PLANNING AND COMMUNITY DEVELOPMENT

PLANNING • CODE ENFORCEMENT • BUILDING INSPECTIONS • CENTRAL PERMITTING

AGENDA
Pender County Planning Board Meeting
January 5, 2010 7:00 p.m.

Pender County Public Meeting Room
805 S. Walker Street, Burgaw, North Carolina

Note: The Pender County Planning Board Meeting adjourns at 11:00 p.m. Any item not discussed shall be placed on the next regular Planning Board Meeting agenda, unless otherwise stated. The items may not be discussed in the order as shown on the agenda. The agenda may be revised by the Planning Board.

Call to Order: Chairman Reynolds

Roll Call: Chairman Reynolds
Pender County Planning Board Members:
Reynolds ___Garrett ___Marshburn ___Millette ___Smith ___Williams ___ Boney ____Newman___

1. **Approval of Minutes:** December 1, 2009
2. **Election of Planning Board officers- Chairman and Vice Chairman**

Subdivision Review

3. **Preliminary Plan** – Stroud Engineering, PA, applicant, on behalf of Avendale Development, LLC, owner, is requesting preliminary plan approval for Phase III of Avendale Subdivision. The proposal consists of 83 residential lots on approximately 27.11 acres. The property is located along NC Hwy 210, approximately ¼ mile north of Cross Creek Subdivision, Hampstead, NC. The property is zoned PD, Planned Development and may be identified as PIN # 3273-14-5830-0000.

Discussion Items

4. **Planning Staff**
   - **Project updates:**
     - **2010 Comprehensive Land Use Plan**
     - **2010 Unified Development Ordinance**
     - **Highway 17 Overlay District**
   - **2010 UDO**
     - **Zoning Map revisions**
     - **Development regulations and Subdivision Design**
     - **Open Space**
     - **Landscaping**
     - **Signs**

5. **Planning Board Members**
6. **Public Comment**
7. **Adjournment**

#3.A

PLANNING STAFF REPORT
Avendale Subdivision
Planning Board Hearing

SUMMARY:

Hearing Date: January 5, 2010
Applicant: Stroud Engineering, P.A.
Property Owner: Avendale Development, L.L.C.
Case Number: PP 10-01-05-01 Avendale

Development Proposal: Applicant is requesting Preliminary Plat approval for Avendale Subdivision, Phase III, which consists of 83 residential lots located on approximately 27 acres.

Location and Land Use: Avendale is located along the east side of NC Highway 210, between Harrison's Creek and Island Creek Road (S.R. 1002). Across from NC Hwy 210 are Cross Creek Subdivision and other single family home sites at about 2 dwelling units/acre.

Zoning District of Property: The property is currently zoned PD, Planned Development.

Staff Recommendation: Planning Staff recommends conditional approval based on final preliminary plat items being met.

Project History:

The Planning Board approved the Avendale Master Plan and Avendale Phase I preliminary plat in February 2006. The Avendale Phase II preliminary plat was approved in December 2006 with 44 units (later revised from 44 units to 62 units in February 2007). There are currently 85 parcels recorded out of the proposed 249 units for the entire development within two separate phases.

Detailed Proposal Discussion:

The applicant is requesting Planning Board approval of Phase III for Avendale Subdivision. Avendale is located along the east side of NC Highway 210, between Harrison's Creek and Island Creek Road (S.R. 1002). Phase III consists of 83 units on approximately 27 acres with lot sizes ranging from ±8,500 sq. ft. to ±25,000 sq. ft. with minimum lot widths ranging from 70'-100'. The approved master plan shows Phase III with minimum 70' lot widths at 3 units per acre which is consistent with the proposal as presented. Phase III will be served by Pender County Utilities with water services and sewage disposal will be provided by the constructed, state approved waste water treatment facility located on-site.

According to NCDOT, the road improvements proposed for Avendale drive will consist of a turning lane and a deceleration lane to be located on NC Hwy 210 to alleviate anticipated increases in traffic. The applicant and NCDOT staff engineers are currently working on the details and requirements of these improvements. Along with all valid State permitting, Pender County Utilities has allocated proper water usage for the entire development. All road names have received approval by Pender County's E-911 Addressing Division.

Staff Recommendation:

Planning Staff is submitting the preliminary plat layout for Planning Board approval. Phase III, as presented is consistent with the Planning Board's previously approved Master Plan for Avendale Subdivision.

Mandatory Items for Final Preliminary Plat Approval:

All requirements of the Pender County Subdivision Ordinance for Preliminary Plats, including items 1 thru 13 pages 22, 23 & 24 have been submitted to and approved by the Director.

1. The submission and plat complies with all requirements of the Pender County Subdivision Ordinance, Zoning Ordinance, other Pender County Ordinances and State Regulations.
2. Total and usable lot areas and required set back lines must be shown for each lot.
3. Public Water Systems
   (1) Constructions plans sealed by a registered engineer, as approved by DENR and Pender County Utilities Department;
   (2) Acceptance of operation and maintenance of the system by Pender County;
   (3) Certification that the system will be dedicated to Pender County.
4. Covenants and Restrictions that ensure ownership, operation, maintenance and replacement of drain fields and system lines located on common open space held in trust by the duly established Homeowner's Association as established under the provisions of this ordinance.
5. Location of existing monuments and control points must be shown on the property.
3. The plat should clearly designate **Wetlands**, **Areas of Environmental Concern**, **CAMA Setbacks**, **Flood Prone Areas** (as shown on current FEMA maps), marshes, swamps, ponds, lakes, streams, and any other natural features on or affecting the site. If no Wetlands, AEC's or Flood Prone Areas exist on the site a note to that affect shall appear on the plat.
4. The plat must clearly designate Hydric Soils (Bohicket Silty Clay Loam, Carteret Fine Sand, Chewacla Loam, Croatan Muck, Dorovan Muck and Muckalee Loam) as shown on the NRCS county soil survey maps or from a Soil Suitability Analysis (required and received) prepared by a licensed Soil Scientist. If no hydric soils exist on the site a note to that affect shall appear on the plat.
5. Storm water management features must show all proposed storm water retention facilities including drainage easements, piping, culverts, swales, ditches, etc.
6. The plat must indicate the location and dimensions of existing and proposed right-of-ways & easements for utility, drainage or other facilities or structures. Easements with a width of 20' from center or 10' from the edge of all drainage facilities included on required drainage plans shall be shown for any such facilities not in public street right-of-way.
7. When any development proposes private streets a description of the method to provide Pender County Emergency Service personnel and vehicles immediate access shall be submitted.
8. An approved NCDOT driveway permit for connection to Washington Acres Road (SR 1582) shall be submitted to Planning.
9. A drainage plan that will include all portions of the development shall be submitted. This plan shall be prepared and sealed by a registered surveyor or engineer. The plan and facilities shall provide for a drainage system for these areas that will accommodate the ten-year storm event without flooding or substantial ponding of water in the areas included in the plan. The plan must also accommodate any discharge from properties in upland portions of the drainage basin that flows through the property for the same storm event for the type development for which that property is zoned. The boundary of any drainage area on a portion of the site and/or upland from the site and drainage areas between storm water discharge points from the site to the recipient perennial stream shall be shown on a map (copy of 7.5 min. USGS Quad or similar map). Any drainage facility receiving storm water discharge from the development shall have the capacity to carry the anticipated storm water flow from areas that discharge through them for the 10 year storm event from the point of discharge at the development to the recipient perennial stream

without overflowing their banks. The location, size and/or capacity of all structures included in the drainage system and receiving discharge from the development to the recipient perennial stream shall be shown on the plan and calculations used in designing the drainage system shall be submitted in a legible format. This plan may be included in the street and drainage plan, storm water management plan or on the preliminary plat, as long as the design professional certifies that the specific drainage plan submitted complies with these requirements and the information required is shown or submitted as noted.

10. Sediment & Erosion Control Plans as approved by Land Quality (with letter of approval) with a copy to Pender County planning.
11. Storm water management plan as approved by the Water Quality Division with a letter of approval sent to Pender County Planning.
12. Approval of Wetlands Delineation by USACE with a copy provided to Pender County Planning as required.
13. Wetlands fill authorization or permit if construction or fill in wetlands is involved with a copy to Pender County Planning as required.
14. Subdivision roads will be named and approved by an EMC representative within 30 days of Planning Board approval and prior to Planning department approval of the Preliminary Plan.
15. A draft copy of the restrictive or protective covenants applicable to the Planned Development shall be submitted to the Planning Board before final plat approval.
16. Unless waived by the Planning Board, the developer shall submit the proposed plans for vegetation preservation and land clearance in the Planned Development.
17. A restrictive easement with a note for individual maintenance of buffers shall be provided on the plat and recorded in the homeowners' association documents.
18. The revised plat for this development should be resubmitted within 30 days of approval by the Planning Board with all map and plan changes for approval by the Director.
19. Upon approval of the Final Preliminary Plat, the development may obtain a zoning determination in order to conduct environmental testing and to obtain Environmental Improvement/Construction Permits.
20. Except for clearing and grubbing associated with surveying and testing required to obtain Preliminary Plat approval, site disturbance and construction can not begin prior to obtaining Final Preliminary Plat approval.
21. Upon approval of the Final Preliminary Plat, the development may obtain a zoning determination in order to conduct environmental testing and to obtain Environmental Improvement/Construction Permits.
22. Except for clearing and grubbing associated with surveying and testing required to obtain Preliminary Plat approval, site disturbance and construction can not begin prior to obtaining Final Preliminary Plat approval.
23. Lots (if any) found to be unsuitable for septic systems will be labeled as unbuildable in accordance with Pender County subdivision requirements on the Final Plat.

Additional Items Recommended For Inclusion By The Planning Board:

1. When any portion of the development is in a Special Flood Hazard Area, as defined in the Pender County Flood Ordinance, as amended, and set out in the FEMA Rate Index Maps, one (1) permanent monument in each subdivision is required to have its elevation recorded on the final plat. **PLEASE NOTE** - New Pender County FIRMS are now available for review and are required to be used as best available data.
2. Base Flood Elevation(s) shall be determined and shown along with the SFHA boundary on the plat. **PLEASE NOTE** - New Pender County FIRMS are now available for review and are required to be used as best available data.
3. The subdivision shall not block or obstruct the natural drainage of any adjoining area.
4. Permanent dead end streets (cul-de-sacs) or temporary dead end (stub) streets shall be no longer than 1,000 ft. unless it is demonstrated by the developer that the configuration of the property prevents its development without longer streets to provide access to the lots and common area to be subdivided. Temporary dead

end or stub streets shall provide turn around capabilities to meet NCDOT requirements. The Cul-de-sac end shall be a bulb type with minimum radii as follows: RW = 50', Pavement = 37' to pavement edge.

5. Sight easements as required in the NCDOT Secondary Roads Standards shall be provided at all street intersections.
6. All utility lines located in a public or private street shall meet NCDOT requirements for encroachment of such lines.
7. All utility lines including water and sewer lines that are located in any public or private street shall be owned, operated and maintained by a public utility or a public entity.

Informational Notes for Developer:

1. A copy of the preliminary plat signed by EMC representative approving the street names will be required to be submitted within 30 days of preliminary plat approval by the Planning Board and before final Preliminary Plan approval by Planning Department.
2. Any reduction in open space, if applicable to this subdivision, will require planning board approval.
3. The applicant should be fully aware of the certification and guarantee requirements for roads, drainage plans, facilities and other improvements in the development. The certification forms are found on the Pender County Website. All documented certifications must be delivered to Planning Department prior to Final Plat Approval.
4. Any changes in the development name or road names after approval by the planning board will require an additional review fee with lot assessments to be paid in full.

