

**ORANGE COUNTY PLANNING DEPARTMENT  
131 W. MARGARET LANE, SUITE 201  
HILLSBOROUGH, NORTH CAROLINA 27278**



**AGENDA  
ORANGE COUNTY PLANNING BOARD**

**ORANGE COUNTY WEST CAMPUS OFFICE BUILDING  
131 WEST MARGARET LANE – LOWER LEVEL CONFERENCE ROOM (ROOM #004)  
HILLSBOROUGH, NORTH CAROLINA 27278  
Wednesday, March 6, 2013  
Regular Meeting – 7:00 pm**

No.	Page(s)	Agenda Item
1.		<b>CALL TO ORDER</b>
2.		<b>INFORMATIONAL ITEMS</b>
	3-4	a. Planning Calendar for March and April
	5-6	b. Interest Areas Raised by Planning Board Members at January 9, 2013 Meeting
3.		<b>APPROVAL OF MINUTES</b>
	7	January 9, 2013 ORC Meeting Notes
	8-14	January 9, 2013 Regular Meeting
4.		<b>CONSIDERATION OF ADDITIONS TO AGENDA</b>
5.		<b>PUBLIC CHARGE</b>
		<b>Introduction to the Public Charge</b>
		The Board of County Commissioners, under the authority of North Carolina General Statute, appoints the Orange County Planning Board (OCPB) to uphold the written land development laws of the County. The general purpose of OCPB is to guide and accomplish coordinated and harmonious development. OCPB shall do so in a manner which considers the present and future needs of its residents and businesses through efficient and responsive process that contributes to and promotes the health, safety, and welfare of the overall County. The OCPB will make every effort to uphold a vision of responsive governance and quality public services during our deliberations, decisions, and recommendations.
		<b>Public Charge</b>
		The Planning Board pledges to the residents of Orange County its respect. The Board asks its residents to conduct themselves in a respectful, courteous manner, both with the Board and with fellow residents. At any time, should any member of the Board or any resident fail to observe this public charge, the Chair will ask the offending member to leave the meeting until that individual regains personal control. Should decorum fail to be restored, the Chair will recess the meeting until such time that a genuine commitment to this public charge is observed.
6.		<b>CHAIR COMMENTS</b>

No.	Page(s)	Agenda Item
7.	15-50	<p><b>PRELIMINARY PLAT – ANNANDALE AT CREEKWOOD:</b> To review and make a recommendation to the BOCC on the Preliminary Plat application for Annandale at Creekwood.</p> <p><b>Presenter:</b> Michael Harvey, Current Planning Supervisor</p>
8.	51-72	<p><b>UNIFIED DEVELOPMENT ORDINANCE (UDO) TEXT AMENDMENT –</b> To make a recommendation to the BOCC on government-initiated amendments to the text of the UDO to modify existing language to provide additional reference to land disturbance thresholds related to stormwater management standards. This item was heard at the February 25, 2013 quarterly public hearing.</p> <p><b>Presenter:</b> Michael Harvey, Current Planning Supervisor</p>
9.	73-78	<p><b>UNIFIED DEVELOPMENT ORDINANCE (UDO) TEXT AMENDMENT –</b> To make a recommendation to the BOCC on government-initiated amendments to the text of the UDO to make changes to the section regarding the Planning Board’s Rules of Procedure. This item was heard at the February 25, 2013 quarterly public hearing.</p> <p><b>Presenter:</b> Perdita Holtz, Planning Systems Coordinator</p>
10.	79-80	<p><b>PLANNING BOARD LIAISON TO THE OUTBOARD -</b> To nominate a Planning Board member to fill the position on the OUTBoard designated for a Planning Board member.</p> <p><b>Presenter:</b> Perdita Holtz, Planning Systems Coordinator</p>
11.		<p><b>ANNUAL BOCC RETREAT:</b> To receive a brief oral report on planning-related outcomes of the annual BOCC retreat held on February 1, 2013.</p> <p><b>Presenter:</b> Craig Benedict, Planning Director</p>
12.		<p><b>COMMITTEE/ADVISORY BOARD REPORTS</b></p> <ul style="list-style-type: none"> <li>a. Board of Adjustment</li> <li>b. Orange Unified Transportation</li> </ul>
13.		<p><b>ADJOURNMENT</b></p>

**IF AN EMERGENCY OCCURS, OR IF YOU ARE RUNNING LATE FOR THE MEETING, PLEASE LEAVE A VOICE MAIL FOR PERDITA HOLTZ (919-245-2578).**

# March 2013

March 2013

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April 2013

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Feb 24 - Mar 2							
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Mar 3 - 9				7:00pm *PLANNING BOARD MEETING (West Campus Office Bldg )	7:00pm BOCC Reg Meeting (Department of Social Services)		
	10	11	12	13	14	15	16
Mar 10 - 16		7:30pm BOA- Board of Adjustment (West Campus Office Bldg) <b>CANCELLED</b>	7:00pm BOCC Work Session (Link Gov't Service Ctr)				
	17	18	19	20	21	22	23
Mar 17 - 23			7:00pm BOCC Reg Meeting (Southern Human Services)	7:00pm OUTBoard Meeting (West Campus Office Bldg)	7:00pm BOCC/Town of Chapel Hill Joint Meeting (Southern Human Services Ctr)		
	24	25	26	27	28	29	30
Mar 24 - 30						<b>HOLIDAY</b>	
	31	Apr 1	2	3	4	5	6
Mar 31 - Apr 6							

\*Requires Planning Board Member Attendance

# April 2013

April 2013

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	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Mar 31 - Apr 6	Mar 31	Apr 1	2	3 *7:00pm PLANNING BOARD MEETING (West Campus Office Bldg )	4	5	6
Apr 7 - 13	7	8 7:30pm Board of Adjustment (West Campus Office Bldg)	9 7:00pm BOCC Reg Meeting (Department of Social Services)	10	11 7:00pm BOCC Budget Work Session (Southern Human Services)	12	13
Apr 14 - 20	14	15	16 7:00pm BOCC Work Session (Link Gov't Services Ctr)	17 7:00pm OUTBoard Meeting (West Campus Office Bldg)	18	19	20
Apr 21 - 27	21	22	23 7:00pm BOCC Reg Meeting (Southern Human Services)	24	25 7:00pm BOCC/Schools (Dept of Social Services)	26	27
Apr 28 - May 4	28	29	30	May 1	2	3	4

\* Requires Planning Board Member Attendance

## Interest Areas Raised by Planning Board Members at January 9, 2013 Meeting

### Pete

1. Parts of UDO that deal with emergency services delivery
  - a. Drainage pipes under driveways should be 16-feet, not 10-feet as fire trucks have a 12-foot wheelbase. cul-du-sac widths, pull-overs on 1 lane private roads, tree clearance.
2. Home Occupations. Current ordinance is too restrictive (max of 2 people)

### Larry

1. Adult Entertainment
2. Gaming
3. Nuisance ordinance to protect EDDs

### Tony

1. Definition of Transit Oriented Development
2. Regulations in rural economic development areas (doesn't think they're viable without some re-write of regulations)

### Andrea

1. Supports looking a home occupations (especially traffic impacts)
2. Outdoor events and mass gatherings (enhance understanding. People need to know they might need a permit)

### Johnny

1. Protection of natural resources. (what does it mean?)
2. Ways to produce less solid waste per capita and dispose and manage waste in an environmentally responsible way. Somehow change waste stream paradigm.
  - a. Education needs to be done

### Lisa

1. Supports looking at home occupations

Alan

1. Streamline approval processes, especially for “no brainer” projects.
  - a. Determine what the hurdle is for people.

Buddy

1. Expand Efland interstate district to include areas around the US70 connector and parcels north and south of Ben Johnson Rd..

## D R A F T

**SUMMARY NOTES  
ORANGE COUNTY PLANNING BOARD  
JANUARY 9, 2013  
ORDINANCE REVIEW COMMITTEE**

NOTE: A quorum is not required for Ordinance Review Committee meetings.

**MEMBERS PRESENT:** Larry Wright (Chair), At-Large, Cedar Grove Township; Peter Hallenbeck (Vice-chair), Cheeks Township Representative; Lisa Stuckey, Chapel Hill Township Representative; Herman Staats, At-Large

**STAFF PRESENT:** Craig Benedict, Planning Director; Michael Harvey, Current Planning Supervisor; Perdita Holtz; Special Projects Coordinator; Tina Love, Administrative Assistant II

**AGENDA ITEM 1: CALL TO ORDER AND ROLL CALL**

**AGENDA ITEM 2: UNIFIED DEVELOPMENT ORDINANCE (UDO) TEXT AMENDMENTS – STORMWATER**  
To review and comment upon proposed revisions to the UDO to modify existing language requiring the submittal of formal stormwater plans as part of subdivision and development applications.  
**Presenter:** Michael Harvey, Current Planning Supervisor

*Mr. Harvey reviewed abstract*

Lisa Stuckey pointed out a needed punctuation correction.

Larry Wright asked about the flowchart and questioned its need.

Michael Harvey pointed out that it is intended to show the steps involved in getting site plan approval.

Lisa Stuckey suggested a word addition to the flowchart.

Pete Hallenbeck asked if the approval is for all future homes being built in the subdivision.

Michael Harvey confirmed that it does.

Pete Hallenbeck questioned the language that states that tree debris cannot be burned.

Michael Harvey conveyed that it is existing policy mandated by the BOCC. He further noted that is as it relates to development.

Lisa Stuckey asked about staff coverage.

Michael Harvey related that additional staff will need to be hired.

**AGENDA ITEM 3: ADJOURNMENT**

Meeting was adjourned by consensus

**DRAFT**  
**MINUTES**  
**ORANGE COUNTY PLANNING BOARD**  
**JANUARY 9, 2013**  
**REGULAR MEETING**

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**MEMBERS PRESENT:** Larry Wright (Chair), At-Large, Cedar Grove Township; Peter Hallenbeck (Vice-chair), Cheeks Township Representative; Alan Campbell, Cedar Grove Township Representative; Buddy Hartley, Little River Township Representative; Johnny Randall, At-Large Chapel Hill Township; Tony Blake, Bingham Township Representative; Andrea Rohrbacher, At-Large Chapel Hill Township; Lisa Stuckey, Chapel Hill Township Representative; Maxecine Mitchell, At-Large Bingham Township; Rachel Hawkins, Hillsborough Township Representative; Herman Staats, At-Large, Cedar Grove Township

**MEMBERS ABSENT:** Dawn Brezina, Eno Township Representative;

**STAFF PRESENT:** Craig Benedict, Planning Director; Michael Harvey, Current Planning Supervisor; Perdita Holtz; Special Projects Coordinator; Tom Altieri, Comprehensive Planning Supervisor; Tina Love, Administrative Assistant II

**HANDOUTS GIVEN AT MEETING** *Planning Calendars for 2013*

**AGENDA ITEM 1: CALL TO ORDER AND ROLL CALL**

**AGENDA ITEM 2: ELECTION OF CHAIR AND VICE-CHAIR FOR 2013**

Buddy Hartley nominated Pete Hallenbeck to serve as the Planning Board Chair for 2013. No other members were nominated. Planning Board members voted unanimously to appoint Pete Hallenbeck to serve as Chair.

Buddy Hartley nominated Alan Campbell to serve as the Planning Board Vice-Chair for 2013.

Larry Wright nominated Lisa Stuckey to serve as the Planning Board Vice-Chair for 2013.

*(paper ballots were distributed and cast)*

*Tina Love tabulated the votes. There was a tie.*

*(Alan Campbell arrived)*

Alan Campbell: I decline the nomination.

Lisa Stuckey was appointed as the Vice-Chair for 2013

Larry Wright: Congratulations to the officers.

**AGENDA ITEM 3: INFORMATIONAL ITEMS**

a) Planning Calendar for January and February

**AGENDA ITEM 4: APPROVAL OF MINUTES**

**DECEMBER 5, 2012 REGULAR MEETING**

**MOTION** by Lisa Stuckey to approve the December 5, 2012 Planning Board minutes. Seconded by Buddy Hartley.

**VOTE: UNANIMOUS**

**DRAFT**

55 AGENDA ITEM 5: CONSIDERATION OF ADDITIONS TO AGENDA

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58 AGENDA ITEM 6: PUBLIC CHARGE

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**Introduction to the Public Charge**

The Board of County Commissioners, under the authority of North Carolina General Statute, appoints the Orange County Planning Board (OCPB) to uphold the written land development laws of the County. The general purpose of OCPB is to guide and accomplish coordinated and harmonious development. OCPB shall do so in a manner which considers the present and future needs of its citizens and businesses through efficient and responsive process that contributes to and promotes the health, safety, and welfare of the overall County. The OCPB will make every effort to uphold a vision of responsive governance and quality public services during our deliberations, decisions, and recommendations.

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**PUBLIC CHARGE**

The Planning Board pledges to the citizens of Orange County its respect. The Board asks its citizens to conduct themselves in a respectful, courteous manner, both with the Board and with fellow citizens. At any time, should any member of the Board or any citizen fail to observe this public charge, the Chair will ask the offending member to leave the meeting until that individual regains personal control. Should decorum fail to be restored, the Chair will recess the meeting until such time that a genuine commitment to this public charge is observed.

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79 AGENDA ITEM 7: CHAIR COMMENTS

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Pete Hallenbeck: Larry, as outgoing Chair, would you like to make any comments?

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Larry Wright: It has been a pleasure to serve you as chair. I have learned and witnessed that this Board and this county does work from the grass roots level up and the BOCC does listen to the Board. Your role on this Board is very important and over the time I have appreciated seeing some people who were reluctant to speak up make their opinions known and they are doing this now and I am happy to see you flourish. One thing I consider very important, and I hope new members continue to observe, is that you exercise your right to have a dissenting opinion and there are times when the BOCC does listen to the dissenting opinion and they move on that. Buckhorn road was a prime example because the majority voted against Buckhorn. Thank you for allowing me to serve.

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**Agenda Item 8: Kennel Processes and Regulations** – To continue discussion on BOCC-requested input into the processes and regulations for kennels. This item was continued from the November 7, 2012 regular meeting when the work plan was acted upon, the Planning Board Chair and Vice-Chair asked that this be a discussion item for the January 9, 2013 agenda.

**Presenter:** Michael Harvey, Current Planning Supervisor

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Michael Harvey: Reviewed abstract on page 15.

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Alan Campbell: On the chart under "Review Process" and "Staff Review and Approval" for Durham and Chapel Hill, does that mean it is discretionary? Also, is that a good thing in your mind?

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Michael Harvey: Obviously, it is similar to Orange County staff reviewing and approving a proposed kennel operation. They have their version of the UDO with guidelines and standards and their obligation is to ensure the project complies with all of those standards. They review a site plan and make the determination that complies with development regulations in issuing a zoning compliance permit allowing the project to move forward. I think you have a policy in this county where the elected officials have determined that certain uses due to their nature deserve a heightened level of review. I am not speaking against Class II Kennel being a special use permit. I think

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**DRAFT**

109 there are issues involved with their locations that warrant a heightened level review. If you are asking if staff would  
 110 be comfortable approving it, with the ordinances we have and the standards, I am comfortable with approving or  
 111 denying anything as long as I have justification.

112  
 113 Alan Campbell: My question gets into the notion that if you have a special use permit that you are held to if they  
 114 meet the requirements then you have to approve it but if it is discretionary then you have more room.

115  
 116 Michael Harvey: If you, as an applicant, prove you comply with the code, I also have to issue the permit. If there  
 117 are interpretative issues, then you have the right to appeal me.

