

**STAFF REVIEW FOR PLANNING BOARD APPROVAL  
TRENNEY LEA MAJOR SUBDIVISION PRELIMINARY PLAT REVIEW**

**DEVELOPER'S PROPOSAL:**

The applicant is requesting approval for the Preliminary Plat of Trenney Lea Subdivision located off of Hoover Road in Hampstead, NC. The Trenney Lea Subdivision is situated on 76.72 acres and is zoned R-20, Residential District. The PIN is 3283-71-6618-0000. The applicant is proposing a total of 10 residential lots on the site. The minimum proposed residential lot size is 4.32 acres.

All lots will be served by individual water wells and onsite septic tanks. Approximately 23.4 acres of open space are provided in this proposal. This exceeds the 15% open space requirement. All land use and setback requirements under the Pender County Zoning Ordinance for the R-20 District will apply to this subdivision.

The road system will consist of Trenney Lea Drive, and Crystal Lane. Trenney Lea Drive will serve as the spine road for the development and will exit out onto Hoover Road. Both proposed roads will be dedicated as private, consisting of 50 ft ROW's built to NCDOT residential road standards. There will be a Homeowners Association in this major subdivision to maintain the private roads.

Storm water management is to be provided via a combination of road-side swales, side lot line swales and rear yard swales (as necessary) that will carry runoff to the development's natural drainage areas.

**STAFF RECOMMENDATION:**

Planning Staff is submitting the preliminary plat layout for Planning Board approval. The submission as presented tonight is substantially complete. Planning Staff recommends approval. Final Preliminary Approval will not be effective until all requirements of preliminary submission as prescribed in the subdivision ordinance are complete, the submission shows compliance with all subdivision requirements and the Director has signed a copy of the Preliminary Plat. The approval is also subject to the following conditions:

**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 must be submitted to and approved by the Director.

1. Soil suitability analysis indicating the suitability of the property for individual septic tanks or an Improvement Authorization Permit for each lot unless community sewer is available and a conditioned approval for connection is submitted. The soil suitability analysis of the property shall also indicate the suitability of the soil for the type structure proposed.
2. Sufficient information shall be provided so that a corner of the property can be located on the ground and found with a measurement from the intersection of two state maintained roads.
3. A copy of the Preliminary Map with the street names as approved by the Pender County Emergency Management Co-coordinator (EMC) or his designee. The plat shall be signed by the EMC representative indicating approval of the road names indicated on the plat. The copy of this plat must be submitted no

- later than 30 days after approval of the preliminary plat of the development by the Pender County Health Department.
14. Verification of receipt of the preliminary plat of the development by the Pender County Health Department.
  5. Verification of receipt of the preliminary plat of the development by the NCDOT District Engineer or his designee.
  6. General description and map of the proposed drainage for the subdivision shall include the following:
    - a. The boundaries of all drainage basins that flow through the property from upstream.
    - b. All drainage facilities that flow through the property and receive any storm water discharge from upstream.
    - c. The boundaries of all drainage basins that receive discharge from the property that is located from the discharge point on the property to the recipient perennial stream.
    - d. All drainage facilities that receive storm water discharge from the property from the discharge point to the recipient perennial stream.
    - e. This information can be described in a narrative submission and shown on a copy of a USGS 7.5 Minute Quad or other similar topographical map (11 X 17 map submission).
  7. Detailed description of any proposed waste water system and system maintenance arrangements and procedures to serve lots that are not suitable for traditional on site septic systems, along with a map showing the proposed location of the off site components of the system, including lines.
  8. 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.
  9. When any street layout or geometric design does not specifically meet the NCDOT Secondary Road Standards or the adopted Pender County Private Street Standards, a narrative explanation, justification detailed drawing of the design shall be submitted for review.
  11. The Director or the Planning Board may request additional information be submitted that is pertinent to review of the proposed subdivision for compliance with the provisions of this ordinance or other Pender County ordinances.