Mandatory Items For Final Plat Approval:

1. For the public road, one of the following items shall be submitted:
   a. Verification of acceptance to the NCDOT maintained state road system or;
   b. A current certification by the NCDOT District Engineer that said subdivision road system has been completed, inspected, is in compliance with relevant NCDOT residential road standard requirements and will be accepted as a state maintained road under specified qualifying conditions acceptable to Pender County or;
   c. The following shall be submitted:
      1. A certified estimate of the cost to construct the entire road system as well as a certified estimate of the cost to complete construction of the streets to NCDOT standards, prepared, signed and sealed by a licensed engineer,
      2. Performance guarantee (performance bond, letter of credit or all cash escrow) for the cost of completion of all streets not certified as complete and acceptable as state maintained roads by the NCDOT District Engineer.
2. A Defects Guarantee (performance bond, letter of credit or all cash escrow) will be provided for all streets in the entire development that have not been accepted for maintenance by NCDOT. The Defects Guarantee will be in the form of the same instruments as permitted for the Performance Guarantee and will be provided in an amount equal to at least 50% of the original construction cost estimate for the streets in question. The Guarantee shall provide a written warranty against defects in the streets until such time they are accepted for maintenance by NDOT
3. The Defects Guarantee shall be in affect until all streets meet NCDOT's residency requirements and have been accepted for maintenance by NCDOT.
4. All requirements of the Pender County Subdivision Ordinance for Preliminary Plats, including items 1 thru 13 pages 22, 23 & 24 have been submitted to and approved by the Director.
5. The submission and plat complies with all requirements of the Pender County Subdivision Ordinance, Zoning Ordinance, other Pender County Ordinances and State Regulations.

6. Improvement Permits must be issued for each lot to be developed with a traditional onsite septic as shown on the applicant's soil suitability analysis/improvement permit.
7. Off-site septic drain fields require construction plans sealed by a registered engineer, as approved by DENR. A detailed description of any proposed off-site septic drainage fields and system operation, maintenance and replacement procedures and processes to serve all lots that are not suitable for traditional on site drain fields, along with a map showing the proposed location of the off site components of the system, including lines must be submitted.
8. Water System Requirements:
    i. Construction plans sealed by a registered engineer, as approved by DENR,
    ii. Approval and acceptance of construction, operation and maintenance of the system by Pender County,
    iii. Certification that the system will be owned by Pender County with conditional acceptance of ownership.
9. Sewer System Requirements:
    i. No final preliminary plat will be approved unless waste water treatment is sufficient in size and capacity to service every approved site and use.
    ii. Construction plans sealed by a registered engineer, as approved by DENR, for a system that provides tertiary treatment with advanced treatment capabilities that can be integrated into a regional wastewater treatment system in the future,
    iii. Approval by Pender County Utilities and Environmental Health,
    iv. Acceptance of operation and maintenance of the system by a licensed Public Utility,
    v. Certification that the system will be owned by a Public Utility with conditional acceptance of ownership.
10. The location of street signs should be provided for all proposed streets.
11. Certifications and guarantees for roads, drainage plans, facilities and other improvements in the development are requirements of Final Plat approval. Planning staff will assist in this process. All documented certifications and guarantees must be delivered to Planning Department prior to Final Plat Approval.
12. No Final Plat will be approved unless and until all infrastructure and site improvements are constructed and installed in a workmanlike manner consistent with generally accepted industry standards and perform the function for which they were permitted, designed and constructed.

Board Action for Avendale Phase III Subdivision Preliminary Plat:

Motion:_____**Seconded**_____

Approved:_____**Denied:**_____**Unanimous**_____

Reynolds ____ Garrett ____ Boney ____ Marshburn ____ Millette ____ Smith____ Williams ____

PLANNING AND COMMUNITY DEVELOPMENT

PLANNING • CODE ENFORCEMENT • BUILDING INSPECTIONS • CENTRAL PERMITTING

APPLICATIONS COVER SHEET

Date Application Filed: 11/23/2009

I. REQUIRED NAMES:

Applicant Stroud Enginmering, PA
Address 102-D Cinema Drive
Wilmington, NC 28403
Phone 910-815-0775 **Fax** 910-815-0593
Email agreene@stroudengineer.com

Owner Avendale Development, LLC
Address P.O. Box 1069
Hampstead, NC 28443
Phone 910-270-1725 **Fax**
Email

Legal Relationship of Applicant to Property Owner: Consulting Engineer

Consultant Name/Company Stroud Engineering, PA

Address 102-D Cinema Drive Wilmington, NC 28403

Phone 910-815-0775 **Fax** 910-815-0593

Email agreene@stroudengineer.com

II. AFFIDAVIT REGARDING OWNER – APPLICANT RELATIONSHIP:

I JW Fussell (owner) and James Fentress (applicant) hereby affirm that an appropriate contractual relationship permitted by the appropriate NC State Codes exists between said Owner and Applicant. Owner and Applicant also affirm that if the owner requests that the application be terminated, staff with comply with Owner's request.

(Signature of Applicant) (Signature of Owner)

III. TYPE OF APPLICATION:
(Please check one)

Board of Adjustment:
____ Variance
____ Appeal

Zoning:
____ Text Amendment
____ Map Amendment
____ Home Occupation
____ Special Use Permit
____ Vested Rights Determination

Plans:
____ Planned Development Master Plan
X Subdivision Preliminary Plat
____ Final Plat

PLANNING AND COMMUNITY DEVELOPMENT

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FEE SCHEDULE

Board of Adjustment:	Applicable Fees:	Fee Calculation:
Variance	$250.00	
Appeal	$250.00	
Zoning:		
Zoning Determination Letter	$15.00	
Text Amendment	$250.00	
Map Amendment	$500.00 for first 5 acres; $10/acre thereafter up to 1,000 acres; $5/acre thereafter	
Vested Rights Determination	$250.00	
Home Occupation	$25.00	
Special Use Permit	$300.00 & $10.00 per acre over 5 acres; max of $5,000.00	
SUP, Part of AEC	$300.00 & $10.00 per acre over 5 acres	
SUP, Tower over 75 ft.	$500.00	
SUP, Mining Borrow Pit	$750.00 & $10.00 per acre over 5 acres	
SUP, Mining other	$1,000.00 plus $5.00 per acre	
Plans:		
Planned Development Master Plan	$500.00 plus $10/acre for the first 100 acres; $5/acre thereafter	500 +(10*33) = $1330.00
Preliminary Plat	$500.00 & $10/lot/residential unit for the first 100 lots/units; $5 per lot/unit thereafter	
Final Plat	$250.00 & $10/lot/residential unit for the first 100 lots/units; $5/lot/unit thereafter	
	Total Fees Due:	$1330.00

Attachments Included with Application:
(Please include # of copies)

1 CD 2 Plan Sets _____ Other Documents/Reports

Method of Payment: _____ Cash
_____ Credit Card, We accept VISA ___ and MasterCard___ only.
x Check, Ck. # (1938)

For Office Use Only:

Receipt # 084669

Received By: KB Date: 11/23/2009

COMMUNITYDEVELOPMENT@PENDER-COUNTY.COM • 805 S. WALKER STREET, BURGAW, NC
PHONE: 910.259.1202 FAX: 910.259.1295

PLANNING AND COMMUNITY DEVELOPMENT

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SUBDIVISION APPLICATION

Date 11/23/2009 Application Fee $ 1330.00

I. PROPERTY INFORMATION:

Record #: _____ Lot #: _____

Parcel ID #: 3273-14-5830-0000 Zoning District: PD

Property Location/Address: South side Avendale Drive at NC 210

Subdivision Name: Avendale Phase: 3

Review Type (check one): [X] Major [ ] Minor

II. A complete submission must be in the Planning and Community Development Department office 45 days prior to the scheduled Planning Board public hearing date. All of the information listed below must be included for the submission to be considered complete:

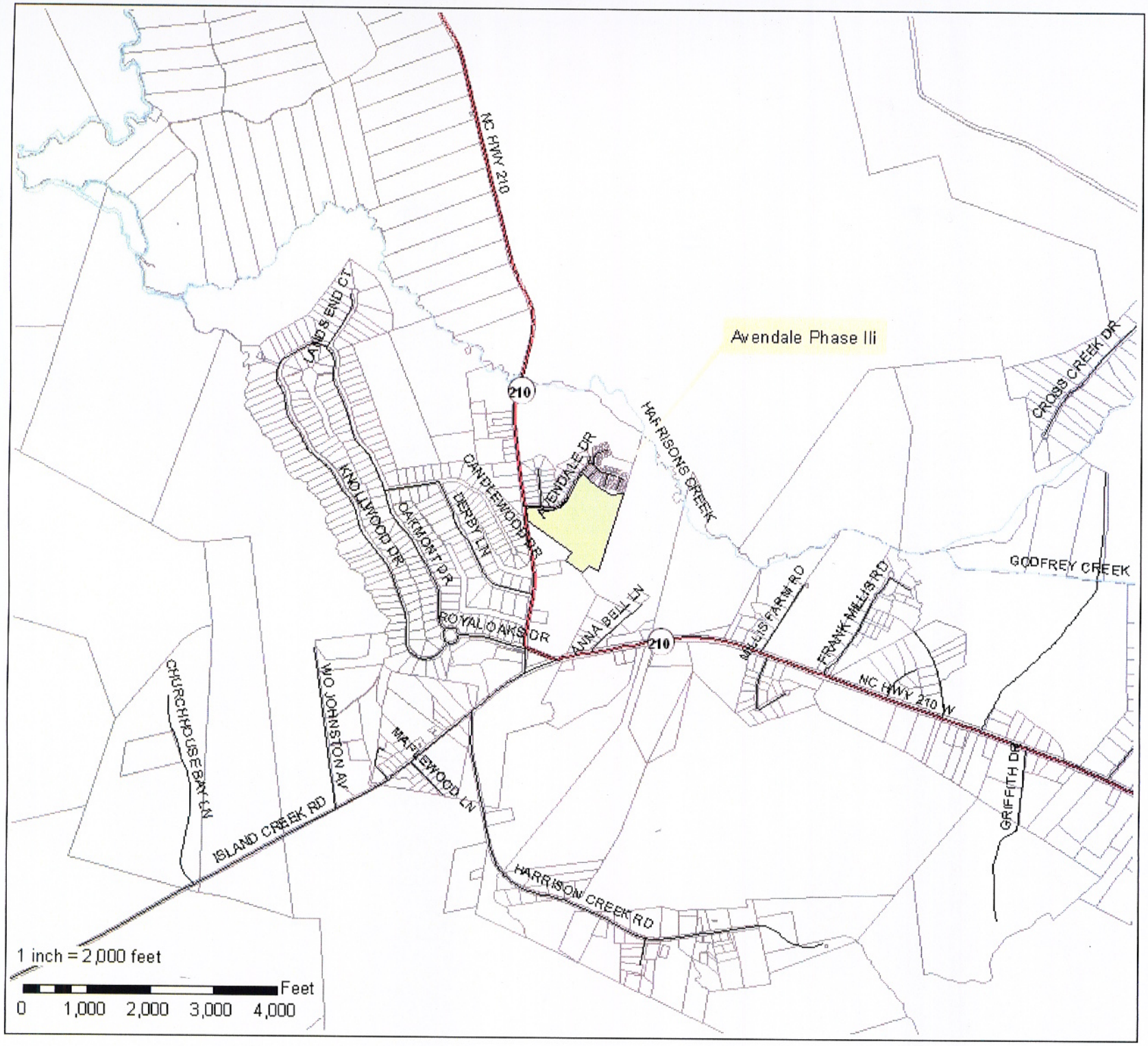
- ☑ Application Fee
- ☑ 18 (11x17) map copies for the Planning Board
- ☑ 2 full size map copies
- ☑ CD containing maps and/or document files in .pdf format

