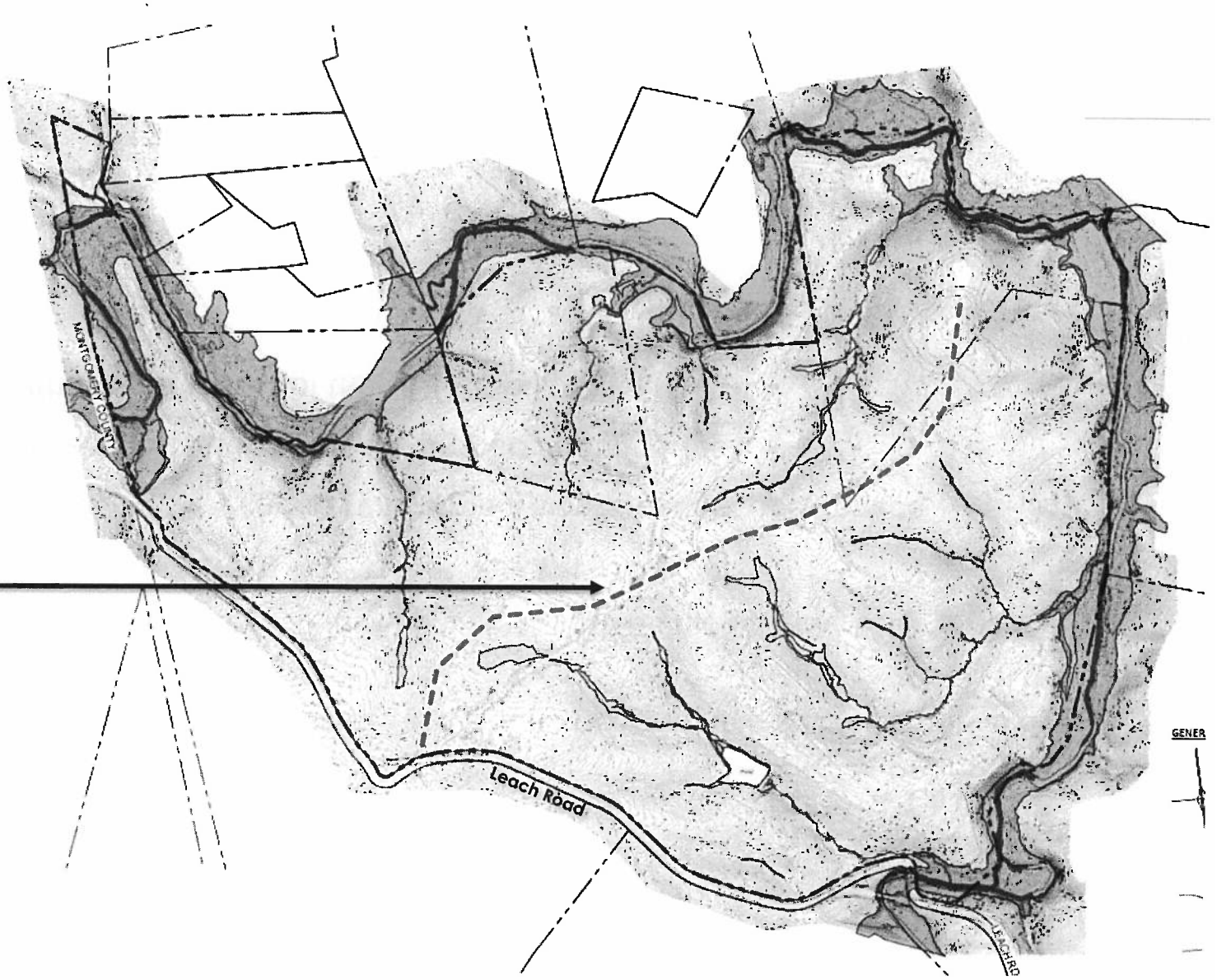
2. The rezoning request **meets the 2013 Land Use Plan standards for rezoning** (Pg 81), including:
   - The proposal is consistent with the vision, themes, and policies contained in the plan
   - The use is specifically designated in the plan in this location
   - Community facilities & streets will be available to serve the proposed use

# Site/Project Information

- Site = 395 +/- acres
- The +/- 3-mile road course will voluntarily meet Federation Internationale de l'Automobile (FIA) Level 2 standards
  - The FIA is the governing body for international motorsports like the USGA is the governing body for golf.
- ¾ mile Kart track
- More than 30% of the property (118 +/- acres) will remain as permanent open space
- At least a 100' buffer will be maintained along the property boundaries
- Signage - Will comply with the standards of the UDO Section 7.15

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# Existing Conditions – Hydrology and Topography



# Existing Conditions – Soils

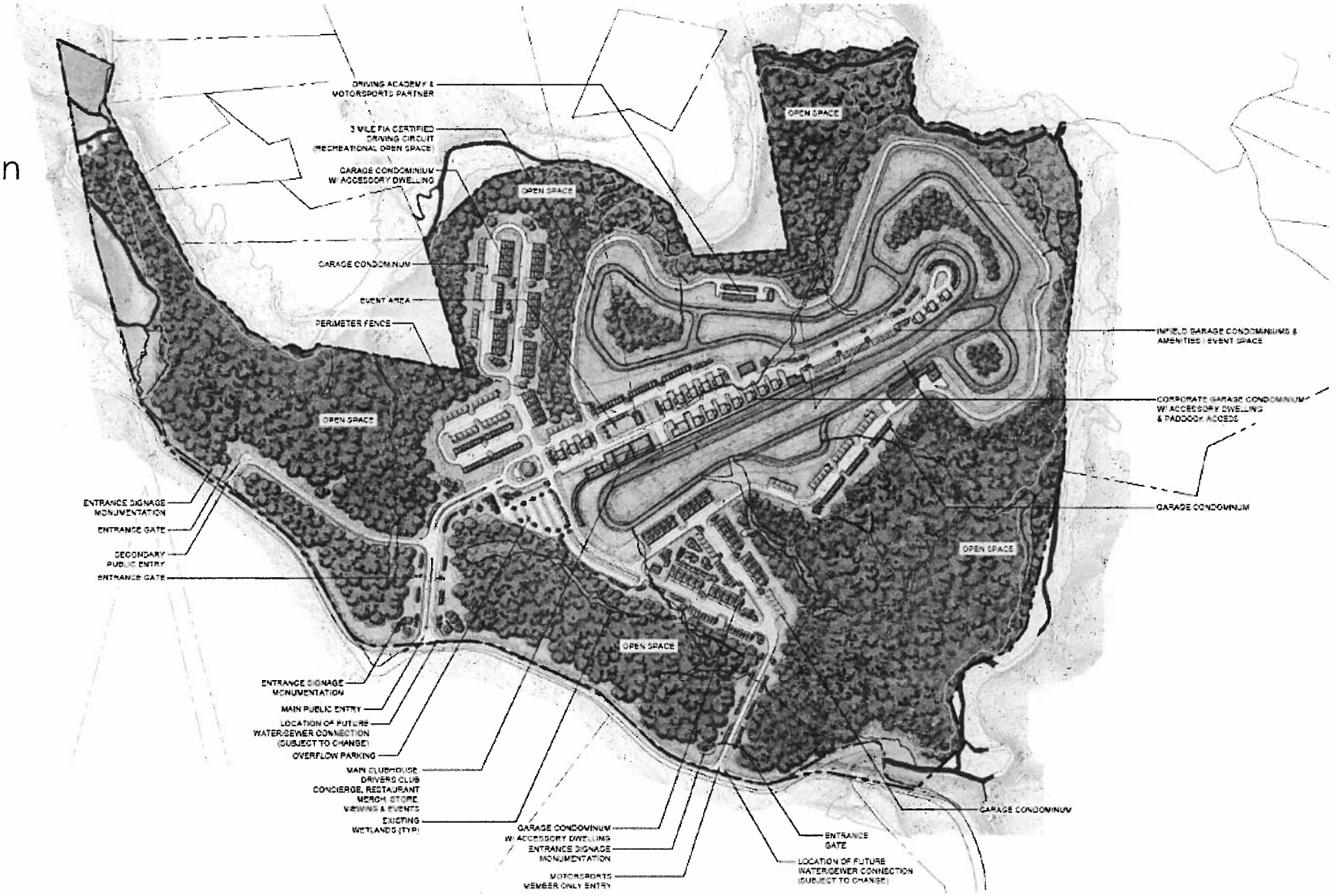



LEGEND:

- PROPERTY BOUNDARY
- ADJACENT PROPERTIES
- MINOR CONTOURS
- MAJOR CONTOURS
- EXISTING WETLANDS
- Ch - CHEWACLA SILT LOAM (0-2%)
- GeB - GEORGEVILLE GRAVELLY SILT LOAM (2-8%)
- GeD - GEORGEVILLE GRAVELLY SILT LOAM (8-15%)
- GoF - GOLDSTON VERY CHANNERY SILT LOAM (15-45%)
- LgB - LIGNUM SILT LOAM (2-7%)
- NaB - NANFORD SILT LOAM (2-8%)
- NaD - NANFORD SILT LOAM (8-15%)
- TnE - TARRUS & NANFORD SOILS (15-25%)
- ToA - TILLERY SILT LOAM (0-3%)

598

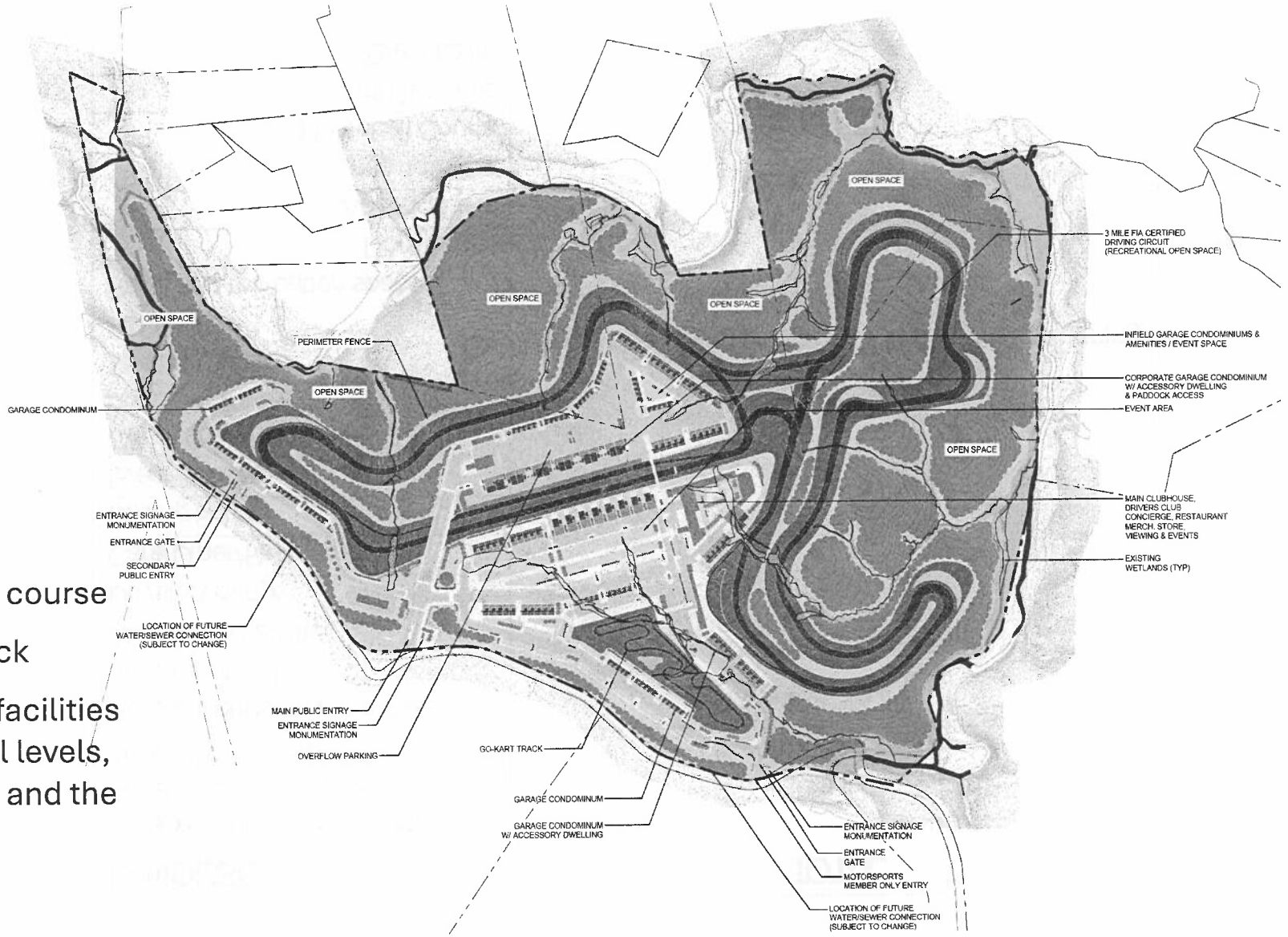
# Concept Plan – Submission



599

# Updated Concept Plan

- 3-mile +/- road course
- ¾ mile Kart track
- Driver training facilities for drivers at all levels, both members and the public



600

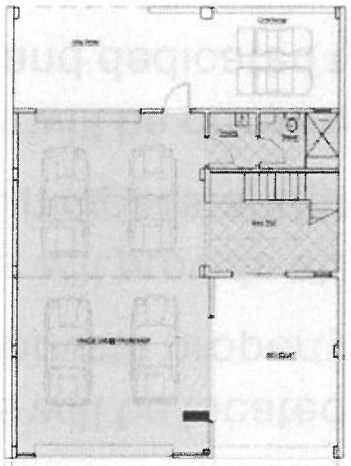
# Development Tabulation

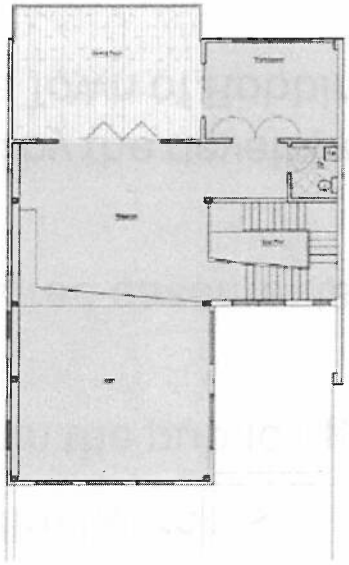
| LANDUSE | TOTAL |
|---|---|
| Garage Condominiums with Accessory Dwelling (see description below) | 165 units |
| Garage Condominiums (See description below) | 120 units |
| Clubhouse Facility | Square footage to be determined during site planning |
| Driver's Lounge | |
| Café/Diner/Restaurant | |
| Driving School | |
| Event Spaces | |
| Office space for facility operations | |
| Meeting Spaces | |
| Retail Store | |
| Parks and recreation spaces | |
| Dog Park(s) | |
| Walking Trails | |
| Jogging Paths | |
| Pickleball Courts | |
| Viewing Terraces | |
| Event Lawn | |

601
Units

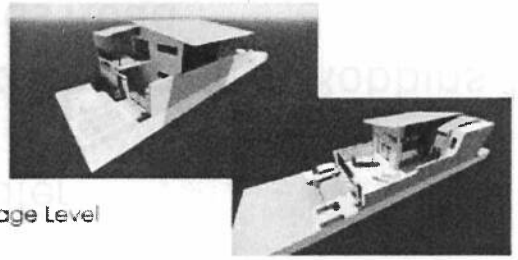
# the LUXURY CONDO

**VEHICLE STORAGE CAPACITY: 10+**





Mezzanine - Viewing Level



Grade - Garage Level

**SQUARE FOOTAGE:**
(subject to change)

1,200 SF:
Fully Conditioned Vehicle Storage.

809 SF:
Mezzanine Flex Space

200 SF:
Upper Level Viewing Terrace

1,400 SF:
Vehicle Courtyard/Corrals (approx.)

**STANDARD FEATURES:**

Fully Conditioned Vehicle Storage -
Dedicated Exterior Courtyard -
(square footages tbd)
Full bath/shower facilities -
Fully ventilated workshop spaces -
Studio Kitchenette -
Integral Passive Solar Design -
Fully Conditioned Mezzanine -
Fire rated office/layover room -
Heated Slabs -
Viewing Terrace w/Track view -
Golf Cart Storage (2 carts) -

**AVAILABLE UPGRADES:**

Multi-level vehicle lifts for extra storage -
Smart Home Packages -
Finish Upgrade Packages -
Electrical Charging Station -
Canopy Covers at Private Courtyards -
Simulator & Gaming Platform Play Area -



Site Locations

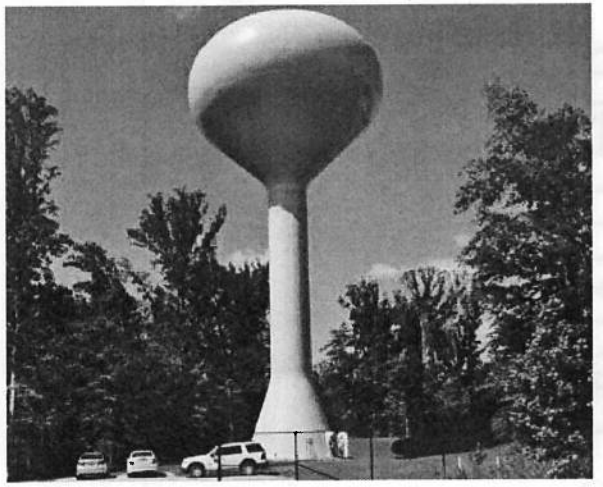
autoport

UWHARRIE
MOTORSPORTS PARK & RESORT

602

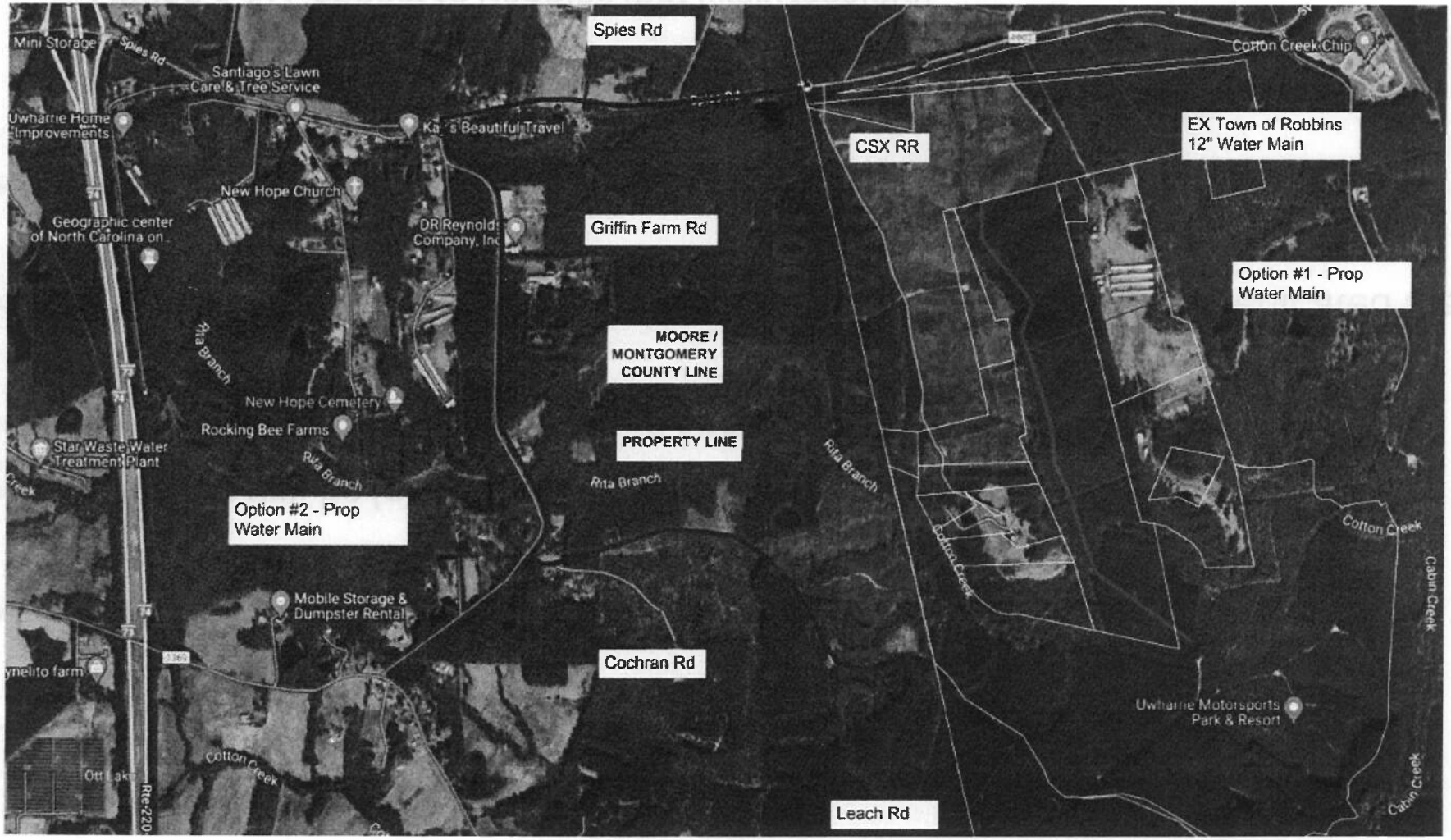
# Utilities – Public Water

- Will connect to the Town of Robbins 12” line located in Spies Road
- An on-site storage tank will be required to meet adequate pressure levels for fire protection, including sprinkler systems & fire hydrants
- Waterlines will be located within the public right-of-way or on private property
- Waterlines will provide all required easements and built to municipal standards
- Waterlines will be constructed by the developer at their cost and dedicated to the Town of Robbins
- Two (2) options



603

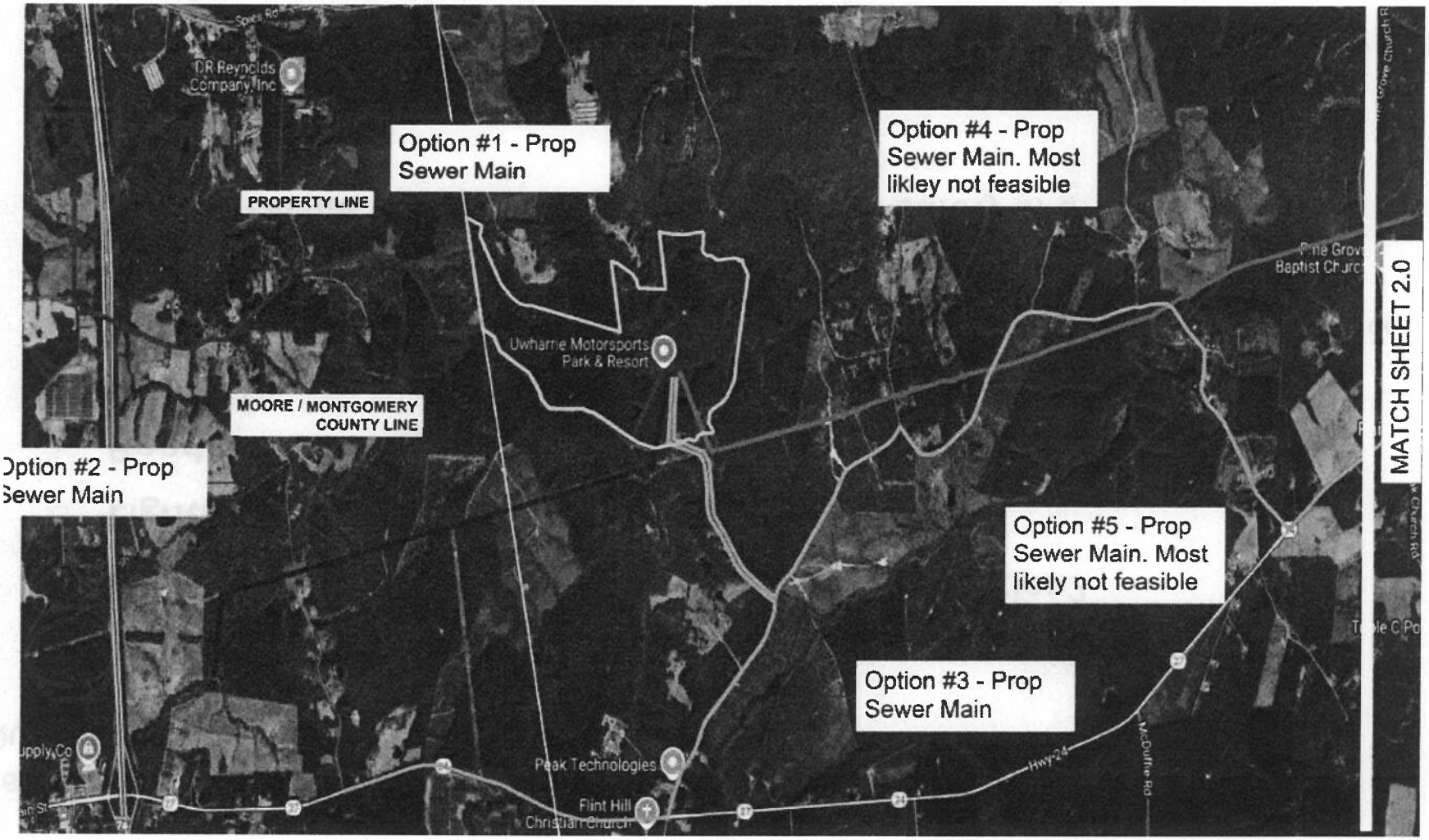
# Utilities – Public Water Alternatives



- An on-site lift station will be required to push wastewater to gravity lines which will connect to existing sewer mains
- Sewer lines will be located within the public right-of-way or on private property
- Sewer lines will provide all required easements and be built to municipal standards
- Sewer lines will be constructed by the developer at their cost and dedicated the local municipality
- Five (5) options, with two most likely unfeasible:
  - Option 1: Connect to Star
  - Option 2-3: Connect to Biscoe
  - Option 4-5: Connect to Robbins (not likely feasible)

605

# Utilities – Public Sewer Alternatives



# Questions Being Asked

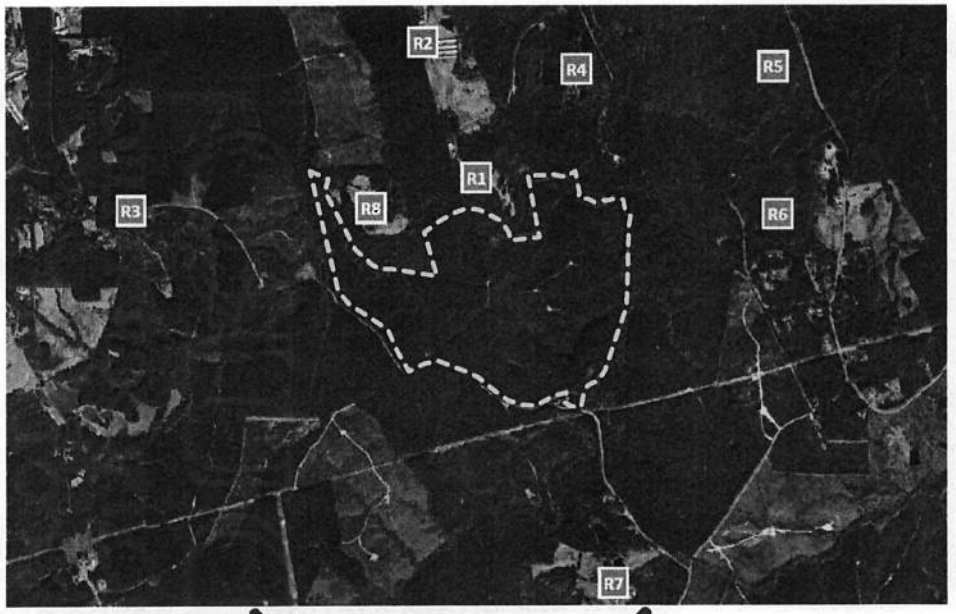
1. **Sound** - What steps will be taken for sound mitigation?
2. **Lighting** - Will the track be lit at night?
3. **Roads and Traffic** - Can the roads handle the traffic generated by the project?
4. **Environmental Impacts** - How will the project affect the environment & wildlife?
5. **Safety** – What plans are there to ensure the safety of drivers and spectators?
6. **Events** - How many & what type of events are going to be held?

