



Planning, Development & Inspections

TEL (PLANNING) 919 856 6310
TEL (INSPECTIONS) 919 856 6222

A Division of Community Services
P.O. Box 550 • Raleigh, NC 27602
www.wakegov.com

PRELIMINARY SUBDIVISION PLAN APPROVAL APPLICATION

Name of Subdivision Bailey Farm - Creedmoor Road

() cluster subdivision () lot-by-lot subdivision () open space
Has a preliminary plan previously been approved for subdivision of this site? () Yes () No
If yes, when and under what name?

Property 0799417447, 0799425758, 0799402628, 0799408718, 0799409710 (portion),
Parcel Identification Number: 0799501229 (portion)
Address:
Location: East side of Creedmoor Rd., at/between
I-540 and North Falls Drive

Total site area in square feet and acres: 3,340,636 square feet 76.69 acres
Zoning District(s) and Overlay Districts (if any) and land area within each: R-40W

Conditions of any Conditional Use Zoning Districts:

Present land use(s): Agricultural - Farm, Vacant, Single Family Residence

Property Owner (Contact information is needed for reviews to proceed- Please provide fax or email)
Name: Premiere Homes II, Inc. (applicant)
Address: 8310 Bandford Way
City: Raleigh State: NC Zip Code: 27615
E-mail Address: henry@premierehomesinc.com FAX: 919-571-1521
Telephone Number: 919-571-8263

Consultant (i.e. surveyor or engineer; person to whom all correspondence will be sent)
Name: Dale Werenko, PE Withers & Ravenel, Inc.
Address: 111 MacKenan Drive
City: Cary State: NC Zip Code: 27511
E-mail Address: dwerenko@withersravenel.com FAX: 919-467-6008
Telephone Number: 919-469-3340 Relationship to Owner: Project Engineer

Proposal
Max. allowable lot density standard* (see Article 5, Unified Development Ordinance, and the Wake County Land Use Plan) :
Max. # of lots allowable*: 76 Proposed # of lots*: 66
Min. allowable lot area*: 20,000 sf Proposed min. lot area*: 20,000 sf
Average lot area*: 30,796 sf
Min. allowable lot width*: 75 ft Proposed min. lot width*: 75 ft

* If applicable, show for each zoning district



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Min. open space standard (see Sec. 3.4.3(E)(1)): () 10 % (✓) 25 % () 30% () 40% of site area
Min. open space area: 19.17 acres
Proposed open space area [by parcel]: 20.53 acres
Proposed open space use(s) [by parcel]: Passive Recreation, Natural Buffers
Proposed future development site area [by site]: 0 acres
Proposed impervious surfaces area: 768,346 sf
Proposed impervious surface coverage (impervious surfaces area/site area x 100): 23.0 %
Site area w/in area of special flood hazard (see Article 14, Unified Development Ordinance): 6.5 acres
within floodway: 2.6 acres

Vehicle Access

Names of access street(s) and number of access points along each:

Table with 8 columns: Name of access or adjacent street, Right-of-way width (ft), Pavement width (ft), No. of lanes, Paved? (Y or N), Roadway design capacity, Traffic volume (ADT)^2, Est. traffic generated (ADT)^3. Row 1: Creedmoor Road (Hwy 50), Varies, 24', 2, Y, [blank], 22000, 709.

1 See NCDOT Highway Capacity Manual or Wake County Thoroughfare Plan Appendix

2 See CAMPO web site (www.raleigh-nc.org/campo) or contact NCDOT Traffic Survey Unit

3 Base on Institute of Transportation Engineers ratios - ratio used for estimate (e.g., x trips per y sf)

Estimated traffic generated by heavy vehicles (vehicles other than automobiles and light trucks):

Type of vehicle: ADT:
Type of vehicle: ADT:

Utilities and Services

Water supply provided by: () municipal system ()
(✓) community system (Aqua North Carolina) () individual well(s)

Estimated total water demand: 71,280 gpd

Wastewater collection/treatment provided by: () municipal system ()
() community system - specify type() (✓) individual on-site system

Estimated total wastewater discharge: 0 gpd

Electrical service provided by: Duke Energy Progress Underground (✓) yes () no

Natural gas service provided by: PSNC

Telephone service provided by: AT&T Underground (✓) yes () no

Cable television service provided by: Time Warner Underground (✓) yes () no

Fire protection provided by: Bayleaf

Miscellaneous

Generalized slope of site: 5% - 20% slopes, moderate to gently sloping topography

Valuable natural features (rare plant community, wildlife habitat, lake, stream, geology, etc.) on or adjoining site: none known

Valuable historic resources (homestead, mill, archeological site) on or adjoining site: none known

Land Use Plan Classifications

General Classification (note associated municipality and/or watershed):

() Short-Range Urban Services Area/Water Supply Watershed _____

() Short-Range Urban Services Area _____

() Long-Range Urban Services Area/Water Supply Watershed _____

() Long-Range Urban Services Area _____

() Non-Urban Area/Water Supply Watershed _____

() Non-Urban Area _____

Land Use Classification(s) (Note Area Land Use Plan, if applicable):

Other information (additional relevant information about the site or proposal you wish to note or cite)

All property owners must sign this application unless one or more individuals are specifically authorized to act as an agent on behalf of the collective interest of some or all of the owners (provide a copy of such authorization).

The undersigned property owner(s) hereby authorize the filing of this application (and any subsequent revisions thereto). The filing of this application authorizes the Wake County staff to enter upon the site to conduct relevant site inspections as deemed necessary to process the application.