**Please refer to Preliminary Plat Checklist for further requirements.*

III. SIGNATURE OF OWNER/APPLICANT: _____

COMMUNITYDEVELOPMENT@PENDER-COUNTY.COM • 805 S. WALKER STREET, BURGAW, NC
PHONE: 910.259.1202 FAX: 910.259.1295

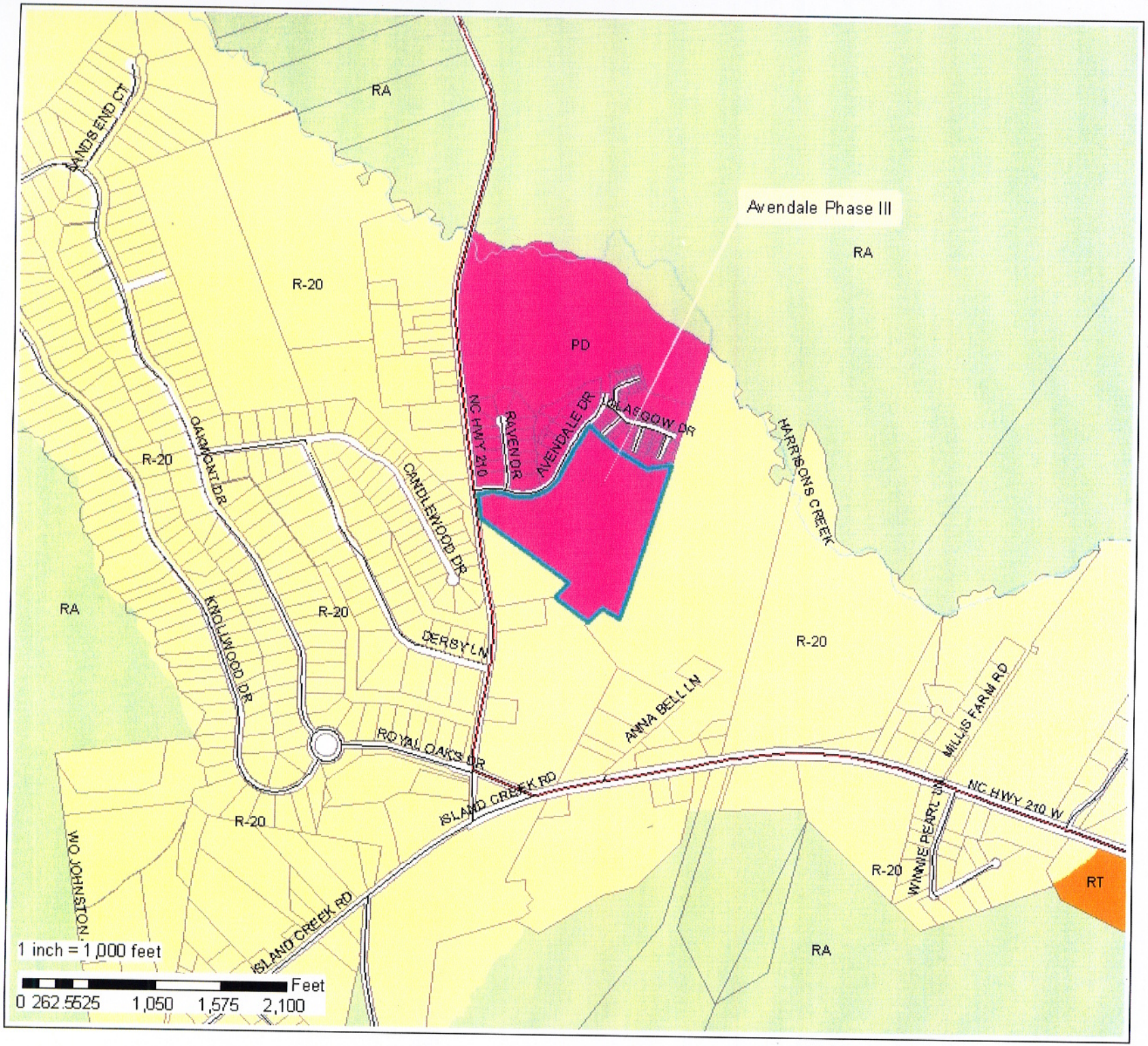
3.B

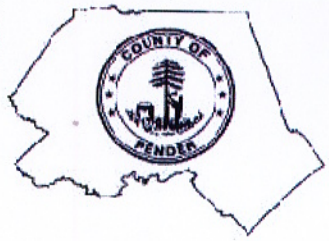


Stroud Engineering, PA

Preliminary Plat
10-01-05-01 Avendale

Vicinity Map





Applicant -
Stroud Engineering, PA

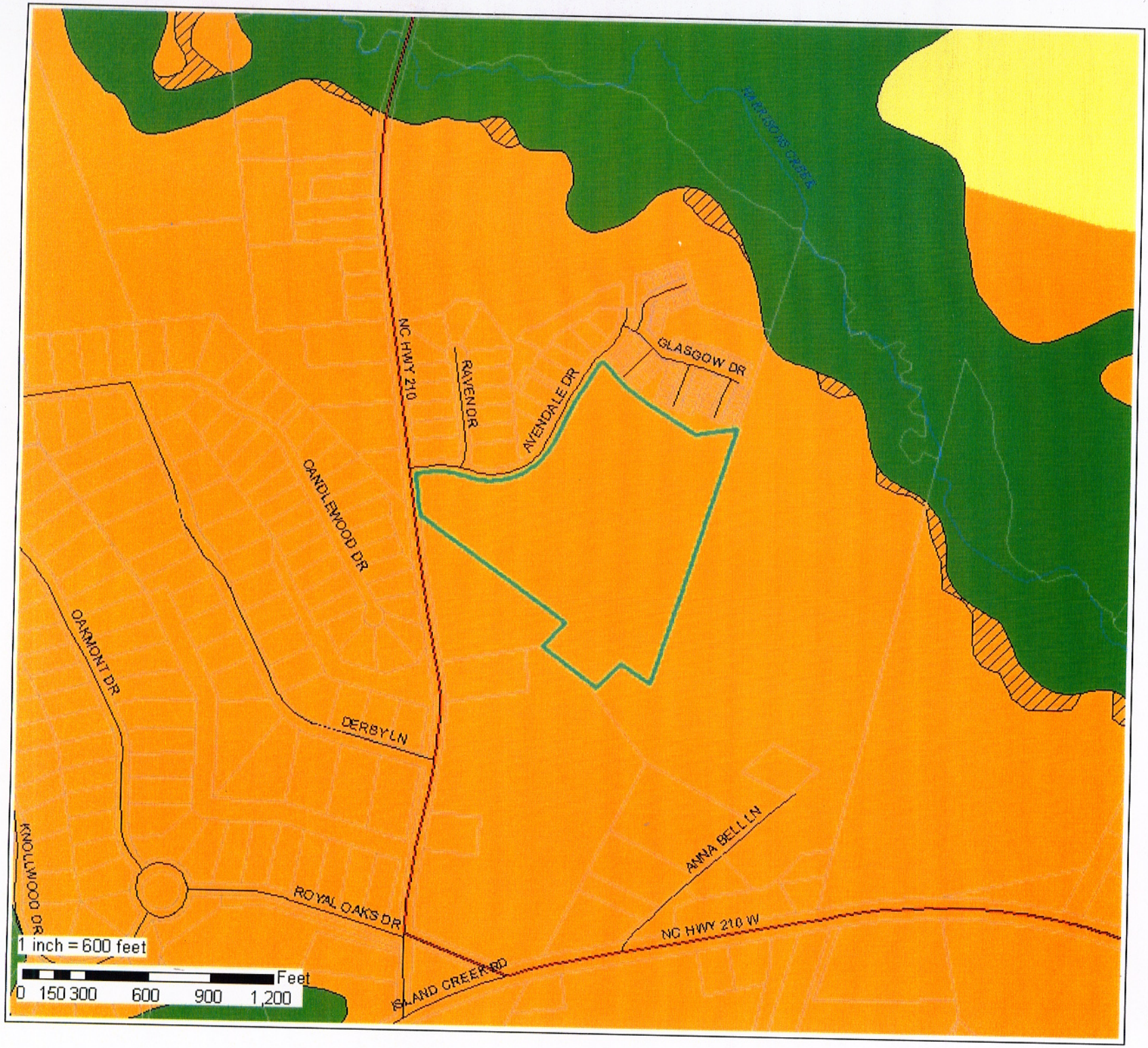
Preliminary Plat
10-01-05-01 Avendale

Avendale_Phase_3

Zoning

- B-1
- B-2
- B-3
- I-1
- I-2
- Incorporated Area
- PD
- R-10
- R-15
- R-20
- R-20C
- RA
- RT
- WSCA
- WSPA

Zoning Map

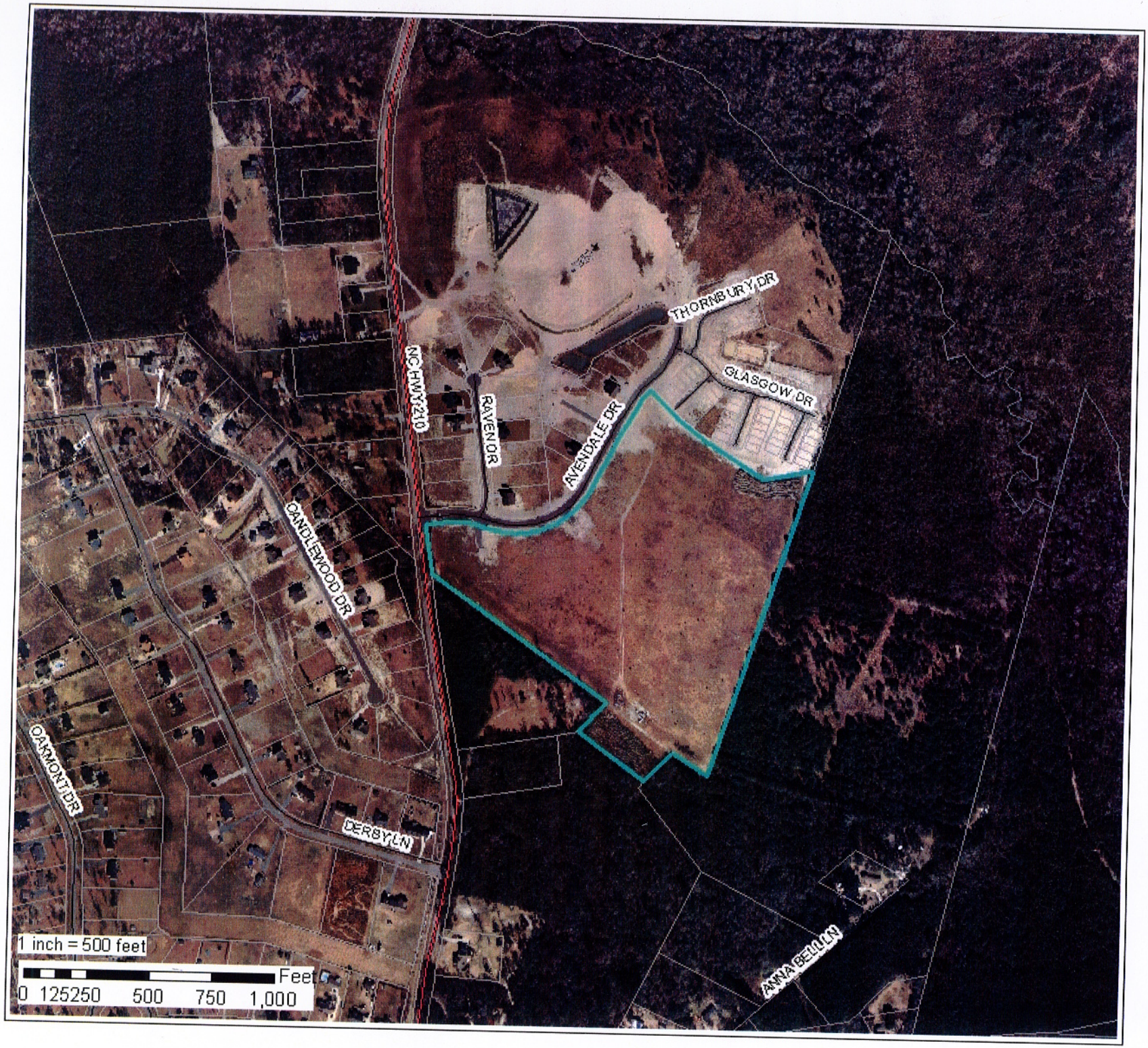


Applicant -
Stroud Engineering, PA

Preliminary Plat
10-01-05-01 Avendale

CAMA Land Use
- Avendale_Phase_3
- Rural Areas
- Rural Clusters
- Urban Growth Areas
- Transition Areas
- Conservation Area II
- Conservation Area I

CAMA Land Use

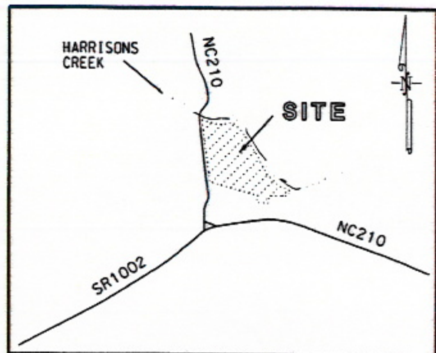


Applicant -
Stroud Engineering, P/

Preliminary Plat
10-01-05-01 Avendale

N

Aerial Map



VICINITY MAP
NTS

TRACT AREA (OVERALL TRACT)	99.63 AC
PHASE 3 AREA	27.11 AC
WETLAND AREA (PHASE 3)	-0-
TRACT ZONING	PD
# OF SINGLE FAMILY UNITS	83
RECEIVING STREAM & CLASS	HARRISONS CREEK, C-SW