# Sound Mitigation Strategy

- Will comply with Moore Co. Code of Ordinances Section 10-42(6), allowing the operation of a vehicular racetrack except between the hours of 11:30 pm and 6:00 am
- Planned track operating hours are 9:00 am-6:00 pm Mon-Sat, and 11:00 am-5:00 pm Sun – Karts may operate between the hours between 9 am and 10 pm Mon-Sat and 11 am and 6 pm Sun
- Track will be designed & located to fit into the natural surroundings & limit sound impacts using topography and retaining existing vegetation along the edges & in buffers along the track
- Driven International has identified strategies to limit off-site sound impacts, including:
  - Fine tuning track design
  - Earthen berms
  - Sound panels
  - Sound level monitoring system
- Sound Level Monitoring System - Will be provided at multiple points around the track
  - Prior to cars entering the track, they will go through a compliance check to make certain they are below the permitted decibel threshold
  - Any cars exceeding the threshold will not be permitted on the track

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# Preliminary Sound Modelling by Driven International




- The above are outside decibel calculations
- No sound mitigation measures have been included in this analysis

3.1.2 Impact level readings

| | 26x 89dBLAFmax | | 26x 95dBLAFmax | | 26x 107dBLAFmax | |
|---|---|---|---|---|---|---|
| | Summer | Winter | Summer | Winter | Summer | Winter |
| [R1] Receptor | 59dB | 54dB | 65dB | 60dB | 77dB | 72dB |
| [R2] Receptor | 35dB | 30dB | 41dB | 36dB | 53dB | 48dB |
| [R3] Receptor | 27dB | 28dB | 33dB | 34dB | 45dB | 46dB |
| [R4] Receptor | 25dB | 20dB | 31dB | 26dB | 43dB | 38dB |
| [R5] Receptor | 0dB | 0dB | 0dB | 0dB | 8dB | 6dB |
| [R6] Receptor | 14dB | 14dB | 20dB | 20dB | 32dB | 32dB |
| [R7] Receptor | 8dB | 16dB | 14dB | 22dB | 26dB | 34dB |
| [R8] Receptor | 57dB | 53dB | 63dB | 59dB | 75dB | 71dB |

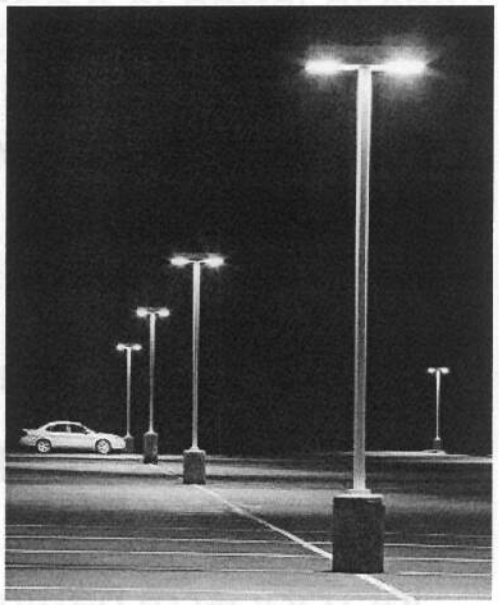
107 dB cars will not be permitted on this track and are a different class of automobile.

*Colour key, intended for visual differentiation: 0-9 dB, 10-19dB, 20-29dB, 30-39dB, 40-49dB, 50-59dB, 60-69dB, 70-79dB.*

609

# Lighting

- The main track will not be lit; The kart track will be lit
- Lighting will follow, at a minimum, UDO Section 7.Q, which includes Dark Sky illumination design principles
- Lights will have full 90-degree cutoff fixtures to direct light to the ground and avoid light going up to limit light pollution
- Lights will have side shields to adjoining properties & on-site condominiums to direct light only where needed
- All light will be directed inward to the property

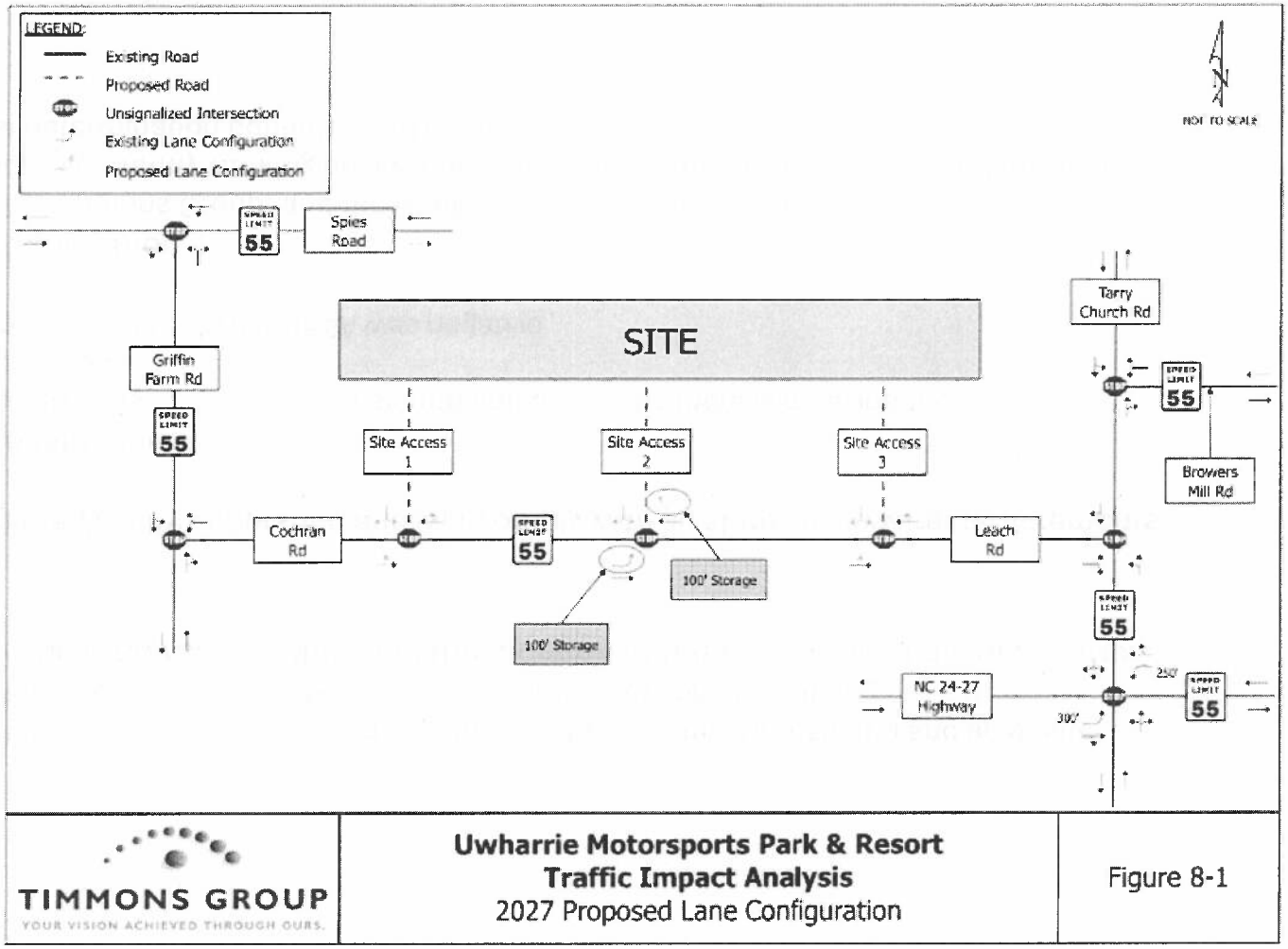


- A Traffic Impact Analysis (TIA) has been completed & submitted to NCDOT for review & comment
- The TIA was scoped with NCDOT & followed NCDOT standards/practices
- Traffic counts were conducted at a similar venue during a typical event to calculate proposed site trips
  - The event size was equivalent to anticipate daily events
- During larger events (2 – 4 times/year), the track operator will provide police and/or volunteers to direct traffic
- All intersection movements are projected to operate at a LOS B or better at each analyzed intersections

611

Roads/Traffic

TIA indicated 100' storage lanes required at Site Access 2




TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

**Uwharrie Motorsports Park & Resort**
**Traffic Impact Analysis**
2027 Proposed Lane Configuration

Figure 8-1

612

# Environmental Analysis

- Archeological Investigation
  - A preliminary investigation was completed by Timmons Group that involved record research and an onsite investigation and the report was reviewed by the North Carolina State Preservation Office
  - A developed site plan will be required to determine the location of the archaeological survey area

- Stormwater
  - The property is located in the WS-IIIP watershed and will comply with all state stormwater requirements

- Phase 1 Environmental Site Assessment
  - Phase 1 ESA was conducted and based on records research and a site visit there is no evidence of contaminated ground water or soil.
  - Phase 2 ESA was not required since the Phase 1 ESA was negative

- Wetland and Stream Buffer Delineation
  - Wetlands were delineated by Timmons Group, and the USACE made a site visit to review the field delineation. Timmons Group is currently working on a wetland delineation report to submit to the USACE and NCDEQ to get jurisdictional determination confirmation letters

613

# Environmental Analysis

- Endangered Species
  - US Fish and Wildlife Service identified a total of seven endangered, threatened, proposed, and candidate species as potentially occurring within the vicinity of the Site

| # | Scientific Name | Common Name | Federal Status | Timmons Assessment |
|---|---|---|---|---|
| 1 | Picoides borealis | Red-cockaded woodpecker | Endangered | **No impact** as confirmed by USFWS |
| 2 | Notropis mekistocholas | Cape Fear shiner | Endangered | **Impact can be avoided**; Developed site plan is required to determine search location |
| 3 | Rhus michauxii | Michaux's sumac | Endangered | **No impact** as confirmed through field survey |
| 4 | Helianthus schweinitzii | Schweinitz's sunflower | Endangered | **No impact** as confirmed through field survey |
| 5 | Fusconaia masoni | Atlantic pigtoe | Threatened | **Impact can be avoided**; Developed site plan is required to determine search location |
| 6 | Perimyotis subflavus | Tricolored bat | Proposed Endangered | **Impact can be avoided** based on time of year tree clearing occurs |
| 7 | Danaus plexippus | Monarch butterfly | Candidate | **No impact** as confirmed through field survey |

614

# Safety

- Safety is the #1 concern related to the operation of the property
- The FIA (Fédération Internationale de l'Automobile) Level 2 requirements for emergency services are designed to ensure the safety and preparedness of emergency teams at motorsport events FIA safety standards adhered to will include:
  - Protective spectator fencing and other debris fencing
  - Trained fire, rescue, & EMS staff must be on site during any on-track driving
  - Ambulances equipped with advanced life support (ALS) capabilities & fire equipment (including fire trucks) must be onsite during any on-track driving
  - Regular training & drills for emergency personnel in conformance with emergency response plans
- The track will employ Safety Officer(s) to monitor track safety during operating hours
- Specialty emergency equipment will be owned & maintained on site 24 hrs/day
- Events will be staffed with emergency personnel from local agencies and/or agencies outside Moore County, as needed & required by FIA standards
- Fire hydrants & sprinklers will be provided as required for the site & buildings

615

# Events

- Public events will be organized by the local community; # of events will be based on community demand:
  - Car Shows & Auctions
  - Concerts & Festivals
  - Charity Marathons & Runs
- Driving and racing events will vary in size and frequency

| | Type of Driving/Racing Event | Planned Frequency | Weekdays/ Weekends | Duration | # of Cars on the Track | # of Spectators |
|---|---|---|---|---|---|---|
| Driving | **Public Driving / Track Days** | Once a month | Weekdays | 2-4 Hours | +/- 10<br>25 Max | n/a |
| | **Private Corporate Driving Experiences** | 1-2 days a week<br>(based on demand) | Weekdays | 2-4 Hours | +/- 10<br>25 Max | n/a |
| | **Driving School** | 1-2 days a week<br>(based on demand) | Weekdays or Weekends | 2-4 Hours | +/- 10<br>25 Max | n/a |
| Racing | **League Racing / Smaller Championships**<br>(Local drivers, High school/college series, etc.) | 6-10 times/year | Weekdays or Weekends | 1 - 8 Hours | +/- 15<br>25 Max | 250 - 500 Spectators in one day |
| | **Race Meetings / Larger Championships**<br>(World Kart, IMSA Super Trofeo, etc.) | 2-4 times/year | Weekends | 2-3 Days | +/- 25<br>40 Max | 5,000 – 10,000 spectators over 3 days |

# Questions & Answers

| Questions | Answers |
|---|---|
| **Sound** - What steps will be taken for sound mitigation? | Will utilize a sound monitoring system & implement sound mitigation strategies (vegetative buffers, earthen berms, and/or sound panels) to minimize off-site sound impacts to neighboring properties |
| **Lighting** - Will the track be lit at night? | The main track will not be lit, but the kart track will; Will comply with Moore County UDO, including Dark Sky illumination design principles; All lighting will be directed inward on the property |
| **Roads/Traffic** - Can the roads handle the traffic generated by the project? | Will construct all road improvements required by NCDOT; Will provide police and/or volunteers to help direct traffic for larger events |
| **Environment** - How will the project affect the environment & wildlife? | Wetland impacts will be minimized & all required permits from the USACE will be obtained; Will comply with all state stormwater requirements; Will conduct further investigation to determine the presence of endangered/threatened species as required by state and federal agencies |
| **Safety** – What plans are there to ensure the safety of drivers and spectators? | Will comply with FIA Level 2 standards for on-site emergency response personnel & equipment; Fire hydrants & sprinklers will be installed; Will employ Safety Officer(s) who will be onsite during operating hours |
| **Events** - How many & what type of events are going to be held? | Will hold 2-4 larger events/year and smaller events 6-10 times/year; Will host other public events (concerts, festivals, shows, etc.) as requested by the community |

# Economic Impact - **Preliminary** Economic and Fiscal Impacts

SH | SANFORD HOLSHOUSER
ECONOMIC DEVELOPMENT CONSULTING

- Sanford Holshouser Group prepared an Economic Impact Study
- Three types of spending:
  1. **Direct** – Spending by Autoport, visitors, & vendors
  2. **Indirect** – Spending by companies from which Autoport, visitors, & vendors buy goods & services
  3. **Induced** – Spending by households of employees of business from which Autoport, visitors, & vendors buy goods & services

| | |
|---|---|
| Direct, Indirect, & Induced Jobs | 284 |
| Construction Economic Impact (one-time effect) | $216 million |
| Direct, Indirect, & Induced Annual Economic Impact | $11.1 million |
| Annual State & Local Fiscal Impact | $1.6 million |
| **TOTAL ANNUAL ECONOMIC & FISCAL IMPACT** | **$12.7 million*** |

* These numbers do not include sales or occupancy taxes

618

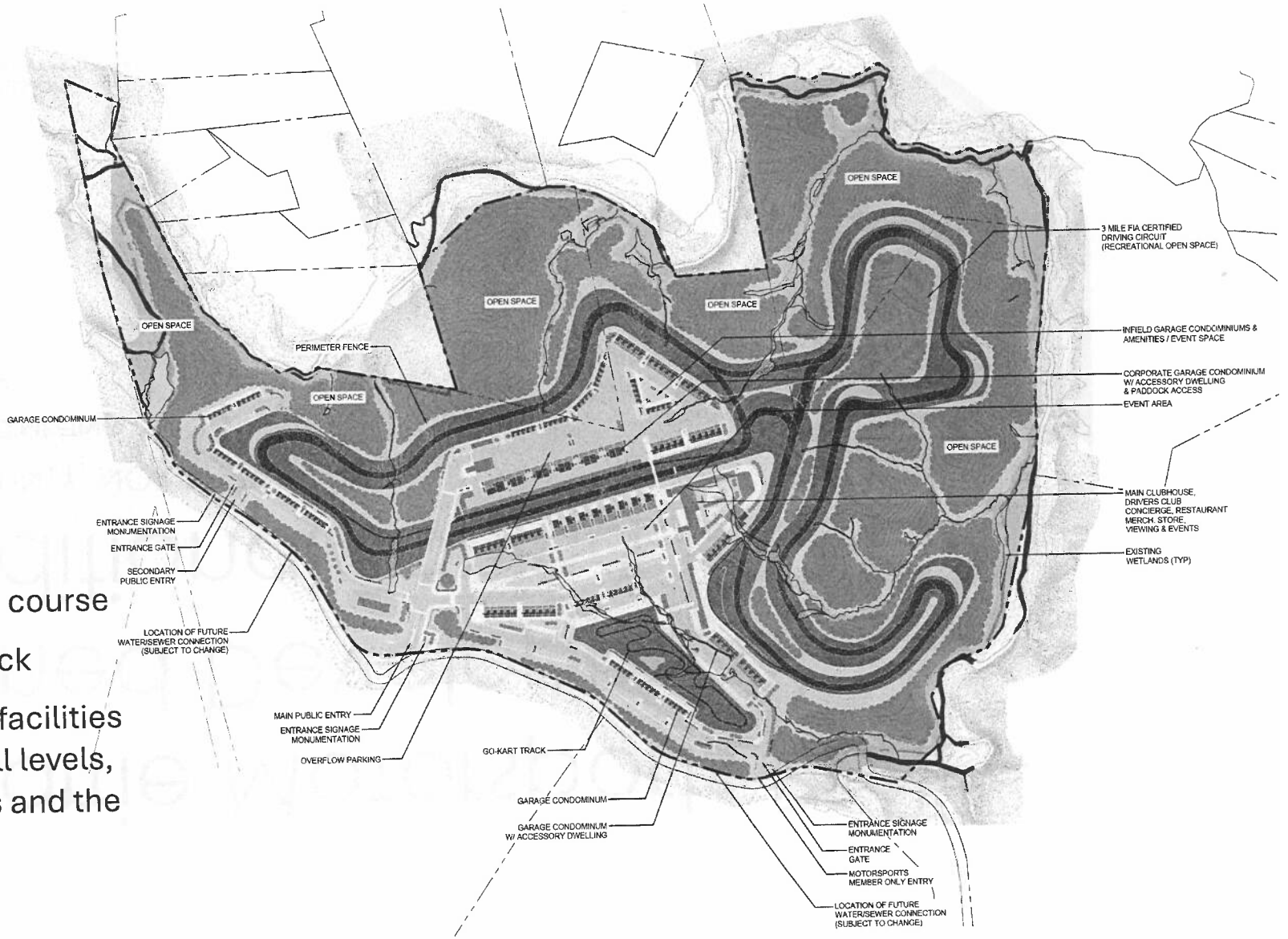
# Reasons Why the Project Should be Approved

- The project complies with the UDO, is consistent with the use shown on the Future Land Use Map, and meets the standards for rezoning included in the Future Land Use Plan and the UDO
- Proposed use is **LESS intense than many of the industrial uses** permitted by the Future Land Use Map
- The State of NC designated this area and site as an **Opportunity Zone** to encourage capital investment and development, Moore County's Land Use Plan reflects this goal
- The project will provide Moore County residents with significant community benefits:
  - A community gathering space
  - Recreational and entertainment opportunities
  - Educational opportunities (driving school and partnerships with local colleges and high schools)
- Significant financial & economic benefits, including:
  - More than **280 jobs**
  - A one-time construction impact of over **$200 million**
  - Annual economic & fiscal impact of nearly **$13 million** (direct, indirect, & induced benefits)

619

# Updated Concept Plan

- 3-mile +/- road course
- ¾ mile Kart track
- Driver training facilities for drivers at all levels, both members and the public



620

# Uwharrie Motorsports Park – Planned Development Conditional Zoning (PD-CZ)

MOORE COUNTY, NORTH CAROLINA

PLANNING BOARD MEETING

SEPTEMBER 5, 2024

APPLICANT:

AUTOPORT

KOONTZJONESDesign
LAND PLANNING | LANDSCAPE ARCHITECTURE

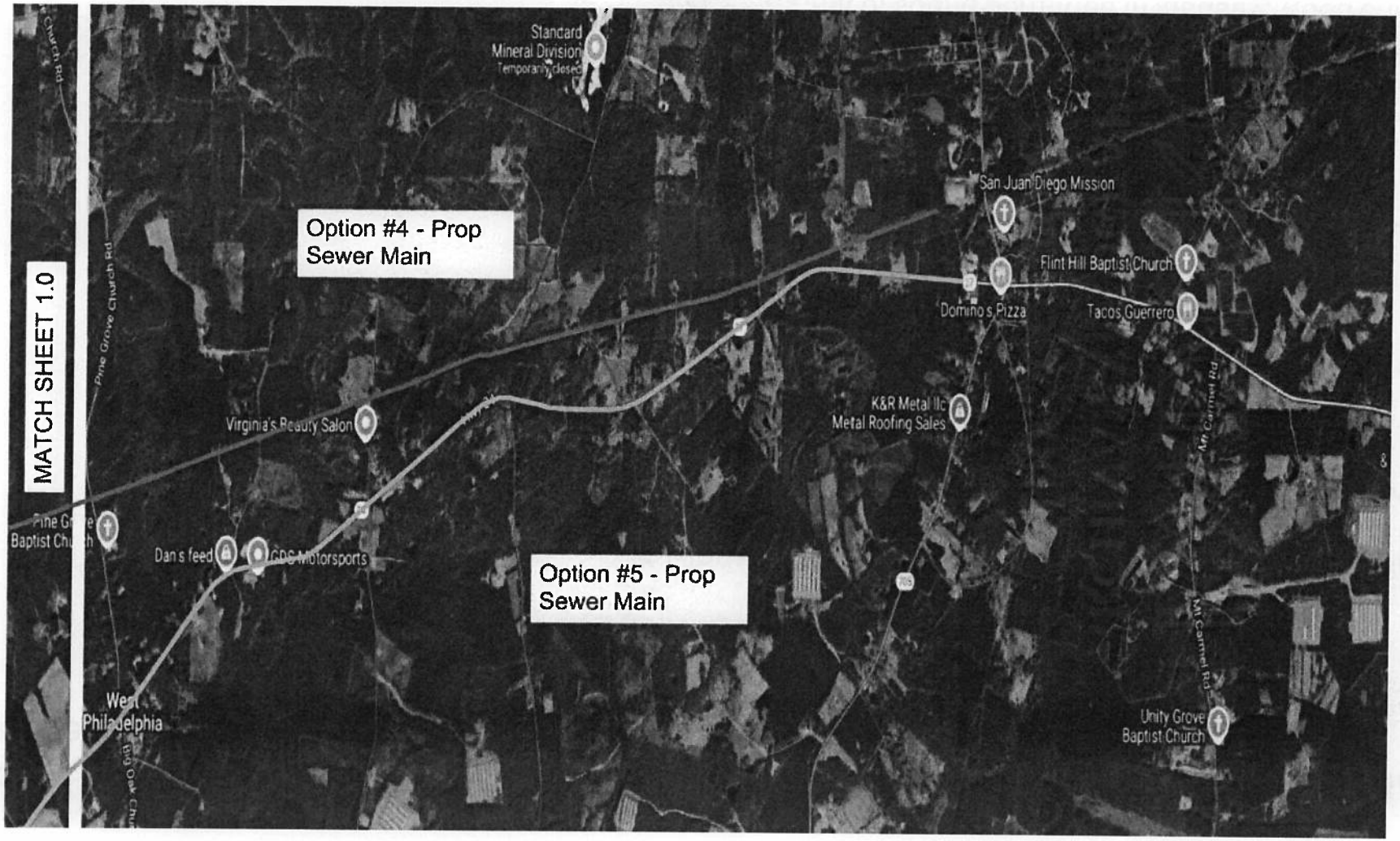
621

# Decibel Level Comparisons

| As a general guide, the following noise decibel readings apply to everyday sounds | |
|---|---|
| dB | Example |
| 0 | The faintest sound we can hear |
| 45 | Typical office space; Ambience in the city at night |
| 60 | Café courtyard at lunchtime, normal conversation |
| 70 | Car passing on the street; Vacuum cleaner |
| 80 | Loud music played at home |
| 90 | Truck passing on the street; Hairdryer; **Sports car with road legal sports exhaust** |
| 100 | Motorcycle; Lawnmower |
| 110 | Car horn; Rock band; **F1 turbocharged cars** |
| 115 | Limit of sound permitted in industry; wood chip mill |
| 120 | Deafening |

622

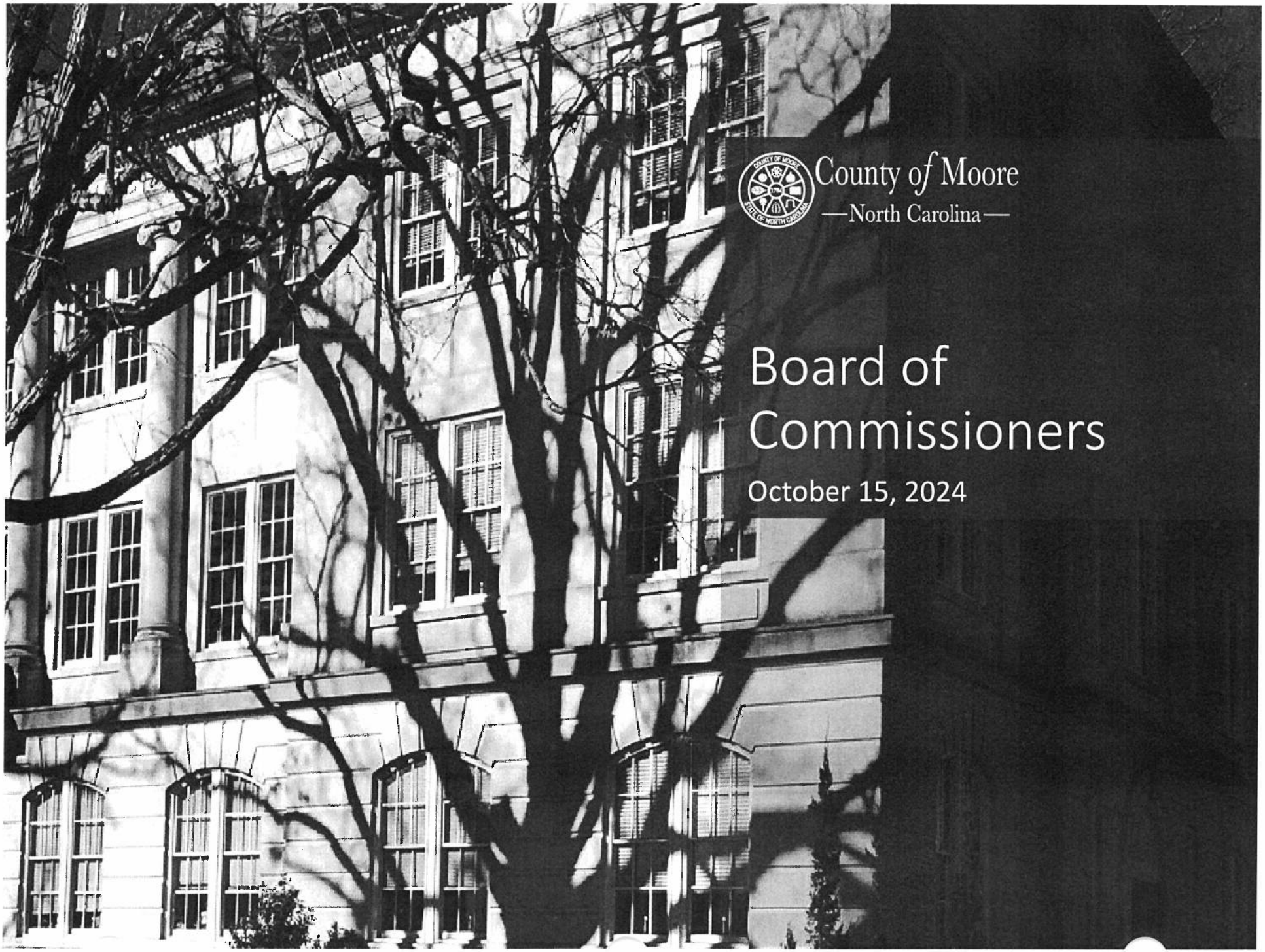
# Utilities – Public Sewer Alternatives



623

# Sound Mitigation Strategy

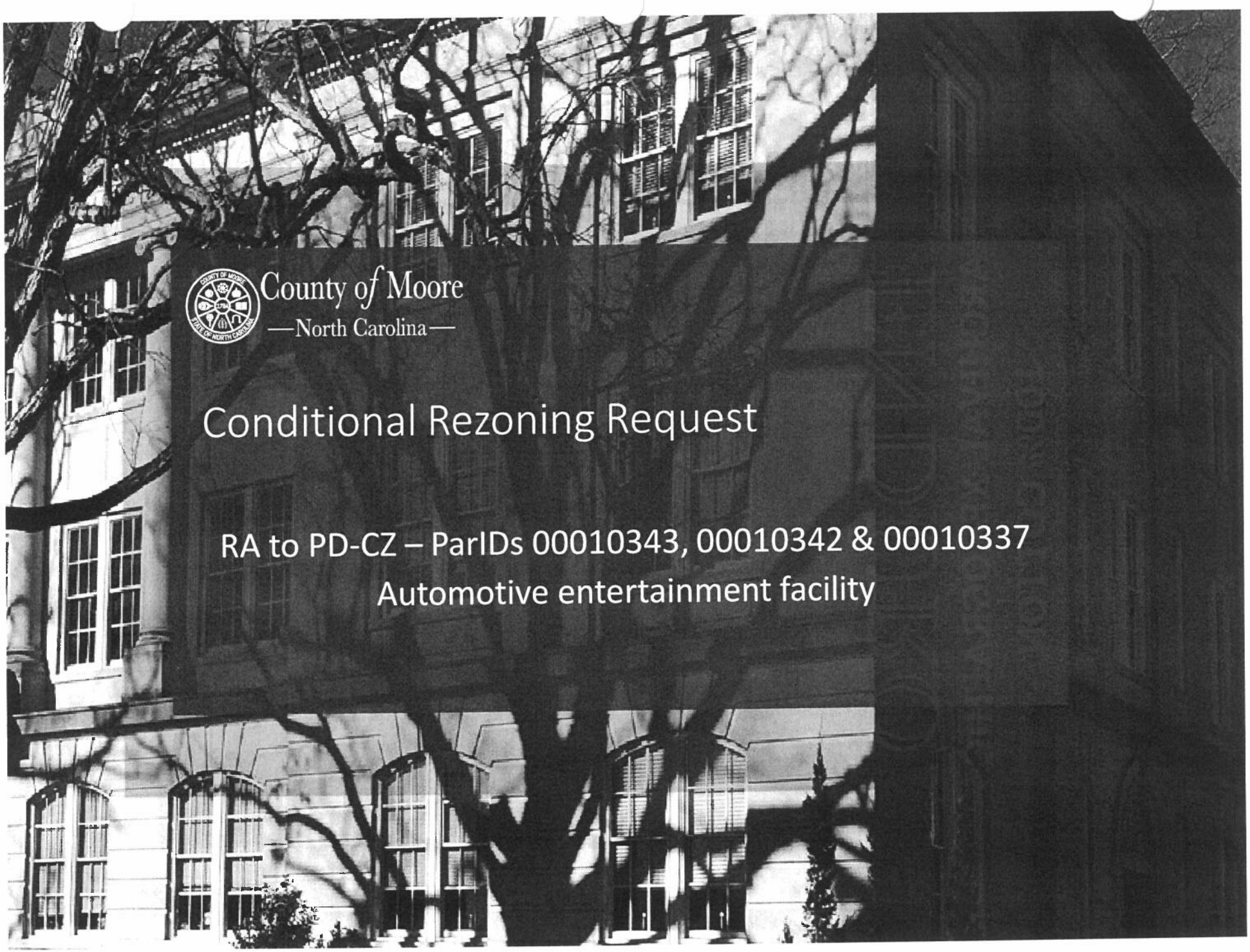
- Process
  - Sound analysis, monitoring, and study of existing ambient level conditions
  - Sound analysis of track design
  - Identify areas where sound could disturb adjoining properties
  - Determine track design solutions & sound mitigating strategies once areas are identified
  - Cars will be limited to a maximum decibel allowance

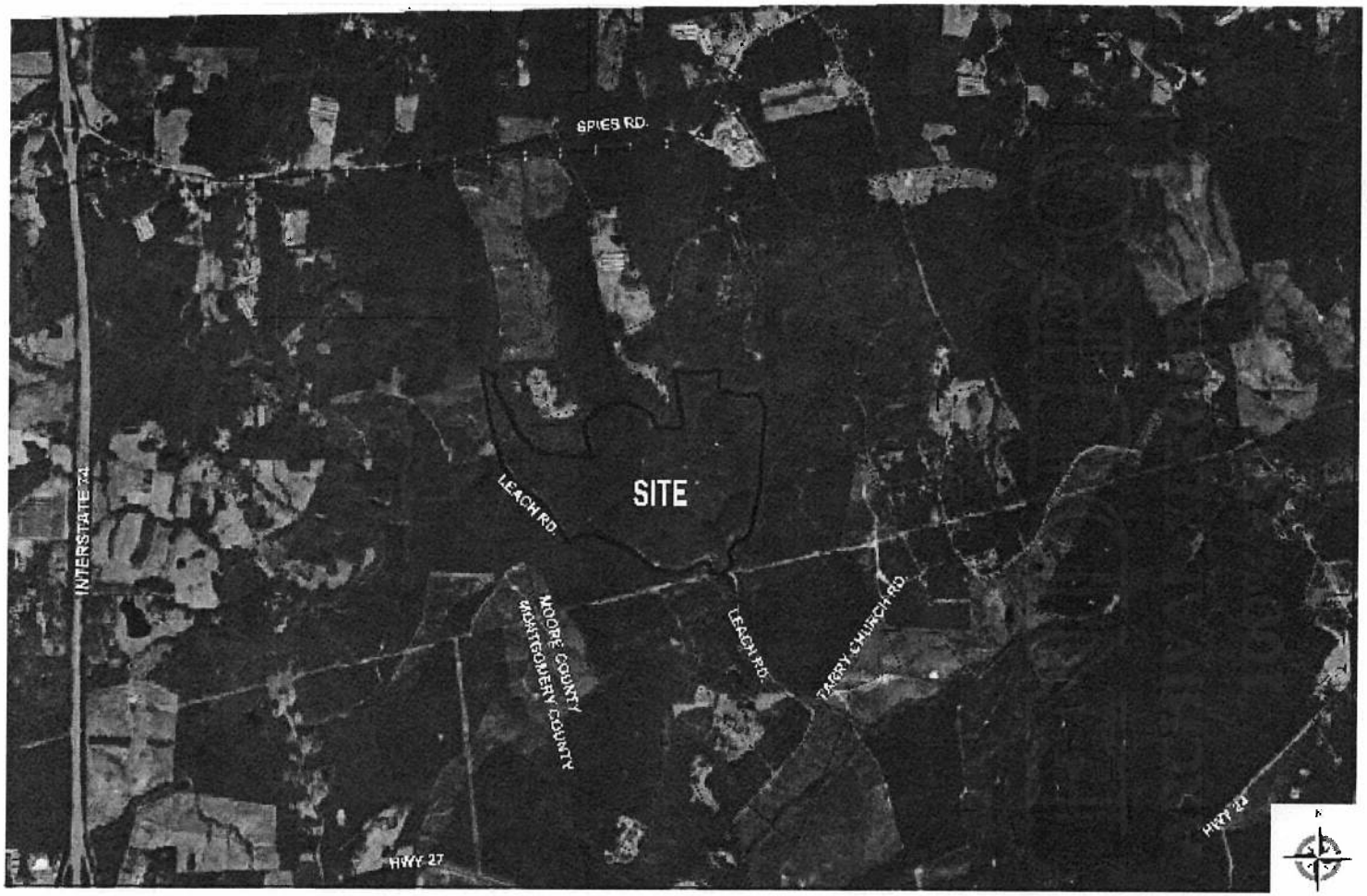


County of Moore
—North Carolina—

# Board of Commissioners

October 15, 2024

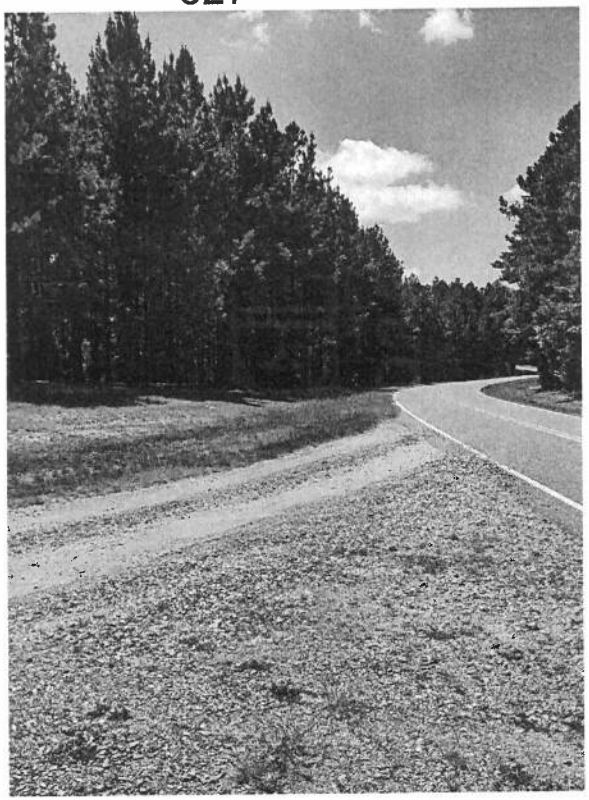

County of Moore
—North Carolina—
Conditional Rezoning Request
RA to PD-CZ – ParIDs 00010343, 00010342 & 00010337
Automotive entertainment facility



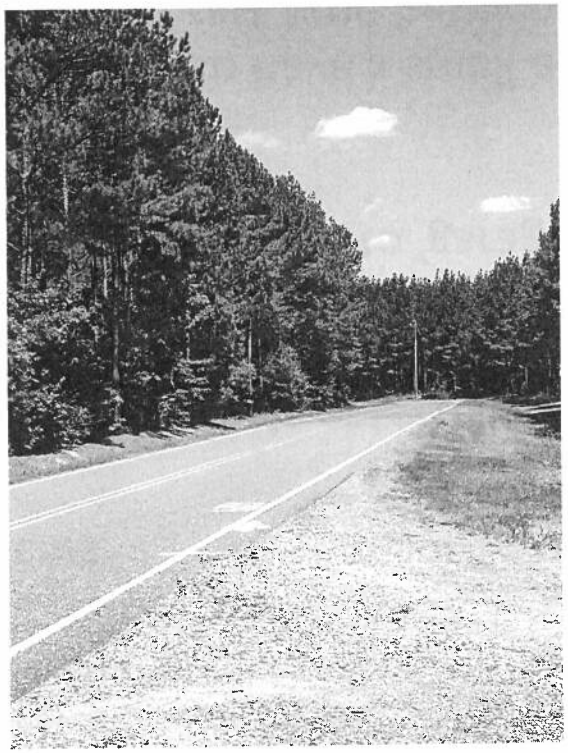

**Site Location Map** (NOT TO SCALE)

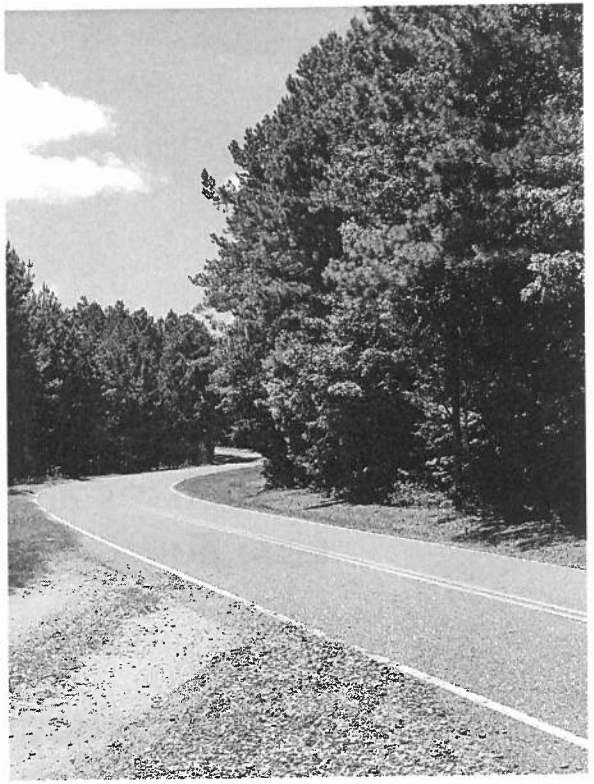
**EXHIBIT II**

627



# Multiple Views off Leach Road





# Background

- Total acreage = +/- 395.67 acres

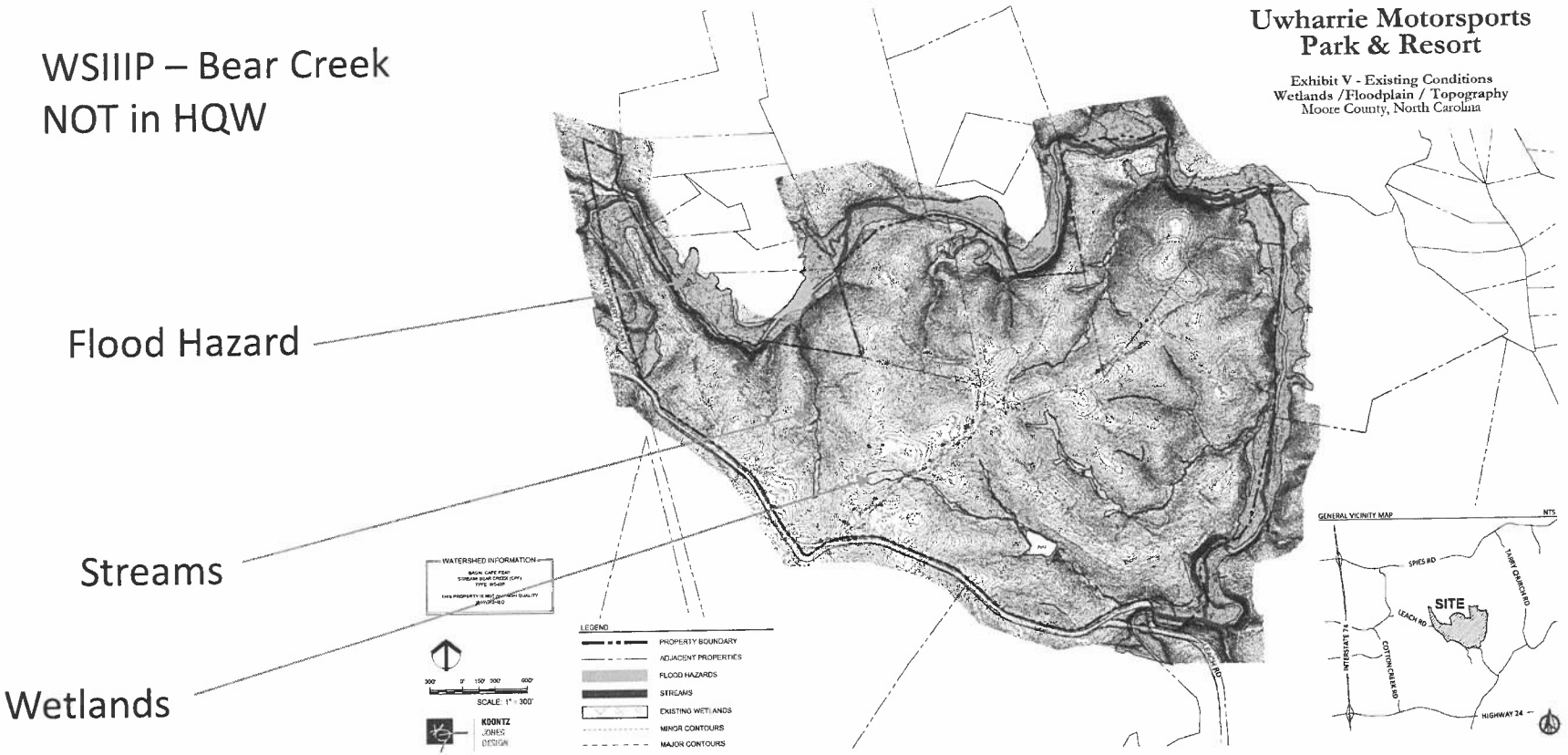
- Northern Moore County- high-end sports entertainment facility.

- The project is intended to attract car enthusiasts and owners of unique cars who will buy 'memberships,' allowing access to 'garage condominiums' where they can store cars.

- These 'garage condominiums' will also have a small accessory living area intended for short overnight stays or rest time between racing sessions.