Signature: James H. Bailey Date: 5/5/2014

Signature: R. Wayne Bailey Date: 5/2/14

Signature: Wayne C. Bailey Date: 5/5/14

The undersigned applicant hereby certifies that, to the best of his or her knowledge and belief, all information supplied with this application is true and accurate.

Signature: Premier Homes II, Inc & J. K. McLeod Date: 5/2/14

Notes: All documents and maps submitted as required become the property of Wake County.
The Wake County Unified Development Ordinance is on the web at <http://www.wakegov.com/>
All application fees are non-refundable.

Bailey Farm - Creedmoor Road
Property Information

Property Owner	PIN	Address	Location	Area		Zoning District	Present Land Use
				sf	ac		
BAILEY LAND COMPANY INC	0799-41-7447	9500 Creedmoor Road	Creedmoor Road (Highway 50)	2,556,631	58.69	R-40W	Agricultural - Farm
WJC VENTURES LLC, WAYNE R. BAILEY	0799-42-5758	0 Creedmoor Road	0.5 Mile North of I-540	490,154	11.25	R-40W	Vacant
WJC VENTURES LLC, WAYNE R. BAILEY	0799-40-2628	9300 Creedmoor Road		182,404	4.19	R-40W	Single Family Residence
CARIG C. BAILEY & LISA BAILEY	0799-40-8718	1300 Goose Pond Road		50,491	1.16	R-40W	Single Family Residence
CRAIG C. BAILEY	0799-40-9710 (portion)	0 Creedmoor Road		24,303	0.56	R-40W	Vacant
WJC VENTURES LLC, WAYNE R. BAILEY	0799-50-1279 (portion)	0 Creedmoor Road		36,653	0.84	R-40W	Vacant
Total				3,340,636	76.69		

Ms. Celena Everette
Wake County Planning Department
P.O. Box 550
Raleigh, NC 27602

RE: Bailey Farm - Creedmoor Road
Property Owner Authorization

Dear Ms. Everette,

The purpose of this letter is to authorize Premiere Homes II, Inc. to file and submit development plans and applications to Wake County and represent the properties that comprise this development project as the Applicant on our behalf.

The properties involved with this application are as follows:

PIN 0799-41-7447

PIN 0799-42-5758

PIN 0799-40-2628

PIN 0799-40-8718

PIN 0799-40-9710

PIN 0799-50-1229

Regards,

Wayne R. Bailey 4/2/14
Wayne R. Bailey Date

Craig C. Bailey 5/5/14
Craig C. Bailey Date

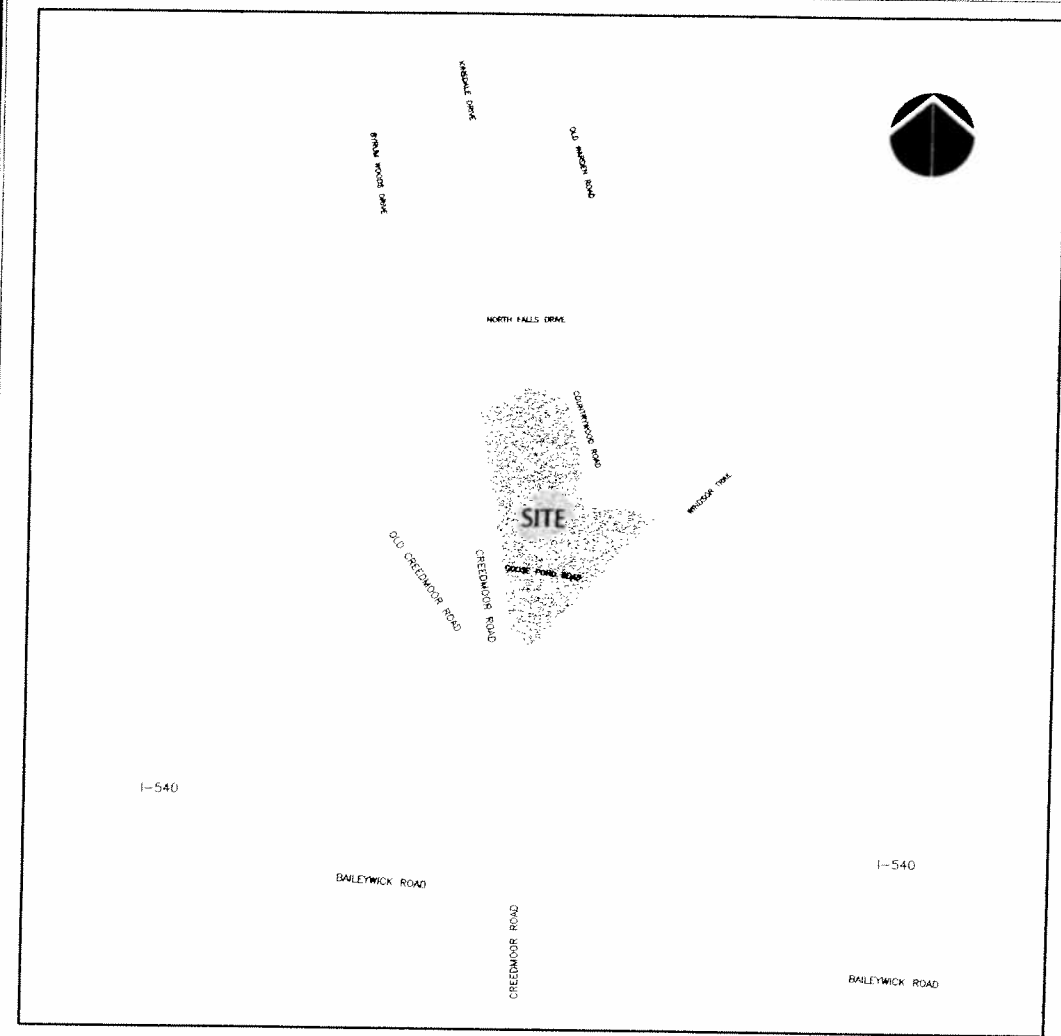
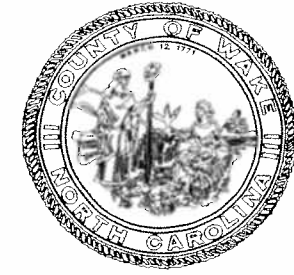
James A. Bailey J. 5/5/2014