PHASE 3 SITE DATA

LEGEND

- ● IRON REBAR SET
- ○ EX. IRON PIPE
- ■ CONTROL MONUMENT SET
- • CONTROL PK NAIL SET
- GRAVITY SEWER
- WATER LINE
- STORM SEWER
- x 24.60 PROPOSED GRADE

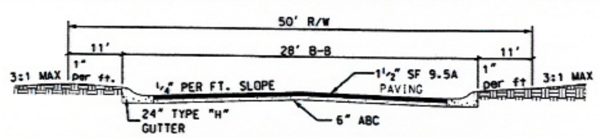
LINE TABLE

Name	Length	Direction
L14	117.90	N62°44'24"E
L15	130.00	S39°16'25"E
L16	463.91	S54°45'00"E
L17	35.56	S72°43'54"E
L18	75.65	S60°09'49"E
L19	162.71	S38°10'12"E
L20	244.04	S17°16'06"W
L21	237.03	S43°05'58"W
L22	681.63	S54°45'00"E
L23	112.23	S46°54'02"E
L24	106.23	S49°12'51"E

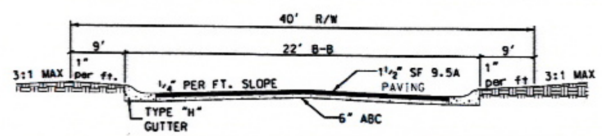
CURVE TABLE

Name	Radius	Arc Length	Chord Length	Tangent Length	Chord Direction
C24	230.00	62.13	61.94	31.25	S47°00'43"E
C25	230.00	72.18	71.89	36.39	S63°44'27"E
C26	310.00	119.00	118.27	60.24	S49°10'01"E
C27	310.00	97.06	96.66	48.93	S47°08'23"E
C28	310.00	397.01	370.43	230.97	S19°25'14"E
C29	310.00	139.76	138.58	71.09	S30°11'02"W
C30	230.00	33.86	33.83	16.96	S09°37'17"W
C31	230.00	241.48	230.54	133.20	S24°40'22"E
C32	230.00	31.51	31.49	15.78	S50°49'31"E

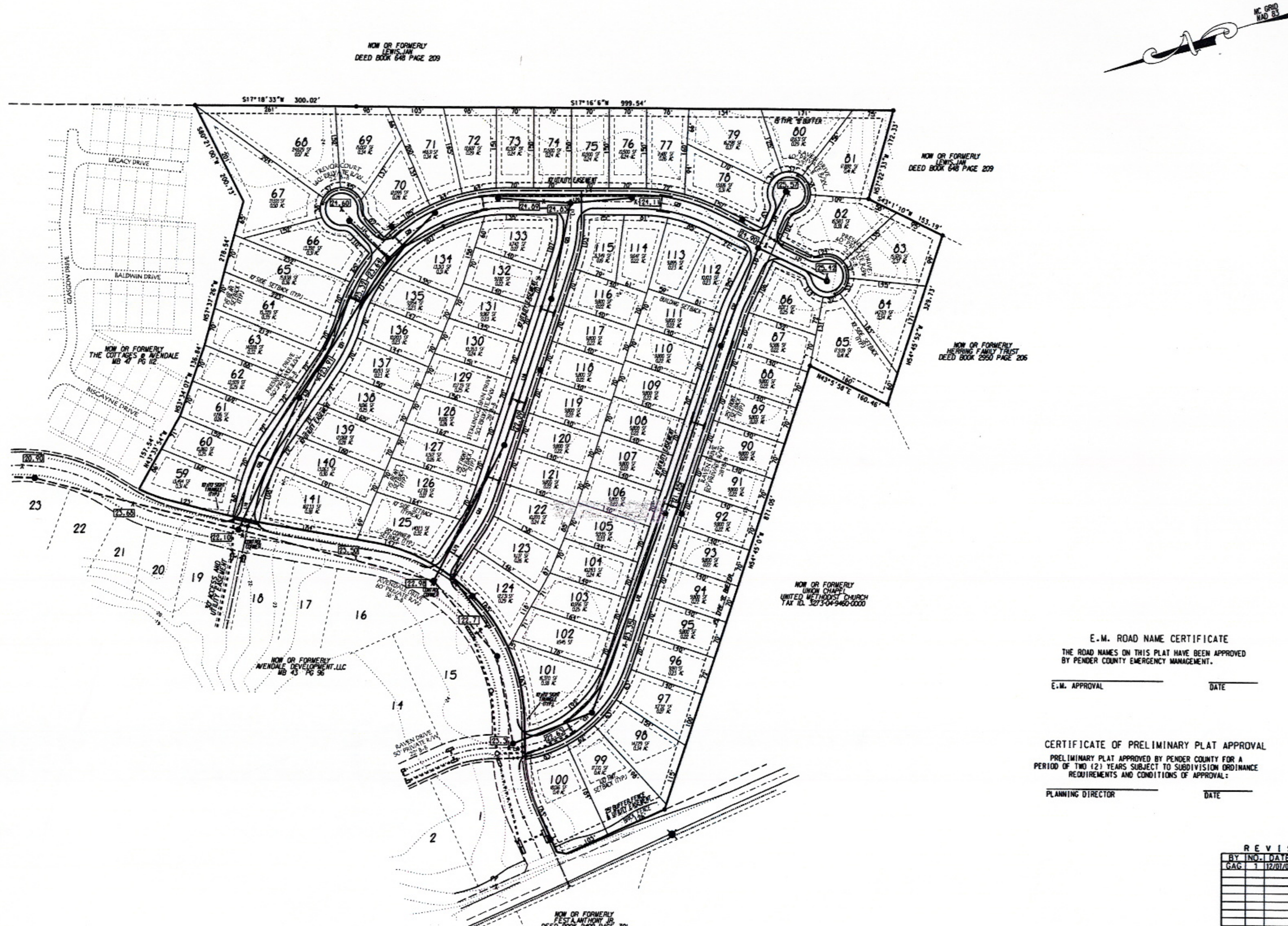
TYPICAL STREET INTERSECTION
NOTE: INTERSECTION WITH HWY. 210 TO HAVE 30' RADII.



TYPICAL COLLECTOR STREET SECTION
N.T.S.



TYPICAL CUL-DE-SAC STREET SECTION
N.T.S.



E.M. ROAD NAME CERTIFICATE

THE ROAD NAMES ON THIS PLAT HAVE BEEN APPROVED BY PENDER COUNTY EMERGENCY MANAGEMENT.

E.M. APPROVAL ____________ DATE ____________

CERTIFICATE OF PRELIMINARY PLAT APPROVAL

PRELIMINARY PLAT APPROVED BY PENDER COUNTY FOR A PERIOD OF TWO (2) YEARS SUBJECT TO SUBDIVISION ORDINANCE REQUIREMENTS AND CONDITIONS OF APPROVAL:

PLANNING DIRECTOR ____________ DATE ____________

REVISIONS

BY	NO.	DATE	DESCRIPTION
GAG	1	12/07/09	PER REVIEW

NOTES:

1. MINIMUM LOT SIZE SHALL BE DETERMINED BY PLANNING BOARD
2. STREETS SHALL BE BUILT TO DOT MINIMUM DESIGN SPECIFICATIONS AND DEDICATED AS PRIVATE
3. PHASE 3 TO BE PROVIDED WATER BY PENDER COUNTY AND SEWERED BY AQUA NC
4. 20.25 ACRES OF OPEN SPACE PROVIDED IN WETLAND TO SERVE ENTIRE DEVELOPMENT

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

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 20643 JAMES H. FENTRESS, JR.

JAMES H. FENTRESS, JR., P.E.
DATE 12/12/2009

PRELIMINARY PLAN FOR
AVENDALE
- PHASE 3 -

TOPSAIL TOWNSHIP — PENDER COUNTY — NORTH CAROLINA

OWNER: AVENDALE DEVELOPMENT, LLC
ADDRESS: PO BOX 1069, HAMPSTEAD, NC 28443
PHONE: (910) 270-1725

STROUD ENGINEERING, P.A.
102-D CINEMA DRIVE
WILMINGTON, NC 28403
(910) 815-0775

DESIGNED:	GAG
DRAWN:	CGW
APPROVED:	JHF
DATE:	11/19/09
SCALE:	1"=100'

SHEET 1 OF 1

PROJECT NO.: PW-598
DRAWING NAME.: W:/MASTER/PW-598/DGN/AVENDALEph3PRELIM.dgn

PROJECT NO.: PW-598

4. A

PLANNING AND COMMUNITY DEVELOPMENT

CODE ENFORCEMENT • BUILDING INSPECTIONS • CENTRAL PERMITTING
PARKS AND RECREATION • PLANNING AND ZONING

To: Pender County Planning Board

From: Patrick T. Davenport, Director

Date: December 23, 2009

RE: Discussion: Continue 2010 UDO- Zoning Map revisions

Staff continues to work on the 2010 UDO and the supporting zoning map is a critical step in the process. Several revision scenarios to the 2010 zoning map have previously been discussed with the Planning Board and staff is requesting the Planning Board continue to review the proposed revisions and finalize the zoning map proposals. The zoning district designations will be presented formally as part of the public hearing process and concurrently with the UDO document.

Generally, most zoning district reassignments follow criteria of current use, adjoining property use and zoning district, parcel size, and property owner input. Please find attached on the following page, a summary of the proposed map revisions and several significant areas of the County which are illustrated with "current" and "proposed" zoning districts.

Staff is available for questions, inputs and concerns.

PTD

UDO Zoning Map Update

- Rural Agricultural (RA) District designation will remain generally unchanged but may increase in area depending on other zoning parcel's re-designation.
- R-20, R-20C, R-15 and R-10 will all merge into the Residential Performance (RP) District; This district may increase in area depending on other zoning parcel's re-designation.
- Planned Development (PD) will remain generally unchanged, with the exception of rezoning certain parcels in the Watts Landing Rd. area using similar criteria for RT revisions.
- A Manufactured Housing Community (MH) District will be created as a "floating" zone (no parcels initially assigned to this district).
- B-1, B-2 and B-3 will all be reassigned into a new General Business (GB) District
- I-1 and I-2 will combine into the General Industrial (GI) District
- Transitional Industrial (TI) District will be created and will receive some RT zoning parcels.
- Airport (A) District will be dissolved- Aviation Support Overlay (AVO) District created and applied to Wallace Airport Area
- Watershed Critical Area and Watershed Protection Area will be converted to overlays; the underlying zoning districts will be rezoned to RA
- Office and Institutional (OI) District will be created for government uses, offices, schools, churches.
- An Environment Conservation (EC) District will be created; Assigned to this district would be State owned properties such as NC Game lands, Holly Shelter, Angola Bay, and other parcels owned by the Nature Conservancy and Coastal Land Trust, etc.
- Rural Transition (RT) district will be dissolved with the new classification to be assigned considering: Existing use of property; Parcel size (greater than 43,560 sq ft and vacant = RA); Adjoining uses/zoning; Property owner input/request

Proposed Zoning Districts	**Proposed Overlay Districts**
Rural Agricultural (RA)	Aviation Support Overlay (AVO)
Residential Performance (RP)	Flood Hazard Overlay (FHO)
Planned Development (PD)	Transportation Corridor Overlay (i.e. TCO-17)
Manufactured Housing Community (MH)	Watershed Critical Area Overlay (WCO)
General Business (GB)	Watershed Protection Area Overlay (WPO)
Office and Institutional (OI)	
Transitional Industrial (TI)	
General Industrial (GI)	
Environmental Conservation (EC)	