# Exhibit V - Existing Conditions – Wetlands/ Floodplain/ Topography

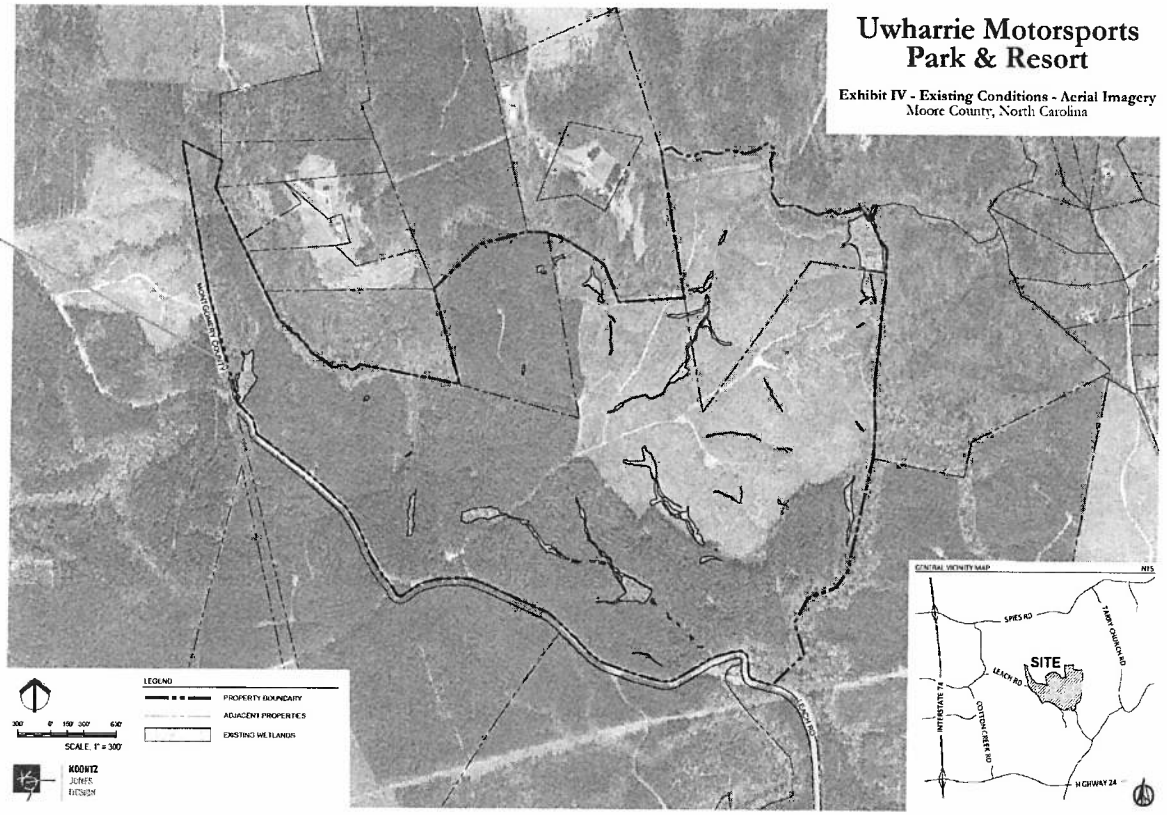
- WSIIIP – Bear Creek
- NOT in HQW




**WATERSHED:** The proposed development area lies within a WS-IIIP area. This allows 24% built-upon area (up to 70% with SNIA approval). There are existing streams, floodplains and wetlands located on the subject parcels. A Planned Development conditional zoning district must meet all standards applicable for development within a watershed overlay district.

# 630 Exhibit IV- Existing Conditions

Wetlands




## WETLANDS:

- Wetland impacts are intended to be minimal and will be coordinated with the United States Army Corp of Engineers (USACE) and the North Carolina Department of Environmental Quality (NCDEQ).

- There are no woodpecker habitants on the subject parcels and no other endangered species exist on the site.

# 631 Exhibit VI- Existing Conditions - Soils



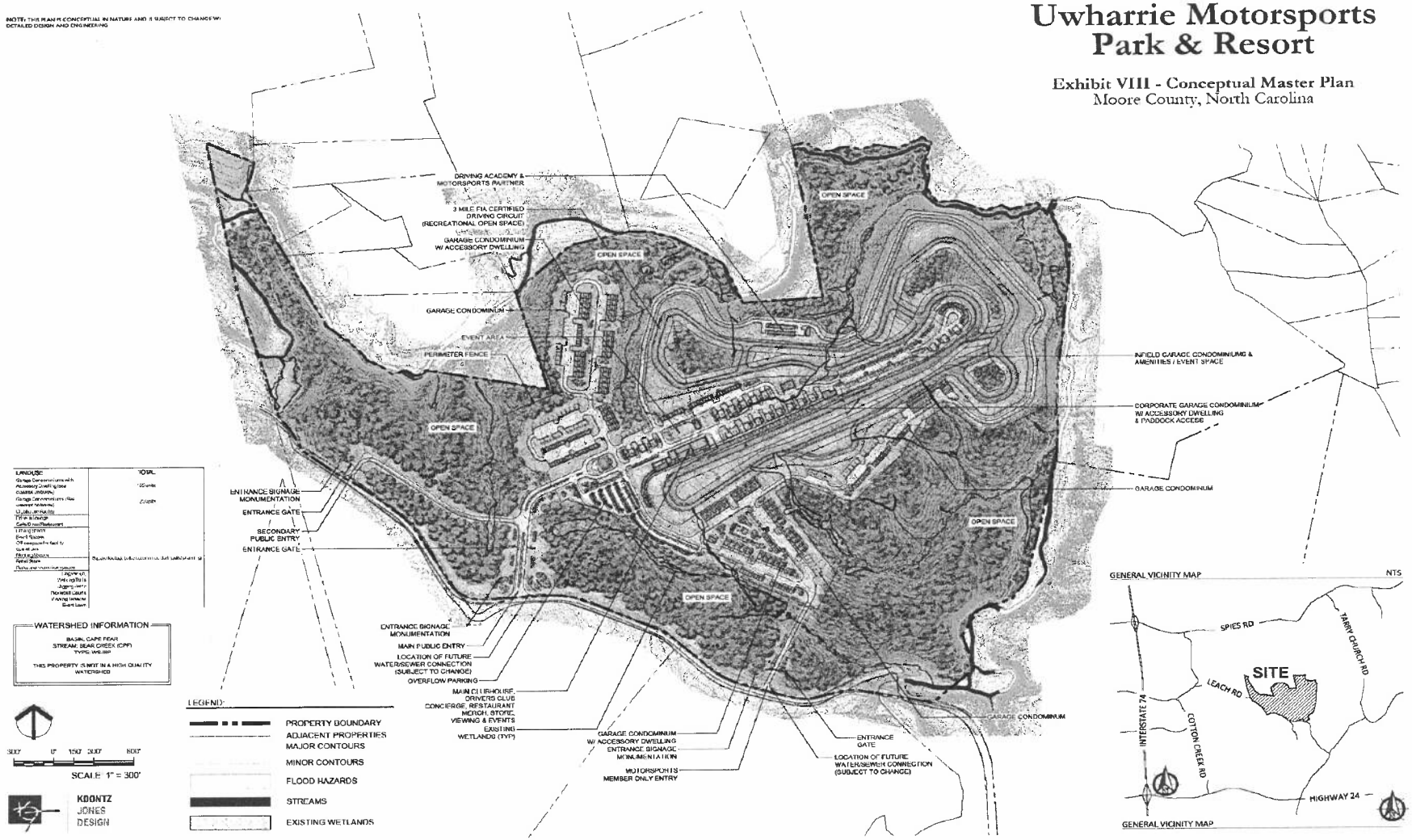
# Ordinance Standards:

## SECTION 3.18. ADDITIONAL STANDARDS FOR PLANNED DEVELOPMENT (PD-CZ) CONDITIONAL ZONING DISTRICTS:

The proposed request must meet the following ordinance standards: The (PD-CZ) district is established and intended to encourage innovative and unified land planning and site design concepts that support economical and efficient use of land, creative design, a high quality of development, and a better built environment. There is a Planned Development document (PD -CZ) document that outlines the master plan, including exhibits. **Land shall be classified into a planned development conditional zoning district only in accordance with the procedures and requirements set forth in this Ordinance for establishing a planned development conditional zoning district.**

Subject property is currently +/- 395.67 acres, zoned RA, and is to be rezoned PD-CZ.

# Exhibit VIII – Conceptual Master Plan



# Master Plan:

1. The general location of individual development areas, identified by land use(s) and/or development density or intensity; **ParID 00010343,00010342, and 00010337.**

2. The general configuration and relationship of the principal elements of the proposed development, including general building types;
   - Uses on the property may be mixed within the development or within individual buildings to promote a mixture of uses throughout the development. **Uses are intended to compliment the operational needs for a motorsports park & resort. Dimensional standards for the development, including building height, buffers, setbacks, and landscaping will follow the standards of the UDO.**

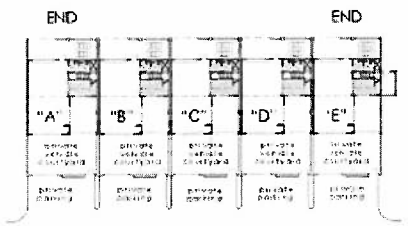
# Master Plan continued :

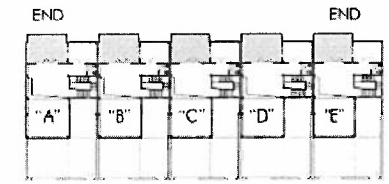
3. The acreage, types and mix of land uses, number of residential units (by use type), non-residential floor area (by use type), residential density, and non-residential intensity.

| LANDUSE | TOTAL |
|---|---|
| Garage Condominiums with Accessory Dwelling (see description above) | 165 units |
| Garage Condominiums (see description above) | 120 units |
| Clubhouse Facility | Square footage to be determined during site planning for these specific land uses |
| Drivers Lounge | |
| Café/Diner/Restaurant | |
| Driving School | |
| Event Spaces | |
| Office Space for facility operations | |
| Meeting Spaces | |
| Retail Store | |
| Parks & Recreation spaces | |
| Dog Park | |
| Pickleball Courts | |
| Jogging Paths / Walking Trails | |
| Viewing Terraces/Event Lawn/ Amphitheater | |

# Exhibit XI- Conceptual Building Plans

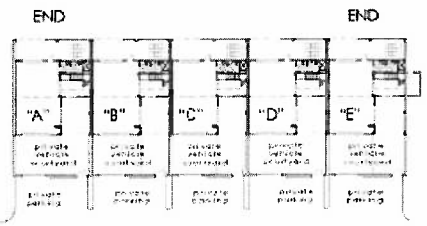
(SEE FOLLOWING PAGES FOR INDIVIDUAL UNIT INFO)

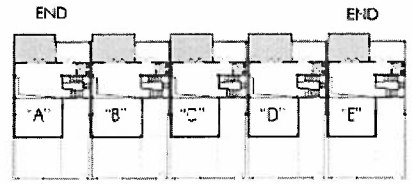



**5 Unit Luxury Car Condo Building**

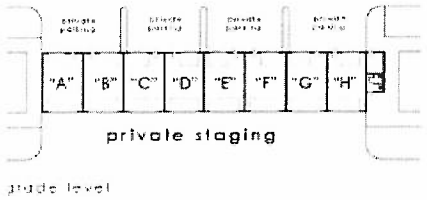
10,526 sf conditioned garage/mezzanine areas
100 sf of sprinklered floor elm




**5 Unit Premium Car Condo Building**

11,276 sf of garage/mezzanine areas
100 sf of sprinklered floor elm




**8 Bay Driver's Garage Building**

6,045 sf of Garage Area
175 sf of Restroom/Sprinkler Riser Rm.

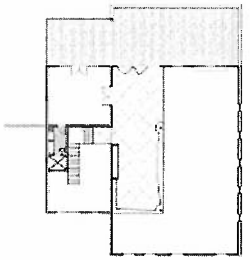
**UNIT TYPE BREAKDOWN:**

| | |
|---|---|
| Sponsor Partner Condo: (proprietary plans TBD) | 2 |
| Opulent Condos: (direct paddock access) | 9 |
| Opulent Condos: | 9 |
| Premium Condo (end unit) | 24 |
| Premium Condo (internal) | 36 |
| Luxury Condo (end unit) | 34 |
| Luxury Condo (internal) | 51 |
| Driver's Garage Condos | 112 |
| TOTAL CAR CONDOS | 277 |

***The Opulent Car Condo Building***

SINGLE BAY
3,600 sf of Garage Area
1,457 sf of Mezzanine Area

## EXHIBIT XI - CONCEPTUAL BUILDING PLANS



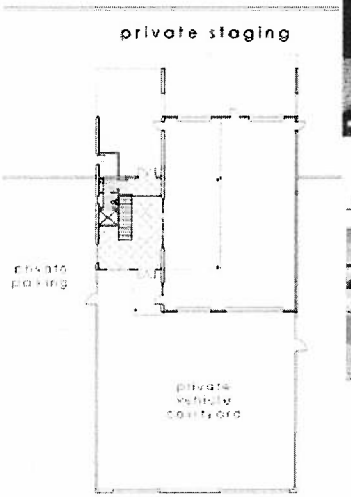










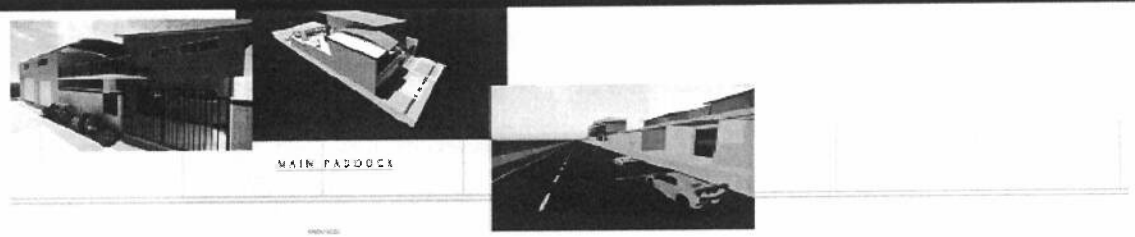



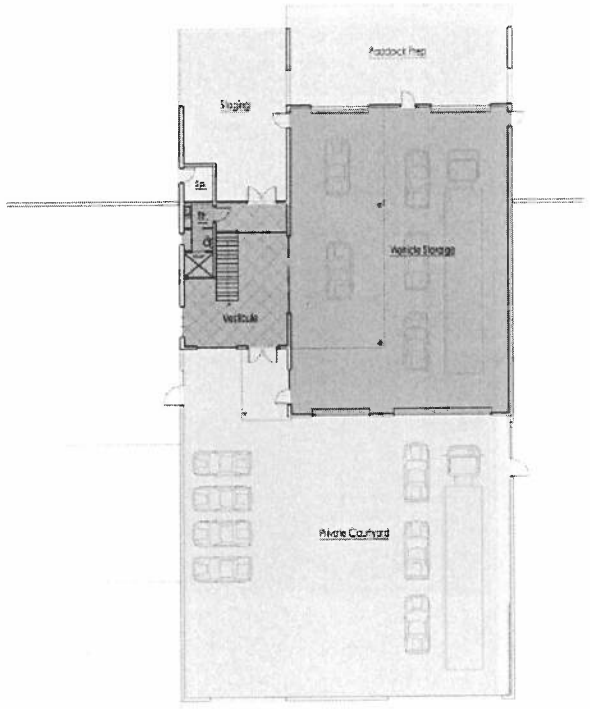

ALL SQUARE FOOTAGES APPROXIMATE AND SUBJECT TO CHANGE

autoport CAR CONDOS

UWHARRIE MOTORSPORTS PARK & RESORT

# Exhibit XI- Conceptual Building Plans




Grade - Garage Level




Mezzanine - Viewing Level

***SQUARE FOOTAGE:***
(subject to change)

3,600 SF:
Fully Conditioned Vehicle Storage.

1,467 SF:
Mezzanine Flex Space

1,000 SF:
Upper Level Viewing Terrace

2,000 SF:
Vehicle Courtyard/Corrals (approx.)

***VEHICLE STORAGE CAPACITY: 30+***

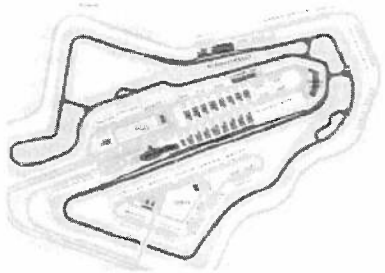
***STANDARD FEATURES:***

-Fully Conditioned Vehicle Storage
- Workshop Ventilation System
- Dedicated Exterior Courtyard (square footages tbd)
-Full bath/shower facilities
-Studio Kitchenette
-Integral Passive Solar Design
-Fully Conditioned Mezzanine
-Fire rated office/layover room
-Heated Slabs
-Viewing Terrace w/Track view
-Golf Cart Storage (2 carts)

-DIRECT MAIN PADDOCK ACCESS - (units TBD)
-PRIORITY MAIN PADDOCK ACCESS -(units TBD)

***AVAILABLE UPGRADES:***

-Multi-level vehicle lifts for extra storage
-Smart Home Packages
-Finish Upgrade Packages
-Electrical Charging Station
-Canopy Covers at Private Courtyards
-Simulator & Gaming Platform Play Area



Site Locations

autoport

UWHARRIE
MOTORSPORTS PARK & RESORT

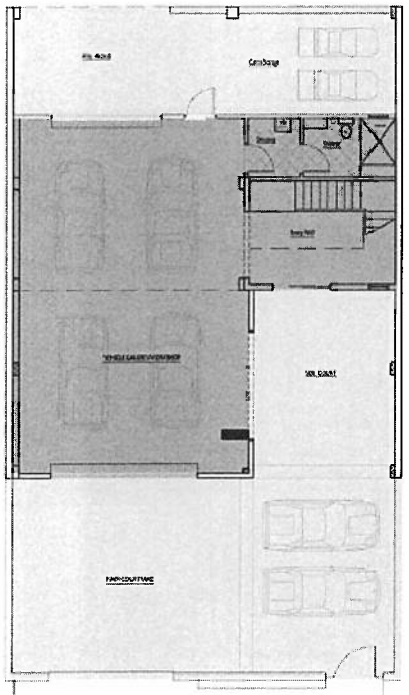
the OPULENT CONDO

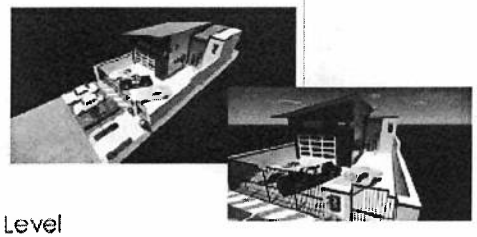
all terms, designs, services & information contained herein are subject to change.

# Exhibit XI- Conceptual Building Plans

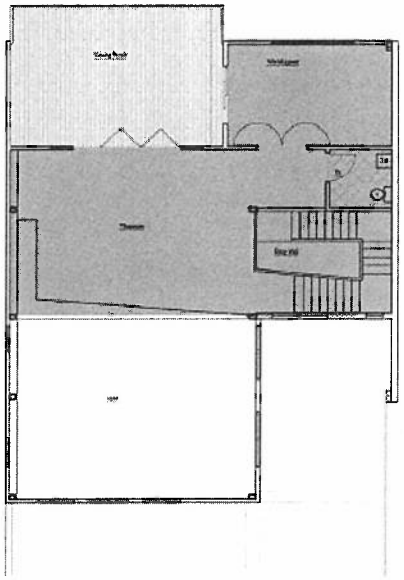
the PREMIUM CONDO

**VEHICLE STORAGE CAPACITY: 15+**





Grade - Garage Level



Mezzanine - Viewing Level

***SQUARE FOOTAGE:***
(subject to change)

1,350 SF:
Fully Conditioned Vehicle Storage.

920 SF:
Mezzanine Flex Space.

250 SF:
Upper Level Viewing Terrace.

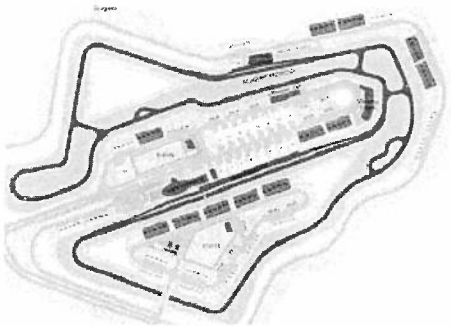
1,600 SF:
Vehicle Courtyard/Corrals (approx.).

***STANDARD FEATURES:***

Fully Conditioned Vehicle Storage -
Full Ventilation for Workshop Spaces -
Dedicated Exterior Courtyard -
(square footages tbd)
Full bath/shower facilities -
Studio Kitchenette -
Integral Passive Solar Design -
Fully Conditioned Mezzanine -
Fire rated office/layover room -
Heated Slabs -
Viewing Terrace w/Track view -
Golf Cart Storage (2 carts) -

***AVAILABLE UPGRADES:***

Multi-level vehicle lifts for extra storage -
Smart Home Packages -
Finish Upgrade Packages -
Electrical Charging Station -
Canopy Covers at Private Courtyards -
Simulator & Gaming Platform Play Area -



Site Locations

autoport

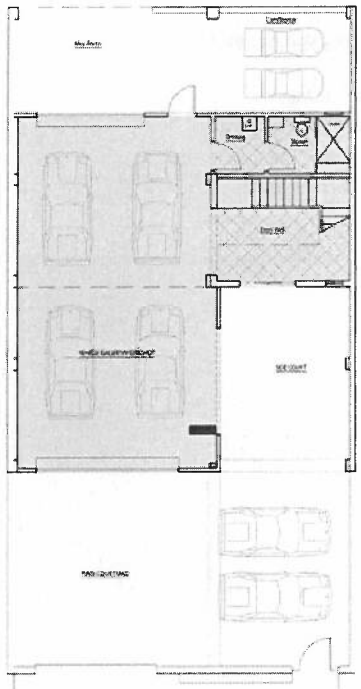
UWHARRIE
MOTORSPORTS PARK & RESORT

all terms, designs, services & information contained herein are subject to change.

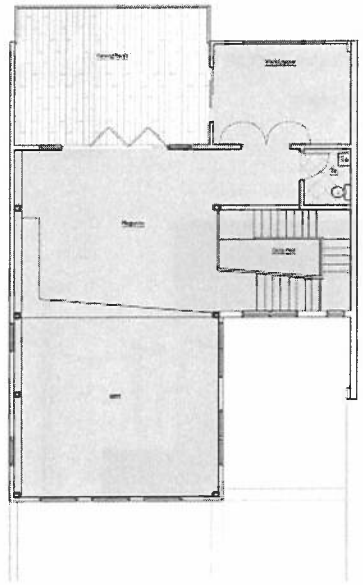
# Exhibit XI- Conceptual Building Plans

**VEHICLE STORAGE CAPACITY: 10+**

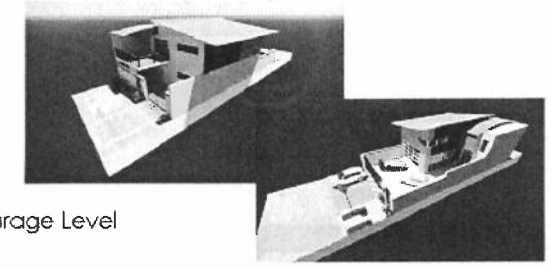
the LUXURY CONDO



Grade - Garage Level



Mezzanine - Viewing Level



***STANDARD FEATURES:***

Fully Conditioned Vehicle Storage -
Dedicated Exterior Courtyard -
(square footages tbd)
Full bath/shower facilities -
Fully ventilated workshop spaces -
Studio Kitchenette -
Integral Passive Solar Design -
Fully Conditioned Mezzanine -
Fire rated office/layover room -
Heated Slabs -
Viewing Terrace w/Track view -
Golf Cart Storage (2 carts) -

***AVAILABLE UPGRADES:***

Multi-level vehicle lifts for extra storage -
Smart Home Packages -
Finish Upgrade Packages -
Electrical Charging Station -
Canopy Covers at Private Courtyards -
Simulator & Gaming Platform Play Area -

***SQUARE FOOTAGE:***
(subject to change)

1,200 SF:
Fully Conditioned Vehicle Storage.

809 SF:
Mezzanine Flex Space

200 SF:
Upper Level Viewing Terrace

1,400 SF:
Vehicle Courtyard/Corrals (approx.)



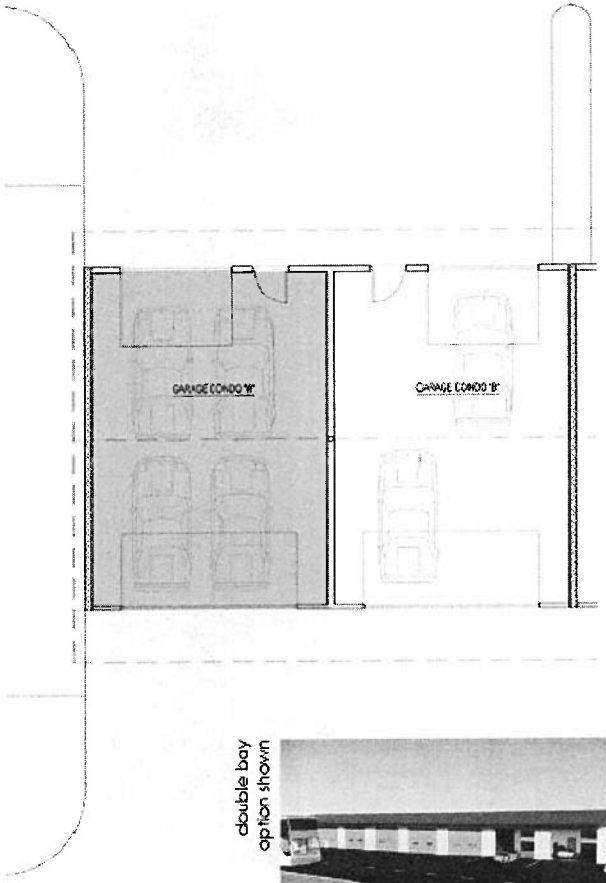
Site Locations

autoport

UWHARRIE
MOTORSPORTS PARK & RESORT

all terms, designs, services & information contained herein are subject to change.