118  
 119 Alan Campbell: If you have someone who opened a kennel where they were not supposed to and don't meet any  
 120 requirements, what is the enforcement mechanism?

121  
 122 Michael Harvey: If we find an illegal kennel, we initiate zoning enforcement actions which mean we can issue civil  
 123 citations daily in the amount of \$500 after appropriate notices of violation are issued. We can seek an injunction  
 124 from the court. They are technically guilty of a misdemeanor if they violate the land use regulations so we have  
 125 enforcement procedures we can initiate.

126  
 127 Alan Campbell: One of the problems with animal enforcements is that if it is the middle of the night, they will not  
 128 address that issue.

129  
 130 Michael Harvey: If is it a land use issue, we initiate an enforcement action. You, as a property owner, do have  
 131 rights to appeal. If you choose to continue an action we have told you is illegal, we have lots of means to make  
 132 sure you comply.

133  
 134 Lisa Stuckey: If you are doing a Class II, maybe I or II, you have to get a permit for Animal Services for each of  
 135 those and then for Class II, you have to get your Class B Special Use Permit. You have to get the Class II kennel  
 136 permit within 30 days of occupancy, would that be 30 within the start of the kennel? Can you open it up and 28  
 137 days later go get your permit?

138  
 139 Michael Harvey: Animal Services provides initial feedback on the proposal and they have met with the applicant  
 140 and looked over the plan. We have documentation to submit to the Board of Adjustment but they can't do final  
 141 approval until they make application and submit the building plans. They can't submit the building plans until they  
 142 have a building permit submitted by the inspections department stating this meets building code so we usually allow  
 143 that grace period for Animal Services to issue the permit on a legally issued kennel operation.

144  
 145 Lisa Stuckey: Does that mean you can have the dogs there before you are issued the permit?

146  
 147 Michael Harvey: The way it is currently worded and the way Animal Services regulations are worded that is a  
 148 correct statement.

149  
 150 Lisa Stuckey: Is that a good idea?

151  
 152 Michael Harvey: One of the reasons is that Animal Services gives you 30 days to get the final permit.

153  
 154 Tony Blake: When I spoke to the kennel owner where we are, he said he felt there was a fair amount of confusion  
 155 between the state regulations and the county regulations but I think what you are describing is the case where  
 156 someone has a lot of dogs and someone decides to convert to a legitimate kennel operation.

157  
 158 Pete Hallenbeck: Didn't you say part of those 30 days was to avoid the time crunch?

159  
 160 Michael Harvey: Yes. And Animal Services has to sign off on the building permit to say that it meets their code  
 161 before a building permit is issued.

162

**DRAFT**

163 Tony Blake: But doesn't the state have to come out as well?  
 164  
 165 Michael Harvey: I don't know the answer to that question because it is not a provision of the UDO.  
 166  
 167 Lisa Stuckey: We wouldn't let people move into a house or building until all the approvals are finished.  
 168  
 169 Michael Harvey: If they get a Certificate of Occupancy and Animal Services signs off on the issuance of that permit  
 170 and it just takes 30 days to get the paperwork done to say you have your permit, I don't see that it is a hardship  
 171 since Animal Services has been involved in the process from day one approving the kennel operation. You have to  
 172 get the Class B Special Use Permit before you can initiate construction.  
 173  
 174 Herman Staats: Relating to the seasonal housing of hunting dogs, is that considered a kennel operation?  
 175  
 176 Michael Harvey: If you have over 20 animals, you are technically in violation of the code as it is written.  
 177  
 178 Herman Staats: If it is fewer than 20?  
 179  
 180 Michael Harvey: If you are keeping them for competition, show or sport then you have to have a Class I Kennel  
 181 Permit.  
 182  
 183 Larry Wright: If you have a research facility and they are .... so you can have two types of research facilities, one  
 184 operated by the state and one by the pharmaceutical company for profit, how is that handled?  
 185  
 186 Michael Harvey: A research facility is an independent land use category in the table of permitted uses. The  
 187 animals are not being transferred, moved in or changed out for commercial endeavors but experimented on.  
 188  
 189 Pete Hallenbeck: What has been the biggest problem when people come in to get kennels?  
 190  
 191 Michael Harvey: Adjacent property owner reaction.  
 192  
 193 Pete Hallenbeck: Historically, is that main concern noise?  
 194  
 195 Michael Harvey: Noise plays a component piece, diminished land value, traffic, not in my back yard.  
 196  
 197 Pete Hallenbeck: With the added feature of barking dogs. Barking dogs are an interesting one because the noise  
 198 technically doesn't meet the criteria for the noise ordinances in terms of how many decibels, it is not a constant  
 199 noise. The problem is that it is still annoying and the answer may be if the BOCC wants to deal with a barking dog  
 200 ordinance.  
 201  
 202 Michael Harvey: Animals Services has regulations governing barking but the comment is will there be an animal  
 203 services officer available at 2:00 a.m. in the morning.  
 204  
 205 Pete Hallenbeck: The rules are in place but you really need a way to enforce them at 2:00 a.m.  
 206  
 207 Rachel Hawkins: Is it because of the kennel at New Hope that these questions come up?  
 208  
 209 Michael Harvey: There are several kennels.  
 210  
 211 Rachel Hawkins: What do people want us to do?  
 212  
 213 Michael Harvey: Deny them.  
 214  
 215 Rachel Hawkins: But they are already there.  
 216

**DRAFT**

217 Michael Harvey: All the cases we have had so far, the adjacent property owners have failed to submit just cause.

218

219 Johnny Randall: Is there an odor component to this?

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221 Michael Harvey: The UDO makes some reference to air pollution but no smell provisions.

222

223 Larry Wright: I have served on several animal use committees in conjunction with my work at the NIH and these  
224 facilities are certified and are subject to be recertified by the U.S. Department of Agriculture. I am not sure what the  
225 source of the odor is but these boards that certify them and many are well established with veterinary schools so it  
226 is a certification process. PETA is there all the time. It has been very gratifying to see the tight control and  
227 safeguarding the animals being used in research.

228

229 Maxecine Mitchell: Did you find anything that anyone is doing that is better than what we have in place?

230

231 Michael Harvey: I wouldn't say it is better or worse but it works better for them.

232

233 Maxecine Mitchell: Dogs are going to make noise but does our regulation muffle the sound?

234

235 Michael Harvey: The last two applications we had, there was an acoustical engineer brought out to talk about how  
236 the applicant would construct the structure to address that issue and on the New Hope Kennel is they don't like it  
237 but they don't hear the dogs.

238

239 Pete Hallenbeck: It is interesting to note that Chapel Hill's answer is to have the kennels in non-residential areas  
240 and Carrboro's answer is to sound proof.

241

242 Michael Harvey: In Carrboro, it is approved through the same process that we use.

243

244 Rachel Hawkins: What are we doing with this information?

245

246 Pete Hallenbeck: Receive the update and provide feedback.

247

248 Michael Harvey: At some point, we are going back to the elected officials and provide them with your comments  
249 and comments from animal service and find out what they want to do. The ones that are already there have  
250 existing special use permits.

251

252

253 **Agenda Item 9: Implementation Bridge Priorities** – To discuss Planning Board priorities for work to be  
254 started and/or accomplished in 2013. At the November 7, 2012 regular meeting when the  
255 work plan was acted upon, the Planning Board Chair and Vice-Chair asked that this be a  
256 discussion item for the January 9, 2013 agenda

257

**Presenter:** None, discussion only

258

259 Pete Hallenbeck: We have heard Planning Board members say they have opinions about things they would like to  
260 change. I would like to get information from you about things you would like to address. I would like to look at some  
261 of the parts of the county ordinance that would have an impact on emergency services delivery. Does anyone have  
262 an item they would like to discuss?

263

264 Tony Blake: I have become interested in transit oriented development and how it fits.

265

266 Pete Hallenbeck: I would like to reference Attachment 2 which is the work that goes on the planning department to  
267 define things. One of the ongoing tasks is to take this list and come up with a priority and there are a number of  
268 topics already listed in the implementation bridge that are going to be working into this document.

269

**DRAFT**

270 Larry Wright: There are a couple of areas that our ordinance doesn't address. One is adult entertainment and the  
 271 other is gaming. Even though gaming looks like it is not doing well that doesn't mean in the future it will not be legal.  
 272 I think we should identify that before something comes up.

273  
 274 Pete Hallenbeck: That makes sense. Another item on my list is home offices. The current ordinance is that you can  
 275 have two people. I think if you are in a rural area, you could have three or four people and not adversely impact the  
 276 community. How can we balance that against with making sure you don't annoy your neighbors?

277  
 278 Johnny Randall: There is mention of protection of natural resources but a lot of times it doesn't say what that means.  
 279 What does it mean to protect a natural area?

280  
 281 Tony Blake: I also have an interest in the regulations for rural economic development areas.

282  
 283 Andrea Rohrbacher: The home business is also of interest to me. I am also interested in the outdoor events and  
 284 mass gatherings and some definitions to make it clear to citizens if they are having an event, they need a permit with  
 285 specifics.

286  
 287 Pete Hallenbeck: The home business issue came up during the Efland Small Area Plan; it was contrasting someone  
 288 wanting to open a beauty salon versus an architect that may have a client show up occasionally.

289  
 290 Craig Benedict: The interest on the existing goals the county has from 2009 did mention the protection and  
 291 promotion of Economic Development Zones and how an adult entertainment establishment in the wrong area next to  
 292 one of our 400 acre economic development zones would kill it. Part of our research is; are there any external issues  
 293 that could affect the economic development zones we have. In the goals on page 23, I put code enforcement in  
 294 Economic Development areas (i.e. abandoned mobile homes or derelict houses), is there a way to bolster our code  
 295 enforcement efforts. We have limitations at the county level but for the protection of the work we have been doing  
 296 over the last few years, the image of those areas is a determining factor.

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 298 Larry Wright: I would like to support that to look into the nuisance ordinance and protect these economic  
 299 development districts.

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 301 Pete Hallenbeck: The BOCC has a retreat on February 1 so if there are things you are interested in, email them to  
 302 me and I will get with staff.

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 304 Lisa Stuckey: The issues that were raised by both of the towns on page 51, 52, etc....

305  
 306 Perdita Holtz: Those have been resolved.

307  
 308 Lisa Stuckey: I am also interested in the home occupations. I was on the Chapel Hill committee when they passed  
 309 theirs.

310  
 311 Rachel Hawkins: What does theirs include?

312  
 313 Lisa Stuckey: It sounds more liberal than what the county has. We looked at the same issues impacts on neighbors.  
 314 The issue arose for Chapel Hill in a subdivision where there were home businesses with a lot of people coming and  
 315 going all the time with big trucks, etc. I think Chapel Hill would be a good one to look at.

316  
 317 Craig Benedict: I would like to review some of the BOCC goals adopted in 2009. (Craig will forward a copy to the  
 318 Board).

319  
 320 Johnny Randall: Another issue is less solid waste per capita with cost effective and environmentally responsible  
 321 disposal and management. That is a huge issue in Orange County since we are going to export out solid waste.  
 322 There is so much education that needs to be done and reducing solid waste is one of the easiest things to do.

323

**DRAFT**

324 Tony Blake: Are you suggesting regulating the private trash haulers?

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326 Johnny Randall: I am thinking of changing the waste stream paradigm that a majority of people live by.

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329 **AGENDA ITEM 10: COMMITTEE/ADVISORY BOARD REPORTS**

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a) Board of Adjustment

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Larry Wright: We met with the attorneys. Protect Rural Orange wanted UNC to go through the special use permit process so the Board of Adjustment did decide that. We met with just the attorneys and went through the minutes and consolidated the findings. They were codified and submitted.

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b) Orange Unified Transportation

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Alan Campbell: We had new members added so it looks like we have some renewed energy and interest from Commissioners. Basically we had a standard meeting and reviewed the progress of various road projects and our own wish list of work items for the coming year.

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344 **AGENDA ITEM 11: ADJOURNMENT**

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**MOTION:** made by Johnny Randall to adjourn. Seconded by Lisa Stuckey.

347 **VOTE: UNANIMOUS**

**ORANGE COUNTY  
PLANNING BOARD  
ACTION AGENDA ITEM ABSTRACT**  
**Meeting Date:** March 6, 2013

**Action Agenda  
Item No.** 7

**SUBJECT:** Major Subdivision Preliminary Plat Application – Annandale at Creek Wood

**DEPARTMENT:** Planning and Inspections

**PUBLIC HEARING: (Y/N)**

No

**ATTACHMENTS:**

1. Preliminary Plat Application Package
2. Property and Vicinity Map
3. Staff Generated Correspondence
4. Fiscal Impact Analysis
5. Excerpt of Approved Minutes from the November 7, 2012 Planning Board Meeting

**INFORMATION CONTACT:**

Michael D. Harvey, Planner III (919) 245-2597  
Craig Benedict, Director (919) 245-2575

**PURPOSE:** To review and make a recommendation to the BOCC on a Major Subdivision Preliminary Plat application in accordance with the provisions of Section 2.15 and Article 7 *Subdivisions* of the Unified Development Ordinance (UDO) for the Annandale at Creek Wood project off of Whitfield Road.

**BACKGROUND:** The Planning Board reviewed a Concept Plan for the subdivision at its November 7, 2012 regular meeting. Agenda materials for this meeting can be viewed utilizing the following link: <http://orangecountync.gov/planning/documents/NovPBPacket.pdf>. Minutes from the meeting are contained within Attachment 5.

**Development Process, Schedule, and Action:** In accordance with Section 2.15 of the UDO, the review of a major subdivision is as follows:

- **FIRST ACTION** – Submission of a concept plan application containing a proposed layout for the project based on a ‘conventional’ and ‘flexible’ development option.

*STAFF COMMENT:* As indicated at the November 7, 2012 Planning Board meeting a complete concept plan application was submitted.

- **SECOND ACTION** – Planning staff schedules a Neighborhood Information Meeting to invite property owners within 500 feet of the subject property to view the proposal.

*STAFF COMMENT:* Staff held the required meeting on October 15, 2012.

- **THIRD ACTION** – The Planning Board shall review and make a recommendation on the Concept Plan Application making a decision on whether the proposed development should proceed as a ‘conventional’ or ‘flexible’ development.

*STAFF COMMENT:* At its November 7, 2012 regular meeting the Board voted unanimously to approve the flexible development option for Annandale at Creek Wood. Per Section 2.15.2 (G) (3) of the UDO the applicant has two years, from

the date of Concept Plan approval, to prepare and file an application for Preliminary Plat approval.

- **FOURTH ACTION** – Once a concept plan option is approved, the Planning Board reviews and makes a recommendation on the approval of the Preliminary Plat for the project.

*STAFF COMMENT:* The Planning Board will review the Preliminary Plat application at its March regular meeting.

- **FIFTH ACTION** – The BOCC reviews and takes action on the Preliminary Plat application.
- **SIXTH ACTION** – If approved, and once all construction activities have been completed or appropriate financial assurances have been approved, staff will sign off on a Final Plat, which will be recorded in the Orange County Registrar of Deeds Office.

Proposal: The applicant has submitted a Preliminary Plat application for a subdivision consistent with the Planning Board's action on the aforementioned Concept Plan proposing 11 single-family residential lots, each at least two acres in area, with an overall proposed density of one dwelling unit per every 3.31 acres of land area for the project.

Roads: The applicant proposes the creation of two roads to serve the project, each constructed to NC Department of Transportation (DOT) public road standards. The applicant intends to turn these roads over to NC DOT for maintenance at a future date. Specifically, the proposal calls for:

- Construction of two cul-de-sac roadways. The first, tentatively identified as Dumfries Lane, will provide access to lots 8 through 11. The second, tentatively identified as Lochwood Court, will provide access to lots 1 through 7.

