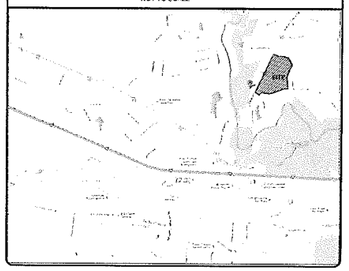
VICINITY MAP

NOT TO SCALE



PRIMARY AND SECONDARY CONSERVATION AREAS ANALYSIS

HISTORIC AND ARCHEOLOGICAL SITES
PER REVIEW OF THE NATIONAL REGISTER OF HISTORIC PLACES FOR ORANGE COUNTY NORTH CAROLINA, THIS SITE DOES NOT CONTAIN A LISTED HISTORIC PROPERTY. AN ARCHEOLOGICAL SURVEY OF THIS TRACT HAS NOT BEEN CONDUCTED.

HYDROLOGY
THIS TRACT CONTAINS A RIDGE THAT RUNS NORTH-SOUTH THROUGH THE CENTER OF THE TRACT. THE EXISTING LAND SLOPES BOTH EAST TO AN UNNAMED STREAM ALONG THE EAST PROPERTY LINE AND WEST TO AN UNNAMED STREAM ALONG THE WESTERN SIDE OF THE TRACT PARALLELING AND ON THE EAST SIDE OF PLEASANT GREEN ROAD. THE WEST-MOST STREAM HAS A 65' RIPERIAN BUFFER FROM THE TOP OF EACH BANK. THE EAST-MOST STREAM HAS AN 65' RIPERIAN BUFFER FROM THE TOP OF EACH BANK. THIS STREAM BEGINS AT A SPRING LOCATED IN THE NORTHEAST PORTION OF THE TRACT JUST SOUTH OF PAPER BIRCH LANE. FROM A PREVIOUS SURVEY OF THIS SITE THERE DOES NOT APPEAR TO BE ANY WETLANDS ON THIS TRACT, PER FEMA DFIRM PANEL 0693, THIS TRACT LIES IN ZONE "X" AND CONTAINS NO FLOODPLAINS OR FLOODWAYS.

EXISTING VEGETATION
THIS TRACT IS COMPLETELY WOODED WITH MOSTLY HARDWOOD TREES. THERE ALSO APPEAR FROM ORANGE COUNTY GIS TO BE GROUPINGS OF EVERGREEN TREES IN A SOUTH CENTRAL AREA NEAR WILLETT ROAD, IN THE CENTRAL UPLAND PORTION OF THE TRACT, AND IN THE NORTHERN PORTION OF THE TRACT ALONG PAPER BIRCH LANE.

SOIL TYPES
SOIL TYPES ON THIS TRACT ARE FROM THE USDA SOIL SURVEY AND INCLUDE GeB AND GeC SOILS ALONG THE SOUTHERN PORTION OF THE TRACT AND HrB SOILS IN THE CENTRAL UPLAND PORTION OF THE TRACT. HrC AND TaD SOILS ARE LOCATED ALONG THE EAST PORTION OF THE TRACT. GeC SOILS ARE LOCATED IN THE NORTHWEST PORTION OF THE TRACT ALONG THE RIPERIAN STREAM BUFFER.

HABITATS AND WILDLIFE CORRIDORS
THIS TRACT IS INHABITED BY WILDLIFE TYPICAL OF FORESTED AREAS IN CENTRAL NORTH CAROLINA AND INCLUDE DEER, FOXES, RABBITS AND OTHER SMALL WILDLIFE SPECIES. THE TWO STREAMS AND THEIR RIPERIAN BUFFERS ON SITE ARE THOUGHT TO BE NATURAL NORTH-SOUTH CORRIDORS FOR WILDLIFE PASSING THROUGH THIS AREA.