# Exhibit XI- Conceptual Building Plans




Grade - Garage Level



double bay option shown





double bay option shown

**SQUARE FOOTAGE:**
(subject to change)

756 SF:
Fully Conditioned Vehicle Storage.

DOUBLE BAY OPTION (while available)
1,512 SF:

Restroom facilities (shared per bldg.)

800 SF of dedicated exterior parking/staging

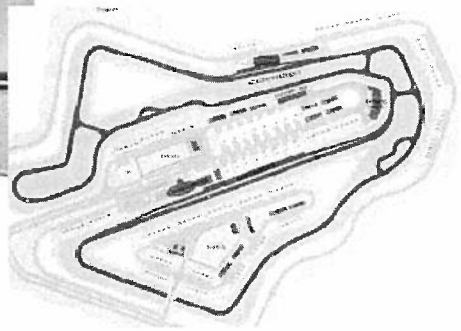
***VEHICLE STORAGE CAPACITY: 4+***

***STANDARD FEATURES:***

Fully Conditioned Vehicle Storage -
Dedicated Exterior Parking/Staging -
(square footages tbd)
Shared Private Restroom facilities -
Fully Ventilated Workshop Spaces -
Integral Passive Solar Design-
Heated Slabs-

***AVAILABLE UPGRADES:***

Multi-level vehicle lifts for extra storage-
Smart Home Packages-
Finish Upgrade Packages-
Electrical Charging Station-
Canopy Covers at Exterior Staging-



Site Locations

the Driver's Garage

autoport

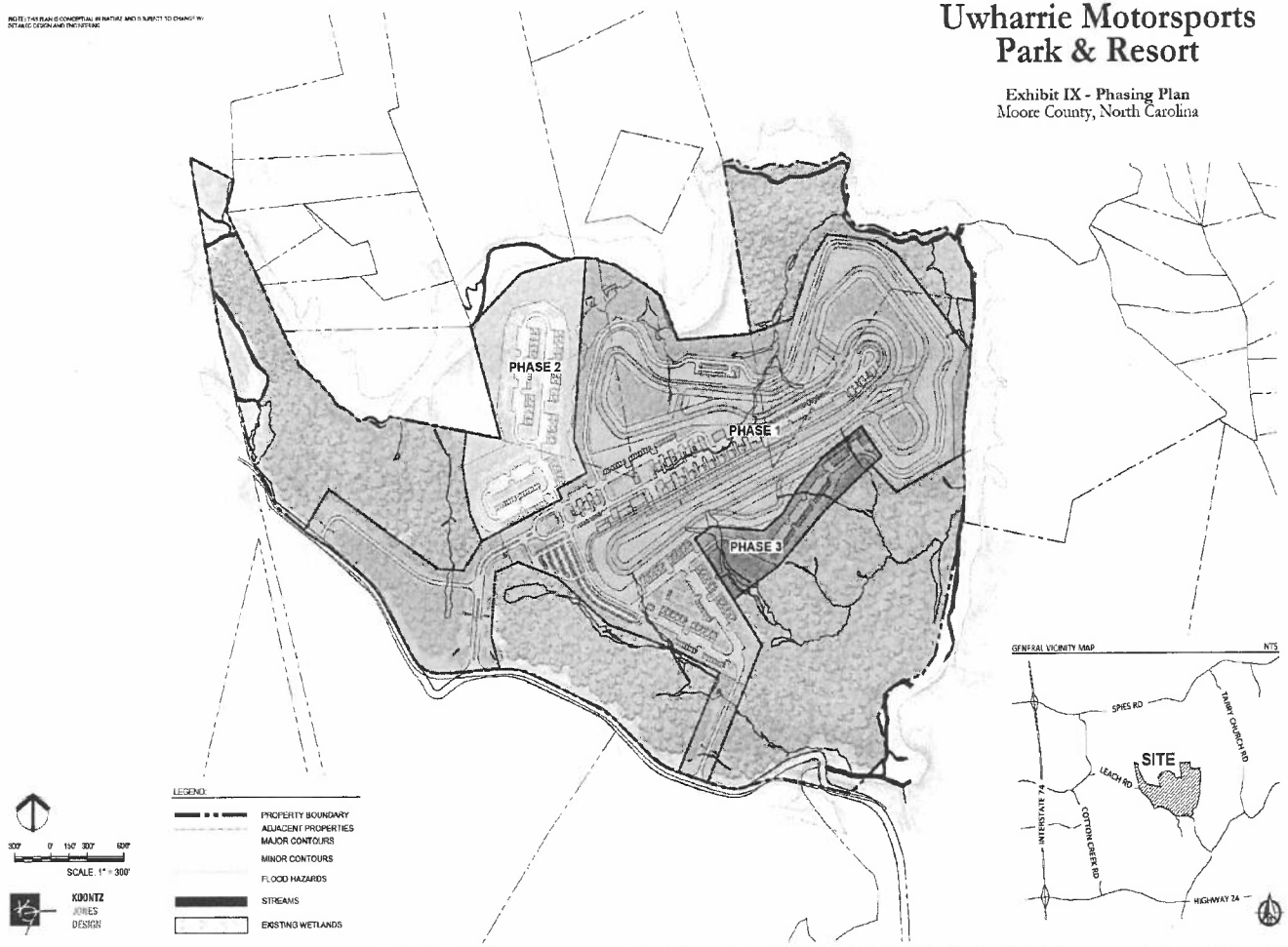
UWHARRIE
MOTORSPORTS PARK & RESORT

all terms, designs, services & information contained herein are subject to change.

641

# Master Plan continued:

4. A development phasing plan that identifies the general sequence or phases in which the district is proposed to be developed, if phasing is proposed



# Exhibit IX – Phasing Plan

5. The dimensional standards for lots applicable in each development area of the district;

6. The general location, amount, and type of open space (whether designated for active or passive recreation).

7. The location of environmentally sensitive lands, wildlife habitat, and resource protection lands;

8. The on-site transportation circulation system, including the general location of all public and private streets, existing or projected transit service, pedestrian, and vehicular circulation features, and how they will connect with existing and planned systems;

# Master Plan continued:

9. The general location of on-site potable water and wastewater facilities, and how they will connect to existing systems;

10. The general location of on-site stormwater management facilities, and how they will connect to existing public systems; and

11. The general location of all other on-site public facilities serving the development, including but not limited to parks, schools, bus shelters, and facilities for fire protection, police protection, EMS, and solid waste management.

**These 11 elements are shown in the submitted master plan and terms and conditions statement.**

# Terms and Conditions Statement:

In addition to a master plan, an application for the establishment of a planned development conditional zoning district shall include a terms and conditions statement. The document shall incorporate by reference or include, but not be limited to:

1. **A statement of planning objectives for the district;**

2. **The degree of consistency between the proposed planned development master plan and the applicable aspects of the County's Adopted Comprehensive Land Use Plan;**

3. **All conditions related to approval of the application.**

4. **How transportation, potable water, wastewater, stormwater management, and other infrastructure will be provided to accommodate the proposed development;**

# Terms and Conditions Statement continued:

5. **The provisions related to environmental protection and monitoring;**

6. **The range of potential principal and accessory uses. Only those principal and accessory uses that are identified as allowable may be included within a planned development conditional zoning district application;**

7. **Any other provisions the Board of Commissioners determines are relevant and necessary to the development of the PD-CZ in accordance with applicable standards and regulations.**

# Compatibility along District Boundaries

Development along the perimeter of a PD district shall be compatible with adjacent existing or proposed development outside the district. Where there are potential issues of land use compatibility, the planned development master plan shall provide for transition areas at the edges of the PD district that provide for appropriate buffering and/or ensure a complementary character of uses. Determination of complementary character shall be based on densities/intensities, lot size and dimensions, building height, building mass and scale, hours of operation, exterior lighting, siting of service areas, or other aspects identified by the Board of Commissioners.

- Meet or exceed the landscape standards within the Moore County UDO per Chapter 7. Landscape buffers are not required within a planned development; however, the Applicant will provide additional areas of landscape buffers and setbacks along the property boundary. A 100' setback and buffer will be provided along the property boundary. The 100' buffer is intended to be undisturbed with existing vegetation to remain. No setbacks or buffers will be provided within the development.

# Compatibility along District Boundaries continued

647

- Applicant is proposing that street, parking lot, and internal lighting will be designed in conformance with the requirements of Section 7.8Q in the Moore County UDO. The driving course/racetrack is intended for daytime use only and will not require heavy illumination for night driving/racing sessions. Lighting in the track area may be provided only as needed for security and safety measures. All lighting will be LED lighting and shall minimize glare hazards and exterior illumination as described in the UDO.

- Applicant is proposing that Driven International will provide studies on noise produced during racing/driving sessions and any mitigation measures needed to control appropriate noise levels for adjacent properties. The track will not be operated at night.

# Site Plan Review

1. The planned development master plan may take the form of a **generalized concept plan** for development that provides a general indication of building and site feature location, or it may be configured to the level of detail associated with site plans and construction drawings depicting exact building placement, location and profile of public infrastructure, and configuration of site features like parking, landscaping, and similar elements.

2. **In cases where the master plan is more general or conceptual in nature, the development proposed in the planned development designation shall also undergo site plan review.**

3. In cases where the master plan is detailed and meets the minimum requirements for a site plan in the opinion of the Board of Commissioners, the applicant may request, and the Board of Commissioners may grant, an exemption from subsequent site plan review.

## Site Plan Review continued

4. If a site plan review exemption is granted by the Board of Commissioners, the proposed development shall fully comply with the development configuration depicted in the planned development master plan. Failure to comply with the approved master plan configuration shall require an amendment of the planned development application.

5. Regardless of the level of detail included in the master plan, the Administrator shall review and comment on the master plan prior to consideration of the planned development conditional rezoning district application by the Planning Board.

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# Community Meeting

Required community meeting was conducted at Robbins First Baptist Church, 651 E Hemp Street, Robbins, NC, on Thursday May 16, 2024, from 4:00 - 6:00 PM. Adjacent property owners were notified by certified return receipt mail, sent on Wednesday, May 1, 2024.

Per Ordinance requirements:

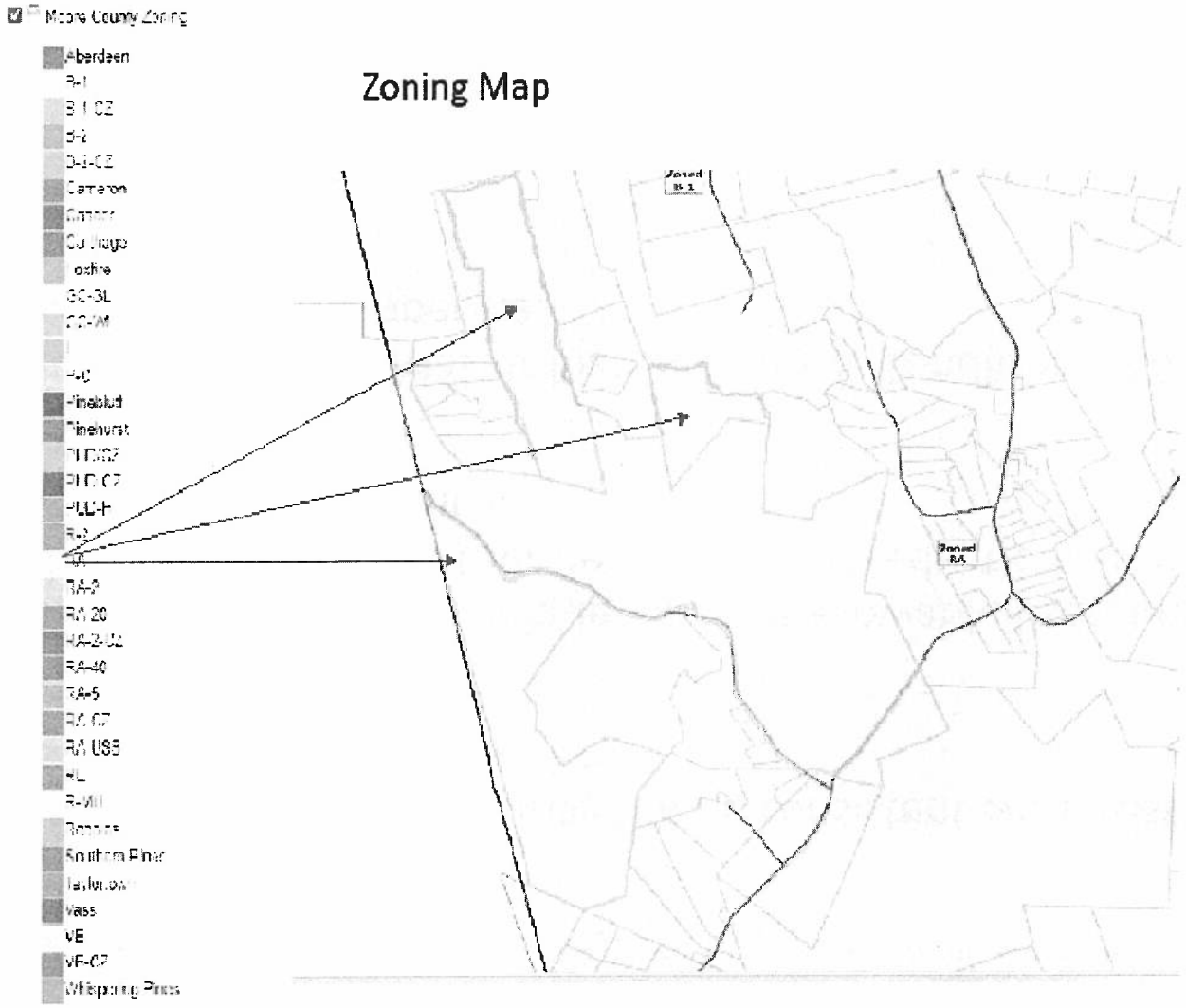
- Signs posted along Leach Road, Tarry Church Road, Owl Farm Road, Cabin Estates Trail and Spies Road
- Adjacent properties received certified and regular mailings

# Planned Development Conditional Zoning (PD-CZ)

- Negotiated zoning district- may or may not be consistent with existing conventional zoning district.
- PD district application proposes unique range of allowable uses, unique dimensional requirements, or other deviations and reductions from generally applicable standards in ordinance.
- Requires approval of the PD Master Plan & Terms & Conditions that detail how development in the PD will operate.

652

# Zoning District Compatibility



# Zoning District Compatibility

**Factors to consider:**

- Enormous size of development
- Increased surrounding buffers
- Specific nature of proposed conditions
- Surrounding land uses are residential and agricultural
- Surrounding area is zoned RA (Rural Agricultural)
- Developer is financing infrastructure upgrades
- Any study findings (TIA, noise, stormwater etc) not ready and available at time of Public Hearing will be required to be submitted through commercial permit review with all plans for final approval.

# Consistency with 2013 Moore County Land Use Plan

- The future land use map identifies the property as Industrial.

- The Land Use Plan defines the Industrial classification as: including light/heavy industrial uses, manufacturing, warehousing and distribution, and transportation-related uses.

    - Industrial areas should:

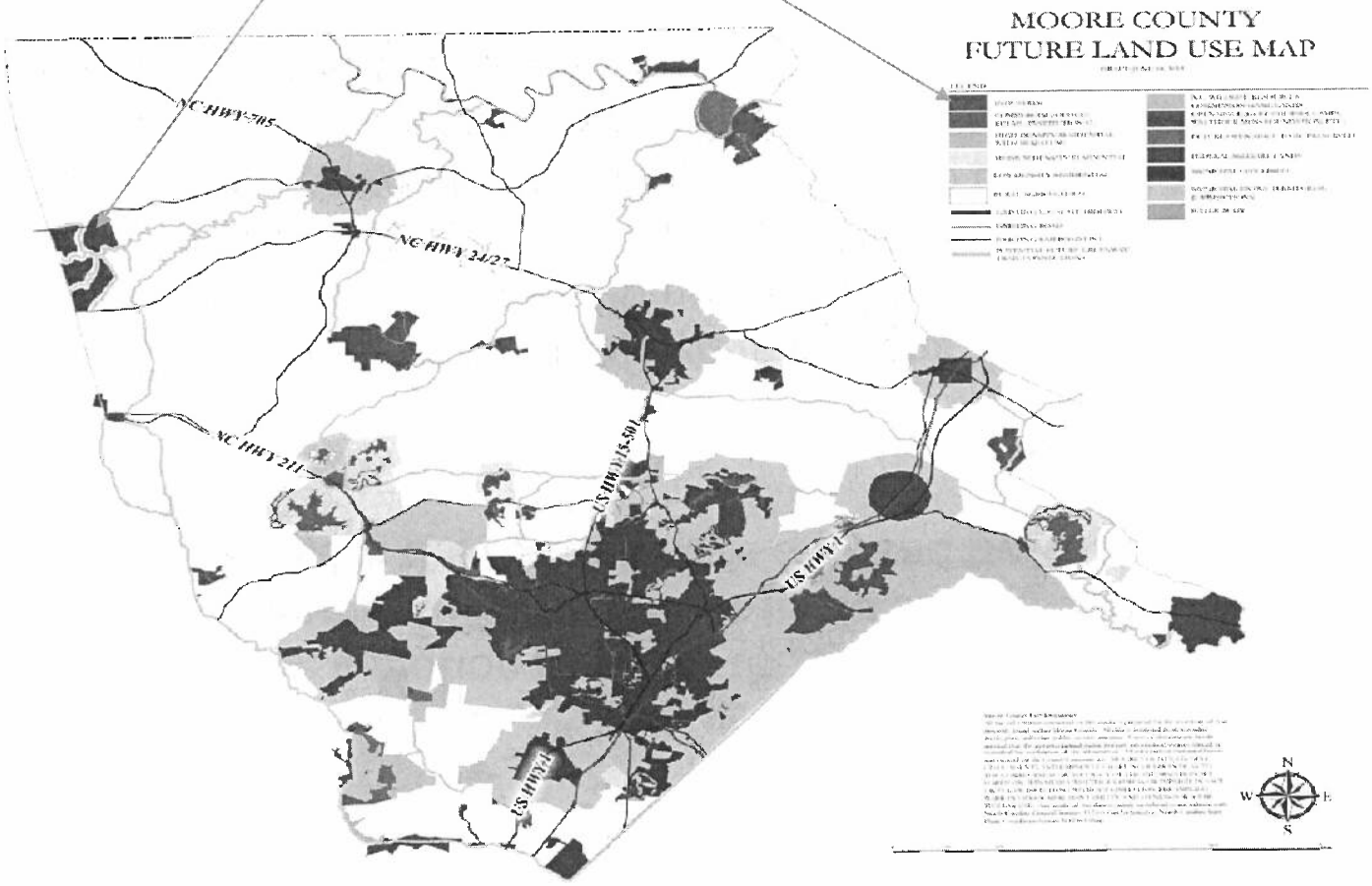
        - Be developed in a manner compatible with nearby properties to minimize potential nuisances or damage to the environment.

        - Have adequate utility infrastructure

        - Provide a buffer and visual screening as appropriate from residential property

# Moore County Future Land Use Map

Area of Proposed
PD-CZ ( in Industrial)



# Recommendation

Staff recommends the Board of Commissioners make two separate motions:

**Motion #1:** Make a motion to adopt the Board of Commissioners Land Use Plan Consistency Statement (**Consistent or Inconsistent**) and authorize the Chairman to execute the document as required by North Carolina General Statute 160D-605.

**Motion #2:** Make a motion to **Approve** or **Deny** the Planned Development Conditional Rezoning of three (3) parcels of approximately 395.67 acres located on Leach Rd., owned by Jordan Two, LLC, per Deed Book 5072, Pages 207- 282 and further described as ParID 00010343, ParID 00010342 and ParID 00010337 in Moore County tax records, from Rural Agricultural (RA) to Planned Development Conditional Zoning (PD-CZ) for an automotive entertainment facility.

# Uwharrie Motorsports Park – Planned Development Conditional Zoning (PD-CZ)

MOORE COUNTY, NORTH CAROLINA

COUNTY COMMISSIONERS MEETING

OCTOBER 15, 2024

APPLICANT:

AUTOPORT

KOONTZJONESDesign

LAND PLANNING | LANDSCAPE ARCHITECTURE

# Reasons Why the Project Should be Approved

- Complies with the UDO and is consistent with the industrial use shown on the Future Land Use Map
  - Proposed use is **LESS intense than many uses** permitted by the Future Land Use Map
- Meets the standards for rezoning
- Located in an **Opportunity Zone** designated to encourage capital investment
- Led by a team of well-rounded business leaders & motorsports experts
- Significant financial & economic benefits to Moore County & the region
- Limited environmental impacts
- Viable accommodations for water, sewer, sound mitigation, lighting, & traffic
- Significant community benefits for Moore County residents