**The Following Material May Be Submitted As A Condition Of Approval Of The Preliminary Plat, When Approved By The Planning Board Or Director:**

All requirements of the Pender County Subdivision Ordinance for Preliminary Plats, including items 1 thru 11 pages 23 & 24.

1. Approval by NCDOT of connection of subdivision roads with DOT maintained roads (Driveway Permit).
2. Street construction & street drainage plans as approved by DOT District Engineer with letter of approval (for public streets).
3. Street construction & street drainage plans in accord with DOT submittal requirements, design and construction standards or in accord with Private Street Standards, Pender County. The plans must be signed and sealed by a registered surveyor or engineer. A letter from the design professional will accompany the plans certifying that they meet the NCDOT submittal requirements, design and construction standards or Private Street Standards, Pender County (for private streets).
6. Sediment & Erosion Control Plans as approved by Land Quality (with letter of approval).
7. Storm water management plan as approved by the Water Quality Division (with letter of approval).
8. Approval of Wetlands Delineation by Corp. of Eng. (if wetlands in development).
9. Wetlands fill authorization or permit if construction in wetlands is involved.
10. 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 (See Required Drainage Certification in development Manual).

11. When any proposed subdivision of land with lots or areas other than open space where structures are prohibited is located in a "Designated Floodway," a "No Rise Certification" prepared by a Registered Engineer shall be submitted for the development.
12. When a proposed subdivision is located in a SFHA the Base Flood Elevation (BFE) shall be determined and shown along with the SFHA boundary on the Preliminary Plat. In SFHA's where the BFE has not been previously determined, the Developer shall be responsible for providing the BFE as determined by a Registered Professional in the manner prescribed by FEMA Regulations.
13. When a proposed subdivision is located within a SFHA and any water or sewer systems are not located on the site of the structure served, a statement from the Registered Professional responsible for design of the off site system shall be provided that "all public or community (off site) sewer and water systems and drainage facilities are designed to minimize flood damage and reduce exposure to flood hazards in accord with FEMA Guidelines."

#### ***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. The final plat shall be reviewed and approved or disapproved and notice of action taken provided to the applicant within 20 working days of completed submission. When the final plat is approved the signed original will be provided to the applicant and a signed copy placed in the Record File for the subdivision.
2. Plat Submission – the final plat must be submitted in digital format to the Director. The digital submission of the plat will be considered proprietary information. The digital layout will be made available to the Tax Supervisor for parcel update and the digital submission may be returned to the person submitting it. A copy on mylar suitable for recording shall be submitted for signing upon review & approval of the final map. The final plat shall be reviewed, approved and signed by the Director, upon approval.