DEVELOPER:

DREES HOMES
c/o DAVID LAZZO
7701 SIX FORKS ROAD SUITE 132
RALEIGH, NC 27615
(919) 844-9288 (PHONE)
(919) 844-1210 (FAX)
DLAZZO@DREESHOMES.COM

DESIGNER CONTACT :

TERRY BOYLAN RLA
SUMMIT DESIGN AND ENGINEERING
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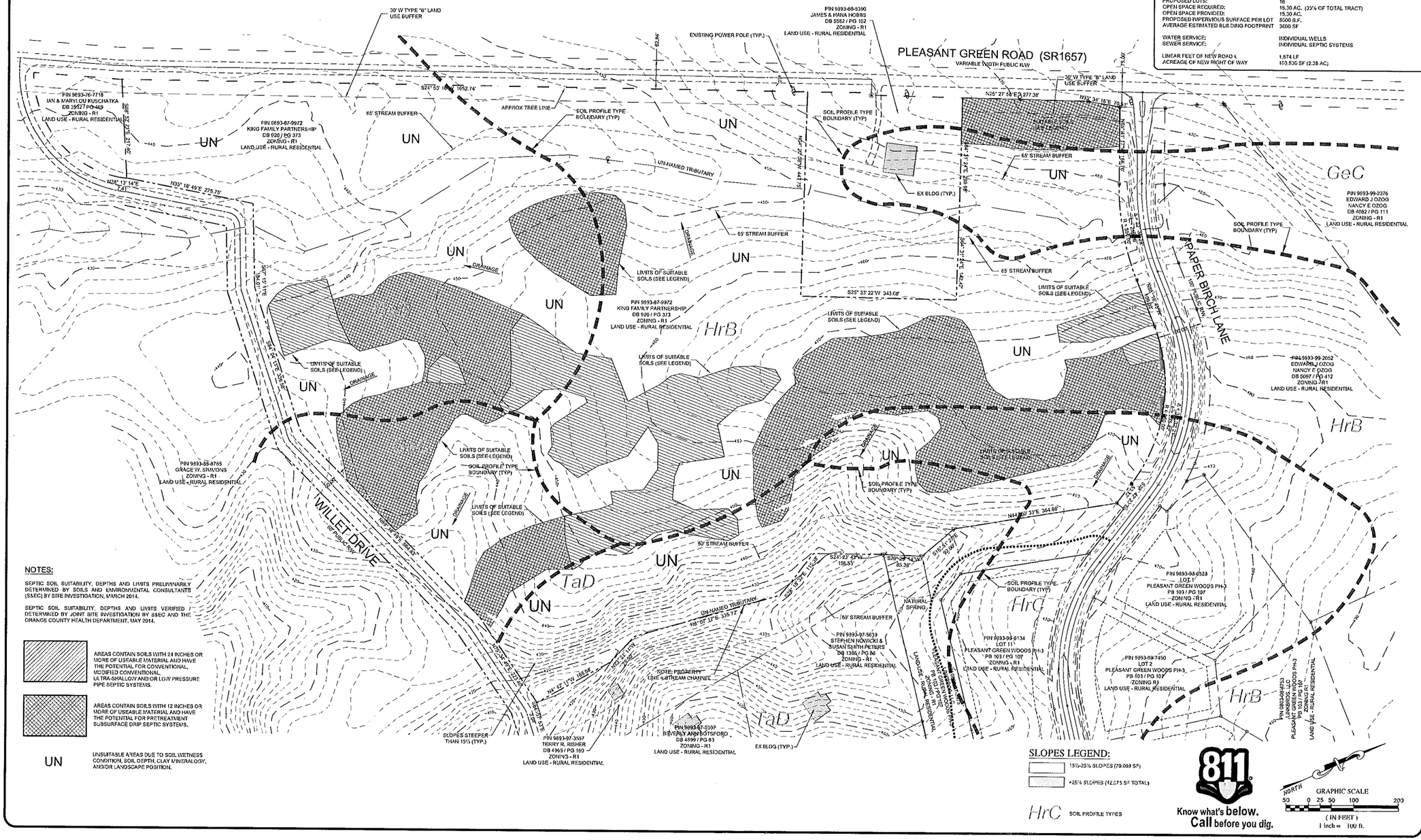
HILLSBOROUGH, NC 27278
(919) 732-3883 (PHONE)
(919) 732-6676 (FAX)
terry.boylan@summitde.net