659

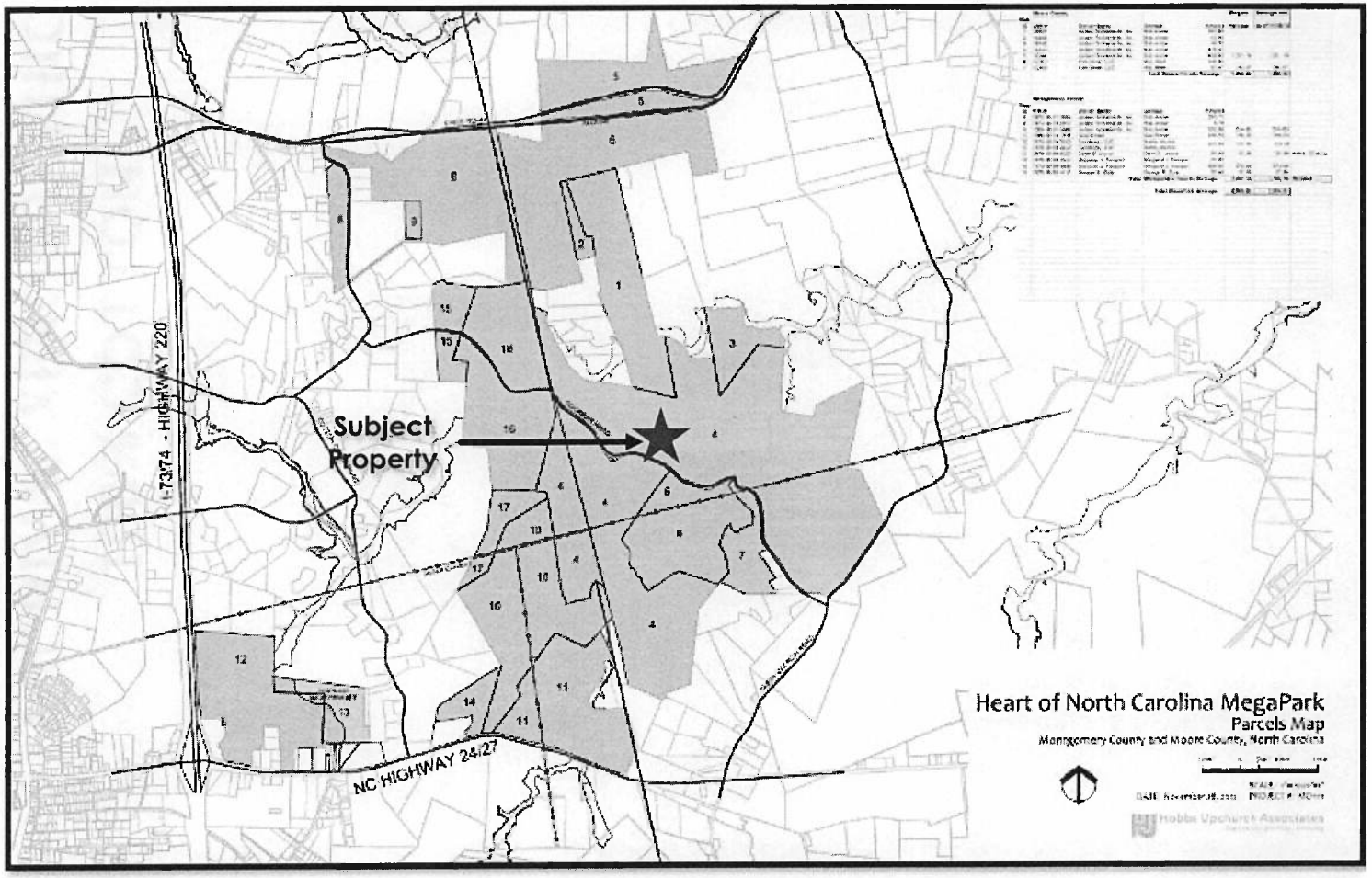
# Site Context



660

# Heart of NC Mega Park

The site was previously included in the **Heart of NC Mega Park**



661
Industrial Property

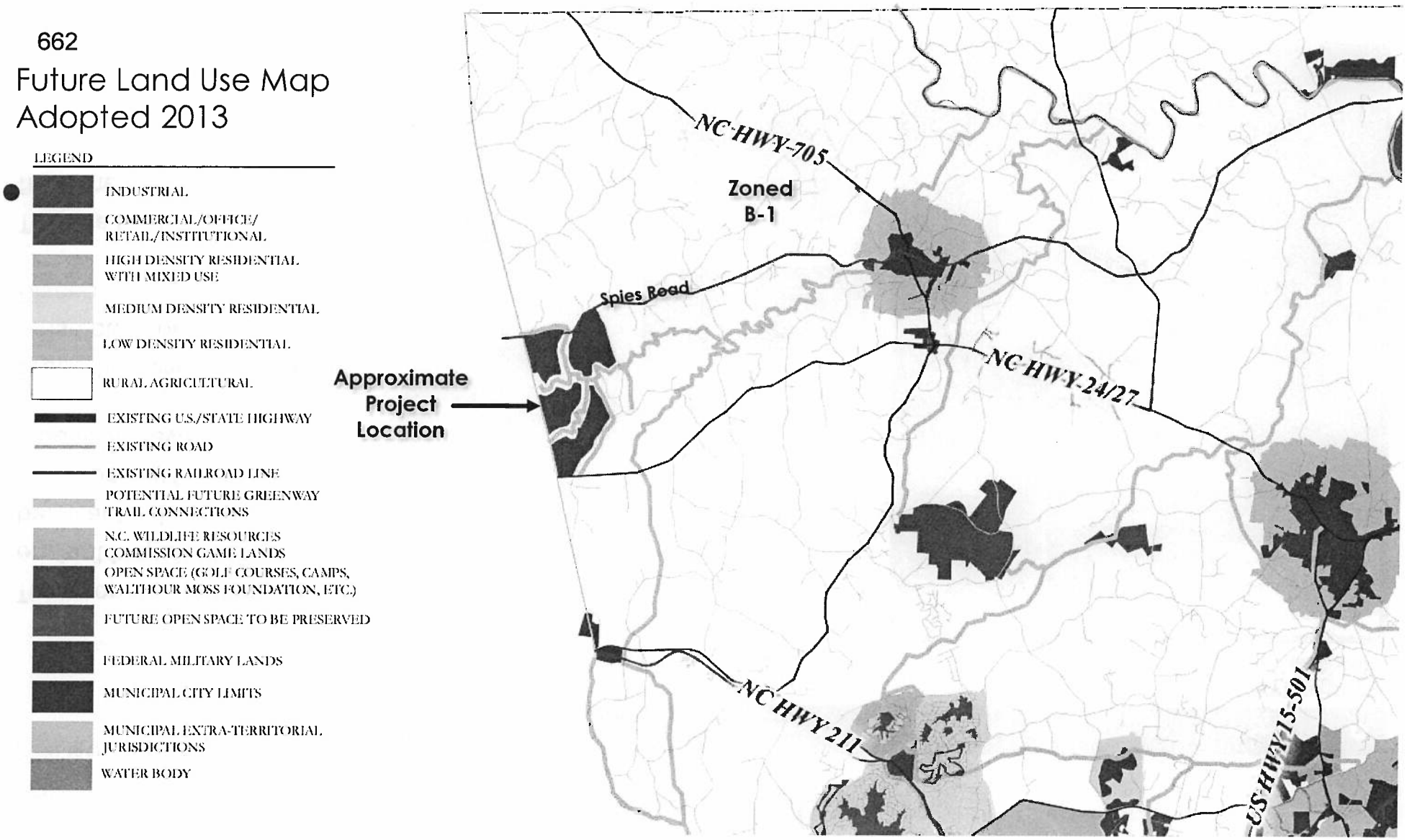
# SITE & BUILDING SEARCH

- This property, part of the original MegaPark site is being actively marketed by Montgomery County for industrial development
- Property is within the zoning jurisdiction of the Town of Biscoe
- The site is +/- 1.65 miles from the subject property.



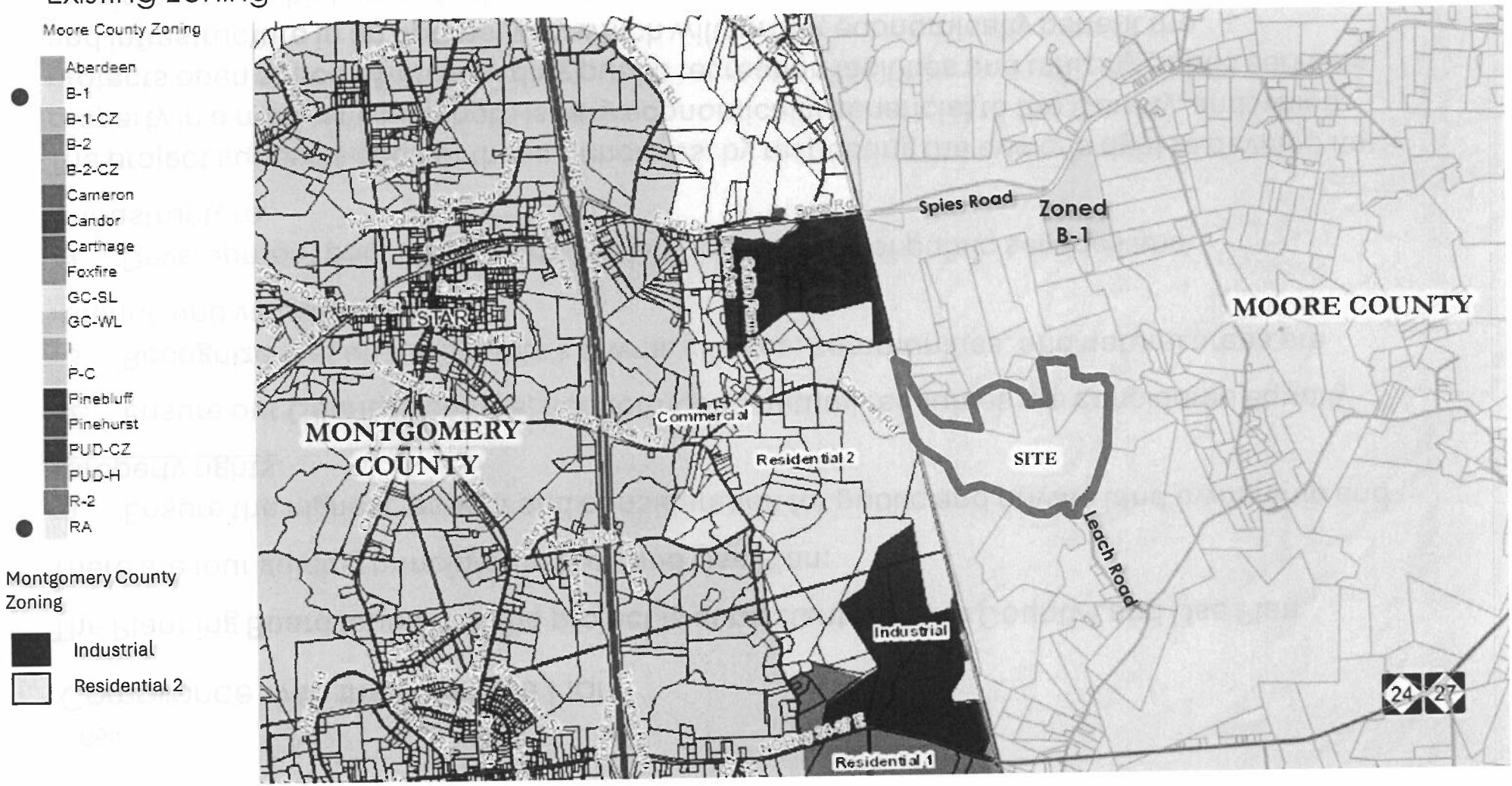
662

# Future Land Use Map
# Adopted 2013



663

# Existing Zoning



# Compliance with the Land Use Plan

- The Planning Board found that the project is consistent with the County Land Use Plan.
- There are four guiding principles in the Land Use Plan:

  1. Ensure the highest respect and consideration for public and private land ownership and property rights.

  2. Ensure our County's culture, economy, and natural resources are considered equally

  3. Recognize that all the County's towns, villages, communities, and natural areas are unique and valued places.

  4. Development policies should result in optimization of public services and infrastructure.

- The project supports each of these principles, by respecting the owner's right to develop its property in a manner which both is very economically beneficial to the County, and which protects open space while providing public recreation facilities and utilizing public services and infrastructure in an optimal way which will further economically benefit the municipalities which provide those services.

665

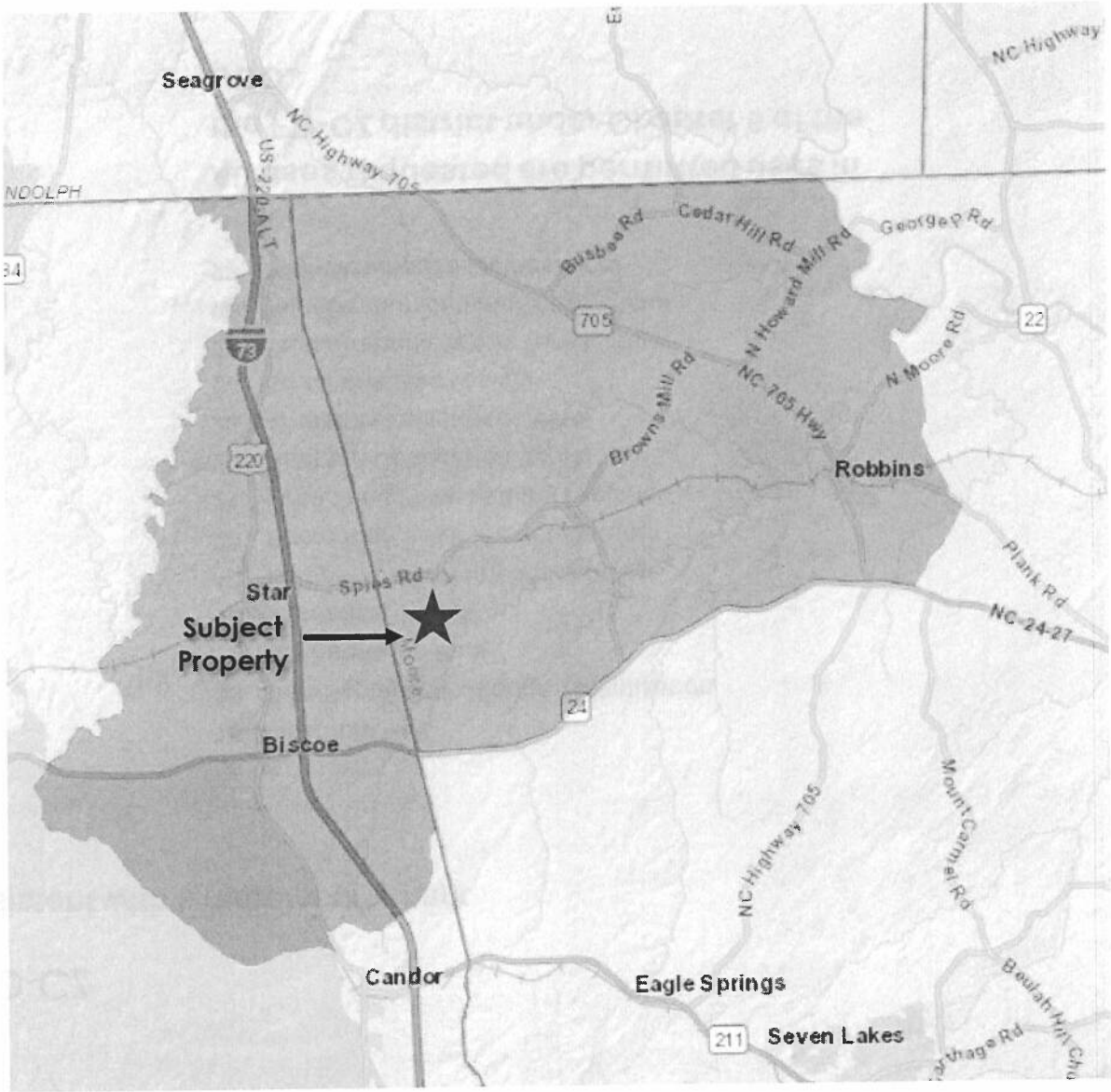
# Opportunity Zone

The project is in an **Opportunity Zone,** an area designated by the State of NC and the U.S. Secretary of the Treasury to attract capital investment & jobs that raise income levels in economically distressed areas

- Family income less than 80% of Area Median Income (AMI)

**Opportunity Zone**

The project is not requesting any tax incentives related to the site's inclusion in the **Opportunity Zone.**



666

# Conditional Rezoning Request for PD-CZ

1. Request a mixture of uses on the site consistent with a motorsports park

## Permissible Uses

1. Agricultural Uses and Buildings (Not in a Bona Fide Farm)
2. Hotel and Motel
3. Office
4. Trade Contractor Office and Workshop
5. Convenience Store
6. Restaurant
7. Retail
8. Car Wash or Auto Detailing
9. Parking Lot as a Principal Use
10. Vehicle, Auto Parts, Tires, Farm Equipment, Boat, RV-Sales, Rental or Service
11. Vehicle Service Stations (Gas Stations)
12. Bar/Tavern
13. College/Business & Trade School
14. Museum/Art Gallery
15. Assembly Hall
16. Civic/Social Club, Lodge, Organization
17. Neighborhood Park
18. Recreation, Indoor
19. Recreation, Low Impact Outdoor
20. Recreation, High Impact Outdoor
21. Public and Private Utility Facilities
22. Antenna Collocation, Major
23. Antenna Collocation, Minor
24. Small Wireless Facility
25. Telecommunications Tower, Major
26. Telecommunications Tower, Minor
27. Mini-Warehouse (self-service)

**All uses requested are permitted uses in the PD-CZ district under Chapter 6 of the UDO.**

667

# Conditional Rezoning Request for PD-CZ

1. The proposed use of High-Impact Outdoor Recreation is **currently permitted by right in the Industrial (I) Zoning District** and is **consistent with the industrial designation in the Moore Co. Future Land Use Map and text of the Land Use Plan.**

**PRINCIPAL USE TABLE**

P = Permitted by-Right
S = Requires Special Use Permit
Z = Permitted in Conditional Zoning District
A = Allowed in PD District
O = Not Permitted

| Principal Use Type | Zoning Districts [1] | | | | | | | | | | | | | | | | Specific Use Standards | Bldg. Code Class. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | RA | RA-20 | RA-40 | RA-2 | RA-5 | RA-USB | RE | GC-SI | GC-WI | PC | B-1 | B-2 | VB | I | MF-CZ | PD-CZ | | |
| Recreation, High Impact Outdoor | Z | • | • | • | • | • | • | • | • | • | • | • | Z | P | • | A | 8.91 | A-5 |

2. The rezoning request **meets the 2013 Land Use Plan standards for rezoning** (Pg 81), including:
   - The proposal is consistent with the vision, themes, and policies contained in the plan
   - The use is specifically designated in the plan in this location
   - Community facilities & streets will be available to serve the proposed use

# Site/Project Information

- Site = 395 +/- acres
- The +/- 3-mile road course will voluntarily meet Federation Internationale de l'Automobile (FIA) Level 2 standards
  - The FIA is the governing body for international motorsports like the USGA is the governing body for golf.
- ¾ mile Kart track
- More than 30% of the property (118 +/- acres) will remain as permanent open space
- At least a 100' buffer will be maintained along the property boundaries
- Signage - Will comply with the standards of the UDO Section 7.15

669

# Existing Conditions – Hydrology and Topography



670

# Existing Conditions – Soils

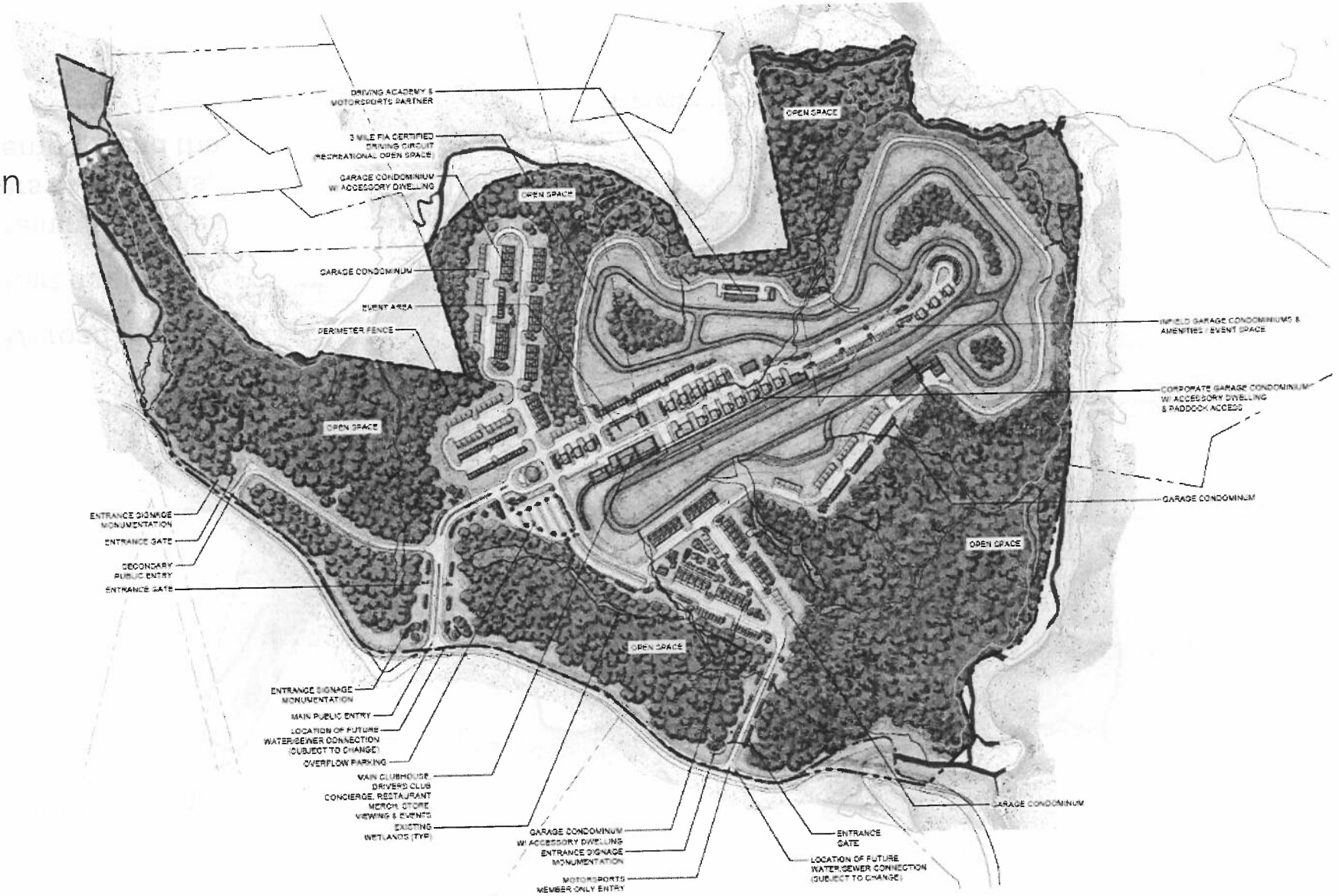



LEGEND:

- PROPERTY BOUNDARY
- ADJACENT PROPERTIES
- MINOR CONTOURS
- MAJOR CONTOURS
- EXISTING WETLANDS
- Ch - CHEWACLA SILT LOAM (0-2%)
- GeB - GEORGEVILLE GRAVELLY SILT LOAM (2-8%)
- GeD - GEORGEVILLE GRAVELLY SILT LOAM (8-15%)
- GoF - GOLDSTON VERY CHANNERY SILT LOAM (15-45%)
- LgB - LIGNUM SILT LOAM (2-7%)
- NaB - NANFORD SILT LOAM (2-8%)
- NaD - NANFORD SILT LOAM (8-15%)
- TnE - TARRUS & NANFORD SOILS (15-25%)
- ToA - TILLERY SILT LOAM (0-3%)

671

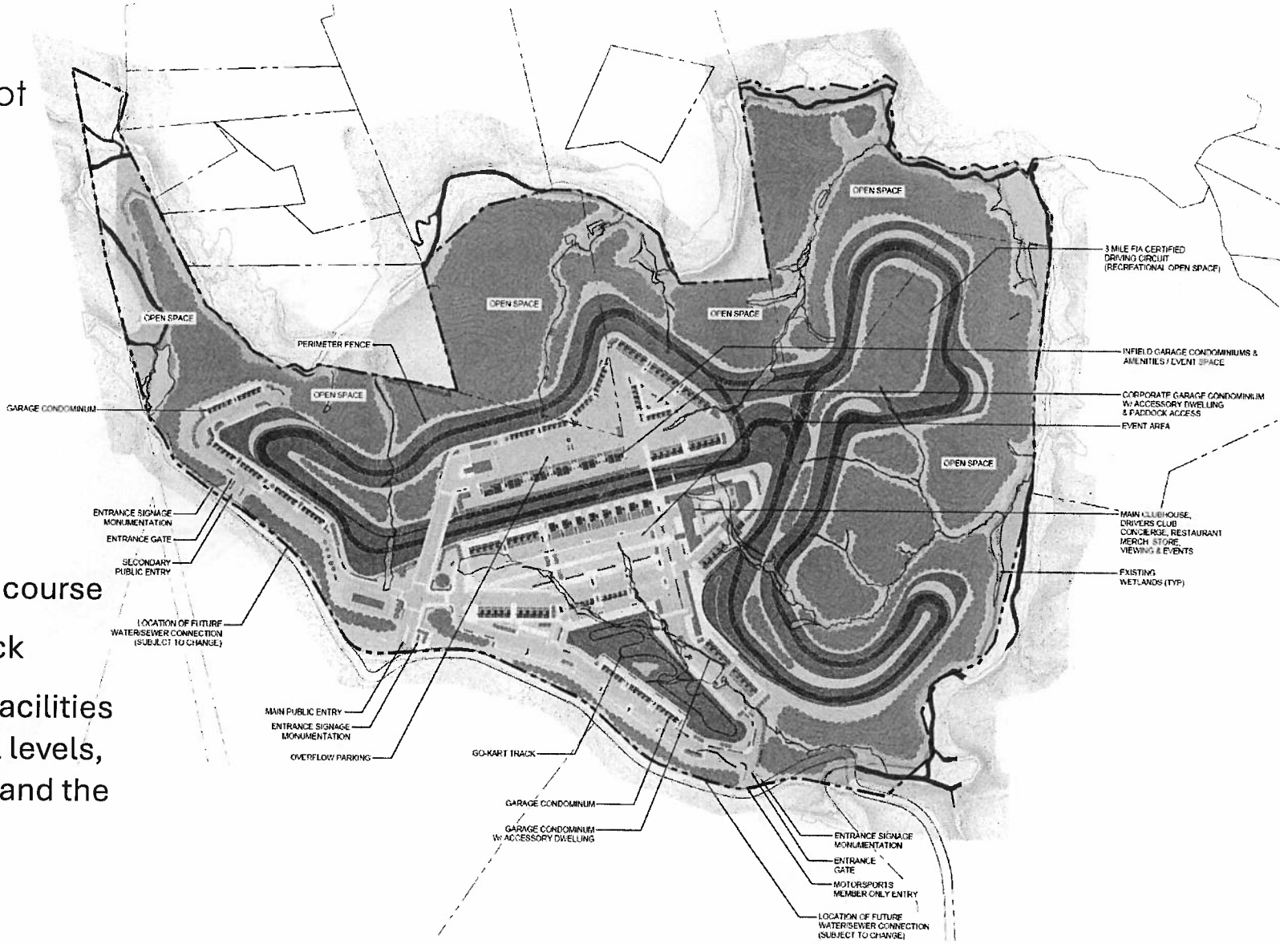
# Concept Plan – Submission



672

# Updated Concept Plan

- 3-mile +/- road course
- ¾ mile Kart track
- Driver training facilities for drivers at all levels, both members and the public

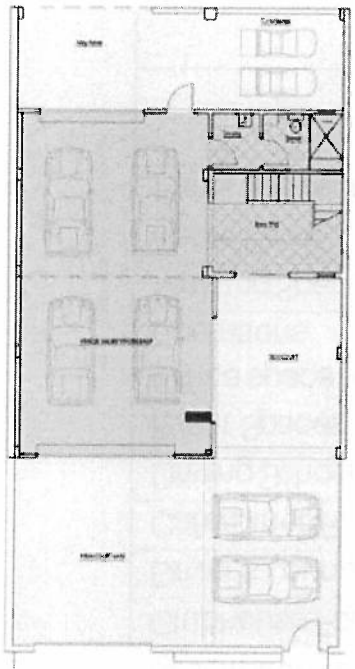


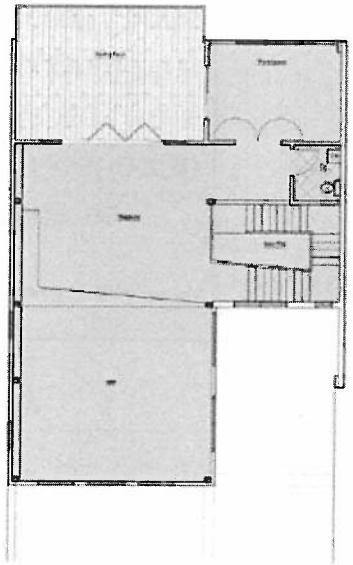
673

# Development Tabulation

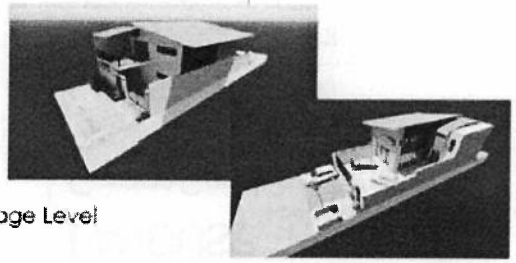
| LANDUSE | TOTAL |
|---|---|
| Garage Condominiums with Accessory Dwelling (see description below) | 165 units |
| Garage Condominiums (See description below) | 120 units |
| Clubhouse Facility | Square footage to be determined during site planning |
| Driver's Lounge | |
| Café/Diner/Restaurant | |
| Driving School | |
| Event Spaces | |
| Office space for facility operations | |
| Meeting Spaces | |
| Retail Store | |
| Parks and recreation spaces | |
| Dog Park(s) | |
| Walking Trails | |
| Jogging Paths | |
| Pickleball Courts | |
| Viewing Terraces | |
| Event Lawn | |

674
Units





Mezzanine - Viewing Level



Grade - Garage Level

**SQUARE FOOTAGE:**
(subject to change)

1,200 SF:
Fully Conditioned Vehicle Storage.