3. All conditions of preliminary plat approval must have been met before any final plat will be considered for review. Confirmation of compliance with all provisions of Preliminary Plat must be submitted at least 10 days before the final plat is accepted for review.
4. All lots shown on the final plat other than open space or other specially approved lots shall meet either a., b., c., d. or e. as follows:
  - a. Be served by an on site waste water system, which is located on the site where the unit served is located, and the system has received an "Improvement Authorization Permit" from Environmental Health,
  - b. Be served by a Community Sewer System as defined in this ordinance and approval for connection to the system is provided,
  - c. Be served by a waste water system that meets the requirements of the "Water And Sewer System Requirements In Streets, Access Easements Or Other Locations Off The Site Of The Unit Served," of this ordinance,
  - d. The soil suitability analysis as required by this ordinance and submitted with the preliminary plat shows that each lot contains at least 5,000 sq. ft. of area that is "suitable" for traditional on site waste disposal and the required 5,000 sq. ft. is not within 10 ft of any lot boundary,
  - e. Lots not meeting a., b., c. or d. provisions of this paragraph shall be labeled with a bold note as follows:  
**"The Parcels So Noted Cannot Be Used For Sale Or Building Development, Unless A New Plat Is Approved And Recorded As Required Under The Pender County Subdivision Ordinance."**
  - f. For alternative, see Design Requirements, Lots Section of this ordinance for "Special Purpose Lots."
5. All improvements proposed in the development must have been constructed and certifications of completion to standards specified provided or their construction guaranteed by a Performance Guarantee.
7. Minimum Number of Lots Required on a Final Plat – the minimum lots included on the final plat shall be as follows:
  - a. Approved Preliminary Subdivision Plat contains less than 100 lots or units – final plat shall contain at least 30 lots or units or the remainder of the lots or units in the subdivision,
  - b. Approved Preliminary Subdivision Plat contains more than 100 lots or units – final plat shall contain at least 50 lots or units or the remainder of the lots or units in the subdivision.
8. The completed final plat must be submitted within 24 months of approval of the preliminary plat or within 24 months of approval of a previously recorded final plat.
9. The final plat must be prepared by a licensed surveyor.
10. The final plat must conform generally to the preliminary plat and specifically to all conditions of approval of the preliminary plat.
11. Upon initial approval of the final plat parcel layout the Director shall immediately notify the Tax Assessor so that parcel identifiers can be issued. The Tax Assessor shall establish parcel identifiers for the parcels on the plat within 10 working days of receipt of notice.
12. The final plat, approved covenants, restrictions and homeowners association documents must be recorded in the Register of Deeds within 60 days after approval by the Planning Board and prior to any sale of lots in the development.
13. The Director must take action on the final plat within 20 days of completed submission and installation of improvements or security for improvements.
14. A final plat will not be accepted for review that is incomplete or for which has not been submitted the documents necessary for verification of the conditions of Preliminary Plat approval.

#### **Additional Materials To Be Submitted With Final Plat.**

1. Certification by District Engineer of completion of construction of all public streets or all of the following:

- a. Estimate of the cost to complete construction of the streets and all other improvements required or proposed in the development that are not complete, prepared, signed and sealed by a licensed engineer,
- b. Performance Guarantee for the cost of all improvements not certified as complete (see Security Documents Section in the Pender County Development Manual for requirements).
2. Certification by a licensed engineer of the completion of construction of all private streets and other required improvements, or all of the following:
  - a. Estimate of the cost to complete construction of the streets and all other improvements required or proposed in the development that are not complete, prepared, signed and sealed by a licensed engineer,
  - b. Performance Guarantee for the cost of all improvements not certified as complete (see Security Documents Section in the Pender County Development Manual for forms and requirements).
3. Certification by a professional land surveyor of installation of all required monuments and markers.
4. Two copies of Articles of Incorporation of Homeowner's Association and related documents for any development that contains private streets or other non-public facilities, including drainage systems outside public street right-of-ways, water systems and sewer systems and open space
5. Two copies of the restrictive covenants to be recorded on the property.
6. The Defect Guarantee when a Performance Guarantee has not been provided for improvements.
7. Draft document transferring ownership of all common area and facilities to the Homeowners Association as shown on the final plat of the portion of the subdivision to be recorded. A recorded copy of this document must be submitted to the Director within 20 days of recording of the final plat (see "Homeowners Association Requirements" Section).

**Certificates Required On Final Plat.**

1. Certificate of Ownership, Dedication and Jurisdiction (org. signed)
2. Certificate of Approval Subdivision Public Road Construction by NCDOT District Engineer (must be signed before Map Review Officer signs off on plat)
3. Surveyor Certificate I
4. Surveyor Certificate II
5. Surveyor Certificate II
6. Parcel Identifier Certificate
7. Certificate of Registration by Register of Deeds (unsigned)
8. Certificate of Final Plat Approval

**Board Action for Trenney Lea Subdivision Preliminary Plat:**

Motion: \_\_\_\_\_ Seconded \_\_\_\_\_

Approved: \_\_\_\_\_ Denied: \_\_\_\_\_ Unanimous \_\_\_\_\_

Walton \_\_\_\_\_ Reynolds \_\_\_\_\_ Garrett \_\_\_\_\_ Gonzales \_\_\_\_\_ Marshburn \_\_\_\_\_ Millette \_\_\_\_\_ Smith \_\_\_\_\_

**Trenney Lea Subdivision, Preliminary Plat Review – Kenny Eason**, applicant, on behalf of Legend Builders, Inc., owner, is requesting approval of a preliminary plat for Trenney Lea Subdivision. Trenney Lea Subdivision consists of 10 lots on 76.72 acres. The property is zoned R-20, Residential and is located off Hoover Road, just north of Renee Road, in Hampstead, NC.