PRELIMINARY SUBDIVISION PLANS FOR BAILEY FARM - CREEDMOOR ROAD WAKE COUNTY, NORTH CAROLINA

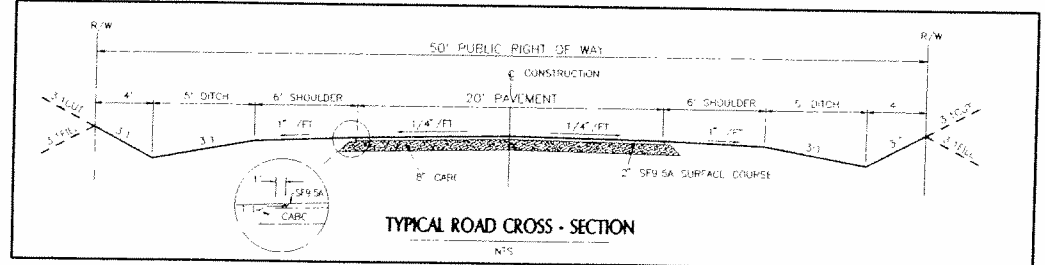
WAKE COUNTY # S-XX-14

May 6, 2014

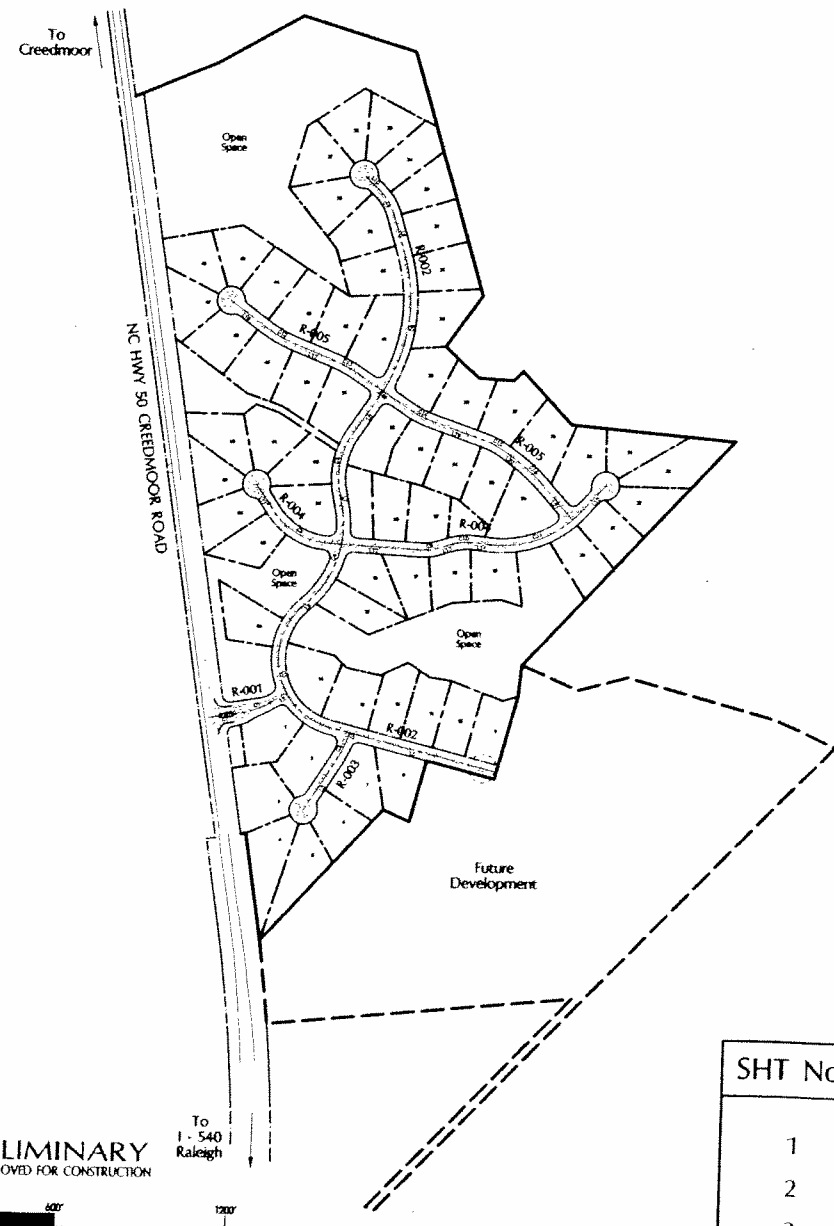
CREATED BY: SUBDIVISION PLANS FOR
 BAILEY FARM - CREEDMOOR ROAD
 MAP PROJECT NO. 02740102.00
 DATE: May 6, 2014