4.B

DEVELOPMENT STANDARDS AND SUBDIVISION DESIGN

ISSUES AND CONCEPTS FOR DISCUSSION

- **Street design**
  - Requiring dedication of R/W (Once County Transportation Plan is updated)
    - State Road-Existing 60' R/W adjacent to proposed subdivision
      - Trans Plan indicates 100' desired R/W
      - Require 20' dedication or 1/2 of desired future R/W width
      - Setbacks and lot area applied after dedication
  - R/W Widths for new construction
    - Allow varying and flexible R/W widths other than State minimum standards
      - Enabling one way streets and alleys
      - Enable traffic circles/roundabouts
  - Road Construction standards
    - Voluntary curb and gutter only
      - Provide option for no curb and gutter waiver by PB if suitable alternative
    - Enable flexible SWM design to encourage LID practices
    - Require NCDOT minimum construction methods and materials for actual roads
    - Provide for interconnectivity as necessary
    - Minimum pavement widths
  - Cul de sac lengths
    - Can exceed 1,000' length if roundabout or traffic circle is provided or side street with suitable cul de sac
  - Sidewalks and Pedestrian/Bike Trails
    - Maintain options for pedestrian/bike trails.
    - Provide trails as indicated on Parks and Rec Plan
    - Not require pavement with HOA maintenance agreement.
  - Street lights
    - Require where sidewalks/pedestrian trails are installed

- **Off street parking**
  - Allow shared parking
  - Allow angled parking stalls
  - Enable LID practices for SWM
  - No curb and gutter required for non residential
  - Pavement required for new development

- **Access management**
  - Minimum spacing for new entrances along major highways as defined
    - 200';Shared driveways
  - Require interconnectivity for new sites to existing sites or stub connection
  - Driveway alignments with entrance across street

- **Sewer and Water Service**
  - Well and septic allowed on 20,000 sq ft lots or larger
  - Water/Septic-Well/Sewer options for 15,000-19,999 sq ft lots
  - Water/Sewer for all smaller dwelling types
  - Non residential-all options possible
  - Require County water connection for new residential development if within 1,000' and if County confirms water availability; County must provide offsite easement rights

- **Stormwater management**
  - Continue with NCDENR issuing SWM permits
  - Enable LID practices for SWM

- **Open space Environmental and Hazard Mitigation (See Open Space Document Attached)**
  - If possible, arranged open space to be sited adjacent to existing open space in other subdivisions
  - E&S permits and enforcement still administered by NCDENR
  - New lots to be created to enable buildable area not within Flood Hazard area
  - Flood study required to establish BFE when A zone exists
  - Clear zone buffers established if wildfire hazard area is present

- **Property/Home Owners Associations**
  - Required for all (non RA) major residential subdivisions with privately maintained streets and/or open space dedications
  - Legal documents recorded with final plat; amenities/land transferred to HOA entity after 25% of units are constructed
  - Require all amenities proposed on Master/Preliminary Plat to be constructed after a certain number of units are built ___% or;
  - Description of when facilities will be built.

- **Minor/Family Subdivision Standards**
  - Minor Subdivision Standards allow 3 plus remainder lot to be developed without construction of road
    - Limit on length of dedicated easement (Current 500' limitation on 3 lot subdivision)
  - Family Subdivisions (3 lot plus remainder)
    - Increase number of lots to be developed off of access easement?
    - Currently no limitation on length of easement to serve lots
    - Require note on plat with owner-conveyer dedication that the lot created is going to family member. For example:

Subdivision activity for transfer to a family member (family member transfer) provided that no more than ten lots are created. The following standards shall apply:

1. For family member transfers, an access easement at least 40 feet in width shall provide access to lots created on the interior of the site from a public roadway.
2. The following Statement shall appear on the plat and be signed by the Grantor(s) and Grantee(s) prior to approval:

The Grantor(s) and Grantee(s) certify that the Grantee(s) is within four (4) degrees of collateral kinship to the Grantor(s), and that the purpose of this waiver is not to circumvent the provisions of the Pender County Unified Development Ordinance, and that none of the lots shall be conveyed to non-family members for a period of not less than one (1) year.

_____ _____

Grantor(s) Grantee(s)

THE PROPOSED STREET(S) WILL NOT BE MAINTAINED BY PENDER COUNTY AND THE MAINTENANCE SHALL BE THE RESPONSIBILITY OF ALL ADJACENT PROPERTY OWNERS TO SAID STREET(S).

4.C

Open Space Requirements (PB Discussion Points)

- Fee in Lieu Of:
  - Allow fees in lieu of open space requirements?

- Recreational Units
  - Does the Planning Board want a trigger to require developments to adhere to a strict number of recreation units provided?
    - Example:
      - A Development of 100-199 units shall be required to provide for 1 recreation unit or Fee in Lieu of or appropriate land dedication to appropriate non-profit or county? One recreational unit may be equivalent to $10,000 or a tot lot or picnic shelter or ¼- ½ acre of usable project land?
      - Developments of 200-299 units shall be required to provide for 2 recreational units or Fee in Lieu of or appropriate land dedication to non-profit or county? Etc…

Open Space

Every subdivider of land for residential purposes shall dedicate a portion of such land, as set forth herein, for the purpose of providing, **active** and **passive** recreation areas to serve the residents of the immediate neighborhood within the subdivision.

1. Open Space Areas Can Be Defined By Active Or Passive Open Space As Follows:
   A. Active Open Space consists of areas such as park land chosen without regard to natural features for the explicit purposes of enhancing design, such as village commons, or providing space for outdoor recreation activities which may include, but not be limited to, tennis courts, ball fields, swimming pools, and tot lots with play equipment.
   B. Passive Open Space areas must consist of undisturbed, unique and sensitive natural features when available, that may include streams, floodplains, wetlands (excluding tidal marsh) conservation resources, and natural heritage areas if identified. These natural spaces will be characterized by undisturbed soils and natural vegetative cover for wildlife habitat. Passive Open space may become part of designated County greenways. Amenities such as walking paths, piers, picnic areas and other passive recreational uses will be allowed with minimal disturbance of the vegetation.

2. Required Open Space: All new residential subdivisions shall provide open space in the amount of **0.03** acres per dwelling unit within the subdivision. No more than 50% of the required open space shall be designated as passive open space. 50% or more of the required open space shall be designated as active open space.
3. Exemptions to Open Space.
   A. Density calculations of a development that is one unit per acre or greater in the RP and RA Zoning Districts.
   B. Developments consisting of 10 units or less.
4. Standards for Park, Recreation and Open Space Areas: Except as otherwise approved by the Planning Board, all park, recreation and open space areas shall meet the following criteria:
   A. Unity
      The dedicated land shall form a single parcel of land, whether or not the subdivision is developed in phases or sections, except where it is determined by the appropriate governing body, that 2 or more parcels would be in the best interests of the residents of the subdivision and the public; and in such case, the appropriate governing body, may require that such parcels be connected.

B. Shape
The portion of dedicated land to be used for active recreation shall be of such a shape to be usable for active recreational facilities including but not limited to tennis courts, racquetball courts, swimming pools, exercise rooms, clubhouses, athletic fields, basketball courts, swings, slides and play apparatus.

C. Greenways
If open space is a greenway, the land shall be a continuous linear parcel through the subdivision of at least 30 feet in width.

D. Location
The dedicated land shall be located so as to reasonably serve the recreation and open space needs of residents of the immediate neighborhood within the subdivision for which the land dedication is made and can be combined with an adjacent park.

E. Access
All dwelling units in the subdivision shall have suitable, safe, and convenient ingress and egress to and from the park, recreation and open space areas provided within the development by means of improved streets or dedicated walkways. Rights-of-way for such access shall be shown on the preliminary plans and final plats.

F. Required Stormwater Detention/Retention Facilities
Required stormwater detention/retention facilities shall not be accepted to fulfill the requirements set forth by this section. Amenities, such as walking paths, piers, picnic areas, and other passive recreational space that are associated with stormwater management facilities (i.e. Wet ponds) shall receive credit towards the calculation of open space if such amenities are reviewed and approved by appropriate state agencies and the Planning Board at the time of Master Plan approval.

G. Landscaping
Park, recreation and open space areas which include amenities such as tennis courts, racquetball courts, swimming pools, exercise rooms, clubhouses, athletic fields, basketball courts, swings, etc. shall be landscaped and shall be provided with sufficient natural or manmade screening or buffer areas to minimize any negative impacts upon adjacent residences.

H. Encroachments
The park, recreation and open space areas required by this section shall exclude roadways, parking areas and other accessory uses except for areas associated with recreational facilities.

I. Consistency with Master Parks Plan ***contingent on Master Parks Plan approval***
If any portion of any subdivision proposed for residential development lies within an area designated on the officially adopted master parks plan as a park, such area shall be included as part of the area set aside to satisfy the requirements of this section. This area shall be dedicated to public use.

5. Procedure for Dedication of Land:

C. Designation of Land to Be Dedicated
Subdividers shall designate on the Master Plan, the area or areas to be dedicated pursuant to this section.

D. Review of Land to Be Dedicated
Upon receipt of the Master Plan, the Administrator shall submit a copy thereof to the appropriate governing agency for review. The appropriate governing agency shall submit any and all recommendations concerning the land to be dedicated to the Planning Board at its next scheduled meeting.

E. Ownership
The type of ownership of land dedicated for park, recreation or open space purposes shall be selected by the owner, developer, or subdivider, subject to the approval of the Planning Board. Provided, however, any of such areas included in the master parks plan shall be dedicated to the county. The type of ownership may include, but is not necessarily limited to, the following:

i. The county, subject to the acceptance by the Planning Board;
ii. Other public jurisdiction or agencies, subject to their acceptance;
iii. Appropriate non-profit agencies, subject to their acceptance; or
iv. Property owner, condominium or cooperative associations or organizations; or
v. Shared, undivided interest by all property owners in the subdivision.

6. Payments in Lieu of Dedication:

A. General Provisions
When the Planning Board determines (upon the recommendation of the Administrator) that the park, recreation and open space needs of a subdivision can also be adequately met by capital facilities constructed or to be constructed on county-owned property or property to be acquired by the county within a reasonable time that is located close enough to such subdivision to reasonably serve its residents, the Planning Board may authorize the subdivider to make a payment to the county in lieu of dedication. The Planning Board may also authorize a combination dedication and partial payment in lieu of dedication when such is determined to be in the best interest of the citizens of the area to be served. Any public dedication is subject to review and acceptance by the Planning Board.

B. Procedure
The subdivider shall include with the application for Master Plan approval, a letter requesting approval to make a payment in lieu of dedication. The letter shall include the proposed per acre value and the basis for the determination of such value. Upon receipt of the Master Plan, the Administrator shall submit a copy thereof with the letter requesting a payment in lieu of dedication to the Planning

Board. The Administrator shall submit any recommendations concerning the request to the Technical Review Committee.

C. Amount of Payment
If the County approves a payment in lieu of dedication, the amount of such payment shall be the product of the number of acres to be dedicated as outlined in subsection (b) above, and the average fair market value of the land being subdivided at the time of the submission of the Master Plan. The Tax Department shall determine the average fair market value of the land based on the value of the land for property tax purposes, the information submitted by the subdivider and other relevant information.

D. Use of Payments in Lieu of Dedication
All monies received by the county pursuant to this section shall be used only for the acquisition or development of recreation, park, or open space areas that will benefit the new subdivision residents.

E. Required Payment in Lieu of Dedication
In the event the County finds that a land dedication does not meet the long range plans of the county it shall require payment in lieu of a dedication.

F. Time of Payment
If a payment in lieu of dedication is authorized, such payment shall be made before recording the final plat for the subdivision. If a subdivision is developed in phases, a payment relating to each phase must be made prior to the recording of a final plat for each phase.

6. Flexibility in Administration Authorized:

F. The requirements set forth in this subsection concerning the amount, size, location and nature of park, recreation and open space areas to be provided in connection with residential developments are established by the County as standards that preemptively will result in the provision of that amount of recreational facilities and open space that is consistent with officially adopted county plans. The County recognizes, however, that due to the particular nature of a tract of land, or the nature of the facilities proposed for installation, or other factors, the underlying objectives of this article may be achieved even though the standards are not adhered to with mathematical precision. Therefore, the Planning Board is authorized to permit minor deviations from these standards whenever it determines that: (i) the objectives underlying these standards can be met without strict adherence to them; and (ii) because of peculiarities in the developer's tract of land or the facilities proposed it would be unreasonable to require strict adherence to these standards.

G. Whenever the County authorizes some deviation from the standards set forth in this section, the official record of action taken

on the development application shall contain a statement of the reasons for allowing the deviation.