Additional comments from the MPO were read into the record concerning the Hoover Road and Hwy 210 connection.

Ken Eason, owner of the property stated that he was trying to minimize the impact instead of increase. He doesn't understand MPO's suggestion of putting a road through the middle of the proposed subdivision.

Rick Garrett stated that he thinks the intent is to allow for interconnectivity to be able to tie into the property. He suggested that Renee Drive is a better choice than what MPO chose.

Vice-Chairman stated that there needed to be a 10' access easement to the open space at the back of the lot.

Rick Garrett motioned that the request be approved as proposed with the items provided by staff and with the condition that open space on the western portion of the property either be connected to one of the other lots or access of a footpath be provided to the homeowner. Karen Gonzales seconded, the vote was unanimous.

Ken Vafier asked the Board if the conditions were something that could be taken care of by Staff.

The Board replied that they could handle this in-house.

# PLANNING AND COMMUNITY DEVELOPMENT

PLANNING • CODE ENFORCEMENT • BUILDING INSPECTIONS • CENTRAL PERMITTING



## APPLICATIONS COVER SHEET

Date Application Filed: \_\_\_\_\_

### I. REQUIRED NAMES:

Applicant Kenny Eason

Owner Legend Builders Inc

Address 5814 DEKKER RD

Address P.O. Box 725

Castle Hayne NC 28429

HAMPSTEAD NC 28443

Phone 910-264-3479 Fax \_\_\_\_\_

Phone 678-9031 Fax 678-9034

Email \_\_\_\_\_

Email Legend BH INC @ AOL.COM

Legal Relationship of Applicant to Property Owner: V. P. of Legend

Consultant Name/Company CLARK ENVIRONMENTAL

Address 5000 BLUE CLAY RD COTT HAYNE 28429

Phone 910-602-3900 Fax \_\_\_\_\_

Email \_\_\_\_\_

[Signature]  
(Signature of Applicant)

[Signature]  
(Signature of Owner)

\*If owner is different from applicant, both signatures are required.\*

### II. TYPE OF APPLICATION:

(Please check one)

Board of Adjustment:

Variance

Appeal

Zoning:

Text Amendment

Map Amendment

Special Use Permit

Plans:

Planned Development

Subdivision Preliminary Plat

REVISION



# PLANNING AND COMMUNITY DEVELOPMENT

PLANNING • CODE ENFORCEMENT • BUILDING INSPECTIONS • CENTRAL PERMITTING



## SUBDIVISION APPLICATION

Date 2-20-09

Application Fee \$ 200.00

### I. PROPERTY INFORMATION:

Record #: \_\_\_\_\_

Lot #: \_\_\_\_\_

Parcel ID #: 3283-71-4619-000

Zoning District: R-20

Property Location/Address: D HOOVER Rd

Subdivision Name: TRENNY LEA Phase: \_\_\_\_\_

Review Type (check one):  Major  Minor  Revision

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:

**SURVEY NOTES:**

- 1) This is a survey of an existing parcel of land. Apparent source of title: Deed Book: 2755, Page: 185 per Pender County Registry.
- 2) No N.C. Grid monuments within 2000 feet of this property.
- 3) All areas figured by coordinate method.
- 4) All distances are horizontal measurements.
- 5) This property is subject to any and all easements and right of ways, written or implied.
- 6) Survey reflects existing conditions as date of survey.
- 7) This survey was performed without the benefit of a title search.
- 8) This property shown hereon is not located in a flood hazard zone. Per Community Panel# 370344 3283 J. Map Revised May 31, 2005.