SITE INFORMATION

PIN:	9893-87-9972
PROPERTY ADDRESS:	4507 PLEASANT GREEN ROAD, DURHAM, NC 27705
PLANNING JURISDICTION:	ORANGE COUNTY
STATE:	NORTH CAROLINA
WATERSHED:	LOWER ENO PROTECTED OVERLAY DISTRICT
RIVER BASIN:	NEUSE
DB/PG:	920 / 373
LOT AREA:	46.34 AC (LISTED - ORANGE COUNTY GIS) 43.62 AC (CALC. - ORANGE COUNTY GIS)
ZONING:	R1 - RURAL RESIDENTIAL
CURRENT USE:	VACANT
PROPOSED USE:	RESIDENTIAL SUBDIVISION (CONSERVATION)
MIN REQUIRED LOT SIZE:	40,000 SF
MIN REQUIRED LOT WIDTH:	130'
AVERAGE LOT SIZE PROVIDED:	62,578 S.F.
TRACT BOUNDARY SETBACK	100'
FRONT SETBACK:	40'
CORNER SIDE SETBACK:	40'
SIDE SETBACK:	20'
REAR SETBACK:	20'
BLDG HEIGHT (MAX.):	35'
WATERSHED OVERLAY DISTRICT: L-ENO-PW	36% IMPERVIOUS SURFACE LIMIT WITHOUT C & G
PROPOSED LOTS:	18
OPEN SPACE REQUIRED:	15.30 AC. (35% OF TOTAL TRACT)
OPEN SPACE PROVIDED:	15.30 AC.
PROPOSED IMPERVIOUS SURFACE PER LOT	5000 S.F.
AVERAGE ESTIMATED BUILDING FOOTPRINT	3600 SF
WATER SERVICE:	INDIVIDUAL WELLS
SEWER SERVICE:	INDIVIDUAL SEPTIC SYSTEMS
LINEAR FEET OF NEW ROAD & ACREAGE OF NEW RIGHT OF WAY	1,574 LF 103,530 SF (2.38 AC)



NOTES:

SEPTIC SOIL SUITABILITY, DEPTHS AND LIMITS PRELIMINARILY DETERMINED BY SOILS AND ENVIRONMENTAL CONSULTANTS (S&EC) BY SITE INVESTIGATION, MARCH 2014.

SEPTIC SOIL SUITABILITY, DEPTHS AND LIMITS VERIFIED / DETERMINED BY JOINT SITE INVESTIGATION BY S&EC AND THE ORANGE COUNTY HEALTH DEPARTMENT, MAY 2014.

AREAS CONTAIN SOILS WITH 24 INCHES OR MORE OF USEABLE MATERIAL AND HAVE THE POTENTIAL FOR CONVENTIONAL, MODIFIED CONVENTIONAL, ULTRA-SHALLOW AND/OR LOW PRESSURE PIPE SEPTIC SYSTEMS.

AREAS CONTAIN SOILS WITH 12 INCHES OR MORE OF USEABLE MATERIAL AND HAVE THE POTENTIAL FOR PRETREATMENT SUBSURFACE DRIP SEPTIC SYSTEMS.

UN — UNSUITABLE AREAS DUE TO SOIL WETNESS CONDITION, SOIL DEPTH, CLAY MINERALOGY, AND/OR LANDSCAPE POSITION.

SLOPES LEGEND:

15%-25% SLOPES (79,093 SF)

+25% SLOPES (42,675 SF TOTAL)

HrC SOIL PROFILE TYPES

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

NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 100 ft.