*STAFF COMMENT:* In reviewing the matter with NC DOT, staff has been informed there are no concerns over accepting the roads for maintenance so long as they are constructed to DOT standards. Please refer to Attachment 3 for additional information.

- Roads shall be located within a fifty-foot right-of-way and involve a 27-foot improved travel way and a 37-foot cul-de-sac radius that will include curb and gutter. These dimensions comply with NCDOT standards for residential subdivisions.

*STAFF COMMENT:* At the November 7, 2012 Planning Board meeting, a board member suggested the applicant consider a 40 foot diameter rather than the depicted 35 foot diameter denoted on the Concept Plan for the proposed cul-de-sacs.

The applicant revised the plans proposing a 37 foot diameter in the cul-de-sacs.

- Access to Lot 7 will require a stream crossing. Both Planning and NC DOT staff discussed the viability of having a driveway off Whitfield Road to serve this lot and avoid a stream crossing. Unfortunately, it was determined direct access off Whitfield Road would create other issues and was not viable.

*STAFF COMMENT:* The proposed crossing appears to be consistent with the provisions of Section 6.13 *Stream Buffers* of the UDO.

Utilities – Water and Sewer: The applicant is proposing to serve the project with individual wells and septic systems on each lot. Sheet C3.0 of the preliminary plat denotes anticipated locations for well and septic sites for the lots.

*STAFF COMMENT:* Orange County Environmental Health has indicated preliminary approval for the proposed septic and well system locations.

Stormwater Drainage: Drainage will be handled through a curb and gutter system located within the proposed road right-of-way. The property is subject to recently adopted stormwater management guidelines.

The Preliminary Plat provides an assessment demonstrating the project will comply with established standards. As part of the proposed stormwater management system, the applicant has voluntarily reduced the maximum allowable impervious surface area for the entire project (i.e. roadways, driveways, and all buildings under roof) to 10.7% or 169,937 sq. ft., in order to comply with Section 6.14.7 *Stormwater Management – Nutrient Load* of the UDO.

*STAFF COMMENT:* Orange County Erosion Control has indicated the project complies with applicable stormwater regulations. Please refer to Attachment 3 for additional information.

Open Space: The plan denotes an open space area in and around an existing stream, totaling approximately 6.7 acres in area, and a 2.4 acre open space parcel to the west. The total area reserved as open space for the project is 529,144 square feet of land area or 12.16 acres (33.31%) of the subject parcel. Open space areas are composed of existing, mature, foliage and trees with an approximate height of between 50 to 70 feet.

The Preliminary Plat denotes a pedestrian open space access (POSA) affording potential future connectivity to an adjacent property, owned by TLC, as well as a pedestrian footbridge through the open space over the existing stream. The project calls for an internal trail system connecting Dumfries Lane to Lockwood Court passing between Lots 9 and 10 and Lots 5 and 6 respectively. This internal trail system has not been designed as a POSA as the applicant is concerned over third party access and wishes to limit use of the aforementioned internal trail to residents of the project.

*STAFF COMMENT:* Staff has determined the proposed open space meets the requirements of the UDO.

Land Use Buffer: There will be a 75-foot buffer along Whitfield Road comprised of existing, dense, vegetation composed of existing, mature, foliage and trees with an approximate height of between 50 to 70 feet. The applicant is also proposing a 50 foot tree protection area along the perimeter of the project.

*STAFF COMMENT:* Staff has determined the proposed land use buffer meets the requirements of the UDO.

Additional Comments: Attachment 3 contains additional comments for this project, including:

- An e-mail from David Sykes, Orange County Emergency Management, indicating there is an existing pond in the area to address fire suppression issues.
- An e-mail from Jeff Scouten, Orange County Solid Waste, approving road layout and construction.

**JPA Review:** In accordance with the Joint Planning Area Agreement, this project was sent to the Town of Chapel Hill for review and comment on December 17, 2012. As of this date staff has not received any comments.

**Analysis:** As required under Section 2.15.3 (C) (7) of the UDO, the Planning Director is required to: *'submit a written analysis of the application and his/her recommendation'* on the preliminary plat to the Planning Board for consideration. In analyzing this request, the Planning Director offers the following:

1. The application has been deemed complete in the required form and quantity in accordance with the requirements of Section 2.2 and 2.15.3 of the UDO.
2. All required auxiliary documents have been properly submitted and the application has been reviewed by the appropriate officials and agencies.
3. The application is compliant with all provisions of the UDO in regard to minimum lot size, impervious cover, density, open space percentage, roadway design, and land use buffers.
4. The proposal is consistent with the various goals outlined within the Comprehensive Plan concerning development, including:
  - a. Land Use Overarching Goal: *Coordination of the amount, location, pattern, and designation of future land uses, with availability of County services and facilities sufficient to meet the needs of Orange County's population and economy consistent with other Comprehensive Plan element goals and objectives.*
  - b. Land Use Goal 2: *Land uses that are appropriate to on-site environmental conditions and features and that protect natural resources, cultural resources, and community character.*
  - c. Land Use Goal 3: *A variety of land uses that are coordinated within a program and pattern that limits sprawl, preserves community and rural character, minimizes land use conflicts, supported by an efficient and balanced transportation system.*
5. The proposed subdivision is consistent with the provisions and goals of the Joint Planning Land Use Plan and Joint Planning Agreement.

**FINANCIAL IMPACT:** Attachment 4 provides a fiscal impact analysis for the project, as a whole, on County services. Staff has determined the project would not require augmentation of County budgetary outlays to support services and that anticipated revenues from property taxes should supplement increases in cost.

**RECOMMENDATION:** The Planning Director recommends the Board:

1. Receive the Preliminary Plat application for the Annandale at Creek Wood Subdivision,
2. Discuss the proposal, and
3. Recommend approval of the Preliminary Plat as submitted.

## EARTHCENTRIC ENGINEERING, INC.



204 W. Clay Street  
 Mebane, NC 27302

Phone: 919-563-9041  
 Fax: 919-304-3234  
 E-mail: Phil.Koch@EarthCentric.com

To:	Michael Harvey Orange County Zoning	Date:	12-07-2012
Address:	131 West Margaret Lane Hillsborough, NC 27278	Project:	12-017 – Annandale at Creek Wood
Phone:	919-245-2897		

**Documents Enclosed:**

Item	Pages	Copies	Description
1	8	25	Preliminary Major Subdivision Plans
2	2	1	Application for Preliminary
3	1	1	Copy of Orange County Tax Map
4	1	1	Estimated Build-Out Schedule
5	22	1	Example copy of protective covenants
6	7	1	Copy of Driveway Study
7		1	Preliminary Calculation Set
8	1	1	Submittal Fee

**Instructions/Comments:**

Preliminary Major Subdivision Submittal

Transmitted Via: Hand Deliver

From:	Shawn Sidener
Title:	Office Manager

# APPLICATION FOR PRELIMINARY PLAN (PROVAL) MAJOR SUBDIVISION

ORANGE COUNTY

5/05

PLEASE TYPE OR PRINT (INK ONLY)

DATE: \_\_\_\_\_

SUBDIVISION NAME: Annandale at Creek Wood

LOCATION: 2520 Whitfield Road, Chapel Hill, NC 27514

OWNER/DEVELOPER: Whitfield Lots, LLC

ADDRESS: 200 Kenilworth Place TELEPHONE NO.: 919-929-9653  
Chapel Hill, NC 27516

AGENT/CONTACT: Heffner Properties, Inc. / Thomas Heffner

ADDRESS: 4130 Garrett Road, #117 TELEPHONE NO.: 919-929-0518  
Durham, NC 27707

**A SUMMARY INFORMATION** Pin# 9880-28-1953  
 Orange County Tax Map \_\_\_\_\_ Block \_\_\_\_\_ Lot(s) \_\_\_\_\_ Township 7  
 Zoning District(s): RB - Rural Buffer  
 Total Number of Acres: 36.46  
 Total Number of Lots: 11 Average Lot Size: 2.07 AC Minimum Lot Size: 2.00 AC  
 Number/Type of Structures: (existing) None (proposed) 11 Single Family Homes  
 Linear Feet in Streets: 1,260.84 LF Acres in Open Space: 12.15 AC  
 Water Supply: \_\_\_\_\_ Public (specify) \_\_\_\_\_ Community \_\_\_\_\_  Well Individual  
 Wastewater Disposal: \_\_\_\_\_ Public (specify) \_\_\_\_\_ Community \_\_\_\_\_  Septic Individual  
 School District: CH - Carr School Fire District: New Hope Fire  
 General Land Uses in Area: Residential & Vacant Lands  
 Critical Areas: Stream & Buffer on Site stream/drainageways \_\_\_\_\_ flood prone areas \_\_\_\_\_  
Jordan Lake Unprotected watershed (specify) \_\_\_\_\_ historic sites \_\_\_\_\_  
 other (explain) \_\_\_\_\_

Is the property to be subdivided currently under "farm use value taxation"? Yes \_\_\_\_\_ No . If "yes," please contact the Orange County Tax Office. Subdivision of the property may require payment of deferred taxes under "farm use value taxation."

**B** All plats must be submitted on sheet no smaller than one inch equals two-hundred feet (1"=200') and no larger than one inch equals twenty feet (1"=20') and must contain the following information:

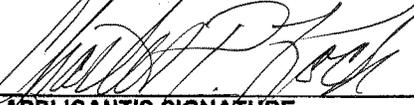
- |                  |  |                  |  |
|------------------|--|------------------|--|
| <u>CPK</u> _____ | subdivision name   | <u>CPK</u> _____ | zoning of tract and adjacent properties  |
| <u>CPK</u> _____ | name & address of owner(s)   | <u>CPK</u> _____ | building setback lines by notation or typical lot layout   |
| <u>CPK</u> _____ | name & address of subdivider (if other than owner)   | <u>CPK</u> _____ | location and width of existing and proposed easements (drainage, utilities, roads, etc.)   |
| <u>CPK</u> _____ | name of surveyor, engineer, landscape architect or architect, address, registration # & seal | <u>CPK</u> _____ | Existing, proposed and adjoining rights-of-way including dimensions and street names and State Road numbers. Linear feet of road centerlines and approximate acreage of new street rights-of-way |
| <u>CPK</u> _____ | (title) Preliminary Plan   |                  |  |
| <u>CPK</u> _____ | scale, north arrow   |                  |  |
| <u>CPK</u> _____ | date of plan preparation and revisions   |                  |  |
| <u>N/A</u> _____ | township, tax map-block-lot references   | <u>CPK</u> _____ | existing and proposed utilities, including type, sizes, hydrants, valves, manholes   |
| <u>CPK</u> _____ | Parent Parcel Identification #   |                  |  |
| <u>CPK</u> _____ | deed book and page # of property to be subdivided  |                  |  |
| <u>CPK</u> _____ | boundary described with bearings and distances   | <u>CPK</u> _____ | existing and proposed curbs, gutters and culverts, including sizes and grades  |

<u>CPK</u>	_____	total acreage of the tract and acreage of lots, including and excluding area within rights-of-way	<u>N/A</u>	_____	location and width of alleys, sidewalks, bike lanes, transit systems, and bus stops
<u>CPK</u>	_____	control corner	<u>CPK</u>	_____	typical street cross-sections and intersection details including design and width of travelway and shoulders
<u>CPK</u>	_____	proposed lot lines with dimensions	<u>CPK</u>	_____	horizontal alignment, centerline radius, and general curve data on all proposed streets
<u>CPK</u>	_____	lot & block numbers			
<u>N/A</u>	_____	phasing line(s)			
<u>CPK</u>	_____	topography at ten (10) foot intervals	<u>CPK</u>	_____	permanent features such as buildings, cemeteries, historic landmarks
<u>CPK</u>	_____	water bodies, streams, floodways and floodplains			
<u>CPK</u>	_____	stream buffers	<u>CPK</u>	_____	adjoining lot layout names of adjoining property owners. If subdivided, subdivision plat name, plat book & page number, and perimeter lot numbers.
<u>CPK</u>	_____	location and size of parcels dedicated for public use, recreational use or reserved in common, with purpose noted			
<u>CPK</u>	_____	impervious surface data (if located in water supply watershed)	<u>N/A</u>	_____	location and size of lots of restricted development potential and notation on plat regarding same
<u>CPK</u>	_____	vicinity map showing general location of subdivision with streets and roads identified by State Road number and name	<u>CPK</u>	_____	stormwater detention and/or retention sites and undisturbed areas for infiltration purposes (if located in water supply watershed)
<u>CPK</u>	_____	landscaping and buffer requirements			
<u>N/A</u>	_____	township, corporate and extraterritorial planning jurisdiction lines which cross the property	<u>CPK</u>	_____	identified natural areas and wildlife corridors

**C OTHER SUBMITTAL REQUIREMENTS:**

1. Twenty-five (25) copies of the Preliminary Plat.
2. One full size copy of an Orange County Tax Map (with tax parcels involved clearly marked).
3. Where municipal or OWASA sewer is not available, a copy of the Preliminary Plat indicating Health Department approval/denial for each lot show thereon.
4. Where a private road is proposed, a written statement by the applicant or his/her authorized representative which sets for the justification for a private road (see Section IV-B-3-d-1 of the Orange County Subdivision Regulations).
5. Auxiliary documents, in draft form, prepared in accordance with Section VI of this Ordinance which assure completion and/or maintenance of improvements required by this Ordinance. Such documents may include, but not be limited to, a private road maintenance agreement and articles of incorporation and restrictive covenants pertaining to a homeowners association. These documents may be required as necessary as evidence that the ordinance requirements are being met.
6. Fee - \$500 plus \$5.00 per lot (one fee for Preliminary and Final Plat).
7. If the subdivision contains 10 lots or more, the following information shall be submitted with the application:
  - a. Number of years to buildout.
  - b. Number of houses to be built during each year until buildout.
  - c. Average price of houses including lots for each year to buildout.

I certify that to the best of my knowledge the information contained above, and in the supporting documents, is a factual representation of the proposed development. I acknowledge that by signing this application, the Orange County Planning and Inspections Department is authorized, pursuant to N.C. Gen. Stat. Section 153a-360, to make as many inspections of the subject property as may be necessary to verify that the proposed work outlined herein is consistent with the provisions of all applicable State and local laws, ordinances and regulations. By signing this application, I acknowledge and agree that inspectors, zoning officers, erosion control officers, and other staff of the Orange County Planning & Inspections Department have a right, upon presentation of proper credentials, to enter the subject property at any reasonable hour for the purposes of inspection or other enforcement action.