809 SF:
Mezzanine Flex Space

200 SF:
Upper Level Viewing Terrace

1,400 SF:
Vehicle Courtyard/Corrals (approx.)

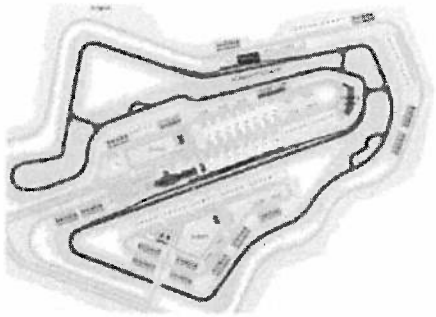
**VEHICLE STORAGE CAPACITY: 10+**

**STANDARD FEATURES:**

Fully Conditioned Vehicle Storage -
Dedicated Exterior Courtyard -
(square footages tbd)
Full bath/shower facilities -
Fully ventilated workshop spaces -
Studio Kitchenette -
Integral Passive Solar Design -
Fully Conditioned Mezzanine -
Fire rated office/layover room -
Heated Slabs -
Viewing Terrace w/Track view -
Golf Cart Storage (2 carts) -

**AVAILABLE UPGRADES:**

Multi-level vehicle lifts for extra storage -
Smart Home Packages -
Finish Upgrade Packages -
Electrical Charging Station -
Canopy Covers at Private Courtyards -
Simulator & Gaming Platform Play Area -



Site Locations

the LUXURY CONDO

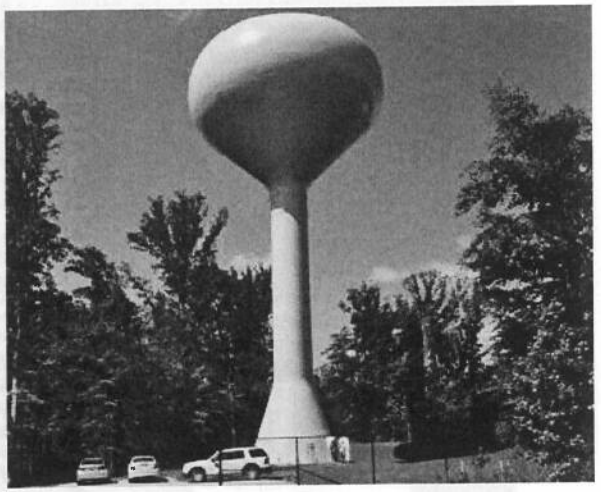
autoport

UWHARRIE
MOTORSPORTS PARK & RESORT

675

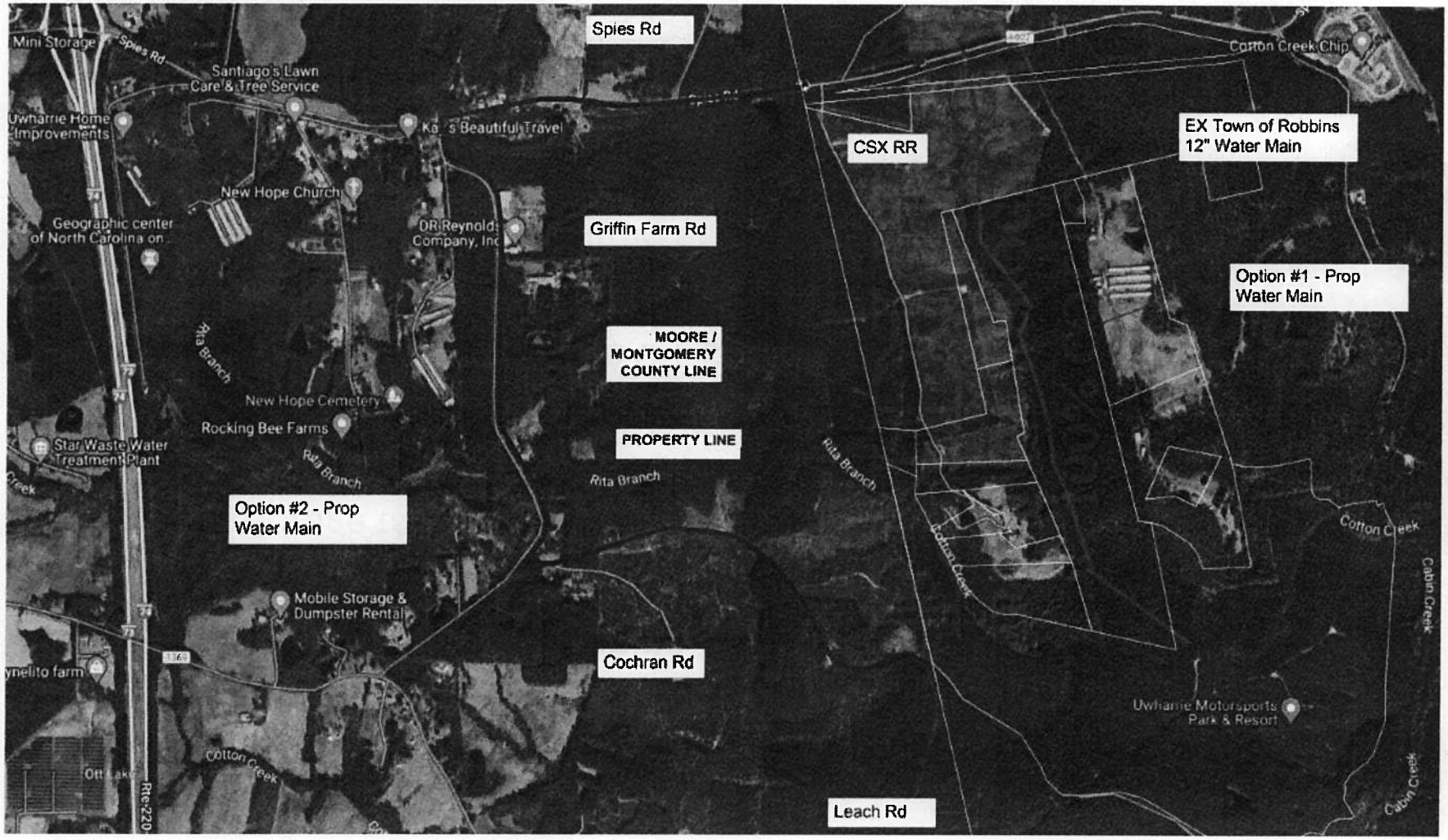
# Utilities – Public Water

- Will connect to the Town of Robbins 12" line located in Spies Road
- An on-site storage tank will be required to meet adequate pressure levels for fire protection, including sprinkler systems & fire hydrants
- Waterlines will be located within the public right-of-way or on private property
- Waterlines will provide all required easements and built to municipal standards
- Waterlines will be constructed by the developer at their cost and dedicated to the Town of Robbins
- Two (2) options



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# Utilities – Public Water Alternatives

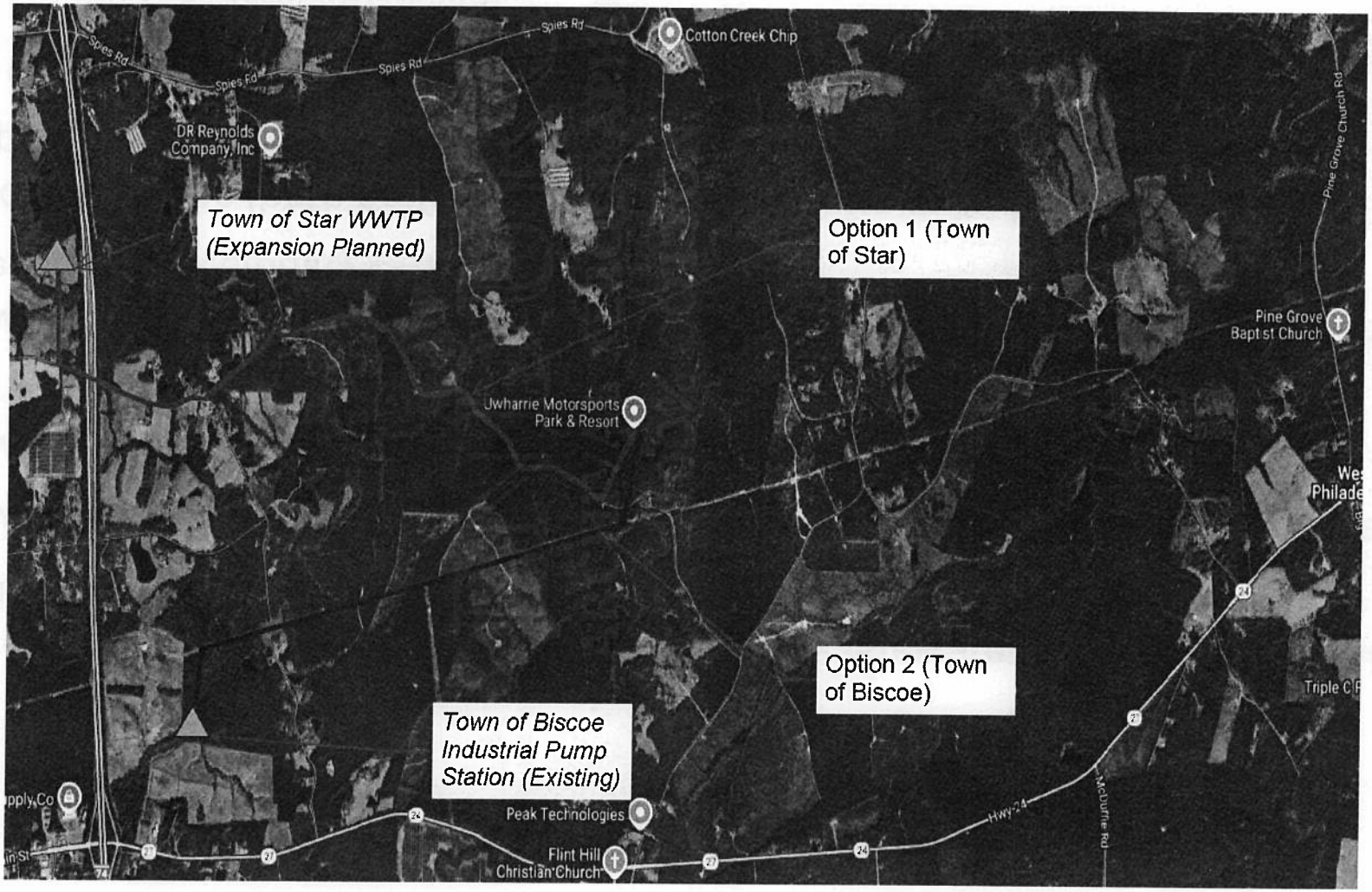


# Utilities – Public Sewer

- An on-site lift station will be required to push wastewater to gravity lines which will connect to existing sewer mains
- Sewer lines will be located within the public right-of-way or on private property
- Sewer lines will provide all required easements and be built to municipal standards
- Sewer lines will be constructed by the developer at their cost and dedicated to the local municipality
- Two (2) options (both providers willing to serve property and have available capacity):
  - Option 1: Connect to Star
  - Option 2: Connect to Biscoe

678

# Utilities – Public Sewer Alternatives



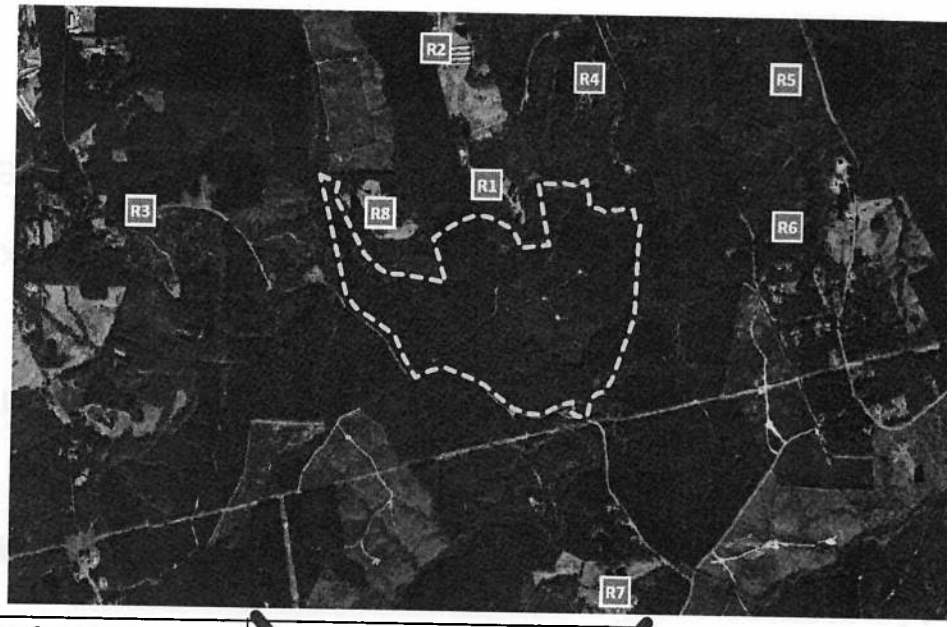
# Questions Being Asked

1. **Sound** - What steps will be taken for sound mitigation?
2. **Lighting** - Will the track be lit at night?
3. **Roads and Traffic** - Can the roads handle the traffic generated by the project?
4. **Environmental Impacts** - How will the project affect the environment & wildlife?
5. **Safety** – What plans are there to ensure the safety of drivers and spectators?
6. **Cemetery** – What is the plan for the existing cemetery?
7. **Events** - How many & what type of events are going to be held?

680

# Preliminary Sound Modelling by Driven International

- The above are outside decibel calculations
- No sound mitigation measures have been included in this analysis




3.1.2 Impact level readings

| | 26x 89dBLAFmax | | 26x 95dBLAFmax | | 26x 107dBLAFmax | |
|---|---|---|---|---|---|---|
| | Summer | Winter | Summer | Winter | Summer | Winter |
| [R1] Receptor | 59dB | 54dB | 65dB | 60dB | 77dB | 72dB |
| [R2] Receptor | 35dB | 30dB | 41dB | 36dB | 53dB | 48dB |
| [R3] Receptor | 27dB | 28dB | 33dB | 34dB | 45dB | 46dB |
| [R4] Receptor | 25dB | 20dB | 31dB | 26dB | 43dB | 38dB |
| [R5] Receptor | 0dB | 0dB | 0dB | 0dB | 8dB | 6dB |
| [R6] Receptor | 14dB | 14dB | 20dB | 20dB | 32dB | 32dB |
| [R7] Receptor | 8dB | 16dB | 14dB | 22dB | 26dB | 34dB |
| [R8] Receptor | 57dB | 53dB | 63dB | 59dB | 75dB | 71dB |

*Colour key, intended for visual differentiation: 0-9 dB, 10-19dB, 20-29dB, 30-39dB, 40-49dB, 50-59dB, 60-69dB, 70-79dB.*

107 dB cars will not be permitted on this track and are a different class of automobile.

681

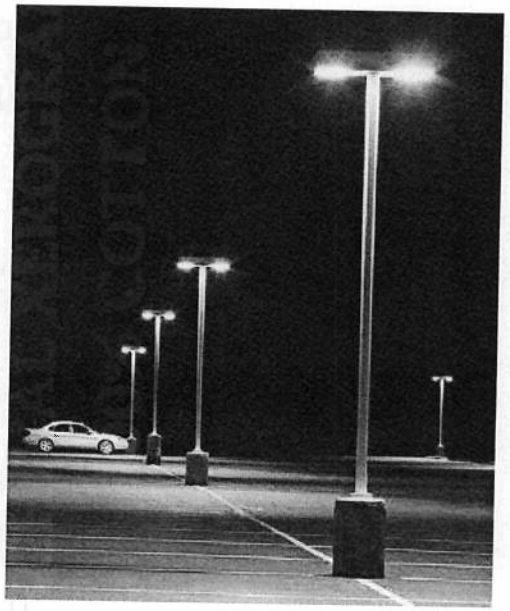
# Sound Mitigation Strategy

- Will comply with Moore Co. Code of Ordinances Section 10-42(6), allowing the operation of a vehicular racetrack except between the hours of 11:30 pm and 6:00 am
- Track will be designed & located to fit into the natural surroundings & limit sound impacts using topography and retaining existing vegetation along the edges & in buffers along the track
- Driven International has identified strategies to limit off-site sound impacts, including:
  - Fine tuning track design
  - Earthen berms
  - Sound panels
  - Sound level monitoring system
- Sound Level Monitoring System - Will be provided at multiple points around the track
  - Prior to cars entering the track, they will go through a compliance check to make certain they are below the permitted decibel threshold
  - Any cars exceeding the threshold will not be permitted on the track

682

# Lighting

- The main track will not be lit; The kart track will be lit
- Lighting will follow, at a minimum, UDO Section 7.Q, which includes Dark Sky illumination design principles
- Lights will have full 90-degree cutoff fixtures to direct light to the ground and avoid light going up to limit light pollution
- Lights will have side shields to adjoining properties & on-site condominiums to direct light only where needed
- All light will be directed inward to the property

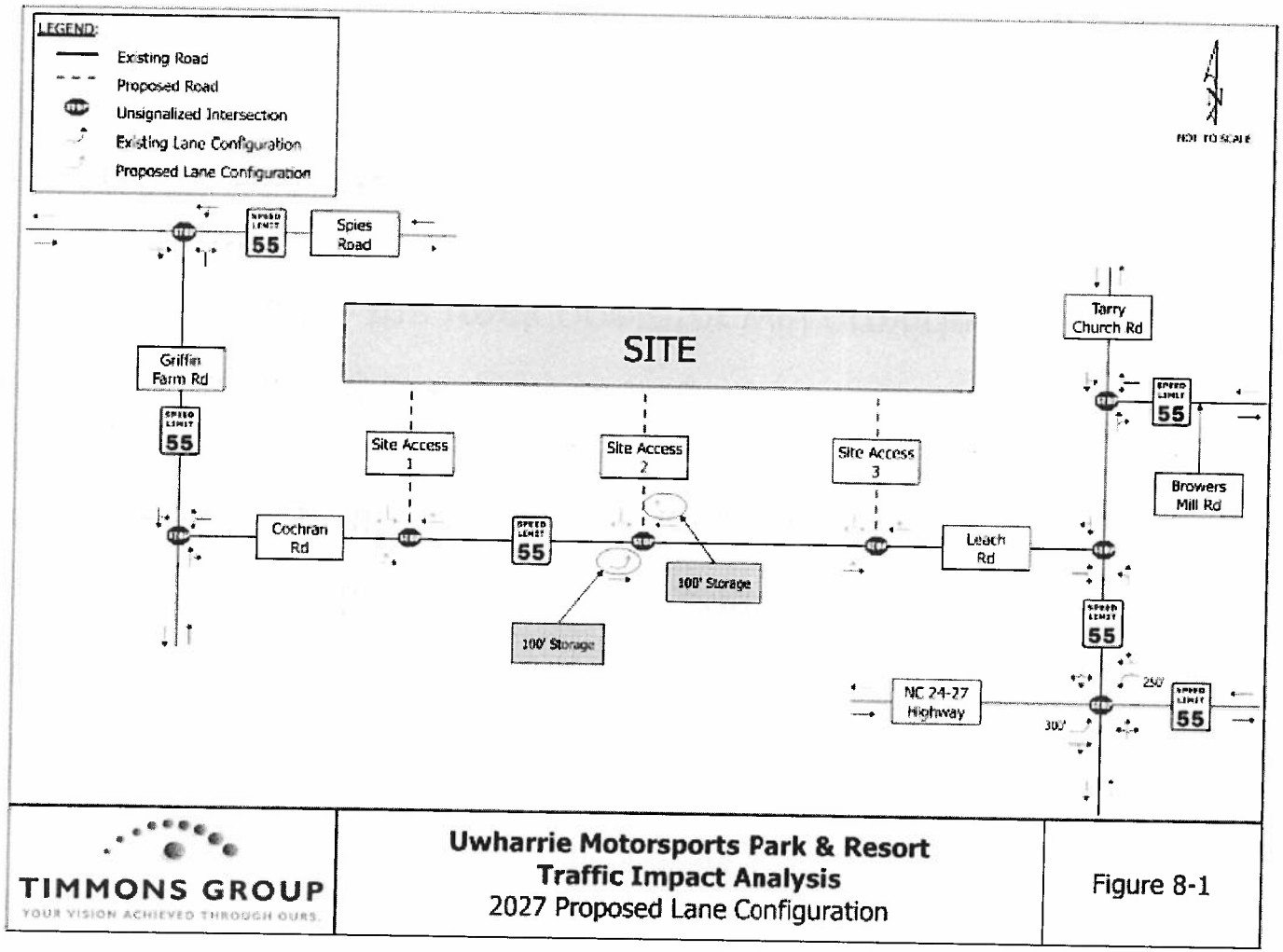


- A Traffic Impact Analysis (TIA) has been completed and reviewed by NCDOT
- NCDOT agreed with the findings of the TIA
- The TIA was scoped with NCDOT & followed NCDOT standards/practices
- Traffic counts were conducted at a similar venue during a typical event to calculate proposed site trips
  - The event size was equivalent to anticipated daily events
- During larger events (2 – 4 times/year), the track operator will provide police and/or volunteers to direct traffic
- All intersection movements are projected to operate at a LOS B or better at each analyzed intersections

684

Roads/Traffic

TIA voluntarily recommended 100' storage lanes. These storage lanes are required at Site Access 2 based on NCDOT concurrence with the TIA.