	BY	DATE	REVISIONS
1	TMB	06-04-14	INITIAL PRELIMINARY PLAN SUBMITTAL
2	KDH	08-13-14	REVISED PRELIMINARY PLAN SUBMITTAL
3			
4			
5			
6			
7			

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PROJECT ENGINEER/ARCHITECT: TMB
PROJECT MANAGER: TMB
DRAWN BY: EKK
SCALE: 1" = 100'

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PRELIMINARY

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT
TERRY R. BOYLAN
PROFESSIONAL SEAL 1220

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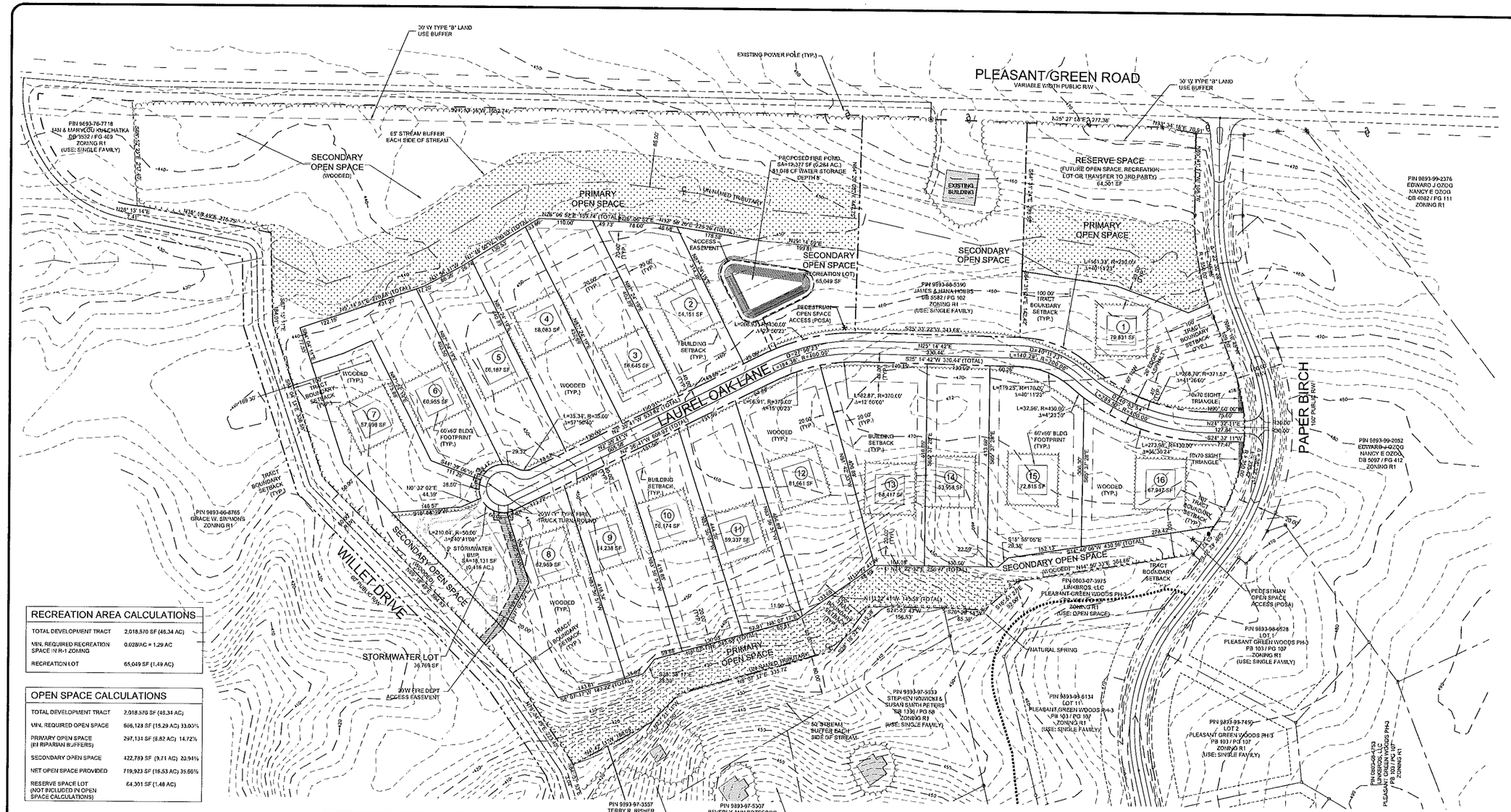
PRELIMINARY PLAT
PLEASANT GREEN WOODS PH-IV
PAPER BIRCH LANE
ORANGE COUNTY, N.C. 27705