VICINITY MAP 1" = 1000'



TYPICAL ROAD CROSS - SECTION



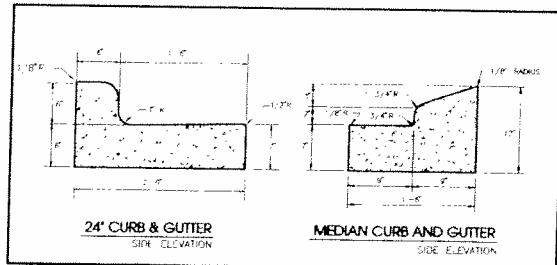
HORIZONTAL STREET CENTERLINE CURVE DATA

CURVE	RADIUS	ARC	CHORD	CHORD BEARING	TANGENT
C1	300.00'	127.36'	126.41'	N68°50'17"E	64.66'
C2	500.00'	103.70'	103.52'	N26°29'44"E	52.04'
C3	248.31'	538.74'	439.12'	S13°30'27"E	470.66'
C4	360.00'	378.20'	361.04'	N18°33'05"E	208.65'
C5	275.00'	218.23'	212.55'	N11°11'23"E	115.23'
C6	600.00'	530.00'	512.93'	S08°37'07"W	283.69'
C7	200.00'	99.15'	98.14'	N30°53'23"W	50.62'
C8	250.00'	227.04'	219.32'	S60°31'37"E	122.03'
C9	200.00'	70.02'	69.66'	N83°25'35"E	35.37'
C10	200.00'	83.20'	82.60'	N85°18'51"E	42.21'
C11	370.00'	354.09'	340.73'	N69°48'54"E	191.92'
C12	500.00'	126.90'	126.56'	S60°56'10"E	63.79'
C13	500.00'	105.86'	105.67'	S62°08'30"E	53.13'
C14	300.00'	75.65'	75.45'	S63°17'59"E	38.02'
C15	300.00'	90.54'	90.20'	S61°52'38"E	45.62'
C16	600.00'	119.81'	119.61'	S47°30'38"E	60.11'

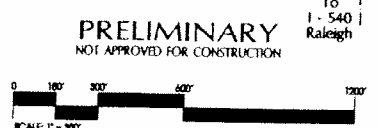
HORIZONTAL STREET CENTERLINE LINE DATA

LINE	BEARING	DISTANCE
L1	N81°00'02"E	114.76'
L2	N58°40'33"E	51.60'
L3	N32°26'14"E	195.23'
L4	N20°33'13"E	16.38'
L5	S75°30'44"E	607.78'
L6	N48°38'50"E	13.89'
L7	N1°32'39"W	48.81'
L8	N33°55'26"E	155.43'
L9	N16°41'13"W	141.31'
L10	N45°05'33"W	83.18'
L11	S34°30'35"E	117.70'
L12	S86°32'39"E	320.77'
L13	N73°23'50"E	45.32'
L14	S82°46'07"E	44.51'
L15	N42°23'56"E	128.44'
L16	S53°39'54"E	152.23'
L17	S68°12'26"E	136.53'
L18	S56°04'34"E	228.93'
L19	S70°31'24"E	200.73'
L20	S53°13'52"E	49.01'
L21	S41°47'24"E	165.17'

APPLICANT / DEVELOPER
PREMIERE HOMES II, INC.
 8310 BANDFORD WAY
 RALEIGH, NORTH CAROLINA 27615
 Contact: J. Terry Stephens, PE
 TEL (919) 571-8263 FAX (919) 571-1521



No.	Revision	Date	By



PLANS PREPARED BY:
WITHERS & RAVENEL
 ENGINEERS | PLANNERS | SURVEYORS
 115 MacKenan Drive Cary, North Carolina 27511 tel: 919-469-3340 www.wITHERSRAVENEL.com License No. C-0832
 Contact: Dale Werenko, PE

INDEX OF SHEETS

SHT No.	DRAWING DESCRIPTION
1	EXISTING CONDITIONS PLAN
2	PRELIMINARY SUBDIVISION PLAN
3	PRELIMINARY STORMWATER MANAGEMENT PLAN

BOUNDARY LINE AND CURVE TABLES

LINE	BEARING	DISTANCE	CURVE	RADIUS	ARC	CHORD	CHORD BEARING	TANGENT
1	S87°07'13"W	320.19	C1	5806.58	282.82	702.79	N04°46'33"W	148.44
2	S87°05'14"W	338.11	C2	5806.58	67.16	67.16	N08°33'24"W	33.58

PROPERTY DATA TABLE

PROPERTY OWNER	PIN	REID	ADDRESS	DEED BOOK/PAGE #	ZONING	CURRENT LAND USE	ACREAGE
BAILEY LAND COMPANY INC	0799-41-7447	0180648	9500 CREEDMOOR ROAD	064588 / 00087	R-40W	AGRICULTURAL FARM	58.69 AC
WJC VENTURES LLC, WAYNE R. BAILEY	0799-42-5758	0003058	0 CREEDMOOR ROAD	-	R-40W	VACANT	11.25 AC
WJC VENTURES LLC, WAYNE R. BAILEY	0799-40-2628	0009827	9300 CREEDMOOR ROAD	-	R-40W	SF RESIDENCE	4.19 AC
CRAIG C BAILEY & LISA BAILEY	0799-40-8718	0211464	1300 GOOSE POND ROAD	015414 / 00485	R-40W	SF RESIDENCE	1.16 AC
A PORTION OF CRAIG C BAILEY	0799-40-9710	0206518	0 CREEDMOOR ROAD	006307 / 00613	R-40W	VACANT	0.56 AC
A PORTION OF WJC VENTURES LLC, WAYNE R. BAILEY	0799-50-1229	0003169	0 CREEDMOOR ROAD	-	R-40W	VACANT	0.84 AC
							76.69 AC