4.D.1

ARTICLE 7 – LANDSCAPING AND BUFFERING

7.1 GENERAL

7.1.1 Intent

The placement of landscape plants on a property can serve numerous purposes. One of the most obvious is to enhance the appearance of the property and increase the property's value. Other benefits of plants and vegetative buffers in the home and business property landscape are as follows:

- Reduce air pollution by absorbing Carbon Dioxide and releasing Oxygen.
- Reduce erosion by dispersing and absorbing rainfall.
- Reduce stream pollution by stabilizing soil and slowing, dispersing and absorbing storm water runoff.
- Reduce storm water runoff and the potential for flooding.
- As properties provide trees, plants and other landscape vegetation, not only is the appearance of individual properties improved, but community appearance is enhanced. This provides a substantial value to the community and other properties in the community.
- Buffer and Landscape trees and other plants also help reduce noise from auto traffic, glare from auto and other lights and help collect & reduce litter from reaching adjacent properties.

Buffers and landscaping as required by this Article are designed to protect adjoining land uses, particularly residential, from the noise, heat, dust, lights, and aesthetic impacts from more intense land-uses. The more intense land use shall be required to provide the buffer as part of its yard requirements. The requirements of this article shall be met for buffers and the yards in which buffers are required.

7.1.2 Applicability

The landscaping and buffering requirements found in this Section shall apply to all development within Pender County with the exception of bona fide farming activities and residential development of one housing type in the Residential Performance Districts. Landscaping and buffer requirements shall apply in all business, planned development, industrial, and non-residential uses in other zoning districts when:

1) A new principal structure is built, or
2) An existing principal structure is expanded sufficiently to increase its interior square footage by twenty-five percent (25%) or more, in any one or more expansions or
3) A change in use from residential related to office, service, commercial or industrial, or from office, service or commercial to industrial or
4) In any residential development with two or more types of housing development.

7.1.3 Tree Survey Required

The primary objective of tree survey requirements is to provide better information about the presence and location of significant trees (see Section 7.1.5.B) on sites proposed for development. This information is needed before plans for development are so far advanced that it is unreasonable and impractical to modify the plans to protect the trees identified on the tree survey. Tree survey requirements do not obligate a property owner or developer to save trees by modifying a plan for development. However, knowing the location and size of significant trees helps the staff evaluate possible modifications to the proposed plans to preserve significant trees and improve the appearance of proposed development.

A. Significant Tree Survey

1. A significant tree survey shall be required for any multifamily development, nonresidential development, major subdivisions or planned unit development, with applications for site plan, preliminary plat, development plan, or special exception permit. The significant tree survey shall show the general location, species and size of any tree. However, a significant tree survey shall not be required for land in designated Special Flood Hazard Areas (unless filled or developed in accordance), jurisdictional and coastal wetlands and wetland buffers, designated Areas of Environmental Concern, and stream buffers.
2. For purposes of this Ordinance, a significant tree shall be defined as follows:
   i. An American holly with a trunk caliper measurement of 8" or greater measured at 4.5 feet above ground;
   ii. A flowering dogwood with a trunk caliper measurement of 4" or greater measured at 4.5 feet above ground;
   iii. A redbud with a trunk caliper measurement of 4" or greater measured at 4.5 feet above ground;
   iv. A live oak with a trunk caliper measurement of 4" or greater measured at 4.5 feet above ground; and
   v. Any tree species included in the planting table (see Sec.7.1.6.D.1) with a trunk caliper measurement of 18" or greater measured at 4.5 feet above ground.
3. For development plans where specific building locations are not shown, a more generalized survey of vegetation may be provided in lieu of a significant tree survey. This survey shall describe existing forest stands, indicating the average species and size of trees on the tract.
4. Where any significant tree shown on the significant tree survey is proposed to be removed such removal shall be mitigated by the planting on site of two (2) trees of the same species with a minimum caliper of 2" or greater.

7.1.4 Landscape Plan Required

A. A landscape plan shall be submitted in conjunction with a required site plan. For minor site plan applications, the landscaping may be shown on the site plan, as opposed to a separate landscape plan.

B. On a case-by-case basis, the Zoning Administrator may approve alternative planting materials or substitutions to landscaping and buffer requirements where requirements would not be practical because of overhead power lines, existing vegetation located in the buffer, existing vegetation in adjacent required and protected buffers or other reasons. Such substitutions must be determined to be in keeping of the purpose and intent of this article by the Zoning Administrator.

7.1.5 Credit for Existing Vegetation

A. General

Existing native habitat or plant material located within the proposed landscaping or buffer area that meets the requirements of these regulations may be counted toward the total buffer required between adjoining land uses, or toward total landscaping requirements. If the existing vegetation has been counted toward the total required buffer or landscaping and is subsequently removed or dies, it shall be replaced with the appropriate buffer or landscaping material.

B. Significant Trees

1. With the exception of clearing required for required driveways or street connections, the retention of significant trees within a proposed landscaping or buffer area shall be required in accordance with Section 7.1.3 A (4) of this Article.
2. The preservation of significant trees located on the building footprint of the principal structure is encouraged, but shall not be required.

C. Credit for Existing Vegetation

In order to encourage the preservation of established vegetation, credit shall be given for preservation within the proposed buffer or other required landscaping areas on a one-for-one basis.

D. Clear-Cutting

1. Prior to Development

Properties shall not be clear-cut prior to undertaking development activities. Along public rights-of-way, a buffer consisting of all existing vegetation located in a required street yard shall be maintained, exclusive of areas required for access to the site. Applications proposing development of properties that failed to maintain such a buffer prior to development may be denied for a period of up to five years from the date of clearing in conformance with N.C.G.S. Section 153A-452(c).

2. During Development

Properties shall not be clear cut while undertaking development activities. The preservation of the maximum amount of existing

vegetation and selective removal of existing trees throughout the site is strongly encouraged during project design and construction to save time and money. Early preparation of a site plan for any proposed development can preclude unnecessary expenditures for buffer and some landscape plantings by preserving existing vegetation on the site. In order to encourage such preservation, the Zoning Administrator may count established vegetation preserved during development towards the landscaping requirement (see paragraph C, above).

7.1.6 Design of Landscaping and Buffers

A. Design, Installation and Establishment Standards

Location of plants and design of landscaping, including maintenance, shall be according to sound landscape and horticultural principles. The use of native vegetation and other lower maintenance landscape materials is desired to promote environmental protection, energy efficiency, and water conservation. The preservation of existing trees and vegetation around the perimeter of the site and in other key locations on the site should be considered prior to site design to reduce the cost of installing and maintaining new plantings.

1. Landscape plans submitted for approval for the purposes of satisfying the requirements of this Section shall clearly indicate the name, location, and size of vegetation to be installed as well as trees to be preserved.
2. Plant material should be chosen from the lists of recommended plant species contained within this Section, and shall adhere to the minimum specifications therein. Plant materials shall be reviewed for suitability with regard to the eventual size and spread, susceptibility to diseases and pests, and appropriateness to existing soil, climate and site conditions.

B. Issuance of Certificate of Occupancy

A permanent certificate of occupancy shall not be issued, until all seeding, trees, and plant material have been placed in accordance with the approved site plan and requirements of this section. A temporary certificate of occupancy may be issued for a period of 120 days under circumstances that would affect the seeding and planting of the site, or until the proper planting season is reached to complete the landscaping requirements, and may be extended up to 90 days upon request to the Zoning Administrator.

C. Plant Material and Minimum Plant Size

The Plant List provided at the end of this Article shall be used as a guide in identifying and categorizing the different acceptable types and minimum sizes for any required plant.

1. Trees
   i. Canopy Trees

Canopy trees shall be of a species having an average minimum height of 15 feet and a minimum mature crown spread of 20 feet. At the time of planting, the tree shall have a minimum caliper of two inches measured at four feet above ground.

ii. Understory Trees

Understory trees shall be of a species having an average minimum height of eight feet and a minimum mature crown spread of 12 feet. At the time of planting, the tree shall have a minimum caliper of two inches measured at four feet above ground.

2. Shrubs

i. Shrubs shall have a minimum mature height of 24 inches.

D. Minimum Planting Areas

1. Canopy trees shall have a planting area no less than 10 feet wide in all dimensions.
2. Understory trees shall have a planting area no less than eight feet wide in all dimensions.
3. When planted as a hedge, the maximum spacing for 20-inch high shrubs shall be 40 inches on center.

E. Mulch

Plants shall be mulched to provide ground cover and prevent water loss due to evaporation. Where selected plant material is not tolerant of deep mulch, a specific note regarding shallower mulch shall be set forth on the final landscape plan and approved by the County as part of the landscape plan.

7.1.7 Requirements for Maintaining Planted Areas

A. Responsibility

The responsibility for maintenance of a required buffer or other landscaping shall remain with the owner of the property, his or her successors, heirs, assignees or any consenting grantee. Maintenance is required in order to ensure the proper functioning of the plantings as a landscaped area which reduces or eliminates nuisance and/or conflict.

B. Maintenance

1. All plantings shall be maintained in an attractive and healthy condition. Maintenance shall include, but not be limited to, watering, mulching, fertilizing and pest management, mowing, weeding, removal of litter and dead plant material, and necessary pruning and trimming.
2. Dead or diseased plantings shall be removed. Unless specifically exempted (such as Understory Trees shaded by Canopy Trees), replacement plantings shall be provided for any required plants which die or are removed for any reason and shall meet all minimum standards and conform to these regulations.

3. Natural water courses within a buffer shall be maintained in a natural condition consistent with any applicable regulations.
4. Landscape structural features such as walls, fences, berms or water features shall be maintained in a structurally safe and attractive condition.
5. Where other uses, including pedestrian, bike or other trails, are allowed within a buffer, these uses shall be maintained to provide for their safe use.

C. Failure to Maintain

Any circumstance found to be in violation of the provisions of this Article shall be subject to enforcement procedures as detailed in Article 12 of this Ordinance.

7.2 REQUIRED BUFFERS

7.2.1 Buffer Defined (MOVE TO DEFINITION SECTION)

A buffer is a specified land area, located parallel to and within the outer perimeter of a lot or parcel and extending to the lot or parcel boundary line, together with the planting and landscaping required on the land. A buffer may also contain, or be required to contain, a barrier such as a berm, fence or wall, or combination thereof, where such additional screening is necessary to achieve the desired level of buffering between various land use activities. A buffer is not the same as the term "yard" or the term "stormwater management area."

7.2.2 Types of Required Buffers

There are two types of required buffers that may occur on any given development site, as follows.

A. Street buffers – a buffer that is located along the street(s) that border a development. The buffer requires a modest amount of landscaping, enhancing the "public" environment.

B. Project boundary buffers - a buffer that is located around the sides and rear of a development. This buffer ensures an appropriate transition between uses. A buffer located around the perimeter of a nonresidential use is intended to protect adjoining land uses from noise, heat, dust, lights, and aesthetic impacts from more intense land uses.

7.2.3 Location

A. Buffers shall be located within the outer perimeter of a lot or parcel, parallel to and extending to the lot or parcel boundary line. Buffers shall not be located on any portion of an existing, dedicated or reserved public or private street or right-of-way.

B. Buffers may be located and constructed within any required yard.

7.2.4 Permitted Use of Buffer Area

A. A buffer may be used for recreation and picnic facilities; and it may contain pedestrian, bike, or equestrian trails, provided that:

1. Minimal existing plant material is eliminated;
2. The total depth of the buffer is maintained; and
3. All other requirements of these regulations are met.

B. Other appurtenances which require high visibility and easy access, such as fire hydrants, public and emergency telephones, mail boxes, and school bus or other bus shelters or benches, are also permitted in a buffer. No screening of such appurtenances is required.

C. A required buffer is encouraged to retain areas of native habitat and may incorporate water resources including stormwater detention/retention facilities designed as a natural-appearing amenity. However a minimum 10-foot contiguous width of the buffer shall be preserved as a planting area without stormwater facilities.

D. Ingress and egress to the proposed use, and utility lines and appurtenances, may cross the buffer provided they minimize the amount of buffer taken.

E. The buffer area may be included as part of the calculation of any required open space.

F. Identification signs may be located within a buffer as specifically permitted in the Sign Ordinance. The landscape buffer shall be designed to address visibility of permitted ground signs.