SITE ANALYSIS MAP

PROJECT NO.
13-0269
DRAWING NAME:
13-SITE
SHEET NO.
C-1



RECREATION AREA CALCULATIONS	
TOTAL DEVELOPMENT TRACT	2,018,570 SF (46.34 AC)
MIN. REQUIRED RECREATION SPACE IN R-1 ZONING	0.028/AC = 1.29 AC
RECREATION LOT	65,049 SF (1.49 AC)

OPEN SPACE CALCULATIONS	
TOTAL DEVELOPMENT TRACT	2,018,570 SF (46.34 AC)
MIN. REQUIRED OPEN SPACE	666,128 SF (15.29 AC) 33.00%
PRIMARY OPEN SPACE (61 RIPARIAN BUFFERS)	297,131 SF (6.82 AC) 14.72%
SECONDARY OPEN SPACE	422,793 SF (9.71 AC) 20.94%
NET OPEN SPACE PROVIDED	719,923 SF (16.53 AC) 35.66%
RESERVE SPACE LOT (NOT INCLUDED IN OPEN SPACE CALCULATIONS)	64,301 SF (1.48 AC)

STREET TREE REQUIREMENTS:

1 CANOPY AND ONE UNDERSTORY PER 65' (WITH AT LEAST 1 TREE PLACED EVERY 100'.

LAUREL OAK LANE: 1,874' LF
NUMBER OF REQUIRED STREET TREES: 28 CANOPY AND 28 UNDERSTORY

REQUIRED PRIMARY TREE PROTECTION AREAS:
FRONT, REAR AND SIDE YARD SETBACKS (SHOWN ON PLAN)
STREAM BUFFERS (SHOWN ON PLAN)
LAND USE BUFFERS (SHOWN ON PLAN)

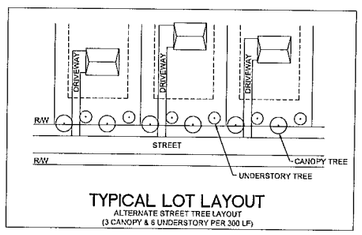
"BETWEEN LOT" TREE PLANTING REQUIREMENTS:

A LANDSCAPE AREA TEN FEET IN WIDTH EXCLUSIVE OF DRAINAGE AND/OR UTILITY EASEMENTS SHALL BE PROVIDED ALONG THE INTERIOR SIDE AND REAR LOT LINES OF EACH LOT BEING DEVELOPED. IF THERE ARE NO EXISTING TREES, THE DEVELOPER SHALL PROVIDE A MINIMUM OF ONE TREE PER ONE THOUSAND SQUARE FEET OF LAND CONTAINED WITHIN THE TEN FOOT LANDSCAPE AREA.

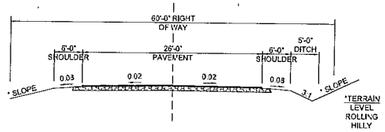
ORANGE COUNTY SOLID WASTE MANAGEMENT

CONSTRUCTION WASTE:

1. ALL EXISTING STRUCTURES 500 SQUARE FEET AND LARGER IN SIZE SHALL BE ASSESSED PRIOR TO DEMOLITION TO ENSURE COMPLIANCE WITH THE COUNTY'S REGULATED RECYCLABLE MATERIALS ORDINANCE (RRMO) AND TO ASSESS THE POTENTIAL FOR DE-CONSTRUCTION AND/OR THE REUSE OF SALVAGEABLE MATERIALS.
2. BY ORANGE COUNTY ORDINANCE, CLEAN WOOD WASTE, SCRAP METAL, AND CORRUGATED CARDBOARD PRESENT IN CONSTRUCTION OR DEMOLITION WASTE MUST BE RECYCLED.
3. BY ORANGE COUNTY ORDINANCE, ALL HAULERS OF MIXED CONSTRUCTION AND DEMOLITION WASTE THAT INCLUDES ANY REGULATED RECYCLABLE MATERIALS SHALL BE LICENSED BY ORANGE COUNTY.
4. PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITY ON THE SITE THE APPLICANT SHALL HOLD A PRE-DEMOLITION/PRE-CONSTRUCTION CONFERENCE WITH THE SOLID WASTE STAFF. THIS MAY BE THE SAME PRE-CONSTRUCTION MEETING HELD WITH OTHER DEVELOPMENT/ENFORCEMENT OFFICIALS.
5. THE PRESENCE OF ANY ASBESTOS CONTAINING MATERIALS (ACM) AND/OR OTHER HAZARDOUS MATERIALS IN CONSTRUCTION AND DEMOLITION WASTE SHALL BE HANDLED IN ACCORDANCE WITH ANY AND ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.



TYPICAL LOT LAYOUT
ALTERNATE STREET TREE LAYOUT
(3 CANOPY & 5 UNDERSTORY PER 300 LF)



*TERRAIN	MAX. SLOPE
LEVEL	2:1
ROLLING	2:1
HILLY	1½:1

NCDOT STANDARD RESIDENTIAL LOCAL ROAD
WITHOUT CURB + GUTTER

SITE INFORMATION

PIN:	9893-87-6972
PROPERTY ADDRESS:	4507 PLEASANT GREEN ROAD, DURHAM, NC 27705
PLANNING JURISDICTION:	ORANGE COUNTY
STATE:	NORTH CAROLINA
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RIVER BASIN:	NEUSE
DB/PG:	920 / 373
LOT AREA:	46.34 AC (LISTED - ORANGE COUNTY GIS) 43.82 AC (CALC. - ORANGE COUNTY GIS)
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CURRENT USE:	VACANT
PROPOSED USE:	RESIDENTIAL SUBDIVISION (CONSERVATION)
MIN REQUIRED LOT SIZE:	40,000 SF
MIN REQUIRED LOT WIDTH:	130'
AVERAGE LOT SIZE PROVIDED:	62,578 S.F.
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CORNER SIDE SETBACK:	40'
SIDE SETBACK:	20'
REAR SETBACK:	20'
BLDG HEIGHT (MAX.):	35'
WATERSHED OVERLAY DISTRICT: L-ENO-PW	35% IMPERVIOUS SURFACE LIMIT WITHOUT C & G
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OPEN SPACE REQUIRED:	15.30 AC. (33% OF TOTAL TRACT)
OPEN SPACE PROVIDED:	15.30 AC.
PROPOSED IMPERVIOUS SURFACE PER LOT	5000 S.F.
AVERAGE ESTIMATED BUILDING FOOTPRINT	3500 SF
WATER SERVICE:	INDIVIDUAL WELLS
SEWER SERVICE:	INDIVIDUAL SEPTIC SYSTEMS
LINEAR FEET OF NEW ROAD:	1,874 LF
ACREAGE OF NEW RIGHT OF WAY	103,530 SF (2.39 AC)

NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 100 ft.

811
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NO.	DATE	BY
1	INITIAL PRELIMINARY PLAN SUBMITTAL	
2	REVISED PRELIMINARY PLAN SUBMITTAL	
3		
4		
5		
6		
7		
1	06-04-14	TMB
2	08-13-14	KSW