Detailed Soils Evaluation Notes Per
CCSC Soil Consulting LLC Preliminary Septic Soils Evaluation

- Soil boundary was flagged in the field and GPS field located.
- Not a Survey.
- Septic system setbacks listed below for new lots.
 - 1) 10' from property lines.
 - 2) 150' from wells for gravity systems.
 - 3) 50' from wells for pump systems.
 - 4) 20' from surface waters (streams, ponds, lakes).
- Any mechanical disturbances such as grading, cutting and filling of the suitable soil areas can render areas unsuitable for future septic systems.
- See accompanying report for additional information.
- Base map acquired from Wake County GIS website, not a survey description for purposes of a land transfer or legal documentation.
- Due to Soil Variability, CCSC cannot guarantee that the areas shown as suitable will be permitted by the local Health Department.
- The preliminary (approximate) soil lines cannot be used as legal descriptions for purposes of a land transfer or legal documentation.
- Additional field work may be required for a septic permit (septic system) (see approval/consent).

Soils Legend

- Areas contain soils with 30 inches or more of usable material and have potential for conventional or modified conventional septic systems. There will be inclusions of soils in these areas that may only be suitable for LPP septic systems.
- Areas contain soils with 24 to 29 inches of usable material and have potential LPP or ultra-shallow conventional septic systems. These areas will contain small areas of soils with greater than 30 inches of suitable soil material that can be used for conventional septic systems.
- Unsuitable areas for conventional or LPP septic systems.
- Approximate location of existing soil or compost piles. These areas need to be removed to the natural soil surface for future on-site wastewater disposal usage.



LEGEND

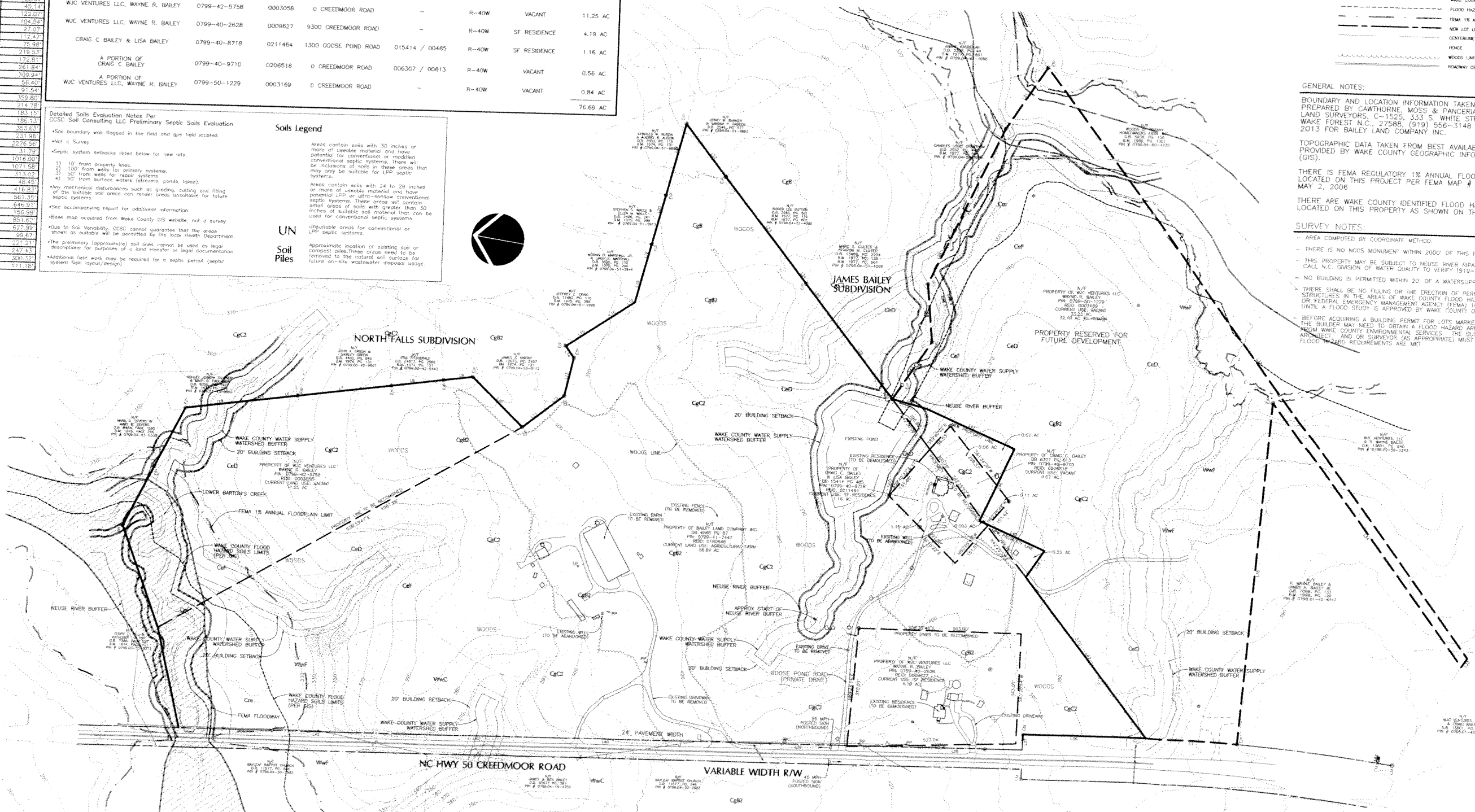
	PROPERTY LINE - LINE SURVEYED
	RIGHT-OF-WAY
	ADJOINING LINE - LINE NOT SURVEYED
	OVERHEAD LINE
	BUILDING SETBACK
	EASEMENT
	NEUSE RIVER RIPARIAN BUFFER
	WAKE COUNTY WATER SUPPLY WATERSHED BUFFER
	FLOOD HAZARD SOILS
	1% ANNUAL FLOOD
	NEW LOT LINE
	CENTRAL LINE OF CREEK
	FENCE
	WOODS LINE
	ROADWAY CENTERLINE