12/7/12

12/7/12

APPLICANT'S SIGNATURE                      DATE                      OWNER'S SIGNATURE                      DATE

**FEES:** Amount \_\_\_\_\_ Date Paid \_\_\_\_\_ Receipt # \_\_\_\_\_



**ANNANDALE AT CREEK WOOD**  
**ESTIMATED BUILD-OUT SCHEDULE**

- a. **Number of years to build-out: Three (2013, 2014, 2015)**
- b. **Number of houses to be built during each year until build-out:**
  - 2013 – 3**
  - 2014 – 5**
  - 2015 – 3**
- c. **Average price of houses including lots for each year to build-out:**
  - 2013 - \$750,000**
  - 2014 - \$800,000**
  - 2015 - \$850,000**

# MAJOR SUBDIVISION - PRELIMINARY PLAN FOR: ANNANDALE AT CREEK WOOD

### ECE GENERAL NOTES

- GENERAL NOTES**
- EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM SURVEY DATA SUPPLIED BY R. S. JONES AND ASSOCIATES, INC.
  - WORK WITHIN PUBLIC RIGHT-OF-WAYS SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS, NOTIFICATIONS, STANDARDS AND POLICES.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK WITHIN PUBLIC R/W FOR THE MAINTENANCE OF LANE-SHARED CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE N.C. SUPERHIGHWAY TO THE MAINTENANCE AND LOCAL CITY INSPECTORS' DIRECTION.
  - ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT PLANS AND/OR SPECIFICATIONS, LOCAL STANDARD DETAILS AND CONSTRUCTION STANDARDS, STATE CONSTRUCTION STANDARDS, AND OTHER APPLICABLE CONTRACT DOCUMENTS.
  - CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING ALL APPROPRIATE PARTIES AND ASSURING THAT UTILITIES ARE LOCATED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CALL NO ONE CALL (PREVIOUSLY 1.800.0) AT 1-800-632-6448 FOR UTILITY LOCATING SERVICES 48 HOURS PRIOR TO COMMENCEMENT OF ANY WORK. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
  - UNDERGROUND UTILITIES SHOWN USING BEST AVAILABLE INFORMATION. ALL LOCATIONS SHALL BE CONSIDERED APPROXIMATE. ONLY THESE MAY BE MORE UNDERGROUND UTILITIES THAN ARE SHOWN HEREON. CONTRACTOR SHALL FIELD LOCATE ALL UTILITIES PRIOR TO ANY EXCAVATIONS.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL DEMOLITION AND CONSTRUCTION ACTIVITIES.
  - ALL CLEARING, GRUBBING AND UNSUITABLE FILL MATERIAL SHALL BE DISPOSED OF LEGALLY.
  - ALL PAVEMENT, CURB, STORM DRAINAGE PIPE, AND STRUCTURES TO BE REMOVED SHALL BE HAULKED OFFSITE AND DISPOSED OF LEGALLY.
  - ALL SHALL BE SERVED BY WELL AND SEPTIC.

CONTRACTOR SHALL NOT MAKE ANY MODIFICATIONS TO THE APPROVED DRAWINGS WITHOUT PRIOR APPROVAL OF BOTH THE DESIGN ENGINEER AND LOCAL INSPECTOR.

### GRADING & STORM DRAINAGE NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL CONSTRUCTION STANDARDS, SPECIFICATIONS, AND PROCEDURES AND THE NCEM'S SEDIMENTATION AND EROSION CONTROL STANDARDS, SPECS., AND PROCEDURES.
- CONTRACTOR SHALL VERIFY THAT ALL APPLICABLE STATE AND LOCAL PERMITS REQUIRED FOR THE COMMENCEMENT OF GRADING OPERATIONS HAVE BEEN OBTAINED PRIOR TO START OF GRADING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING UTILITIES PRIOR TO THE BEGINNING OF DEMOLITION AND/OR CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO REMAIN DURING ALL CONSTRUCTION ACTIVITIES.
- ALL STORMWATER MANAGEMENT FACILITIES SHALL BE DESIGNED AND CONSTRUCTED TO MEET ALL STATE AND LOCAL REQUIREMENTS, INCLUDING 2007 STATE STANDARDS FOR WATER QUALITY AND DETENTION FACILITIES.
- EROSION CONTROL MEASURES SHALL BE PROVIDED AS NEEDED TO PROTECT ADJACENT PROPERTIES.
- CONTRACTOR SHALL PROVIDE ALL STAKING, FLAGGING AND/OR FENCING NECESSARY TO PROVIDE PROPER PROTECTION OF THE STREAM BUFFER.

LEGEND		NEW	EXISTING
PROPERTY LINE	---	---	---
EASEMENT	---	---	---
SETBACK	---	---	---
RIGHT-OF-WAY	---	---	---
CENTRALINES	---	---	---
CURB & GUTTER	---	---	---
EDGE OF PAVEMENT	---	---	---
SIDEWALK	---	---	---
CREEK	---	---	---
STRUCTURE NO.	①	①	①
CATCH BASIN	■	□	□
YARD INLET	■	□	□
STORM DRAINAGE JUNCTION BOX	⊕	⊕	⊕
CURB INLET	⊕	⊕	⊕
SANITARY SEWER MANHOLE	⊕	⊕	⊕
SANITARY SEWER CLEANOUT	⊕	⊕	⊕
METER BOX	⊕	⊕	⊕
VALVE	⊕	⊕	⊕
FIRE HYDRANT	⊕	⊕	⊕
FIRE DEPARTMENT CONNECTION	⊕	⊕	⊕
LIGHT POLE	⊕	⊕	⊕
UTILITY POLE AND GUY WIRE	⊕	⊕	⊕
CABLE TV LINE	---	---	---
ELECTRIC	---	---	---
FIBER OPTIC CABLE	---	---	---
GAS LINE	---	---	---
OVERHEAD UTILITY LINE	---	---	---
SANITARY SEWER	---	---	---
STORM DRAIN PIPE	---	---	---
TELEPHONE	---	---	---
WATER LINE	---	---	---
GRADE CONTOUR	---	---	---
FINISHED GRADE SPOT ELEVATION	---	---	---
CLEARING LIMIT/TREE LINE	---	---	---
LIMITS OF DISTURBANCE	---	---	---
DITCH OR SHALE FLOWLINE	---	---	---
TREE PROTECTION FENCE	---	---	---
SILT FENCE	---	---	---
FENCE	---	---	---
RIP RAP APPROX	---	---	---
CHECK DAM	---	---	---
SEDIMENT FENCE OUTLET	---	---	---
FILET PROTECTION	---	---	---
WHEELCHAIR RAMP	---	---	---
ELECTRICAL TRANSFORMER	---	---	---

**PROJECT DATA**

**SITE INFORMATION:**  
PIN NUMBER: 9880-28-1953  
DEED REFERENCE: BOOK 5368, PAGE 194  
ACREAGE: 36.46 ACRES  
ZONING: RD - RURAL BUFFER  
WATERSHED: JORDAN LAKE UNPROTECTED OVERLAY  
TOWNSHIP: 7  
SCHOOL DISTRICT: CHAPEL HILL - CARRBORO  
FIRE DISTRICT: NEW HOPE

**PROPOSED SITE DATA:**  
NUMBER OF LOTS: 11 WELL & SEPTIC LOTS  
AVERAGE LOT SIZE: 2.06 ACRES  
MIN. LOT SIZE: 2.00 ACRES  
OVERALL DENSITY: 11 LOTS / 36.46 ACRES  
0.30 UNITS PER ACRE  
1,260.84 LF  
12.16 ACRES  
1,732 SF  
40'  
20'  
75', TYPE B, OPTION 1 MIXED

**PROPOSED ROADWAY DATA:**  
DUMFRIES LANE  
0.49 ACRES RIGHT-OF-WAY  
314 LINEAR FEET OF CENTER LINE  
11,977 SF IMPERVIOUS AREA  
LOCKWOOD COURT  
1.11 ACRES RIGHT-OF-WAY  
853 LINEAR FEET OF CENTER LINE  
26,542 SF IMPERVIOUS AREA

**OPEN SPACE CALCULATIONS:**  
75' LAND USE BUFFER ALONG WHITEFIELD = 2.61 ACRES  
OPEN SPACE LOCATED EAST OF LOCKWOOD = 0.24 ACRES  
OPEN SPACE LOCATED WEST OF DUMFRIES = 2.22 ACRES  
OPEN SPACE LOCATED AROUND STREAM = 6.76 ACRES  
OPEN SPACE LOCATED IN POSA = 0.33 ACRES  
TOTAL OPEN SPACE PROVIDED = 12.16 ACRES

**IMPERVIOUS SURFACE CALCULATIONS:**  
PROPOSED IMPERVIOUS SURFACE LIMIT = 10.81%  
TOTAL LOT AREA = 36.46 ACRES (1,588,198 SF)  
TOTAL IMPERVIOUS ALLOWED = 3.94 ACRES (171,684 SF)  
IMPERVIOUS AREA FOR DUMFRIES = 0.27 ACRES (11,977 SF)  
IMPERVIOUS AREA FOR LOCKWOOD = 0.61 ACRES (26,542 SF)  
TOTAL ROADWAY IMPERVIOUS AREA = 0.88 ACRES (38,519 SF)  
IMPERVIOUS ALLOWED FOR EACH LOT = 0.25 ACRES (11,000 SF)  
TOTAL NUMBER OF PROPOSED LOTS = 11  
SUBTOTAL IMPERVIOUS FOR ALL LOTS = 2.78 ACRES (121,000 SF)  
10% OVERAGE ALLOWANCE = 0.28 ACRES (12,100 SF)  
TOTAL IMPERVIOUS FOR ALL LOTS = 3.06 ACRES (133,100 SF)  
TOTAL ROADWAY IMPERVIOUS = 0.88 ACRES (38,519 SF)  
TOTAL LOT IMPERVIOUS = 3.06 ACRES (133,100 SF)  
TOTAL PROPOSED PROJECT IMP. = 3.94 ACRES (171,619 SF)

**OWNER/DEVELOPER:**  
WHITFIELD LOTS, LLC  
C/O TOM HEFFNER  
200 KENILWORTH PLACE  
PHONE: (919) 829-6653  
MOBILE: (919) 880-6279  
TOM@CHAPELHILLINC.COM

**ENGINEER:**  
CHARLES P. KOCH P.E.  
EARTH CENTRIC ENGINEERING, INC.  
204 WEST CLAY STREET  
MEBANE, NC 27302  
PHONE: (919) 563-9041  
FAX: (919) 304-3234  
PHIL.KOCH@EARTHCENTRIC.COM

**SURVEYOR:**  
ROBERT S. JONES  
R.S. JONES & ASSOCIATES, INC.  
121 WEST CLAY STREET  
SUITE A  
MEBANE, NC 27302  
PHONE: (919) 563-3623  
FAX: (919) 563-0086  
BOBBYJ@RSJONESANDASSOCIATES.COM

**LAND PLANNER:**  
THE DESIGN RESPONSE  
1616 EVANS ROAD  
SUITE 205  
CARY, NC 27513  
PHONE: (919) 678-8050  
FAX: (919) 678-8150  
LKING@THEDESIGNRESPONSE.COM

- INDEX OF DRAWINGS:**  
C-1 COVER SHEET  
C-2 EXIST. COND. / DEMOLITION  
C-3 SITE & UTILITY PLAN  
C-4 GRADING & STORM DRAINAGE  
P-1 DUMFRIES LN PLAN & PROFILE  
P-2 LOCKWOOD CT PLAN & PROFILE  
D-1 STORMWATER DETAILS  
D-2 DOT ROADWAY DETAILS



CALL BEFORE YOU DIG... IT'S THE LAW.  
CALL N.C. ONE-CALL(1-800-632-6448)  
FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST  
3 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.  
NORTH CAROLINA GENERAL STATUTE 87-102

**APPROVAL STAMP**

**EarthCentric Engineering, Inc.**  
LICENSE #FC-2838  
204 W. Clay Street  
Mebane, NC 27302  
Phone: (919) 563-9041  
Fax: (919) 304-3234  
E-Mail: Phil.Koch@EarthCentric.com

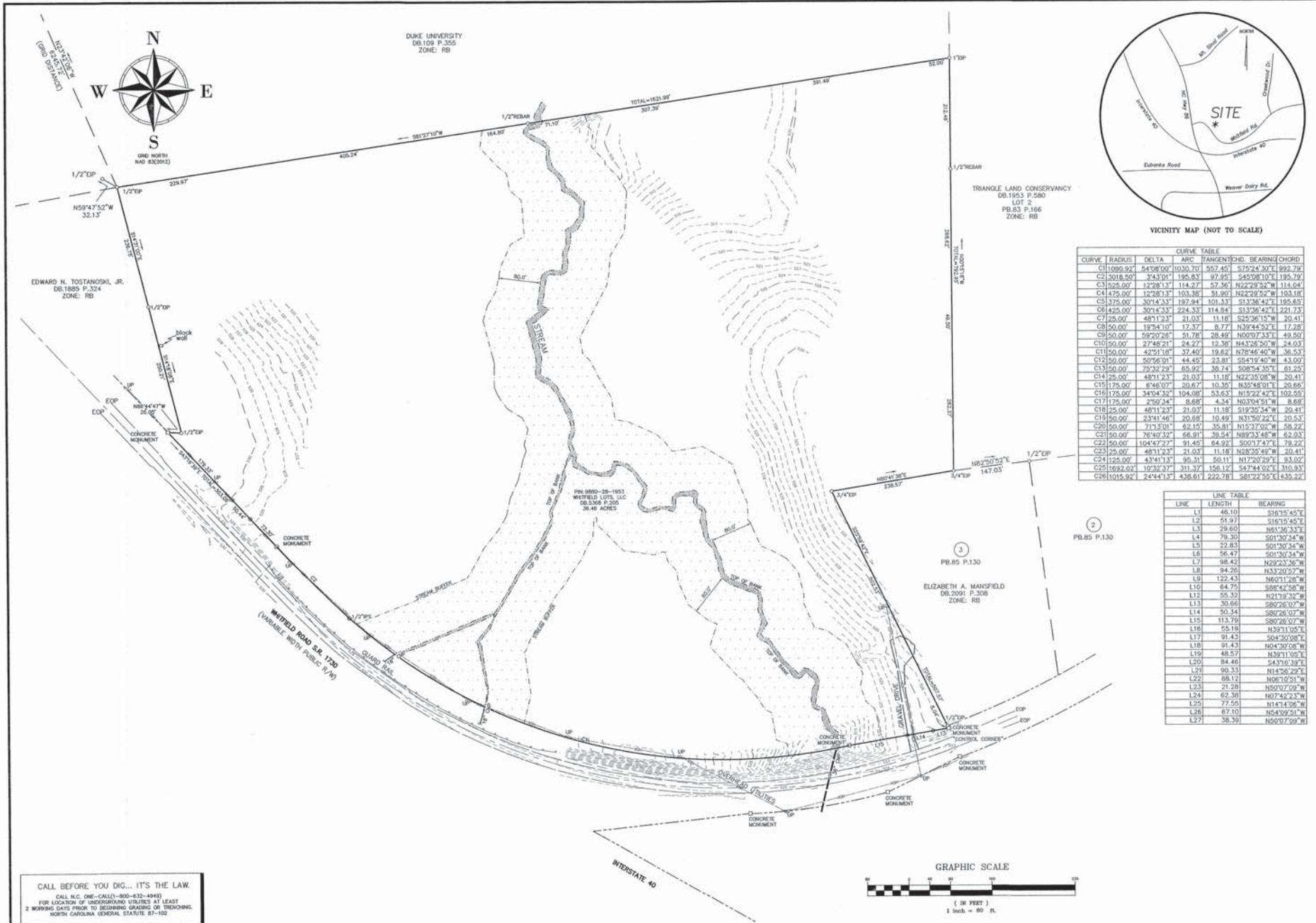


**ANNANDALE**  
AT CREEK WOOD  
ORANGE COUNTY, NORTH CAROLINA  
COVER SHEET

REV.	DATE	DESCRIPTION
1	11/01/22	ADDITIONAL INFO PER STAFF
2	12/07/22	PRELIM PLAN SUBMITTAL
3	01/04/23	FOR CITY OF CREEK WOOD
4	02/21/23	LOT LINE REVISION

DATE:	11/17/2022
PROJECT NO.:	11-21
PROJECT NAME:	ANNANDALE
PROJECT MANAGER:	CPK
DESIGNER:	CPK
CHECKER:	CPK
DATE:	11/17/2022