G. Lighting may be located within a buffer as specifically permitted in Section 6.6, Outdoor Lighting.

H. Other activities and development required by this Ordinance or expressly authorized by the Zoning Administrator.

7.2.5 Prohibited Use of Buffer Area

A buffer area shall not be used for any building or use, accessory building or use, parking or loading area, storage area, or other principal or accessory uses except as specifically permitted in this Ordinance.

7.2.6 Planting in Easements

A. Where required plantings are located in easements, the property owner shall be responsible for replacement of such required vegetation if maintenance or other utility requirements require their removal.

B. No trees shall be planted in wet retention ponds, drainage maintenance easement, or any utility maintenance easements.

C. Shrubs may be planted within easements, provided they are only within the outer three feet of the easement. No new trees may be planted in an easement.

D. Existing trees may remain in dry retention ponds provided that the natural grade is undisturbed to the tree line, they are a species adapted to seasonal flooding and the pond is adequately maintained.

7.2.7 Determination of Buffer Requirements

To determine the type of buffer required between two adjoining lots or parcels, or between a lot or parcel and a street, the following procedure shall be followed:

A. Street Buffers
Determine the appropriate street buffer based on Section 7.2.8.

B. Project Boundary Buffers
Identify the zoning districts of the subject parcel and all adjoining properties. Determine the buffer opacity class required on each boundary (or segment thereof) of the subject parcel. Refer to the minimum project boundary buffer table in Section 7.2.9.

7.2.8 Project Boundary Buffers

A. Project Boundary Buffers ensure a landscaped transition between different types of uses and/or zoning districts.

B. Required Project Boundary Buffer Table
Schedule of perimeter landscaping treatments.

1. Perimeter landscaping A.
This buffer is a low density planting area to be used along boundary lines in rural areas between large lots or tracts with substantial buffer width and set backs to provide spatial separation between uses that are developed at very low density. At a minimum the following trees and shrubs shall be planted within all required landscape yards.
   i. At least three (3) canopy trees for each one hundred (100) lineal feet shall be planted within the required landscape yard.
   ii. At least two (2) understory trees for each one hundred (100) lineal feet shall be planted within the required yards and setback area.
   iii. At least twelve (12) Shrubs per (100) linear feet and grass or groundcover shall be dispersed at 98% coverage except within 4 feet of the base of any tree or shrub within the required yards and setback area.
   iv. The required landscape yard shall be a minimum of twenty (20) feet in width averaged with no width being less than ten (10) feet.

2. Perimeter landscaping B.
This buffer is a medium density planting area to be used primarily along non street boundary lines to provide spatial separation between similar types of uses. At a minimum the following trees and shrubs shall be planted within all required landscape yards.
   i. At least one (1) canopy tree for each one hundred (100) lineal feet shall be planted within the required landscape yard.
   ii. At least two (2) understory trees for each one hundred (100) lineal feet shall be planted within the required yards and setback area.
   iii. At least twelve (12) shrubs per (100) linear feet and grass or groundcover shall be dispersed at 98% coverage except

within 4 feet of the base of any tree or shrub within the required yards and setback area.

iv. The required landscape yard shall be a minimum of twenty-five (25) feet in width averaged with no width being less than twelve and one half (12.5) feet.

3. Perimeter landscaping C.

This buffer is designed to provide a high density screen primarily along non street boundary lines to provide buffer and separation between different categories of uses such as commercial adjacent to residential uses or other non residential uses adjacent to high density single family residential uses.

i. At least two (2) canopy trees for each one hundred (100) lineal feet shall be planted within the required landscape yard.

ii. At least two (2) evergreen understory trees for each one hundred (100) shall be planted within the required yards and setback area.

iii. Evergreen shrubs that will provide a continuous screen at least six feet high within 4 years and groundcover shall be dispersed at 98% coverage except within 4 feet of the base of any tree or shrub within the required yards and setback area.

iv. The required landscape yard shall be a minimum of thirty (30) feet in width. No buffer width can be averaged less than fifteen (15) feet

The schedule of landscape requirements below summarizes this section with the required perimeter landscaping for each type of perimeter landscaping.

Schedule of Landscaping Requirements

Buffer Type	Buffer Width	Canopy Trees	Understory Trees	Shrub	Grass Coverage
Perimeter Landscaping A	Minimum 20' wide average, no width less than 10'	3 trees per 100 linear feet	2 trees per 100 linear feet	12 shrubs per 100 linear feet	98% except within 4 feet of any tree or shrub base
Perimeter Landscaping B	Minimum 25' wide average, no width less than 12.5'	1 tree per 100 linear feet	2 trees per 100 linear feet	12 shrubs per 100 linear feet	98% except within 4 feet of any tree or shrub base
Perimeter Landscaping C	Minimum 30' wide average, no width less than 15'	2 trees per 100 linear feet	2 evergreen trees per 100 linear feet	Evergreen shrub screen at least 6' high within 4 years	98% except within 4 feet of any tree or shrub base

The project boundary buffer table below identifies the required perimeter landscaping for sites that adjoin land with a different zoning classification. To determine the requirement, read down the first column to find the zoning classification of the adjoining property. Next read across the top row to find the zoning classification of the site being developed. The intersection of the row and the column on the chart determines the type of perimeter landscaping required.

Project Boundary Buffer Table

	RA, RP	MH	OI, PD	GB	IT, IG
RA, RP	A	B	B	C	C
MH	B	A	B	C	C
PD, OI	A	A	A	A	C
GB	C	C	A	A	C
IT, IG	C	C	C	A	A

i. Where the adjoining property is already developed with no buffer, the proposed project is responsible for providing the total required buffer.

ii. Where the adjoining property is already developed with a partial buffer, the proposed project is responsible for providing the remaining buffer.

7.3 Internal Landscaping in Parking areas and other Site areas, other than single family.

A. Any development order other than for single family detached and duplex dwellings shall require that all ground surface areas used on commercial, institutional, community facility, industrial, condominium, recreational vehicle parks, or multifamily sites shall have internal landscaping to provide visual and climatic relief from broad expanses of pavement and channelize and define logical areas for pedestrian and vehicular circulation. The following special landscaping requirements apply to commercial, institutional, community facility, industrial, condominium, recreational vehicle parks and multifamily sites.

B. *Interior Parking areas.*

1. Landscape islands shall be provided within parking areas, except parking garages, as described below to prevent excessively long, contiguous runs of parking spaces. These areas shall use control measures to prevent encroachment or damage to trees and vegetation.
    a) Light poles, fire hydrants, or other necessary features are permitted to be located within landscape islands and parking areas.
2. Single-Row Terminal Landscape Islands. A single-row parking bay shall not contain the following:
    a) More than ten (10) contiguous parking spaces or extend more than one-hundred and twenty (120) feet, whichever is more restrictive.
    b) One single-row terminal landscape island, with a minimum pervious area of three hundred (300) square feet and a minimum width of twelve (12) feet, shall be provided at each end of a single-row parking bay.
    c) Each single-row terminal landscape island shall contain at least one (1) canopy tree.
    d) Required maximum two (2) foot high screening shrubs shall be utilized the entire length of the landscape island, or as limited by sight distances. Please see below *Figure A – Single and Double-Row Terminal Landscape Island*
3. Double-Row Terminal Landscape Islands. A double-row parking bay with head-to-head parking shall not contain more than twenty (20) contiguous parking spaces in a 2 rows x 10 spaces configuration or extend more than one-hundred and twenty (120) feet, whichever is more restrictive.
    a) One double-row terminal landscape island, with a minimum pervious area of six hundred (600) square feet and a minimum width of twelve (12) feet, shall be provided at each end of a double-row parking bay.

b) Each double-row terminal landscape island shall contain at least two (2) canopy trees.
c) Required maximum two (2) foot high screening shrubs shall be utilized the entire length of the landscape island, or as limited by sight distances.

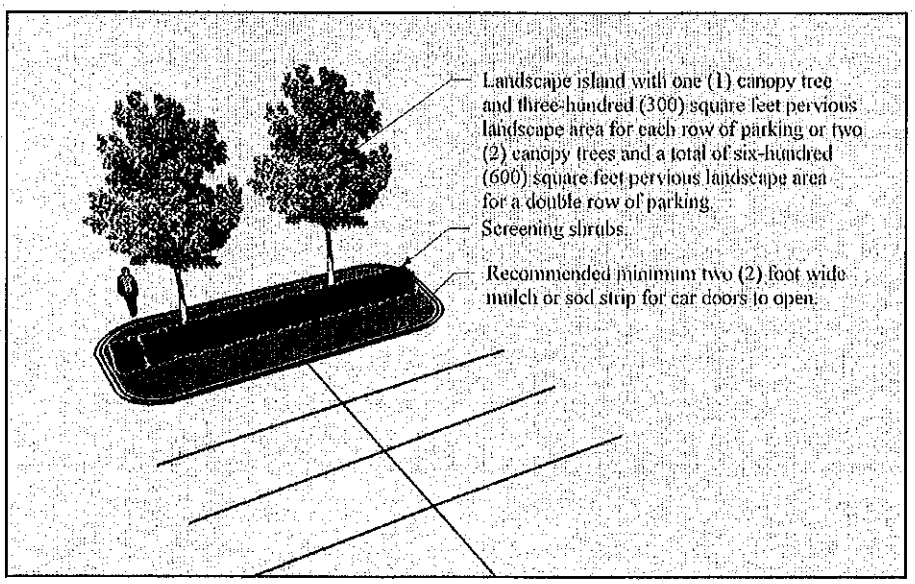
4. Intermediate Landscape Islands. Intermediate landscape islands shall be provided for any parking lot with eighty (80) or more parking spaces, and an additional intermediate landscape island shall be provided for every additional twenty (20) parking spaces in excess of eighty (80).
    a) Each intermediate landscape island shall have a minimum pervious area of three hundred (300) square feet and a minimum width of twelve (12) feet, and
    b) Each intermediate landscape island shall contain at least one (1) canopy tree.
    c) Required maximum two (2) foot high screening shrubs shall be utilized the entire length of the landscape island, or as limited by sight distances. Alternatively a minimum seven (7) foot wide landscape strip may be provided between head-to-head parking, which may count as the required intermediate landscape island for every three hundred square feet (300) of pervious area provided. If a landscape strip is used, ornamental landscape trees and shrubs shall be planted within the landscape strip on minimum thirty (30) foot centers. Please see below Figure B – Intermediate Landscape Islands.
5. *Limited Off-Street Paved Parking areas.* Interior portions of off-street parking facilities, which are not specifically designed as parking spaces or maneuvering areas, shall not be paved for vehicle use.
6. *Parking Lot Trees and Substitutions.* All trees in the parking lots shall be canopy trees, unless otherwise provided.
7. *Perimeter Trees and Spacing.* Canopy trees shall be planted an average of fifty (50) foot centers around the total perimeter of the parking lot and all vehicular service areas. Clustering may be utilized but spacing shall not exceed one-hundred and fifty (150) foot spacing. The canopy trees shall be planted between eight feet (8) and thirty (30) feet from the edge of pavement. Canopy trees within the landscape buffers may be used if they fall within thirty (30) feet from the edge of paving or vehicular service area as shown in *Figure C – Perimeter Trees and Spacing.*

C. *Pervious Parking.* Parking spaces provided in excess of the minimum required shall be constructed of pervious materials, including grassed parking areas. Additional pervious parking may be provided, if not otherwise prohibited by other provisions of the UDO, in the following areas:

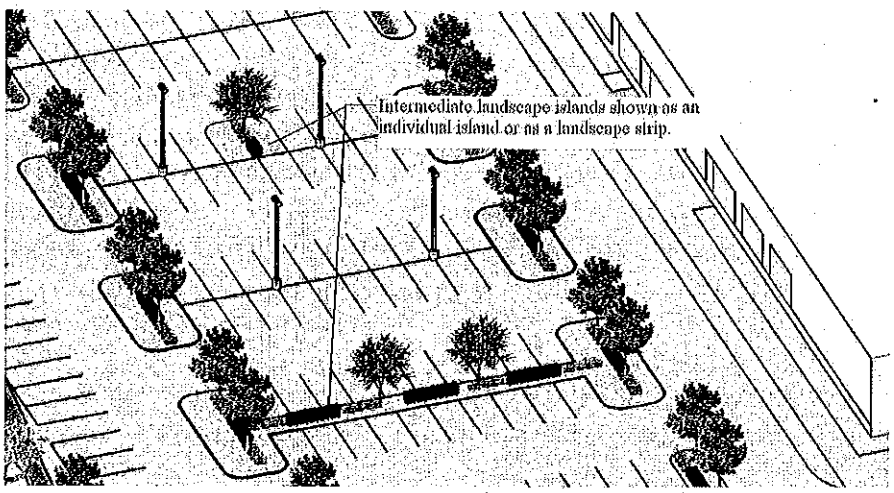
1. Adjacent to parking lot landscape islands to allow for the percolation of water and the exchange of oxygen for the tree roots.
2. Grass paving or turf block areas may be utilized in low impact areas or infrequent use areas such as churches or the outlying parking areas of malls or other shopping areas.