GENERAL NOTES:
BOUNDARY AND LOCATION INFORMATION TAKEN FROM A SURVEY PREPARED BY CAWTHORNE, MOSS & PANCERIA, PC PROFESSIONAL LAND SURVEYORS, C-1525, 333 S. WHITE STREET, P.O. BOX 1253, WAKE FOREST N.C. 27588, (919) 556-3148 ON SEPTEMBER 19, 2013 FOR BAILEY LAND COMPANY INC.

TOPOGRAPHIC DATA TAKEN FROM BEST AVAILABLE INFORMATION PROVIDED BY WAKE COUNTY GEOGRAPHIC INFORMATION SYSTEMS (GIS).
THERE IS FEMA REGULATORY 1% ANNUAL FLOODPLAIN LIMITS LOCATED ON THIS PROJECT PER FEMA MAP # 372007900J MAY 2, 2006.

THERE ARE WAKE COUNTY IDENTIFIED FLOOD HAZARD SOILS LOCATED ON THIS PROPERTY AS SHOWN ON THE PLANS.

- SURVEY NOTES:
- AREA COMPUTED BY COORDINATE METHOD.
 - THERE IS NO NCDS MONUMENT WITHIN 2000' OF THIS PROPERTY.
 - THIS PROPERTY MAY BE SUBJECT TO NEUSE RIVER RIPARIAN BUFFER RULES. CALL N.C. DIVISION OF WATER QUALITY TO VERIFY (919-791-4200).
 - NO BUILDING IS PERMITTED WITHIN 20' OF A WATERSHED WATERSHED BUFFER.
 - THERE SHALL BE NO FELLING OR THE ERECTION OF PERMANENT STRUCTURES IN THE AREAS OF WAKE COUNTY FLOOD HAZARD SOILS OR FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) 100 YEAR FLOOD ZONES UNTIL A FLOOD STUDY IS APPROVED BY WAKE COUNTY OR FEMA.
 - BEFORE ACQUIRING A BUILDING PERMIT FOR LOTS MARKED BY THE BUILDER MAY NEED TO OBTAIN A FLOOD HAZARD AREA USE PERMIT FROM WAKE COUNTY ENVIRONMENTAL SERVICES. THE BUILDER'S ENGINEER, ARCHITECT, AND/OR SURVEYOR (AS APPROPRIATE) MUST CERTIFY THAT ALL FLOOD HAZARD REQUIREMENTS ARE MET.



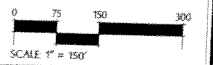
LEGEND:

EIP	- EXISTING IRON PIPE
EPA	- EXISTING PIPE N/AE
NIP	- NEW IRON PIPE SET
R/W	- RIGHT OF WAY
CATV	- CABLE TV BOX
EB	- ELECTRIC BOX
TEL	- TELEPHONE PEDESTAL
PP	- POWER POLE
OL	- OVERHEAD LINE
LP	- LIGHT POLE
WM	- WATER METER
WV	- WATER VALVE
CO	- SEWER CLEAN-OUT

REFERENCES:

DB 18414	PG 485
DB 13801	PG 543
DB 13801	PG 632
DB 13801	PG 823
DB 6352	PG 50
DB 6307	PG 813
DB 688	PG 87
DB 0422	PG 17
EM 1994	PG 764
EM 1977	PG 601
EM 1974	PG 131
EM 1975	PG 296

PRELIMINARY
NOT APPROVED FOR CONSTRUCTION



No.	Revision	Date	By	Designer	Scale
				WJK	1" = 150'
				DW	Date: 05/06/24
				DW	Job No: 74690200

BAILEY FARM - CREEDMOOR ROAD
WAKE COUNTY
BARTON'S CREEK TOWNSHIP
NORTH CAROLINA

EXISTING CONDITIONS PLAN

WITHERS & RAVENEL
ENGINEERS | PLANNERS | SURVEYORS
115 Mackranon Drive Cary, North Carolina 27511 | tel: 919-469-3340 | www.witthersravenel.com | License No. C-26825

Sheet No. **1** of **3**

STORMWATER GENERAL NOTES:

1. PROJECT PEAK FLOWS WILL BE DOCUMENTED IN CONSTRUCTION PLANS.
2. THE EXISTING STORMWATER OUTFALL FROM THE EXISTING POND IS NOT SUBJECT TO DIFFUSE FLOW REQUIREMENTS.
3. NEUSE RIVER RIPARIAN BUFFERS ARE SHOWN PER AN APPROVED SURFACE WATER DETERMINATION LETTER APPROVED BY ACDENP ON MAY 23, 2013. NBRRO# 13-115.