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PROJECT MANAGER: TMB
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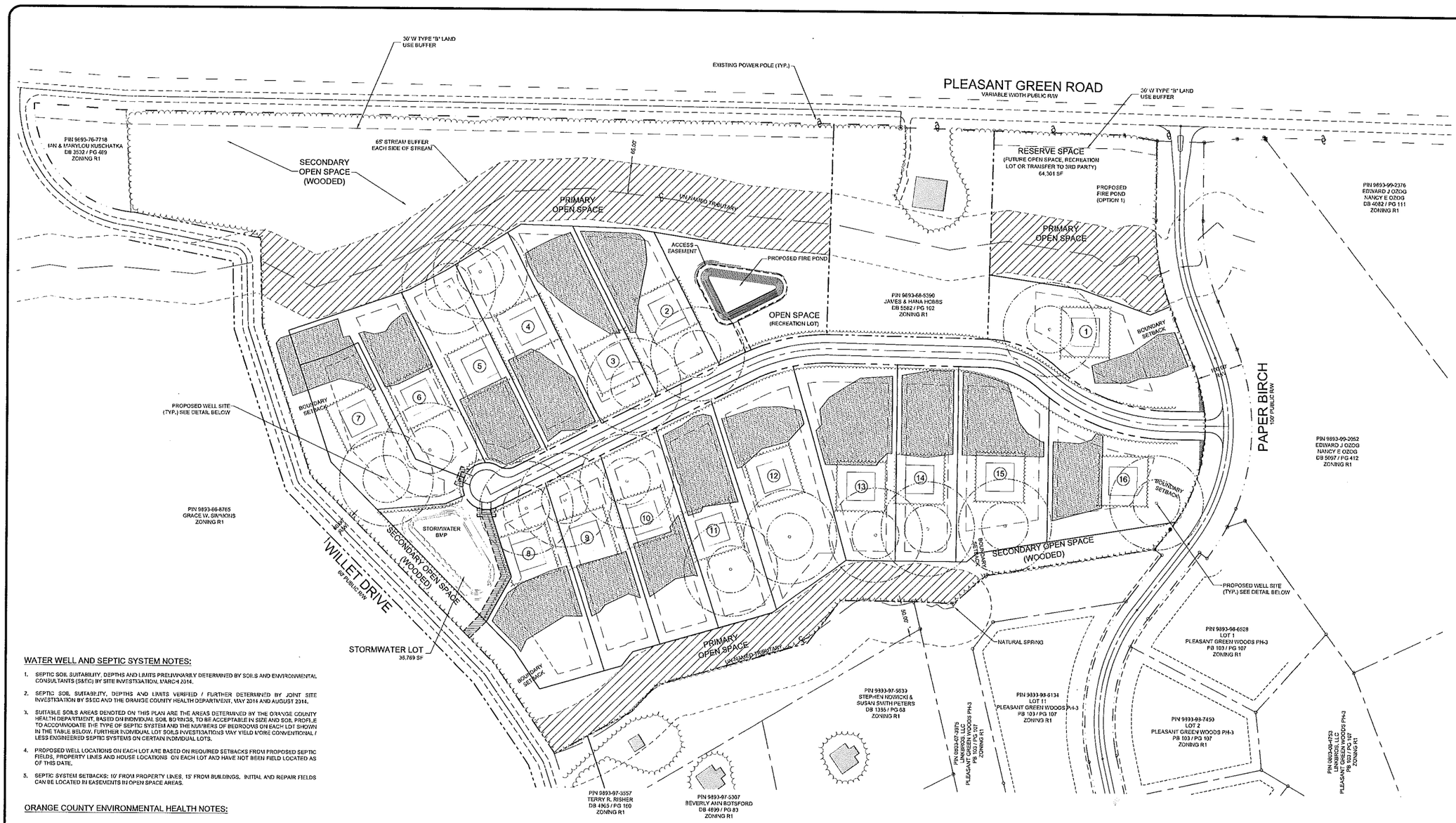
PRELIMINARY PLAT
PLEASANT GREEN WOODS PH-IV
PAPER BIRCH LANE
ORANGE COUNTY, N.C. 27705

FLEX DEVELOPMENT PLAN

PROJECT NO.
13-0269
DRAWING NAME:
13-FLEXIBLE
SHEET NO.
C-2

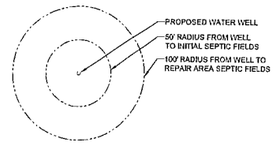


WATER WELL AND SEPTIC SYSTEM NOTES:

1. SEPTIC SOIL SUITABILITY, DEPTHS AND LIMITS PRELIMINARILY DETERMINED BY SOILS AND ENVIRONMENTAL CONSULTANTS (S&EC) BY SITE INVESTIGATION, MARCH 2014.
2. SEPTIC SOIL SUITABILITY, DEPTHS AND LIMITS VERIFIED / FURTHER DETERMINED BY JOINT SITE INVESTIGATION BY S&EC AND THE ORANGE COUNTY HEALTH DEPARTMENT, MAY 2014 AND AUGUST 2014.
3. SUITABLE SOILS AREAS DENOTED ON THIS PLAN ARE THE AREAS DETERMINED BY THE ORANGE COUNTY HEALTH DEPARTMENT, BASED ON INDIVIDUAL SOIL BORINGS, TO BE ACCEPTABLE IN SIZE AND SOIL PROFILE TO ACCOMMODATE THE TYPE OF SEPTIC SYSTEM AND THE NUMBERS OF BEDROOMS ON EACH LOT SHOWN IN THE TABLE BELOW. FURTHER INDIVIDUAL LOT SOILS INVESTIGATIONS MAY YIELD MORE CONVENTIONAL / LESS ENGINEERED SEPTIC SYSTEMS ON CERTAIN INDIVIDUAL LOTS.
4. PROPOSED WELL LOCATIONS ON EACH LOT ARE BASED ON REQUIRED SETBACKS FROM PROPOSED SEPTIC FIELDS, PROPERTY LINES AND HOUSE LOCATIONS ON EACH LOT AND HAVE NOT BEEN FIELD LOCATED AS OF THIS DATE.
5. SEPTIC SYSTEM SETBACKS: 10' FROM PROPERTY LINES, 15' FROM BUILDINGS. INITIAL AND REPAIR FIELDS CAN BE LOCATED IN EASEMENTS IN OPEN SPACE AREAS.

ORANGE COUNTY ENVIRONMENTAL HEALTH NOTES:

LOT	NO. BEDROOMS BY PROP. SYSTEM	TYPE OF PROPOSED SEPTIC SYSTEM
1	4 BDRM	CONVENTIONAL
2	5 BDRM	SUBSURFACE DRIP
3	4 BDRM	CONVENTIONAL
4	5 BDRM	CONVENTIONAL
5	5 BDRM	ULTRA SHALLOW CONVENTIONAL INITIAL W/ SUBSURFACE DRIP REPAIR
6	5 BDRM	CONVENTIONAL
7	4 BDRM	CONVENTIONAL
8	5 BDRM	ULTRA SHALLOW CONVENTIONAL INITIAL W/ SUBSURFACE DRIP REPAIR
9	5 BDRM	CONVENTIONAL
10	5 BDRM	ULTRA SHALLOW CONVENTIONAL INITIAL W/ SUBSURFACE DRIP REPAIR
11	5 BDRM	CONVENTIONAL INITIAL W/ ULTRA SHALLOW TRENCH REPAIR
12	5 BDRM	ULTRA SHALLOW CONVENTIONAL INITIAL W/ SUBSURFACE DRIP REPAIR
13	4 BDRM	CONVENTIONAL
14	5 BDRM	ULTRA SHALLOW CONVENTIONAL INITIAL W/ SUBSURFACE DRIP REPAIR
15	5 BDRM	ULTRA SHALLOW CONVENTIONAL INITIAL W/ SUBSURFACE DRIP REPAIR
16	5 BDRM	ULTRA SHALLOW CONVENTIONAL INITIAL W/ SUBSURFACE DRIP REPAIR



WELL SITE SETBACKS DETAIL

NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 100 ft.

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NO.	DATE	BY
1	INITIAL PRELIMINARY PLAN SUBMITTAL	TMB
2	REVISED PRELIMINARY PLAN SUBMITTAL	05-04-14
3		06-13-14
4		KSW
5		
6		
7		

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PRELIMINARY PLAT
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PAPER BIRCH LANE
ORANGE COUNTY, N.C. 27705

WATER WELLS & SUITABLE SEPTIC SOILS PLAN

PROJECT NO.
13-0269
DRAWING NAME:
13-FLEXIBLE
SHEET NO.
C-3