D. *Internal Access Roads.* Developments with internal access roads shall be required to plant one (1) canopy tree on each side of the road approximately every fifty (50) feet. Access roads immediately in front of commercial structures and other buildings do not have to meet the access road tree requirement but do have to meet other parking landscape requirements. Parking lot island canopy trees may be used to meet this requirement if they fall within thirty (30) feet from the edge of the pavement along the internal access road.

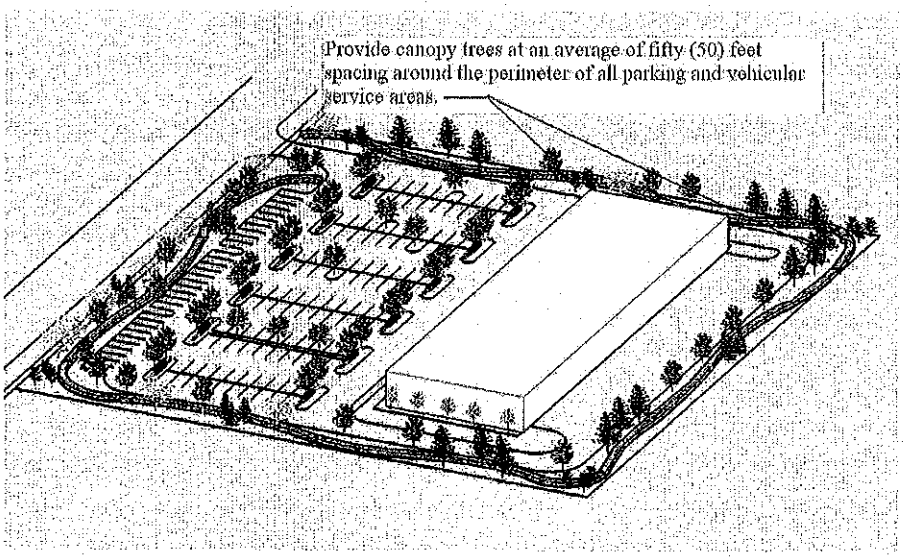
1. *Rain Gardens.* Parking lot islands are encouraged to use curb breaks and create swale or depression areas to allow for the percolation of rainwater and parking storm water. Attention shall be given to the selection, placement and durability of landscape material within rain garden areas to ensure their long-term viability. Any proposed rain garden areas must comply with all storm water requirements. Smaller rain gardens that serve as landscape islands shall adhere to all canopy and understory requirements for landscape islands.



A


Intermediate landscape islands shown as an individual island or as a landscape strip.

B


Provide canopy trees at an average of fifty (50) feet spacing around the perimeter of all parking and vehicular service areas.

C

A. *A parking lot landscape and screening plan shall be submitted as a part of every site plan required by the provisions of this division. General standards: The following standards shall apply to parking lot landscaping and screening plans required by this section.*

1. *All trees shall required by provisions of the buffer requirements shall be installed. In addition, evergreen shrubs having a minimum height of (18) inches at time of planting to mature within 5 years for a height of (4) feet. This height is measured from the finished grade of the parking area. Spacing of the shrubs shall be in accordance to plant species but is required to provide an opaque screen from the parking area at time of maturity.*
2. *Existing vegetation which is suitable for use in compliance with the landscaping regulations of this division may be used to fulfill these planting requirements.*

B. *Interior parking lot landscaping.*

1. *Any parking lot of more than ten (10) spaces shall be provided with landscaped open space within the perimeter of the parking area, in the minimum amount of eight (8) percent of the entire surface area of the parking lot. Landscaped areas between parking areas and buildings shall not be considered as interior landscaping.*
2. *The primary landscaping materials used in parking lots shall be large deciduous trees which provide shade or are capable of providing shade at maturity.*
3. *The landscaping areas shall be reasonably dispersed throughout the parking lot and shall have a minimum width of six (6) feet measured from the back (interior) of the curb. There shall be a landscaped island with a minimum width of six (6) feet and a minimum length of equal to the adjoining parking space at the end(s) of every row of parking spaces.*
4. *There shall be a minimum of one (1) large deciduous tree per landscaped island. Two (2) large deciduous trees per landscape island are required where opposite bays align.*
5. *Large parking areas shall be broken into sections not to exceed one hundred (100) spaces separated by landscaped buffers for visual relief. Such buffer areas are required in addition to the five (5) percent minimum landscape areas in the interior of the parking lot.*

4. E

Article 9 Signs

9.1 Intent

The intent of this Article is to regulate the erection, number, area, height, location, type and maintenance of signs to promote the health, safety and general welfare of the public and the orderly development of the County by protecting property values, and providing adequate signage for businesses and motorists; protecting and enhancing the image, appearance and economic vitality of the County. Any type of sign not currently listed in this Article shall be prohibited.

A. Signs prohibited in all districts. The following types of signs shall be prohibited in all zoning districts:
   1. Animated or flashing signs.
   2. Signs painted directly onto the exterior of buildings.
   3. Inflatable and portable signs.
   4. Roof mounted signs.
   5. Signs placed in public rights of ways without permission of NCDOT or other properly established organization responsible for maintenance of right of way.

B. Signs allowed in all districts.
   All temporary signs shall be displayed for no more than three (3) fifteen (15) day periods in one calendar year. The following types of signs shall be allowed in all zoning districts unless otherwise prohibited in this Article:
   1. Signs indicating the names or addresses of the occupants of residences.
   2. Signs or bulletin boards associated with public institutions.
   3. Commemorative plaques and historical markers.
   4. Signs identifying civic, social or other nonprofit organizations.
   5. Private road signs.
   6. Signs erected or required by a governmental agency.
   7. Temporary yard sale signs.
   8. Temporary real estate signs.
   9. Temporary window signs.
   10. Temporary construction signs.
   11. Temporary campaign signs.
   12. Flag signs.
   13. Informational signs.
   14. Directional signs.
   15. Temporary banner signs

C. Signs allowed in certain districts.
   The following types of signs are allowed for approved development proposals in accordance with applicable development standards:
   1. Business signs.
   2. Cottage occupation signs.
   3. Freestanding building entrance signs.

4. Residential subdivision identification signs.
5. Multi-tenant complex signs.

D. Off-Premises Outdoor Advertising Signs.
1. Billboards (as defined) are permitted only along the I-40 corridor:
   a. No billboard shall be located any closer than fifteen hundred (1,500) feet off the state right-of-way on Interstate-40. The maximum height of sign on I-40 shall be thirty (30) feet. The maximum size of any one sign shall be two hundred (200) square feet with a maximum length of forty (40) feet. No two (2) outdoor advertising sign structures shall be spaced less than fifteen hundred (1,500) feet apart.

E. Shopping (multi-unit commercial) Center Signs, Malls, Strip Malls and Office, Business & Industrial Parks/Buildings
1. Pylon/free Standing Sign: For multi-unit commercial, office & industrial developments under single ownership or under unified control, one (1) pylon or free standing sign shall be permitted for each street frontage not to exceed two signs per development and the total combined sign area does not exceed 200 sq. ft. When a single frontage development has 400 or more feet of road frontage, a second sign will be permitted as long as both signs do not exceed 200 sq. ft. Such signs shall be subject to the following:
   a. Content: Such sign shall advertise only the name and location of such center and/or name and type of business of each occupant of the center, or other activities on the site.
   b. Area: The gross area in square feet permitted for the pylon/free standing signs shall be one (1) square foot per lineal foot of development frontage; however such signs shall not exceed a total of two hundred (200) square feet.
   c. Location: The sign shall not be closer than ten (10) feet to any property line or road right of way and shall not project higher than thirty (30) feet above ground level.
   d. Wall Signs: In addition to the pylon/free standing sign such developments may have one wall sign, for each tenant. Such wall sign shall be in accord *with* Subsection 9.1.H.2 of this Article.
   e. Free Standing Signs: Each principal structure in the development will be permitted to have one free standing sign, advertising tenants or activities in that structure only. Such sign shall not exceed 32 sq. ft. in area, 10 ft. in height and not be closer than 10' to any street right of way or 10' to any parking or access way or structure. The sign and structure for which the sign is erected shall be on a separate lot in the development or the sign shall be within 30' of the front entrance of the structure.
   f. Setbacks.
   All freestanding signs shall be set back at least 10 feet from lot lines, rights of way or access easements.

F. Minimum spacing between freestanding signs.
The minimum distance separating freestanding signs shall be 100 feet. The Administrator may allow two signs to be separated by less than 100 feet in order to allow the signs to share an appropriate location. In such cases, the two signs shall be separated from other signs by a distance of 100 feet plus the distance by which the separation between the two signs was reduced from the required 100 feet.

G. Height.
Sign height shall be measured in accordance with Article 4.6.1. The following restrictions shall apply to the height of signs:
1. Freestanding building entrance signs, directional signs, and informational signs shall not exceed five feet in height.
2. Freestanding residential subdivision entrance signs shall not exceed eight feet in height.
3. All other freestanding signs located in the RA (Rural Agricultural) Zoning District shall not exceed 15' feet in height.
4. In developments utilizing a multi-tenant complex sign, on-site freestanding business signs shall not exceed 30 feet in height.

H. Size. The following restrictions shall apply to the size of signs:
1. Freestanding Business signs shall be limited to 100 sq. ft.
2. Wall-mounted business signs shall be permitted to encompass 20% of the area of the wall to which the sign is attached, provided that the total area of the wall-mounted business sign does not exceed 100 square feet. In situations where there are more than three individual building users, each sign are shall not exceed 25 square feet.
3. Cottage occupation signs shall not exceed four square feet in area.
4. Freestanding building entrance sign shall not exceed four square feet in area.
5. Subdivision entrance signs shall not exceed 32 square feet in area.
6. Directional signs shall not exceed five square feet in area.
7. Informational signs shall not exceed 10 square feet in area.

I. Number.
1. Freestanding business signs, excluding multi-tenant complex signs, in the IT and IG Districts shall be limited to one per property.
2. Freestanding multi-tenant complex signs in the PD, GB, OI, IT and IG Districts shall be limited to one per development
3. Freestanding business signs, excluding multi-tenant complex signs, shall be limited to one per property in all other districts where allowed.
4. Freestanding multi-tenant complex signs shall be limited to one per 1,200 linear feet of road frontage per development in all other districts where allowed.
5. Cottage occupation signs shall be limited to one per business.

J. Maintenance. All signs shall be maintained in a state of good repair. Signs that are damaged, structurally unsound or poorly maintained shall be repaired or removed within 30 days.
   1. If an off-premises sign advertises a business or activity that is no longer being operated or conducted or if a directional sign refers to a location where the advertised activities no longer exist, that sign shall be considered to be abandoned and shall be removed by the owner within 30 days.
   2. If the message portion of a sign is removed, the supporting structural components shall be removed or the message portion replaced within 30 days.

K. Zoning approval and building permits required.
   1. Before a sign may be constructed, reconstructed or altered, zoning approval and a building permit, if applicable is required.
   2. The following signs shall be exempt from obtaining building permits, provided they comply with ordinance regulations:
      a. Signs indicating the names or addresses of the occupants of residences.
      b. Signs or bulletin boards associated with public institutions.
      c. Commemorative plaques and historical markers.
      d. Signs identifying civic, social, or other nonprofit organizations.
      e. Private road signs.
      f. Signs erected or required by a governmental agency.
      g. Temporary yard sale signs.
      h. Temporary real estate signs.
      i. Temporary window signs.
      j. Temporary construction signs.
      k. Temporary political campaign signs.
      l. Directional signs.
      m. Informational signs.
      n. Flag signs.