Stormwater Calculations - R-40W

Total Area of Tract	3,340,636 SF, 76.691 AC
66 Lots of 9,136 SF / Lot	603,000 SF
Impervious Area in New Roads	165,346 SF
Total Impervious Area	768,346 SF, 23.0%

* SUBJECT TO WEETING NUTRIENT OFFSET THRESHOLDS - SEE STORMWATER CALCULATIONS
66 lots AVG 9,136 SF / LOT *



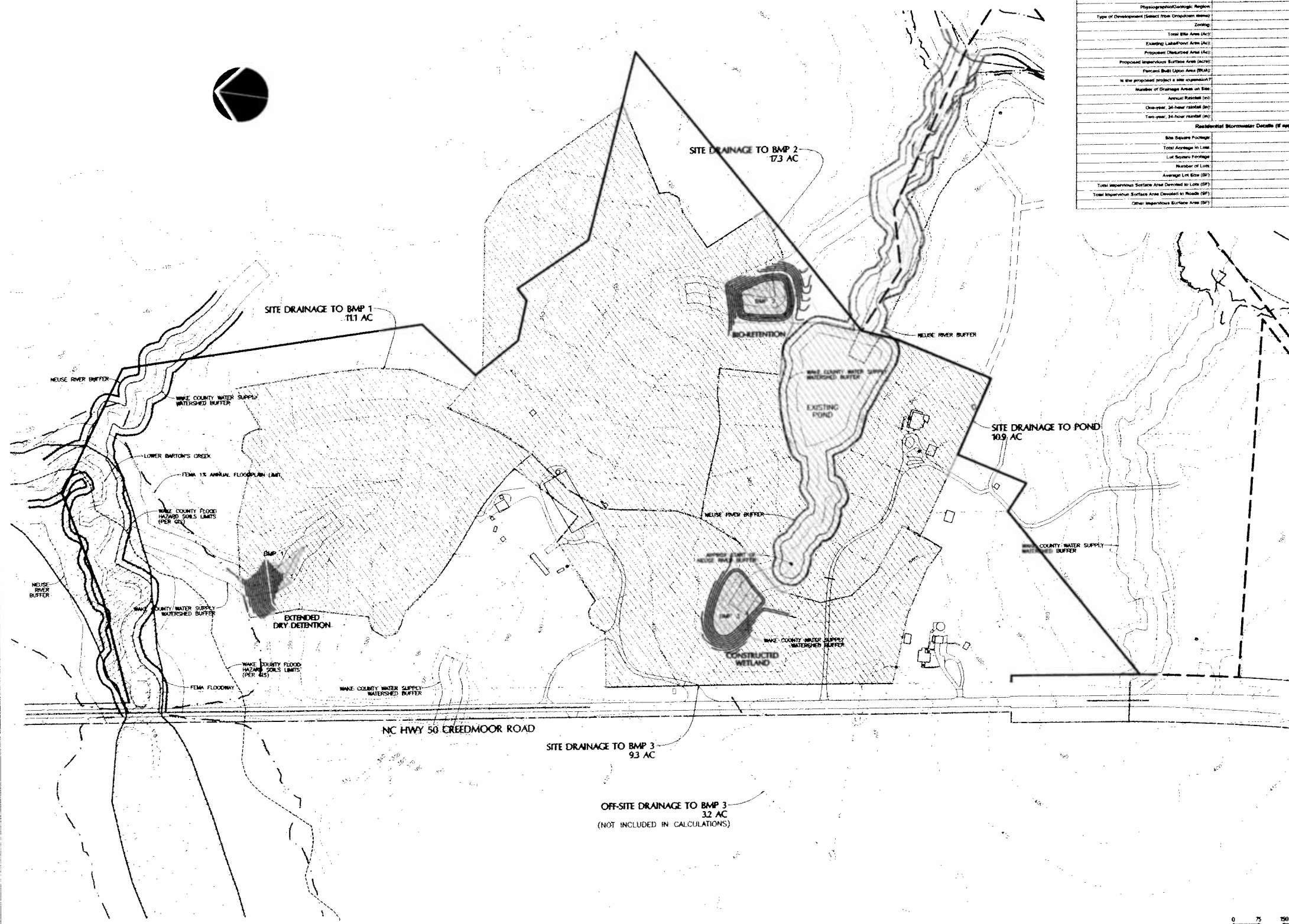
SITE DATA

Project Information	
Project Name:	Bailey Farm - Creedmoor Road
Applicant:	Hunter Freeman, Withers & Ravenel
Applicant Contact Name:	Hunter Freeman, Withers & Ravenel
Applicant Contact Number:	919-469-3360
Applicant Contact Email:	hfreeman@withersr.com
Site Data:	
Road Status:	New
Regulatory Watershed:	1.66
Physiographic/Geologic Region:	Piedmont
Type of Development (Select from dropdown menu):	Residential
Zoning:	R-40W
Total Site Area (ac):	75.19
Existing Land/Forest Area (ac):	1.25
Proposed Developed Area (ac):	57.72
Proposed Impervious Surface Area (ac):	17.29
Percent Built Upon Area (BUP):	23%
Is the proposed project a site expansion? (Y/N):	No
Number of Drainage Areas on Site:	5
Annual Rainfall (in):	45.41
One-year, 24-hour rainfall (in):	3.00
Two-year, 24-hour rainfall (in):	3.60
Residential Stormwater Details (if applicable):	
Site Square Footage:	3,275,276
Total Areaage in Lots:	48.83
Lot Square Footage:	96
Number of Lots:	66
Average Lot Size (sq ft):	603,000
Total Impervious Surface Area Devoted to Lots (sq ft):	150,064
Total Impervious Surface Area Devoted to Roads (sq ft):	0
Other Impervious Surface Area (sq ft):	0