**SUBDIVISION DESIGN NOTES:**

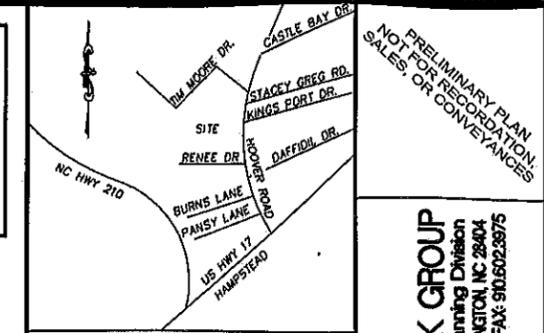
- 1) Property is zoned: R-20.
- 2) Total proposed area to be developed 76.72± Acres.
- 3) Parent tax pin ID: 3283-71-6618-0000.
- 4) Total Proposed Lots: 20
- 5) All proposed parcels contain a minimum of at least 55% uplands.
- 6) No more than a half acre of wetlands will be impacted.
- 7) Setbacks are as follows per Pender County Zoning Ordinance, and must be verified by governing authority:
  - A) Front: 30'
  - B) Side: 15'
  - C) Rear: 25'
  - D) Secondary Street: 20'
- 8) Minimum lot size is 1.50± Acres.
- 9) Average lot size is: 2.70± Acres.
- 10) Total Open Space: 19.45± Acres.
- 11) No proposed storm water retention facilities will be on site.
- 12) Individual water wells will be located on each site.
- 13) All boundary markers are new iron pipes unless otherwise specified.

**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 \_\_\_\_\_



**VICINITY MAP**  
NOT TO SCALE

**Legend**

- EIP EXISTING IRON PIPE
- WETLANDS
- PK NAIL SET IN C/L OF ROAD

PRELIMINARY PLAN  
NOT FOR RECORDATION,  
SALES, OR CONVEYANCES

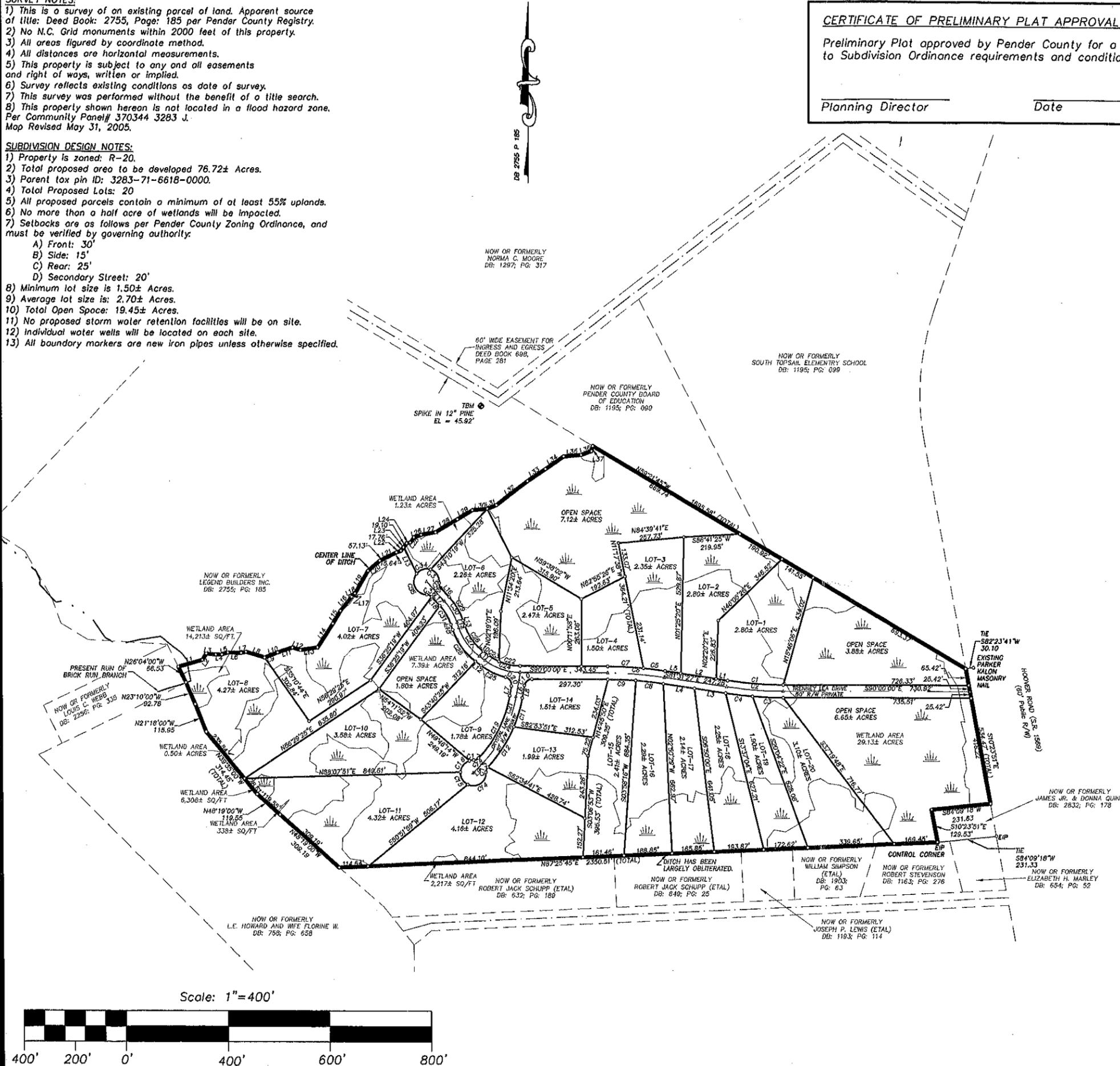
**THE CLARK GROUP**  
Mapping and Planning Division  
PO BOX 1086, WILMINGTON, NC 28404  
PH: 910.602.3900 - FAX: 910.602.3975