SHEET NO.  
**C1.0**



**CURVE TABLE**

CURVE	RADIUS	DELTA	ARC	TANGENT	CHD.	BEARING	CHORD
C1	1090.92'	54.9800'	1030.70'	557.45'	579.24.307'	922.79'	
C2	3018.50'	3.4301'	195.83'	97.92'	545.08.107'	195.79'	
C3	925.00'	12.28.13'	114.27'	57.36'	N22.29.52'W	114.04'	
C4	475.00'	12.28.13'	103.35'	51.80'	N22.29.52'W	103.16'	
C5	375.00'	3014.33'	187.84'	101.33'	S13.36.42'E	195.65'	
C6	425.00'	3014.33'	224.33'	114.84'	S13.36.42'E	221.73'	
C7	25.00'	48.11.23'	21.03'	11.18'	S25.36.15'W	20.41'	
C8	50.00'	19.24.10'	17.37'	8.77'	N30.44.52'E	17.28'	
C9	50.00'	59.20.26'	51.78'	26.49'	N00.07.33'E	49.50'	
C10	50.00'	27.48.21'	24.27'	12.38'	N43.26.50'W	24.03'	
C11	50.00'	4.29.118'	37.40'	19.67'	N78.46.40'W	36.53'	
C12	50.00'	59.24.39'	44.45'	23.81'	S54.19.40'W	43.00'	
C13	50.00'	75.32.29'	65.92'	39.74'	S08.54.35'E	61.25'	
C14	25.00'	48.11.23'	21.03'	11.18'	N22.35.08'W	20.41'	
C15	175.00'	8.46.02'	20.67'	10.35'	S35.48.01'E	20.66'	
C16	175.00'	34.04.32'	104.08'	53.63'	N19.23.42'E	102.50'	
C17	175.00'	2.50.34'	8.68'	4.34'	N03.04.51'W	8.68'	
C18	25.00'	48.11.23'	21.03'	11.18'	S19.30.34'W	20.41'	
C19	50.00'	3.34.44'	20.65'	10.49'	N33.50.22'E	20.52'	
C20	50.00'	7.13.01'	62.15'	35.81'	N15.37.02'W	58.22'	
C21	50.00'	78.40.32'	66.81'	39.54'	N89.33.48'W	62.03'	
C22	50.00'	104.47.27'	91.45'	44.92'	S00.17.47'E	79.22'	
C23	25.00'	48.11.23'	21.03'	11.18'	N29.25.49'W	20.41'	
C24	125.00'	43.41.13'	95.31'	50.11'	N17.20.29'E	93.02'	
C25	1692.02'	10.32.33'	311.37'	156.12'	S47.44.02'E	310.83'	
C26	1015.92'	24.44.13'	438.61'	222.78'	S81.22.50'E	435.22'	

**LINE TABLE**

LINE	LENGTH	BEARING
L1	46.10	S16.15.45'E
L2	51.93	S16.15.45'E
L3	29.60	N03.30.34'W
L4	79.30	S01.30.34'W
L5	22.83	S01.30.34'W
L6	56.47	S01.30.34'W
L7	98.42	N08.23.26'W
L8	94.26	N33.20.57'W
L9	122.43	N60.11.28'W
L10	64.75	S08.23.26'W
L11	55.33	N21.19.52'W
L12	30.66	S80.26.07'W
L13	90.34	S80.26.07'W
L14	115.79	S80.26.07'W
L15	55.19	N39.11.05'E
L16	91.43	S04.30.08'E
L17	91.43	N04.30.08'E
L18	48.57	N59.11.05'E
L19	84.46	S43.16.39'E
L20	90.33	N14.56.29'E
L21	88.13	N08.10.51'W
L22	21.28	N50.07.09'W
L23	62.38	N07.42.23'W
L24	77.55	N14.74.06'W
L25	67.10	N5.49.50'W
L26	38.39	N50.07.09'W

**CURVE TABLE**

CURVE	RADIUS	DELTA	ARC	TANGENT	CHD.	BEARING	CHORD
C1	1090.92'	54.9800'	1030.70'	557.45'	579.24.307'	922.79'	
C2	3018.50'	3.4301'	195.83'	97.92'	545.08.107'	195.79'	
C3	925.00'	12.28.13'	114.27'	57.36'	N22.29.52'W	114.04'	
C4	475.00'	12.28.13'	103.35'	51.80'	N22.29.52'W	103.16'	
C5	375.00'	3014.33'	187.84'	101.33'	S13.36.42'E	195.65'	
C6	425.00'	3014.33'	224.33'	114.84'	S13.36.42'E	221.73'	
C7	25.00'	48.11.23'	21.03'	11.18'	S25.36.15'W	20.41'	
C8	50.00'	19.24.10'	17.37'	8.77'	N30.44.52'E	17.28'	
C9	50.00'	59.20.26'	51.78'	26.49'	N00.07.33'E	49.50'	
C10	50.00'	27.48.21'	24.27'	12.38'	N43.26.50'W	24.03'	
C11	50.00'	4.29.118'	37.40'	19.67'	N78.46.40'W	36.53'	
C12	50.00'	59.24.39'	44.45'	23.81'	S54.19.40'W	43.00'	
C13	50.00'	75.32.29'	65.92'	39.74'	S08.54.35'E	61.25'	
C14	25.00'	48.11.23'	21.03'	11.18'	N22.35.08'W	20.41'	
C15	175.00'	8.46.02'	20.67'	10.35'	S35.48.01'E	20.66'	
C16	175.00'	34.04.32'	104.08'	53.63'	N19.23.42'E	102.50'	
C17	175.00'	2.50.34'	8.68'	4.34'	N03.04.51'W	8.68'	
C18	25.00'	48.11.23'	21.03'	11.18'	S19.30.34'W	20.41'	
C19	50.00'	3.34.44'	20.65'	10.49'	N33.50.22'E	20.52'	
C20	50.00'	7.13.01'	62.15'	35.81'	N15.37.02'W	58.22'	
C21	50.00'	78.40.32'	66.81'	39.54'	N89.33.48'W	62.03'	
C22	50.00'	104.47.27'	91.45'	44.92'	S00.17.47'E	79.22'	
C23	25.00'	48.11.23'	21.03'	11.18'	N29.25.49'W	20.41'	
C24	125.00'	43.41.13'	95.31'	50.11'	N17.20.29'E	93.02'	
C25	1692.02'	10.32.33'	311.37'	156.12'	S47.44.02'E	310.83'	
C26	1015.92'	24.44.13'	438.61'	222.78'	S81.22.50'E	435.22'	

**LINE TABLE**

LINE	LENGTH	BEARING
L1	46.10	S16.15.45'E
L2	51.93	S16.15.45'E
L3	29.60	N03.30.34'W
L4	79.30	S01.30.34'W
L5	22.83	S01.30.34'W
L6	56.47	S01.30.34'W
L7	98.42	N08.23.26'W
L8	94.26	N33.20.57'W
L9	122.43	N60.11.28'W
L10	64.75	S08.23.26'W
L11	55.33	N21.19.52'W
L12	30.66	S80.26.07'W
L13	90.34	S80.26.07'W
L14	115.79	S80.26.07'W
L15	55.19	N39.11.05'E
L16	91.43	S04.30.08'E
L17	91.43	N04.30.08'E
L18	48.57	N59.11.05'E
L19	84.46	S43.16.39'E
L20	90.33	N14.56.29'E
L21	88.13	N08.10.51'W
L22	21.28	N50.07.09'W
L23	62.38	N07.42.23'W
L24	77.55	N14.74.06'W
L25	67.10	N5.49.50'W
L26	38.39	N50.07.09'W

**REVISIONS**

REV.	DATE	DESCRIPTION	BY	APP'D.
1		PRELIMINARY		
2		FINAL		
3		AS BUILT		
4		CONTRACT REVISION		
5		CONTRACT REVISION		
6		CONTRACT REVISION		
7		CONTRACT REVISION		
8		CONTRACT REVISION		
9		CONTRACT REVISION		
10		CONTRACT REVISION		
11		CONTRACT REVISION		
12		CONTRACT REVISION		
13		CONTRACT REVISION		
14		CONTRACT REVISION		
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21		CONTRACT REVISION		
22		CONTRACT REVISION		
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25		CONTRACT REVISION		
26		CONTRACT REVISION		
27		CONTRACT REVISION		
28		CONTRACT REVISION		
29		CONTRACT REVISION		
30		CONTRACT REVISION		

**EarthCentric Engineering, Inc.**  
 LICENSE # C-2638  
 204 W. Clay Street  
 Mebane, NC 27302  
 Phone: (919) 959-9041  
 E-Mail: Phil.Koch@EarthCentric.com

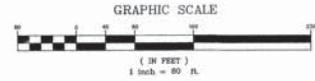
**ANNANDALE**  
 AT CREEK ROAD  
 ORANGE COUNTY, NORTH CAROLINA  
 EXISTING CONDITIONS  
 & DEMOLITION PLAN

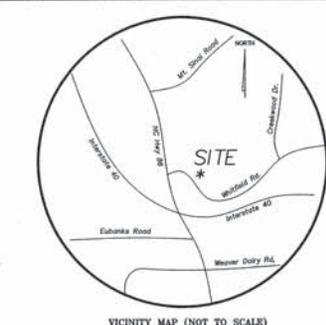
**PHIL KOCH**  
 PRINCIPAL ENGINEER  
 NOPE #22004

**SCALE**  
 HORIZONTAL SCALE: 1" = 80'  
 VERTICAL SCALE: 1" = 80'  
 PROJECT NUMBER: C2.0  
 DRAWN BY: PHIL KOCH  
 CHECKED BY: PHIL KOCH  
 DATE: 11/11/2011

**SHEET NO.**  
**C2.0**  
 PRELIMINARY MAJOR SUBSECTION PLAN

CALL BEFORE YOU DIG... IT'S THE LAW.  
 CALL N.C. ONE-CALL(1-800-432-4949)  
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST  
 2 WORKING DAYS PRIOR TO BEGINNING GRAZING OR TRENCHING.  
 NORTH CAROLINA GENERAL STATUTE 87-102





**CURVE TABLE**

CURVE	RADIUS	DELTA	ARC LENGTH	CHORD BEARING	CHORD
C1	1090.92	54.0800°	1030.70	252.45°	575.24/307.1
C2	3018.50	34.3091°	195.83	97.95°	545.38/101.1
C3	525.00	12.2813°	114.27	57.36°	N222°29'24"W 114.04
C4	475.00	12.2813°	103.38	51.90°	N222°29'24"W 103.18
C5	375.00	30.1433°	187.84	101.33°	S13°30'42"E 188.63
C6	425.00	30.1433°	224.33	114.84°	S13°30'42"E 221.73
C7	25.00	48.1123°	21.03	11.18°	S25°36'15"W 20.41
C8	50.00	19.5419°	12.37	8.77°	N39°44'56"E 17.88
C9	50.00	59.2028°	51.78	28.49°	N00°07'33"E 49.50
C10	50.00	27.4821°	24.27	12.38°	N43°26'30"W 24.03
C11	50.00	42.3118°	37.40	19.82°	N78°46'40"W 36.53
C12	50.00	59.2028°	44.45	23.81°	S54°19'40"W 43.00
C13	50.00	79.3229°	65.92	38.74°	S08°54'35"E 61.20
C14	25.00	48.1123°	21.03	11.18°	N22°35'08"W 20.41
C15	175.00	8.4607°	20.67	10.35°	N35°48'01"E 20.68
C16	175.00	34.7432°	104.08	53.63°	N15°22'42"E 102.55
C17	175.00	2.9034°	8.68	4.34°	N03°04'51"W 8.68
C18	25.00	48.1123°	21.03	11.18°	S19°35'14"W 20.41
C19	50.00	27.4146°	20.68	10.49°	N31°50'22"E 20.53
C20	50.00	71.1301°	62.15	35.81°	N15°37'02"W 58.22
C21	50.00	78.4032°	66.81	39.54°	N89°33'48"W 62.02
C22	50.00	104.4727°	91.45	64.92°	S00°17'47"E 79.22
C23	25.00	48.1123°	21.03	11.18°	N28°35'48"W 20.41
C24	125.00	43.4413°	85.31	50.11°	N17°00'20"E 83.02
C25	1892.02	10.3237°	311.37	156.12°	S47°44'02"E 310.83
C26	1015.92	24.4413°	438.61	222.78°	S81°22'55"E 435.22

**LINE TABLE**

LINE	LENGTH	BEARING
L1	46.10	S16°15'45"E
L2	51.97	S16°15'45"E
L3	29.60	N15°19'33"E
L4	79.30	S01°30'34"W
L5	22.83	S01°30'34"W
L6	56.47	S01°30'34"W
L7	98.43	N02°21'36"W
L8	94.26	N33°20'57"W
L9	122.43	N6°11'28"W
L10	64.75	S88°42'58"W
L11	55.32	N01°19'35"W
L12	30.66	S80°28'07"W
L13	50.34	S80°28'07"W
L14	113.79	S80°28'07"W
L15	55.19	N30°11'05"E
L16	91.43	S04°30'08"E
L17	91.43	N04°30'08"E
L18	91.43	N04°30'08"E
L19	48.57	N30°11'05"E
L20	84.46	S43°16'39"E
L21	90.33	N14°26'29"E
L22	88.12	N08°17'51"E
L23	21.26	N50°07'09"W
L24	62.38	N07°42'23"E
L25	77.55	N14°14'06"E
L26	67.10	N54°49'51"W
L27	38.39	N50°07'09"W

**EarthCentric Engineering, Inc.**  
 LICENSE # C-2838  
 204 W. City Street  
 Raleigh, NC 27601  
 Phone: (919) 852-9041  
 Fax: (919) 304-3234  
 E-Mail: Phil.Koch@EarthCentric.com