BMP 3	
Type of BMP:	Wetland
Area Treated by BMP (ft ²):	407,737
Percent Impervious of Contributing Watershed (%):	88%
Runoff Coefficient, Rv:	0.843683278
Inflow Volume (ft ³):	468,855
Incoming Total Nitrogen Concentration (mg/L):	1.43
Annual Incoming Total Nitrogen Load (lbs):	41.88
Incoming Total Phosphorus Concentration (mg/L):	0.42
Annual Incoming Total Phosphorus Load (lbs):	12.32
Volume Reduction by BMP (%):	25%
Effluent Median Total Nitrogen Concentration (mg/L):	1.126742141
Effluent Median Total Phosphorus Concentration (mg/L):	0.16
Outflow Volume (ft ³):	351,643
Annual Outflow Total Nitrogen Load (lbs):	24.68
Annual Outflow Total Phosphorus Load (lbs):	3.45
Annual Total Nitrogen Reduction (%):	41.07%
Annual Total Phosphorus Reduction (%):	72.00%

BMP 2	
Type of BMP:	Bioretention without IWS
Area Treated by BMP (ft ²):	623,082
Percent Impervious of Contributing Watershed (%):	91%
Runoff Coefficient, Rv:	0.866344093
Inflow Volume (ft ³):	835,266
Incoming Total Nitrogen Concentration (mg/L):	1.38
Annual Incoming Total Nitrogen Load (lbs):	72.08
Incoming Total Phosphorus Concentration (mg/L):	0.37
Annual Incoming Total Phosphorus Load (lbs):	19.18
Volume Reduction by BMP (%):	50%
Effluent Median Total Nitrogen Concentration (mg/L):	1.0764095
Effluent Median Total Phosphorus Concentration (mg/L):	0.17
Outflow Volume (ft ³):	417,633
Annual Outflow Total Nitrogen Load (lbs):	28.01
Annual Outflow Total Phosphorus Load (lbs):	4.41
Annual Total Nitrogen Reduction (%):	61.15%
Annual Total Phosphorus Reduction (%):	77.05%

BMP 1	
Type of BMP:	Dry Detention Pond
Area Treated by BMP (ft ²):	483,353
Percent Impervious of Contributing Watershed (%):	88%
Runoff Coefficient, Rv:	0.844358383
Inflow Volume (ft ³):	558,217
Incoming Total Nitrogen Concentration (mg/L):	1.40
Annual Incoming Total Nitrogen Load (lbs):	48.67
Incoming Total Phosphorus Concentration (mg/L):	0.38
Annual Incoming Total Phosphorus Load (lbs):	13.30
Volume Reduction by BMP (%):	10%
Effluent Median Total Nitrogen Concentration (mg/L):	1.221807005
Effluent Median Total Phosphorus Concentration (mg/L):	0.22
Outflow Volume (ft ³):	502,395
Annual Outflow Total Nitrogen Load (lbs):	38.24
Annual Outflow Total Phosphorus Load (lbs):	6.89
Annual Total Nitrogen Reduction (%):	21.43%
Annual Total Phosphorus Reduction (%):	48.17%

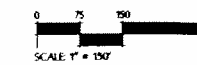


Development Name: Bailey Farm - Creedmoor Road
 Total Development Area (ft²): 3,275,276
 Designer: Hunter Freeman
 Date: May 6, 2014

Development Summary

	Pre-Development Conditions	Post-Development Conditions	Post-Development w/ BMPs
Percent Impervious (%)	0.0%	23.0%	23.0%
Annual Runoff Volume (c.f.)	619,710	3,185,200	2,594,531
Total Nitrogen EMC (mg/L)	1.47	1.42	1.30
Total Nitrogen Loading (lb/yr)	56.88	283.13	211.42
Total Nitrogen Loading (lb/ac/yr)	0.76	3.77	2.81
Total Phosphorus EMC (mg/L)	0.25	0.38	0.28
Total Phosphorus Loading (lb/yr)	9.67	75.62	45.57
Total Phos. Loading (lb/ac/yr)	0.13	1.01	0.61

PRELIMINARY
NOT APPROVED FOR CONSTRUCTION



No.	Revision	Date	By	Design	Scale
				WAK	1" = 150'
				DW	05/06/14
				DW	Job No. 24070200

BAILEY FARM - CREEDMOOR ROAD
 WAKE COUNTY BARTON'S CREEK TOWNSHIP NORTH CAROLINA

PRELIMINARY STORMWATER MANAGEMENT PLAN

WITHERS & RAVENEL
 ENGINEERS | PLANNERS | SURVEYORS
 15 Lockwood Drive Cary, North Carolina 27511 | Tel: 919-469-3360 | www.withersr.com | License No. C-0813

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