**TRENNY LEA SUBDIVISION**  
Proposed Subdivision Preliminary Plat  
Township Pender County North Carolina

**LEGEND BUILDERS INC.**  
OWNER, DEVELOPER, AND APPLICANT:  
Kenny Eason  
400 Carl Street, Suite 203  
Wilmington, NC 28403  
Phone: 910-264-3479

PARTY CHECK: J.B.  
DRAWN BY: W.R.D.  
SCALE: 1"=200'  
DATE: 2.20.09  
PROJECT No.: 06733\_003  
DRAWING NAME: PRELIM PLAT REV.dwg  
SHEET:



CURVE TABLE				
CURVE	CHORD DIRECTION	CHORD	DELTA	LENGTH
C1	S88°48'43"E	GH=218.00'	8°28'33"	1475.00'
C2	S88°48'43"E	GH=221.70'	8°28'33"	1500.00'
C3	S87°44'31"E	GH=120.31'	4°31'12"	1925.00'
C4	S83°00'00"E	GH=105.23'	3°57'16"	1525.00'
C5	N83°07'56"W	GH=85.59'	3°12'27"	1525.00'
C6	N85°48'43"W	GH=221.70'	8°28'33"	1500.00'
C7	N87°22'12"W	GH=139.95'	5°16'36"	1525.00'
C8	N83°38'36"W	GH=109.08'	4°14'17"	1475.00'
C9	N87°52'52"W	GH=109.08'	4°14'17"	1475.00'
C10	S50°00'00"W	GH=38.57'	8°00'00"	30.00'
C11	N16°29'13"E	GH=118.60'	12°27'51"	625.28'
C12	N33°18'04"E	GH=187.53'	20°33'35"	625.28'
C13	S20°20'28"W	GH=29.41'	48°11'33"	25.00'
C14	N35°40'44"E	GH=58.40'	11°32'01"	50.00'
C15	S30°10'37"E	GH=58.46'	68°45'18"	50.00'
C16	S38°34'41"W	GH=56.46'	68°45'18"	50.00'
C17	S82°37'25"W	GH=16.79'	19°20'09"	50.00'
C18	N87°51'36"E	GH=20.66'	48°48'12"	25.00'
C19	N26°43'44"E	GH=273.45'	33°27'27"	475.00'
C20	N33°29'07"W	GH=41.29'	86°58'16"	30.00'
C21	N27°03'03"E	GH=293.22'	34°08'06"	600.00'
C22	S78°04'03"E	GH=84.77'	23°51'54"	205.00'
C23	S59°59'28"E	GH=46.37'	19°58'11"	205.00'
C24	S71°14'08"E	GH=146.40'	36°11'06"	230.00'
C25	S85°03'33"E	GH=105.27'	23°49'24"	255.00'
C26	S35°47'41"E	GH=122.28'	34°42'20"	205.00'
C27	S35°47'41"E	GH=137.20'	34°42'20"	230.00'
C28	S35°47'41"E	GH=162.11'	34°42'20"	255.00'