**ANNANDALE**  
 AT CREEK WOOD  
 ORANGE COUNTY, NORTH CAROLINA  
 SITE & UTILITY PLAN

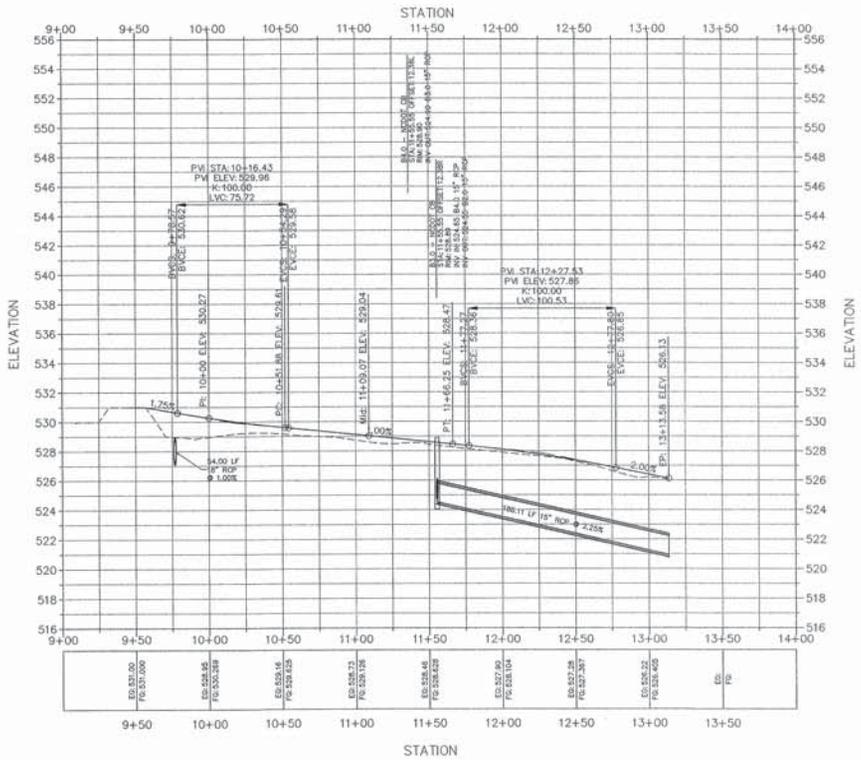
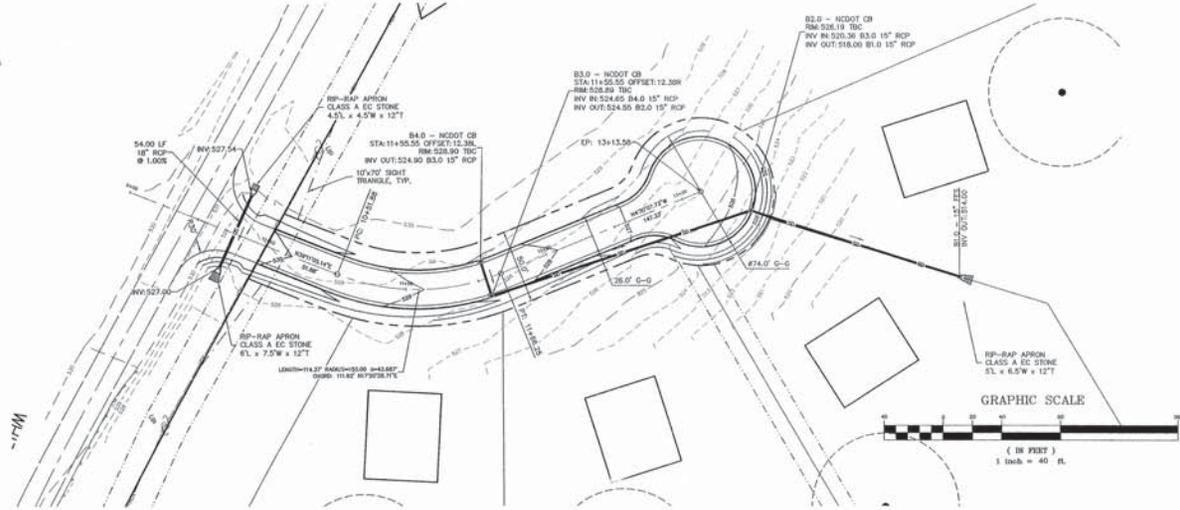
REV	DATE	DESCRIPTION	BY
1	08/15/24	ADDITIONAL INFO PER STAFF	BAK
2	10/22/24	PRELIM SUBMITTAL	CPK
3	01/04/25	PER DOC COMMENTS	SCS
4	02/03/25	LOT LINE REVISION	SCS
5	02/28/25	ADD ANNOTATION	SCS

SCALE	REVISIONS
HORIZONTAL SCALE	DATE
VERTICAL SCALE	DATE
PROJECT NUMBER	DATE
DRAWN BY	DATE
CHECKED BY	DATE
PROJECT NO.	DATE
DRAWING NAME	DATE

**SHEET NO.**  
**C3.0**  
 PRELIMINARY MAJOR ELECTRICAL PLAN

CALL BEFORE YOU DIG... IT'S THE LAW.  
 CALL N.C. ONE-CALL (1-800-832-4849)  
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST  
 2 WORKING DAYS PRIOR TO BEGINNING GRAZING OR TRENCHING.  
 NORTH CAROLINA GENERAL STATUTE 87-102





**EarthCentric Engineering, Inc.**  
 LICENSE # C-2638  
 204 W. Clay Street  
 Mebane, NC 27024  
 Phone: (919) 562-3944  
 Fax: (919) 562-3944  
 E-Mail: Phil.Koch@EarthCentric.com

**PHIL KOCH**  
 LICENSE # 1000  
 REGISTERED PROFESSIONAL ENGINEER  
 CIVIL ENGINEERING  
 STATE OF NORTH CAROLINA

**ANNANDALE**  
 AT CREEK WOOD  
 ORANGE COUNTY, NORTH CAROLINA  
**DUMFRIES LN. - PLAN & PROFILE**  
 STA:10+00 TO STA:13+14

REV	DATE	DESCRIPTION	BY
1	11/15/11	ANALYZE	AK
2	12/07/12	ADDITIONAL INFO PER STAFF	AK
3	12/07/12	PRELIM PLAN SUBMITTAL	CPK
4	12/04/13	PER DC COMMENTS	SCS
5	02/11/14	CONSTRUCTION	SCS
6	02/11/14	LOT LINE SURVEY	SCS

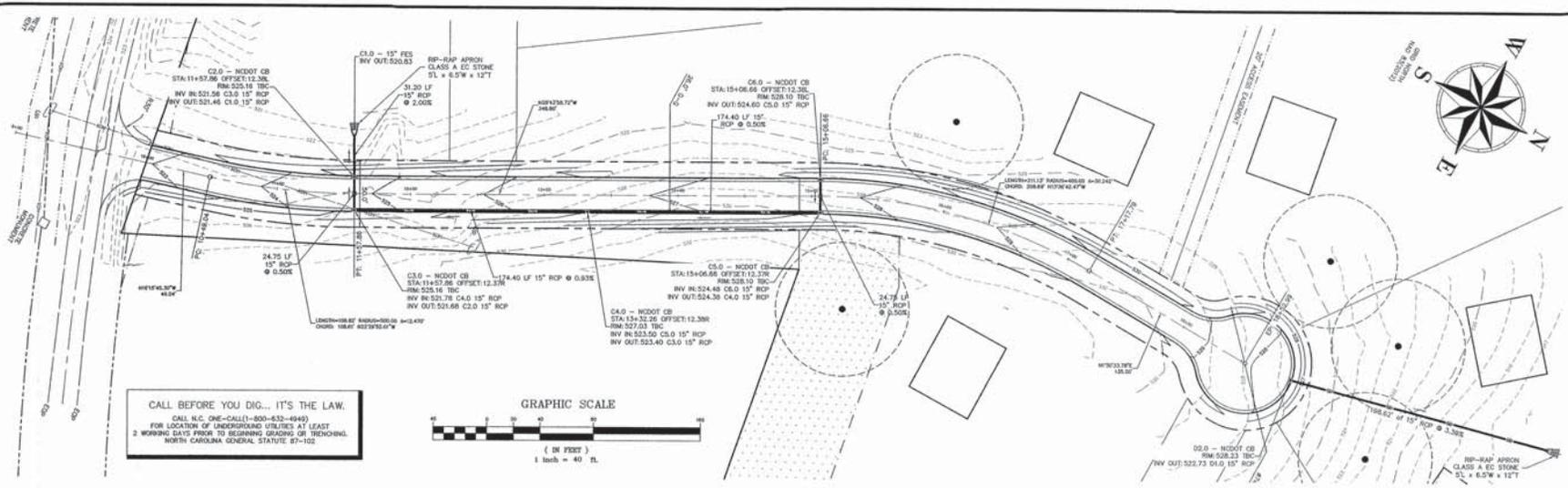
DATE: OCTOBER 2012  
 HORIZONTAL SCALE: 1" = 40'  
 VERTICAL SCALE: 1" = 4'  
 TYPICAL METERS: 100'  
 DRAWN BY: TMM  
 PROJECT NO.: 10102  
 DRAWING NAME: D10102.PLT

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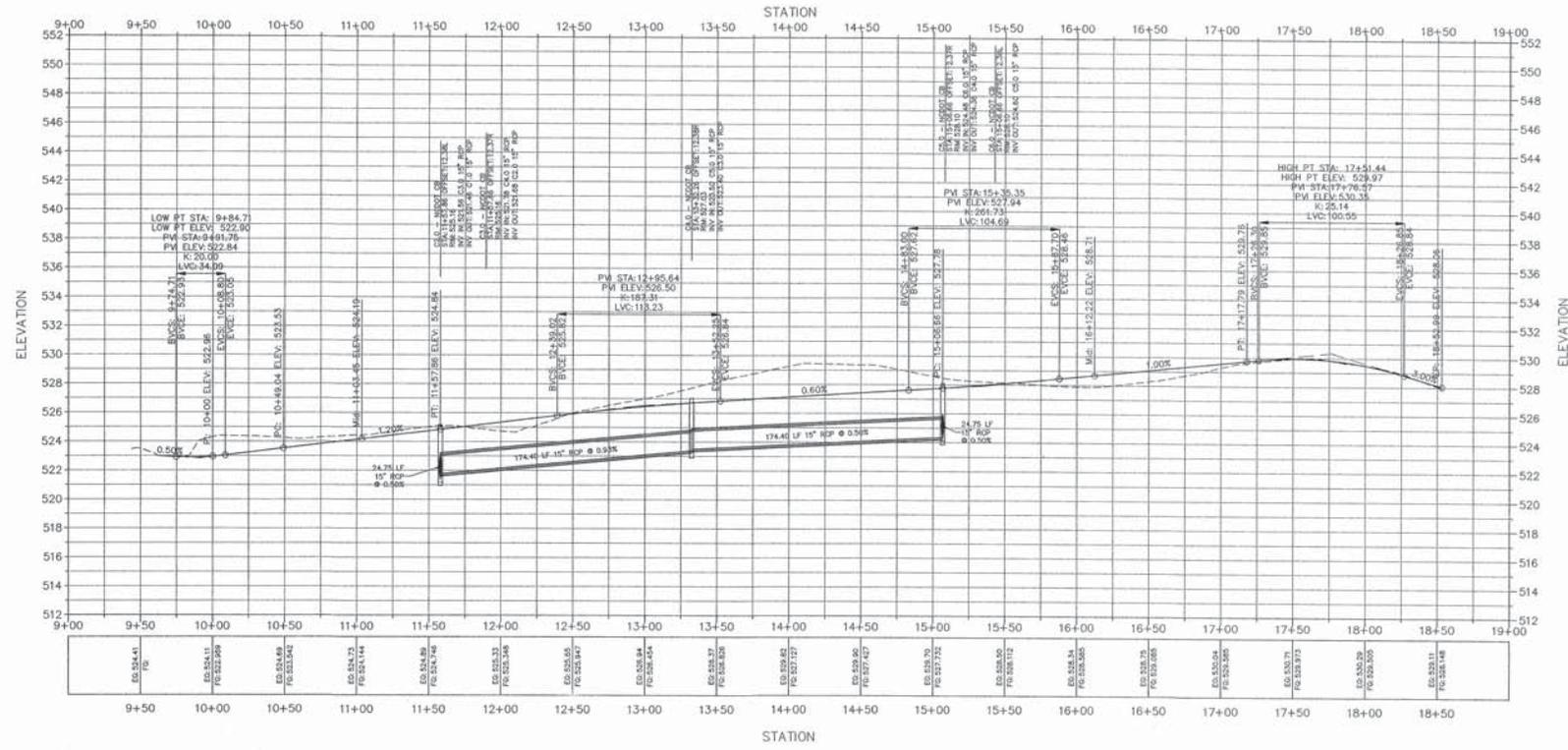
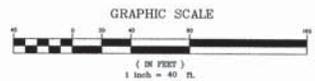
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SHEET NO.  
**P1.0**  
 PRELIMINARY MAJOR ELECTRICAL PLAN

CALL BEFORE YOU DIG... IT'S THE LAW.  
 CALL N.C. ONE-CALL-(800-433-4949)  
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST  
 2 WORKING DAYS PRIOR TO BEGINNING GRADING OR TRENCHING.  
 NORTH CAROLINA GENERAL STATUTE 57-102



CALL BEFORE YOU DIG... IT'S THE LAW.  
 CALL 811 OR 1-800-CALL411 (248-4111)  
 FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST  
 2 WORKING DAYS PRIOR TO BEGINNING OF TRENCHING.  
 NORTH CAROLINA GENERAL STATUTE 87-102



STATION	ELEVATION	DESCRIPTION
9+50	524.41	FS
10+00	524.11	FS
10+50	524.69	FS
11+00	524.73	FS
11+50	524.89	FS
12+00	525.33	FS
12+50	525.65	FS
13+00	525.84	FS
13+50	525.97	FS
14+00	525.90	FS
14+50	525.70	FS
15+00	525.30	FS
15+50	525.14	FS
16+00	525.25	FS
16+50	525.54	FS
17+00	525.71	FS
17+50	525.29	FS
18+00	525.11	FS
18+50	525.14	FS

**EarthCentric Engineering, Inc.**  
 LICENSE # C-6595

**ECE**  
 CORPORATION

204 W. Clay Street  
 Mebane, NC 27302  
 Phone: (919) 563-9941  
 Fax: (919) 304-3254  
 E-Mail: Phil.Kocot@earthcentric.com