685

# Environmental Analysis

- Archeological Investigation
  - A preliminary investigation was completed by Timmons Group that involved record research and an onsite investigation and the report was reviewed by the North Carolina State Preservation Office
  - A developed site plan will be required to determine the location of the archaeological survey area

- Stormwater
  - The property is located in the WS-IIIP watershed and will comply with all state stormwater requirements

- Phase 1 Environmental Site Assessment
  - Phase 1 ESA was conducted and based on records research and a site visit there is no evidence of hazardous substances or petroleum products in, on or at the property due to release to the environment.
  - Phase 2 ESA was not required since the Phase 1 ESA was negative

- Wetland and Stream Buffer Delineation
  - Wetlands were delineated by Timmons Group, and the USACE made a site visit to review the field delineation. Timmons Group is currently working on a wetland delineation report to submit to the USACE to get jurisdictional determination confirmation letters and verify non-jurisdictional areas.
  - There are no State-mandated stream buffers on the site. However, there are Moore County required stream buffers for perennial streams shown in USGS map. (Cotton Creek and Cabin Creek)

686

# Environmental Analysis

- Endangered Species
  - US Fish and Wildlife Service identified a total of seven endangered, threatened, proposed, and candidate species as potentially occurring within the vicinity of the Site

| # | Scientific Name | Common Name | Federal Status | Timmons Assessment |
|---|---|---|---|---|
| 1 | Picoides borealis | Red-cockaded woodpecker | Endangered | **No impact** as confirmed by USFWS |
| 2 | Notropis mekistocholas | Cape Fear shiner | Endangered | **Impact can be avoided**; Developed site plan is required to determine survey location |
| 3 | Rhus michauxii | Michaux's sumac | Endangered | **No impact** - confirmed not located on site through a plant survey |
| 4 | Helianthus schweinitzii | Schweinitz's sunflower | Endangered | **No impact** - confirmed not located on site through a plant survey |
| 5 | Fusconaia masoni | Atlantic pigtoe | Threatened | **Impact can be avoided**; Developed site plan is required to determine search location |
| 6 | Perimyotis subflavus | Tricolored bat | Proposed Endangered | **Impact can be avoided** based on time of year tree clearing occurs |
| 7 | Danaus plexippus | Monarch butterfly | Candidate Species | **No adverse affect** as confirmed by Consultant |

# Safety

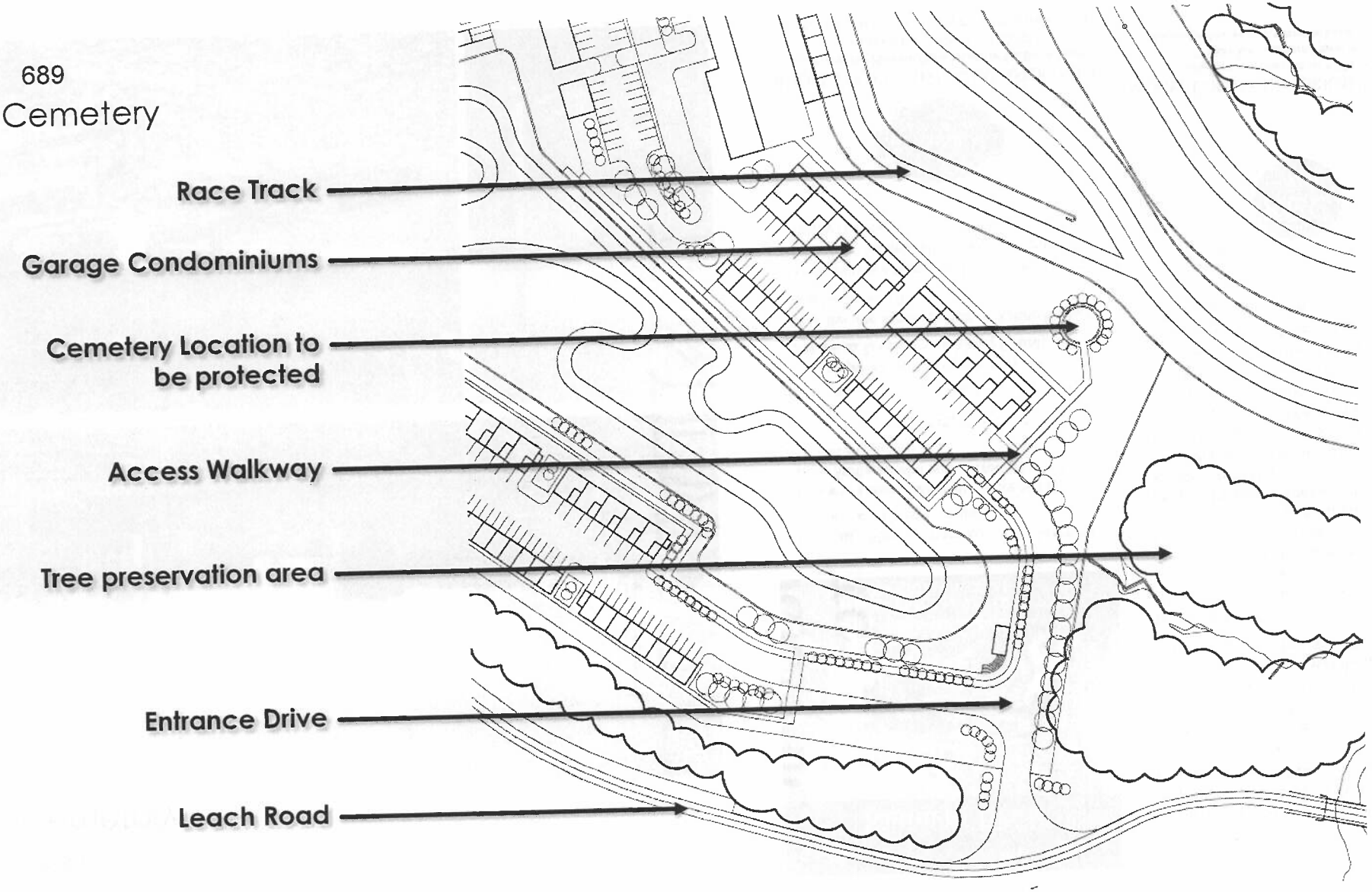
- Safety is the #1 concern related to the operation of the property
- The FIA (Fédération Internationale de l'Automobile) Level 2 requirements for emergency services are designed to ensure the safety and preparedness of emergency teams at motorsport events FIA safety standards adhered to will include:
  - Protective spectator fencing and other debris fencing
  - Trained fire, rescue, & EMS staff must be on site during any on-track driving
  - Ambulances equipped with advanced life support (ALS) capabilities & fire equipment (including fire trucks) must be onsite during any on-track driving
  - Regular training & drills for emergency personnel in conformance with emergency response plans
- The track will employ Safety Officer(s) to monitor track safety during operating hours
- Specialty emergency equipment will be owned & maintained on site 24 hrs/day
- Events will be staffed with emergency personnel from local agencies and/or agencies outside Moore County, as needed & required by FIA standards
- Fire hydrants & sprinklers will be provided as required for the site & buildings

688

# Cemetery

- Cemetery is a small cemetery with +/- 8 headstones dating back to 1881.
- One of several Leach family cemeteries in the area.
- The cemetery is not on the historical register.
- The North Carolina Cemetery Act does not apply to this cemetery.
- NCGS Section 65-47(a) states, "[t]he provisions of this Article shall apply to all persons engaged in the business of operating a cemetery..." That is not the case with this small cemetery as it is not operated by a business.
- The Moore County Historical Association states that the original Leach Family Cemetery is located some distance from this property.
- The applicant will consult with the Moore County Historical Association, the Montgomery County Historical Association, and the descendants of the Leach family regarding the implementation of its preservation plan for the cemetery.

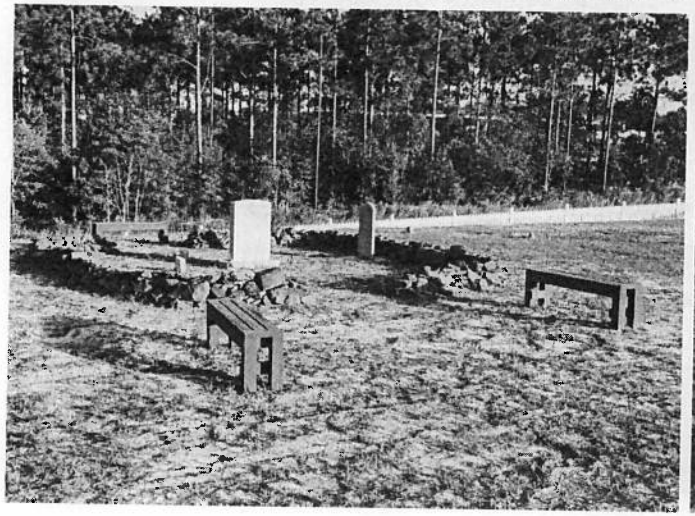
689
Cemetery



690

# Cemetery





Moore County Historical Association • Since 1946

## Kenneth Black



THE AMERICAN REVOLUTION IN OUR BACKYARD

Kenneth Black represents the American Revolution in Moore County.

Kenneth's tale is that of innocence as a Loyalist from Scotland who was murdered in 1781 by American Patriots.

The Moore County Historical Association's special preservation project is as old as the American Revolution in Moore County.

It is the site where Scotsman Kenneth Black was buried in 1781.

Kenneth was a farmer and his home and farm land was located about 500 feet from this family cemetery.

MOORE COUNTY HISTORICAL ASSOCIATION
Located in the Historic Shaw House in Southern Pines
www.moorehistory.com • 910.692.2051
PO Box 324, Southern Pines, NC 28388 • info@moorehistory.com

Kenneth Black was a prominent figure in early Moore County history. He settled here in the mid 1700s, an immigrant from Jura, Scotland. He remained loyal to the Royal Colony until he was killed by troops of Colonel Phillip Alston. Not only did he shelter Flora MacDonald until her safe return to Scotland, his murder was the reason behind the skirmish at the House in the Horseshoe.

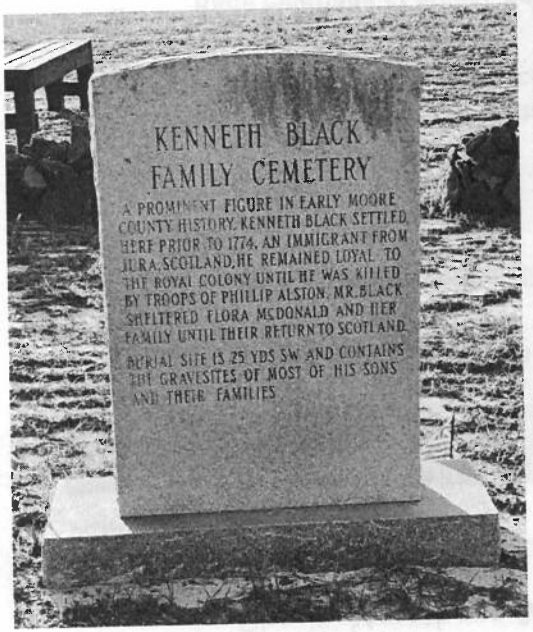
History tells us that on July 20, 1781 Kenneth's family hosted David Fanning, another Loyalist, at his home in Southern Pines. Fanning was on his way to Wilmington. Kenneth helped to guide Fanning through the dense pines until reaching Aberdeen. A grateful Fanning continued on his way and Kenneth turned to go back home. Shortly thereafter Black was attacked, tortured and killed by Patriot Colonel Alston's troops. Upon hearing of Kenneth's murder, an enraged Fanning and his Loyalist militia attacked Alston's House in the Horseshoe as revenge. Every year this skirmish is reenacted at the state site and the original bullet holes still remain by the front door.

KBC 1781

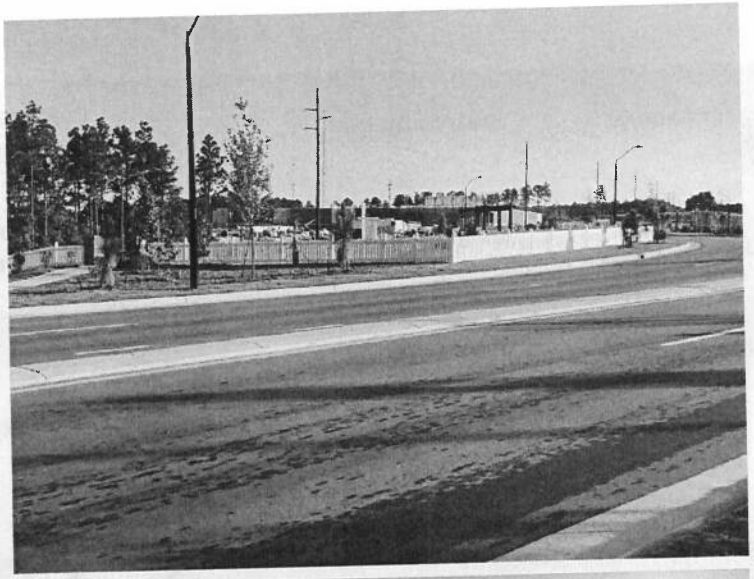
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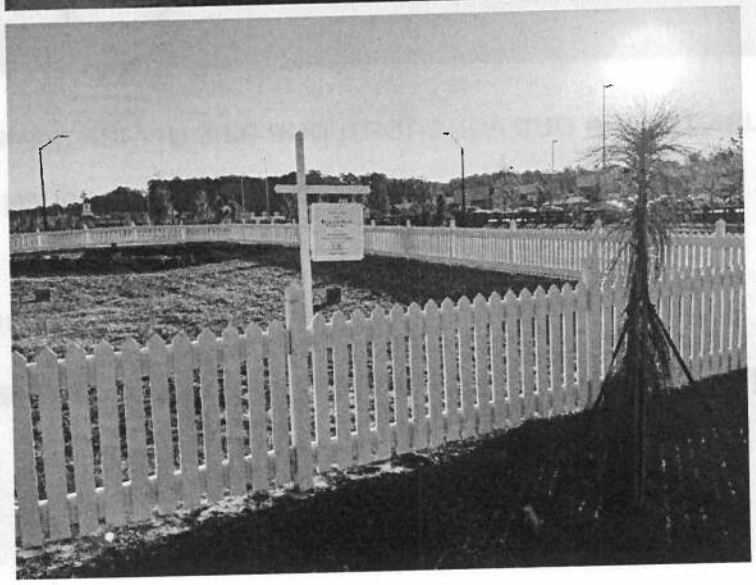
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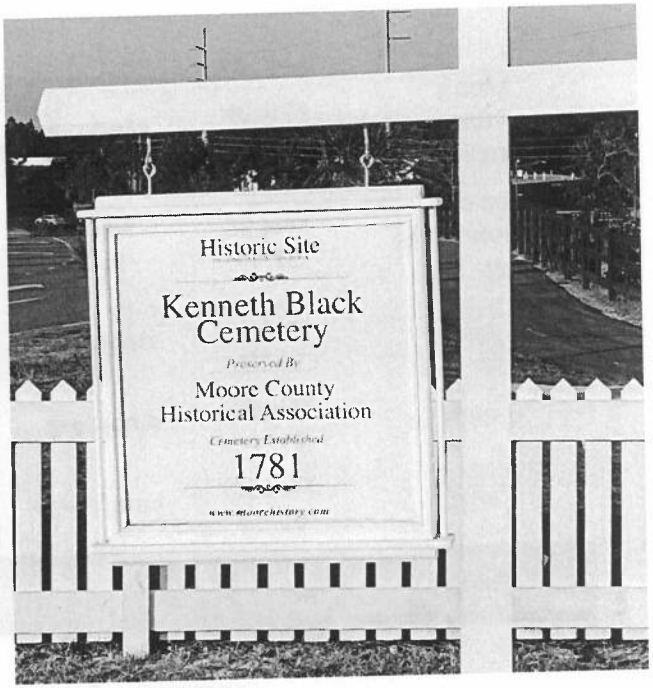
# Cemetery












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# Events

- Public events will be organized by the local community; # of events will be based on community demand:
  - Car Shows & Auctions
  - Concerts & Festivals
  - Charity Marathons & Runs
- Driving and racing events will vary in size and frequency and could eventually include:

| | Type of Driving/Racing Event | Planned Frequency | Weekdays/ Weekends | Duration | # of Cars on the Track | # of Spectators |
|---|---|---|---|---|---|---|
| Driving | **Public Driving / Track Days** | Once a month | Weekdays | 2-4 Hours | +/- 10<br>25 Max | n/a |
| | **Private Corporate Driving Experiences** | 1-2 days a week<br>(based on demand) | Weekdays | 2-4 Hours | +/- 10<br>25 Max | n/a |
| | **Driving School** | 1-2 days a week<br>(based on demand) | Weekdays or<br>Weekends | 2-4 Hours | +/- 10<br>25 Max | n/a |
| Racing | **League Racing / Smaller Championships**<br>(Local drivers, High school/college series, etc.) | 6-10 times/year | Weekdays or<br>Weekends | 1 - 8<br>Hours | +/- 15<br>25 Max | 250 - 500<br>Spectators in one day |
| | **Race Meetings / Larger Championships**<br>(World Kart, IMSA Super Trofeo, etc.) | 2-4 times/year | Weekends | 2-3 Days | +/- 25<br>40 Max | 5,000 – 10,000<br>spectators over 3 days |

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# Questions & Answers

| Questions | Answers |
|---|---|
| **Sound** - What steps will be taken for sound mitigation? | Will utilize a sound monitoring system & implement sound mitigation strategies (vegetative buffers, earthen berms, and/or sound panels) to minimize off-site sound impacts to neighboring properties |
| **Lighting** - Will the track be lit at night? | The main track will not be lit, but the kart track will; Will comply with Moore County UDO, including Dark Sky illumination design principles; All lighting will be directed inward on the property |
| **Roads/Traffic** - Can the roads handle the traffic generated by the project? | Will construct all road improvements required by NCDOT; Will provide police and/or volunteers to help direct traffic for larger events |
| **Environment** - How will the project affect the environment & wildlife? | Wetland impacts will be minimized & all required permits from the USACE will be obtained; Will comply with all state stormwater requirements; Will conduct further investigation to determine the presence of endangered/threatened species as required by state and federal agencies |
| **Cemetery** – What are plans related to the existing cemetery? | The applicant will preserve the cemetery and consult with the Moore County and Montgomery County Historical Societies and the descendants of the Leach family to determine how best to preserve the cemetery |
| **Safety** – What plans are there to ensure the safety of drivers and spectators? | Will comply with FIA Level 2 standards for on-site emergency response personnel & equipment; Fire hydrants & sprinklers will be installed; Will employ Safety Officer(s) who will be onsite during operating hours |
| **Events** - How many & what type of events are going to be held? | Will hold 2-4 larger events/year and smaller events 6-10 times/year; Will host other public events (concerts, festivals, shows, etc.) as requested by the community |

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# Economic and Fiscal Impacts

- Sanford Holshouser Group prepared an Economic Impact Study
- Three types of spending:
  1. **Direct** – Spending by Autoport, visitors, & vendors
  2. **Indirect** – Spending by companies from which Autoport, visitors, & vendors buy goods & services
  3. **Induced** – Spending by households of employees of business from which Autoport, visitors, & vendors buy goods & services

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ECONOMIC DEVELOPMENT CONSULTING

## THE STATS

The following are summary estimated economic and fiscal impact highlights of the proposed Autoport development.

**Direct, Indirect, and Induced Annual Economic Impact**
$115,382,500

**Construction Economic Impact ( one time effect)**
$216,000,000

**Direct, Indirect and Induced Jobs**
284

**Total Annual Ad Valorem Taxes**
$464,479

**Total Annual Sales Tax**
$450,975

**Total Annual State and Local Fiscal Impact**
$2,167,471

**TOTAL ANNUAL ECONOMIC AND FISCAL IMPACT**
$117,549,971

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# Reasons Why the Project Should be Approved

- The project complies with the UDO, is consistent with the use shown on the Future Land Use Map, and meets the standards for rezoning included in the Future Land Use Plan and the UDO
- Proposed use is **LESS intense than many of the industrial uses** permitted by the Future Land Use Map
- The State of NC designated this area and site as an **Opportunity Zone** to encourage capital investment and development, Moore County's Land Use Plan reflects this goal
- The project will provide Moore County residents with significant community benefits:
  - A community gathering space
  - Recreational and entertainment opportunities
  - Educational opportunities (driving school and partnerships with local colleges and high schools)
- Significant financial & economic benefits, including:
  - More than **280 jobs**
  - A one-time construction impact of over **$200 million**
  - Annual economic & fiscal impact of over **$117 million** (direct, indirect, & induced benefits)

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## Compliance with the Land Use Plan

- The Planning Board found that the project is consistent with the County Land Use Plan.
- There are four guiding principles in the Land Use Plan:

  1. Ensure the highest respect and consideration for public and private land ownership and property rights.

  2. Ensure our County's culture, economy, and natural resources are considered equally

  3. Recognize that all the County's towns, villages, communities, and natural areas are unique and valued places.

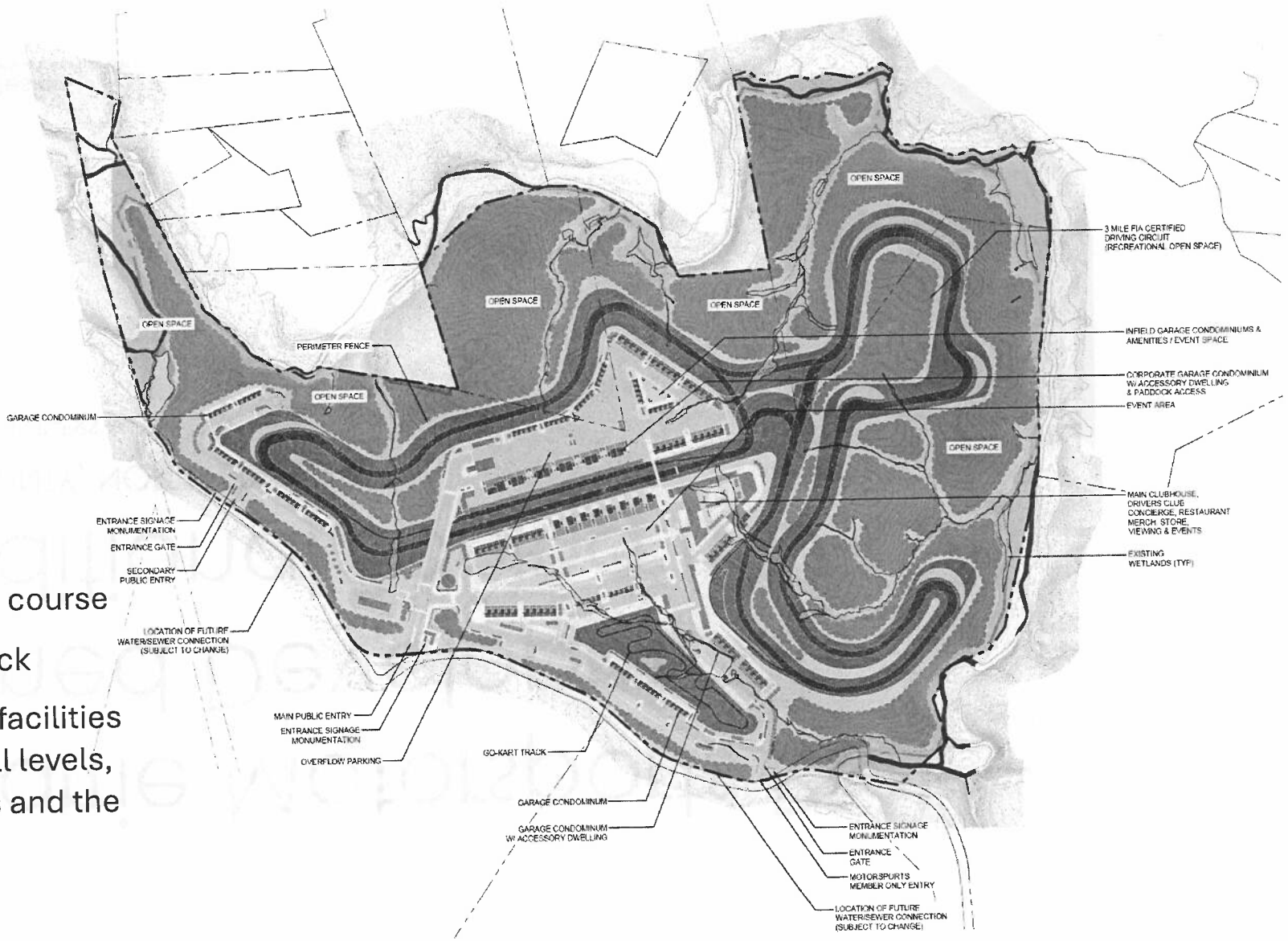
  4. Development policies should result in optimization of public services and infrastructure.

- The project supports each of these principles, by respecting the owner's right to develop its property in a manner which both is very economically beneficial to the County, and which protects open space while providing public recreation facilities and utilizing public services and infrastructure in an optimal way which will further economically benefit the municipalities which provide those services.

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# Concept Plan

- 3-mile +/- road course
- ¾ mile Kart track
- Driver training facilities for drivers at all levels, both members and the public



# Uwharrie Motorsports Park – Planned Development Conditional Zoning (PD-CZ)

MOORE COUNTY, NORTH CAROLINA

COUNTY COMMISSIONERS MEETING

OCTOBER 15, 2024

APPLICANT:

AUTOPORT

KOONTZJONESDesign
LAND PLANNING | LANDSCAPE ARCHITECTURE