C29	N30°33'20"W	GH=107.02'	24°13'37"	255.00'
C30	N30°33'20"W	GH=96.53'	24°13'37"	230.00'
C31	N30°33'20"W	GH=86.04'	24°13'37"	205.00'
C32	S18°24'27"E	GH=20.41'	48°11'33"	25.00'
C33	N33°20'50"W	GH=66.78'	27°44'19"	50.00'
C34	S23°24'28"W	GH=56.46'	68°45'18"	50.00'
C35	S25°44'42"E	GH=80.59'	12°25'18"	50.00'
C36	N86°45'50"W	GH=20.41'	48°11'33"	25.00'

RUN OF DITCH LINE TABLE		
LINE	LENGTH	BEARING
L1	97.77	N73°58'50"E
L2	25.89	N31°07'11"E
L3	37.78	S83°40'39"E
L4	23.57	N88°44'39"E
L5	28.12	N70°25'07"E
L6	52.53	S88°38'03"E
L7	19.94	N77°52'40"E
L8	75.86	S73°01'24"E
L9	27.51	S68°18'30"W
L10	27.51	N68°18'30"E
L11	61.16	N71°54'40"E
L12	154.59	S23°07'28"E
L13	67.63	N81°06'46"E
L14	111.13	N33°04'42"E
L15	58.08	N30°52'48"E
L16	69.60	N38°41'32"E
L17	5.07	N57°33'28"E
L18	20.55	N42°34'59"W
L19	101.42	N30°33'07"E
L20	61.02	N49°42'36"E
L21	72.77	N83°49'14"E
L22	18.86	N68°14'54"E
L23	38.86	N74°40'37"E
L24	14.38	N77°12'36"E
L25	24.94	N37°10'49"E
L26	29.25	N69°24'07"E
L27	57.73	N28°31'28"E
L28	100.18	N59°33'44"E
L29	67.96	N58°58'23"E
L30	58.34	N84°18'37"E
L31	39.34	N88°14'03"E
L32	154.59	N82°30'42"E
L33	84.50	N53°32'27"E
L34	66.78	N55°19'54"E
L35	68.51	N84°31'51"E
L36	44.00	N68°34'58"E
L37	20.14	N13°28'42"E

PROPOSED SUBDIVISION LINE TABLE		
LINE	LENGTH	BEARING
L1	45.85	N81°31'27"W
L2	139.65	S91°31'27"E
L3	123.62	S81°31'27"E
L4	123.62	S81°31'27"E
L5	61.76	S81°31'27"E
L6	96.05	N10°00'00"E
L7	37.96	N10°00'00"E
L8	49.90	N10°00'00"E
L9	50.82	S44°06'08"W
L10	27.26	N53°08'51"W
L11	27.26	N53°08'51"W
L12	27.26	N53°08'51"W
L13	21.34	S10°28'31"E
L14	21.34	N18°28'31"W
L15	21.34	N18°28'31"W
L16	47.33	N42°40'08"W
L17	103.23	N42°40'08"W
L18	47.33	N42°40'08"W