PHIL KOCOT - NCPE 02254  
 PRINCIPAL ENGINEER

**ANNANDALE**  
 AT CREEK WOOD

ORANGE COUNTY, NORTH CAROLINA  
 LOCKWOOD CT. - PLAN & PROFILE  
 STA:10+00 TO STA:18+53

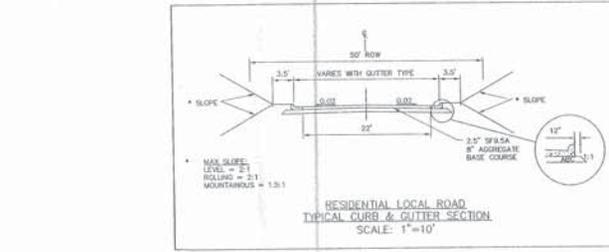
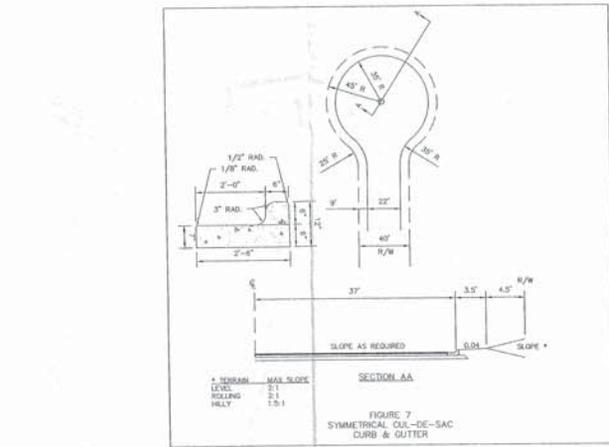
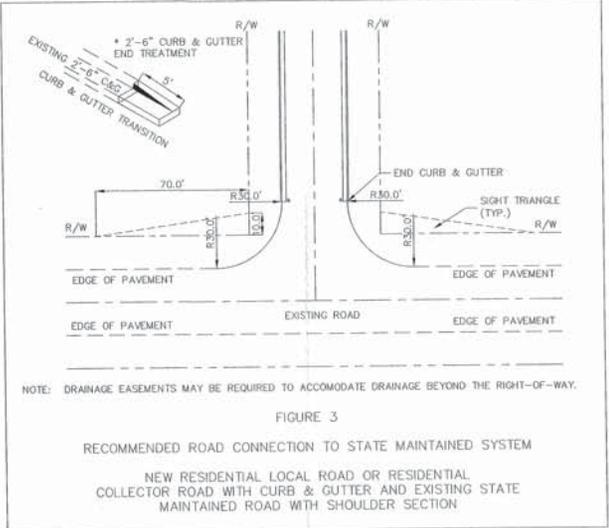
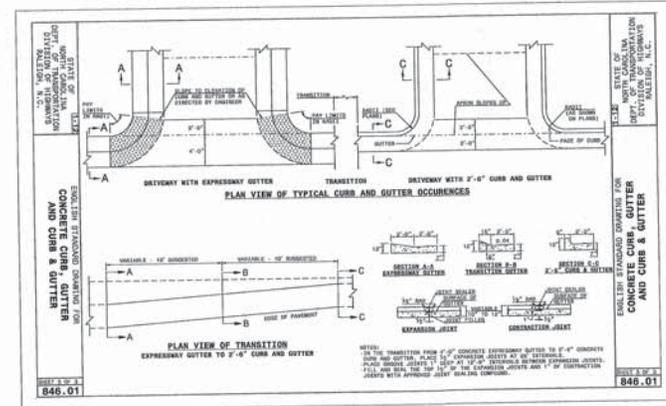
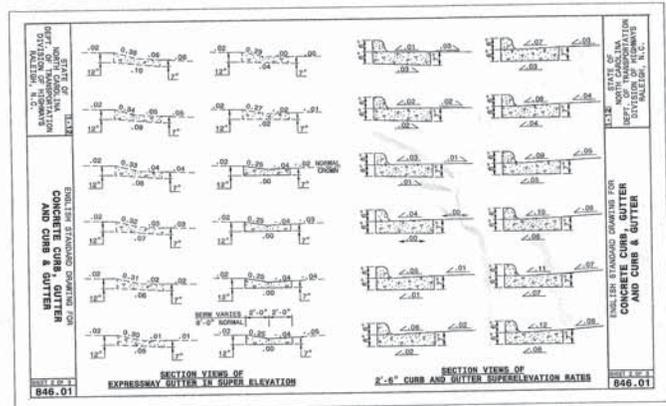
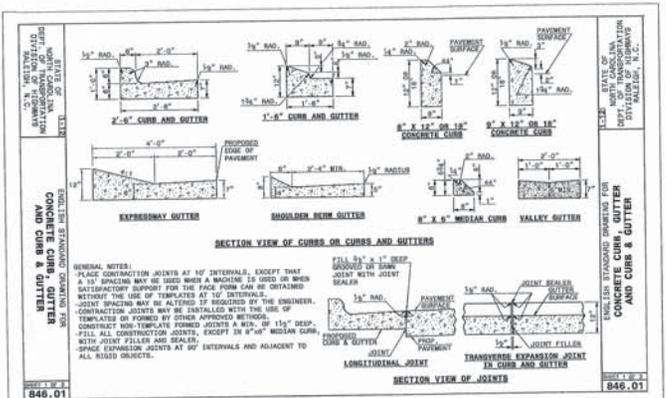
REV.	DATE	DESCRIPTION	BY
1	08/25/12	ADDITIONAL PRO PER STA/F	BAK
2	10/07/12	PRELIM PLAN SUBMITTAL	CPK
3	01/05/13	PRELIM COMMENTS	BOJ
4	02/07/13	FINAL COMMENTS	BOJ
5	02/07/13	FINAL LOT/LINE REVISION	BOJ

DATE: SEPTEMBER 2013  
 PROVISIONAL SCALE: 1" = 40'  
 GEOMETRIC SCALE: 1" = 40'  
 PROJECT NUMBER: 12-01  
 DRAWING: 18-1  
 PROJECT NO.: 18-1  
 DRAWING NO.: 18-1

SHEET NO.  
**P2.0**

PRELIMINARY MAJOR SUBDIVISION PLAN





**EarthCentric Engineering, Inc.**  
 LICENSED PROFESSIONAL ENGINEER  
 NORTH CAROLINA  
 DIVISION OF HIGHWAYS  
 WALTER, N.C.

**ECE**  
 ENGINEERING CORPORATION

204 W. Clay Street  
 Mebane, NC 27302  
 Phone: (919) 563-9041  
 Fax: (919) 304-3224  
 E-Mail: Phil.Koch@EarthCentric.com

PHIL KOCH - LICENSE # 62204

**ANNANDALE**  
 AT CREEK WOOD  
 ORANGE COUNTY, NORTH CAROLINA  
 SITE & PAVING  
 DETAILS

DATE: 02/15/2011  
 PROJECT: ANNANDALE AT CREEK WOOD  
 PROJECT NUMBER: 010  
 SHEET NO.: D2.0  
 SHEET TOTAL: 10

REVISIONS:  
 1. 02/15/2011: PRELIM PLAN SUBMITTAL  
 2. 02/15/2011: ADDITIONAL PRELIM PLAN

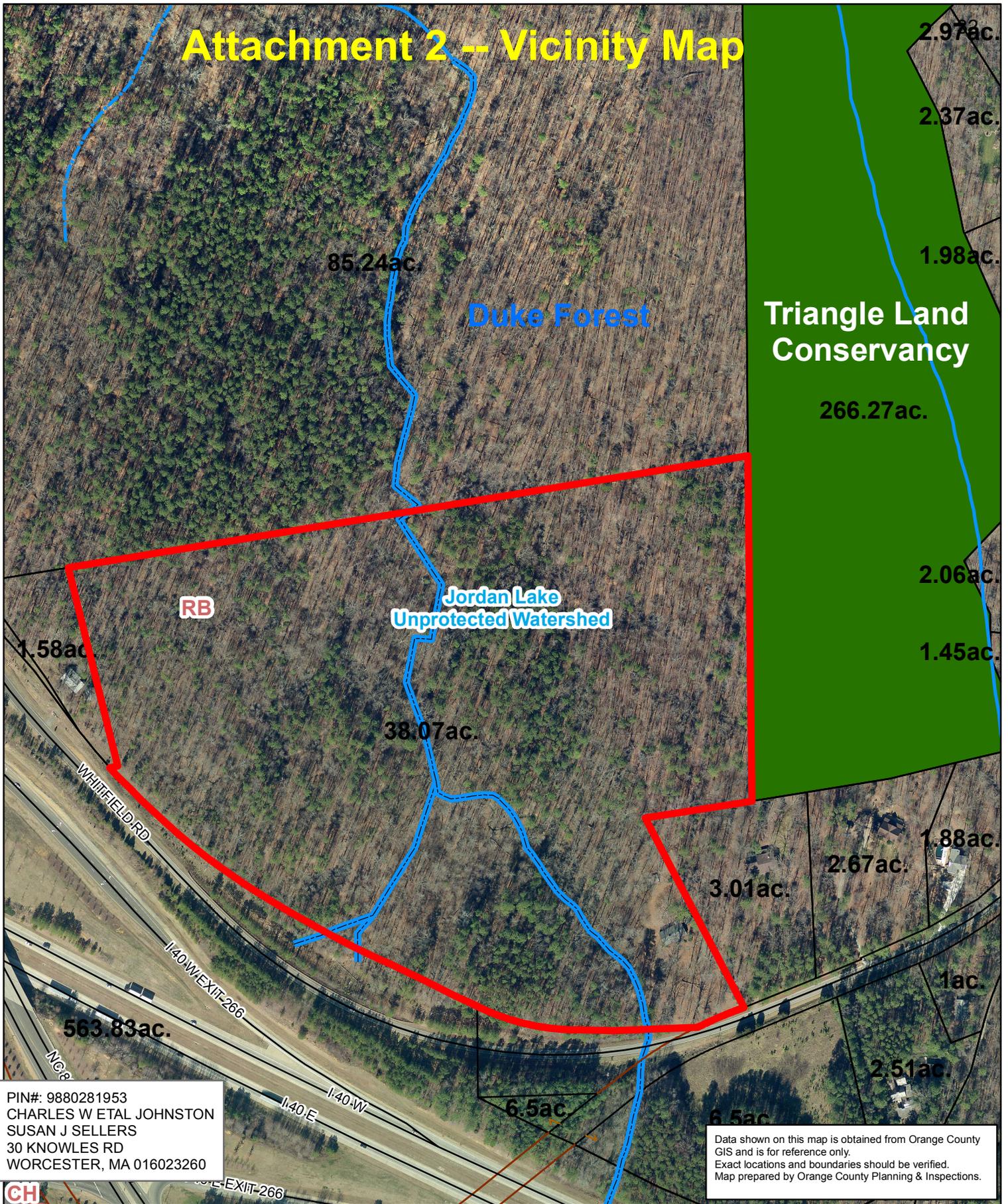
DESIGNED BY: [Redacted]  
 CHECKED BY: [Redacted]  
 DRAWN BY: [Redacted]

SCALE: 1"=10'

PROJECT MANAGER: [Redacted]  
 PROJECT ENGINEER: [Redacted]  
 PROJECT ARCHITECT: [Redacted]

PREPARED BY: EarthCentric Engineering, Inc.

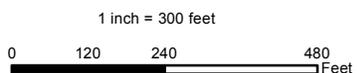
# Attachment 2 -- Vicinity Map



PIN#: 9880281953  
 CHARLES W ETAL JOHNSTON  
 SUSAN J SELLERS  
 30 KNOWLES RD  
 WORCESTER, MA 016023260

Data shown on this map is obtained from Orange County GIS and is for reference only. Exact locations and boundaries should be verified. Map prepared by Orange County Planning & Inspections.

- USGS Water Feature
- Soils Survey Water Feature
- OC Updated Water Feature
- Water Body
- River Basins
- Watershed
- Parcels
- Township
- School System Boundary
- Contours
- County Boundary
- Soils
- Zoning
- City Limits
- ETJ
- Conservation Easements Held by Others
- Orange County Conservation Easements
- 100 YR Floodplain (Effective 02/02/07)
- Floodway (Effective 02/02/07)
- 500 YR Floodplain (Effective 02/02/07)
- Buildings
- Water and Sewer Boundary



# Orange County Health Department

Colleen Bridger, MPH, PhD  
Health Director



Prevent • Promote • Protect  
Partnering for the Public's Health

February 25, 2013

SOIL/SITE Evaluation Summary for:  
Annandale at Creek Wood  
PIN: 9880281953  
Map Date February 21, 2013

Lot #	DESIGN FLOW	SYSTEM TYPE
1	600 gpd	Shallow Trench Conventional
2	600 gpd	Conventional
3	600 gpd	Shallow Trench Conventional
4	600 gpd	Conventional
5	600 gpd	Ultra Shallow Trench Conventional
6	600 gpd	Ultra Shallow Trench Innovative
7	600 gpd	Pump Conventional
8	480 gpd	Innovative Trench
9	480 gpd	Innovative Trench
10	600 gpd	Ultra Shallow Trench Conventional
11	600 gpd	Innovative Trench

## NOTES:

The design flow is based upon the number of bedrooms applied for by the property owner or developer. The design flow for a bedroom is 120 gallons/day (gpd). (e.g. 600 gpd = 5 bedrooms)

Proposed house locations are provided by the property owner or developer as required by 15A NCAC 18A .1900 - .1970 (The Laws and Rules for Sewage Treatment and Disposal Systems).

The design flow, type system, and pump requirement are subject to change based upon the application and site plan or plat submitted for the Wastewater Construction Authorization.

The blocked areas on the accompanying plat are the limits of the provisionally suitable soils as evaluated by the Orange County Health Department.

It should be noted that all lots having a conventional-type drain field with pump are reviewed at a minimum of every five years by the health department as required by 15A NCAC 18A .1961 (Maintenance of Sewage Systems).

Ultra Shallow Trench Conventional Systems are placed in areas with 24 inches or more of provisionally suitable soil/site characteristics and a 6-10" soil cap is placed over the trenches.

Shallow Trench Conventional Systems are placed in areas with 30 inches or more of provisionally suitable soil/site characteristics.

Conventional Trench Systems are placed in areas with 36" inches or more of provisionally suitable soil/site characteristics.

Innovative Trench Systems can be used in areas with 24-36 "of provisionally suitable soil/site characteristics.

The approved septic areas should be kept free of vehicular traffic, logging, grading, and compacting activities. It is the responsibility of the property owner or developer to maintain the integrity of the septic areas prior to system construction and installation. No parking, cutting or filling shall be allowed in or around the drain field areas.

Drainage ways and easements should be utilized to convey storm water run-off to the storm water retention areas. These conveyances should not be located through designated septic drain field areas.

This report is for planning purposes only and does not constitute any approval. Lot approval is granted by the health department only in the form of an Improvement Permit. Improvement Permits are issued once the lots are recorded and have received individual Parcel Identification Numbers.

**ORANGE COUNTY  
DEPARTMENT OF ENVIRONMENT, AGRICULTURE,  
PARKS AND RECREATION**

**MEMORANDUM**

To: Glenn Bowles, *Current Planning*  
From: Rich Shaw, *DEAPR Land Conservation Manager*  
Date: January 7, 2013  
Subject: Proposed Annandale at Creek Wood Subdivision

---

Thank you for the opportunity to evaluate a Preliminary Plat for the proposed Annandale at Creek Wood subdivision. The plat identifies 11 lots on 36.46 acres located north of Whitfield Road, just east of the intersection of Whitfield Road and NC 86 (Chapel Hill Township).

My comments are based on a review of DEAPR's comprehensive resource database and an examination of the Site Plan (dated 8/24/12). As presented, the plan would set aside 12.15 acres of open space (33.3 %). The subject property is entirely forested with fairly mature tree cover considered to be high-quality forest for wildlife habitat<sup>1</sup>. Within the forest there are two streams that flow through the site and into the neighboring Duke Forest property. The streams drain into Old Field Creek and eventually to New Hope Creek.

The property is located immediately south of the **Henry J. Oosting Natural Area**—a highly significant natural heritage area<sup>2</sup> (SNHA) owned and managed by Duke University. This unit of Duke Forest is protected for research and education, and is not open for public use. The property also borders on the **Johnston Mill Nature Preserve**, owned and managed by the Triangle Land Conservancy (TLC). The 296-acre preserve protects land on New Hope Creek and features 3.5 miles of public hiking trails accessed from Mt. Sinai and Turkey Farm roads.

The proposed Open Space includes 80-foot-wide stream buffers that would help protect water quality and aquatic habitat on this property and the downstream Oosting Natural Area. The remaining Open Space wraps around the western and southern property boundaries. I would prefer to have the Open Space along the northern and eastern boundaries to help buffer the adjacent Duke and TLC natural areas, but if that's not feasible the large lot sizes (2 acres plus) may help lessen any potential adverse effects of the residential development (e.g., encroachment, informal trail connections) on those conservation lands.

The plan includes a 50-foot-wide pedestrian open space area (POSA) leading to the Johnston Mill Nature Preserve. There should be no trail be constructed in the POSA until TLC is ready to accommodate pedestrians entering the Preserve at this location.

**Conclusion - The large lot size and 80-foot stream buffers will help protect surface waters and riparian habitat, and the overall 33% open space will help**

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<sup>1</sup> *Rating Land in Orange County by its Wildlife Value* (Triangle Land Conservancy, 1999)

<sup>2</sup> *Inventory of Natural Areas and Wildlife Habitats for Orange County, NC* (Sather et al., 2004)

Glenn Bowles  
January 7, 2013  
Page 2

**protect the rural character of this area, however it would be optimal (if feasible) to reposition the perimeter open space to the northern and eastern property boundaries to help buffer the adjacent Duke and TLC natural areas.**

**DEAPR recommends no trail be constructed in the POSA until Triangle Land Conservancy is ready to accommodate pedestrians entering the Johnston Mill Preserve at this location.**

**DEAPR further recommends that the Open Space remain in private ownership and managed as common land (wildlife habitat and low-impact recreation) by the homeowners association.**

If you have any questions, please contact me at 245-2514 or [rshaw@orangecountync.gov](mailto:rshaw@orangecountync.gov).

cc: David Stancil

**Glenn Bowles**

---

**From:** Jeff Scouten  
**Sent:** Friday, December 21, 2012 10:11 AM  
**To:** Glenn Bowles  
**Subject:** Annandale at Creekwood - Preliminary Subdivision Plan Dated 9/5/12 and Revised Through 12/07/12

Glenn:

I have looked at the subject preliminary subdivision plan and find it to be compliant with our ordinance and regulations. The proposed cul-de-sac radii of 37' (to face of curb) should be sufficient for service vehicles to access the project without any problems.

Solid waste collection will be by private collection/hauler contractor but Orange Community Recycling will collect recyclables curbside every other week. Each new resident will be required to come to our office to sign up for and obtain their recycling containers.

Thanks for the opportunity to review this application and let me know if you have any questions or wish to discuss this matter further.

Jeff Scouten  
Environmental Enforcement Supervisor  
Orange County Solid Waste Management  
P.O. Box 17177  
Chapel Hill, NC 27516-7177  
919-968-2788 x 107 (Office)  
919-932-2900 (Facsimile)  
[jscouten@orangecountync.gov](mailto:jscouten@orangecountync.gov)



Orange Soil and Water Conservation  
 P.O. Box 8181  
 Hillsborough, NC 27278  
 919-245-2750

Dec. 12, 2012

To: Glenn Bowles  
 Orange County Planning Dept.

From: Gail Hughes  
 Soil Conservationist  
 Orange Soil and Water Conservation District

**RE: Annandale at Creek Wood Subdivision  
 Whitfiled Lots, LLC , c/o Tom Hefner (preliminary plan)**

According to the Orange County Soil Survey, the following soils are located on this site:

EnB Enon loam, 2-6% slopes  
 EnC Enon loam 6-12% slopes  
 GeB Georgeville silt loam – 2-6% slope  
 GeC Georgeville silt loam – 6- 10 % slopes  
 HrC Herndon silt loam – 6-10% slopes  
 \*TaD Tatum Silt loam –8-15% slopes

\*Tatum soil series has been renamed to Tarrus silt loam (per USDA-NRCS web site)

Soils names and locations were provided on a site analysis map by the applicant.  
 Soils have been verified using the Orange County GIS and Aries web site;  
<http://aries.co.orange.nc.us> .

A brief description of the soil capabilities in the area are attached but are available in detail on the <http://websoilsurvey.nrcs.usda.gov/app/>

An on-site investigation by the Orange County Environmental Health Dept. should determine site specific soil capabilities and exact locations of septic tanks ( if applicable).

If you have any questions or concerns, please feel free to call or email me at [ghughes@orangecountync.gov](mailto:ghughes@orangecountync.gov) and 919-245-2753.

**Glenn Bowles**

---

**From:** David Sykes  
**Sent:** Thursday, November 01, 2012 1:14 PM  
**To:** Glenn Bowles  
**Subject:** RE: Annandale

Glenn,

I have spoken with New Hope Fire Dept. and they have a pond on Whitfield Rd. that is located close to the proposed subdivision. This pond can be used if needed for water in the event of a fire.

David Sykes

**From:** Glenn Bowles  
**Sent:** Friday, October 26, 2012 4:18 PM  
**To:** David Sykes  
**Subject:** RE: Annandale

Good, the applicant is proposing 27-foot roads. Any thoughts on the location of water for fire suppression? There are no ponds in the immediate area.

**From:** David Sykes  
**Sent:** Friday, October 26, 2012 4:16 PM  
**To:** Glenn Bowles  
**Subject:** Annandale

Glenn,

I have made a mistake about the Annandale project. I have not sent any comments to your office. I would need the two access roads to the houses to be twenty feet wide. This width allows for emergency vehicles to be able to pass each other on the road. The turning radius at the end of the cul-de-sac should allow for vehicles to make the turn and not have to back up.

David Sykes  
Assistant Fire Marshal  
Orange County Emergency Services  
510 Meadowlands Drive  
Hillsborough, NC 27278

Office: (919)245-6125  
Cell: (919)537-2148  
Fax: (919)732-8130  
Email: [dsykes@orangecountync.gov](mailto:dsykes@orangecountync.gov)

**Glenn Bowles**

---

**From:** David Sykes  
**Sent:** Tuesday, January 15, 2013 8:19 AM  
**To:** Glenn Bowles  
**Subject:** FW: Annandale Subdivision

Glenn,

I received the accompanying email from Chief Tapp regarding available water for the new Annandale Subdivision. Please contact myself or Chief Tapp if you need any more information regarding the Annandale project.

David Sykes

**From:** Mike Tapp [<mailto:mike.tapp@newhopefire.com>]  
**Sent:** Monday, January 14, 2013 2:40 PM  
**To:** David Sykes  
**Subject:** Annandale Subdivision

David,

There is a large pond that we use as an approved recognized water point across from the proposed Annandale Subdivision on Whitfield. Also, there are several OWASA fire hydrants close to the area that we can use as additional water sources for fire protection. The pond and additional fire hydrants will provide sufficient water supplies for fire protection for the proposed subdivision. Please contact me if you need additional information.

Mike Tapp, Fire Chief  
New Hope Fire Department  
P.O. Box 16484  
4012 Whitfield Rd.  
Chapel Hill, NC 27514  
Station: 919-493-1001  
Cell: 919-619-8685

**Glenn Bowles**

---

**From:** Jones, DeAngelo J <djjones1@ncdot.gov>  
**Sent:** Tuesday, January 15, 2013 9:48 AM  
**To:** Glenn Bowles  
**Subject:** FW: Annandale

FYI

---

**From:** Jones, DeAngelo J  
**Sent:** Wednesday, November 07, 2012 4:55 PM  
**To:** 'shawn.sidener@earthcentric.com'  
**Cc:** Edwards, Charles N  
**Subject:** RE: Annandale

Hello Shawn,

I have read the study and reviewed the exhibit submitted for Annandale Subdivision. According to the study, it is my understanding that an adequate line of sight is 550'. The western drive (Dumfries Lane) is located in a straight portion of SR 1730 (Whitfield Road) and it was determined that sight distance would not be a concern at this location. Also, it has been established that Lot 7 will not have access on SR 1730, but would be served internally by a cross access easement for connection to the proposed road (Lockwood Court). The study showed that the eastern drive (Lockwood Court) line of sight would be impeded due to existing trees, but can be remedied by removal of the trees. The tree clearing would provide the line of sight needed for traffic to operate at the drive safely. I agree with your analysis, and in accordance with the exhibit plan provided that these two access points have been placed at optimal locations to achieve safe access to the site.

A Driveway Permit accompanied with detailed plans must be submitted to the District Office for approval before construction or connection to SR 1730 (Whitfield Road) for this development.

If you have any questions or concerns feel free to contact me.

DeAngelo Jones  
Asst. District Engineer  
NCDOT Division 7-District 1  
Graham, NC  
(336)570-6833 (t)  
(336)570-6873 (f)

**Michael Harvey**

---

**From:** Glenn Bowles  
**Sent:** Wednesday, January 02, 2013 12:07 PM  
**To:** Michael Harvey  
**Subject:** FW: Annandale at Creek Wood Prelimin. Plat

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**From:** Reynolds Ivins  
**Sent:** Tuesday, December 18, 2012 8:56 AM  
**To:** Glenn Bowles  
**Cc:** Wesley Poole  
**Subject:** RE: Annandale at Creek Wood Prelimin. Plat

Looks fine. No additional comments.

Ren Ivins  
Erosion Control Supervisor  
131 W. Margaret Lane, Suite 201  
Hillsborough, NC 27278  
wk 919 245-2586  
Cell 919-883-7270

[rivins@orangecountync.gov](mailto:rivins@orangecountync.gov)

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**From:** Glenn Bowles  
**Sent:** Monday, December 17, 2012 1:04 PM  
**To:** Reynolds Ivins  
**Subject:** Annandale at Creek Wood Prelimin. Plat

**RESIDENTIAL FISCAL IMPACT TEMPLATE: SERVICE STANDARD METHOD**

Bureau of Economic & Business Research - University of Florida

Modified 4/15/97 - Orange County, NC Planning Department

**SECTION 1 - PROJECT DATA:**

ENTER THE FOLLOWING DATA FOR EACH PROJECT:

<b>PROJECT:</b>	Annandale at Creek Wood
<b>TOWNSHIP:</b>	Chapel Hill
<b>CONSTRUCTION PERIOD:</b>	
Beginning Year:	2013
Ending Year:	2016
Inflation Rate:	1.70%

<b>CHARACTERISTICS OF HOUSEHOLDS:</b>		
Persons/House	ENTER "1" BESIDE APPLICABLE SCHOOL DISTRICT BELOW.	2.56
Children/House:	ENTER "1" BESIDE APPLICABLE SCHOOL DISTRICT BELOW.	0.36
% Non-Elderly:		70.00%

<b>HOME SALES DATA:</b>			
	<b>Number of</b>	<b>Average</b>	<b>Distribution</b>
<b>Year</b>	<b>Homes</b>	<b>Sales Price</b>	<b>of Units</b>
		<b>(\$)</b>	<b>by Year</b>
2013	3	750,000	27.27%
2014	3	750,000	27.27%
2015	3	750,000	27.27%
2016	2	750,000	18.18%

<b>SCHOOL DISTRICT DATA:</b> ENTER "1" IN ( ) BESIDE SCHOOL DISTRICT IN WHICH PROJECT IS TO BE LOCATED TO GENERATE STUDENT DISTRIBUTION BY SCHOOL TYPE.			
<b>School District:</b>		<b>School Attendance:</b>	
Orange County	( 0 )	Elementary School	45%
		Middle School	23%
Chapel Hill-Carrboro	( 1 )	High School	32%

**SECTION 2 - LOCAL GOVERNMENT AND SCHOOL DISTRICT DATA**

<b>BUDGET YEAR:</b>	2012-2013
<b>COUNTY POPULATION:</b> (NC Demo) for July 2011	134484
<b>SCHOOL DISTRICT STUDENT POPULATION:</b>	11658

<b>COUNTY EMPLOYMENT:</b>	<b>POSITIONS</b>	<b>PER CAPITA</b>
General Services, Governing, and Management	167.00	0.0012
Public Safety	256.00	0.0019
Community & Environment + Culture & Recreation	86.00	0.0006
Human Services	292.00	0.0022
Education (School District)	1780.00	0.0132

<b>SCHOOL DISTRICT EMPLOYMENT:</b>	<b>POSITIONS</b>	<b>PER STUDENT</b>
Total	1780.00	0.1527

<b>COUNTY PER CAPITA REVENUES (\$):</b>	<b>REVENUES</b>	<b>PER CAPITA</b>
Taxes - Other Than Property	16055304	119.38
Intergovernmental	13515810	100.50
Service Charges	9292257	69.10
Other Sources	3332872	24.78
Miscellaneous	798340	5.94

<b>COUNTY PER CAPITA EXPENDITURES (\$):</b>	<b>EXPENDITURES</b>	<b>PER CAPITA</b>
General Services, Governing, and Management	23051740	171.41
Public Safety	20121532	149.62
Community & Environment + Culture & Recreation	8184392	60.86

Human Services	30711556	228.3744
Education (Recurring Capital)	25551075	189.99
Non-Departmental	5434131	40.41

COUNTY PER EMPLOYEE EXPENDITURE (\$):	EXPENDITURES	PER EMPLOYEE
General Services, Governing, and Management	23051740	138034.37
Public Safety	20121532	78599.73
Community & Environment + Culture & Recreation	8184392	95167.35
Human Services	30711556	105176.56
Education (Recurring Capital)	25551075	14354.54

SCHOOL DISTRICT PER STUDENT EXPENDITURES (\$):	EXPENDITURES	PER STUDENT
County Government	49981296	4287.30
School District	30372967	2605.33
State	26787400	2297.77

SCHOOL DISTRICT PER EMPLOYEE EXPENDITURES (\$):	EXPENDITURES	PER EMPLOYEE
County Government	49981296	28079.38
School District	30372967	17063.46
State	26787400	15049.10

TAX DATA: ENTER APPLICABLE ASSESSMENT RATIO AND ELDERLY EXEMPTION:			
County Tax Rate (\$)	0.1884	0.8580	Per \$100 Assessed Valuation
School District Tax Rate (\$)	includes 0.3028 from O. C.	0.1884	Per \$100 Assessed Valuation
Assessment Ratio		100.00	
Elderly Exemption		0	\$11,000 Where Applicable

### SECTION 3 - DEMOGRAPHIC PROJECTIONS BASED ON PROJECT DATA

EAR	2013	2014	2015	2016
<b>HOUSING UNITS</b>	3	3	3	2
<b>POPULATION</b>	8	8	8	5
<b>SCHOOL CHILDREN</b>				
Elementary	0.49	0.49	0.49	0.32
Middle	0.25	0.25	0.25	0.17
High School	0.35	0.35	0.35	0.23
<b>TOTAL</b>	1	1	1	1
<b>COUNTY GOVERNMENT ADDITIONAL EMPLOYEES</b>				
General Government	0.01	0.01	0.01	0.01
Public Safety	0.01	0.01	0.01	0.01
Public Works	0.00	0.00	0.00	0.00
Human Services	0.02	0.02	0.02	0.01
<b>TOTAL</b>	0.05	0.05	0.05	0.03
<b>SCHOOL DISTRICT ADDITIONAL EMPLOYEES</b>				
	0.10	0.10	0.10	0.07

### SECTION 4 - PROJECTED FISCAL IMPACT OF PROJECT ON COUNTY GOVERNMENT

EAR	2013	2014	2015	2016
<b>TAX BASE (\$1000)</b>	2250	4538	4538	6115
<b>REVENUES (\$)</b>				
Property Tax	19305	38938	38938	52470
Other Taxes	917	932	948	632
Intergovernmental	772	785	798	532
Service Charges	531	540	549	366

Miscellaneous	46	46	47	31
<b>TOTAL (\$)</b>	<b>21570</b>	<b>41242</b>	<b>41281</b>	<b>54032</b>
<b>EXPENDITURES (\$)</b>				
General Government	1316	1339	1362	908
Public Safety	1149	1169	1188	792
Public Works	467	475	483	322
Human Services	1754	1784	1814	1209
Education	6089	6193	6298	4199
Non-Departmental	310	316	321	214
<b>TOTAL (\$)</b>	<b>11086</b>	<b>11275</b>	<b>11467</b>	<b>7644</b>
<b>NET FISCAL IMPACT (\$)</b>	<b>10483</b>	<b>29967</b>	<b>29814</b>	<b>46387</b>

#### SECTION 5 - PROJECTED FISCAL IMPACT OF PROJECT ON SCHOOL DISTRICT

YEAR	2013	2014	2015	2016
<b>REVENUES (\$)</b>				
County	6089	6193	6193	4129
School District	4239	8550	8550	11521
State	2482	2524	2524	1683
<b>TOTAL (\$)</b>	<b>12810</b>	<b>17267</b>	<b>17267</b>	<b>17333</b>
<b>EXPENDITURES (\$)</b>				
County	6089	6193	6193	4129
School District	2814	2862	2862	1908
State	2482	2524	2524	1683
<b>TOTAL (\$)</b>	<b>11385</b>	<b>11578</b>	<b>11578</b>	<b>7719</b>
<b>NET FISCAL IMPACT (\$)</b>	<b>1425</b>	<b>5688</b>	<b>5688</b>	<b>9614</b>

#### SECTION 6 - SUMMARY OF PROJECTED DEMOGRAPHIC/FISCAL IMPACTS

YEAR	2013	2014	2015	2016
<b>HOUSING UNITS</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
<b>POPULATION</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>5</b>
<b>SCHOOL CHILDREN</b>				
Elementary	0	0	0	0
Middle	0	0	0	0
High School	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>COUNTY EMPLOYEES</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.03</b>
<b>SCHOOL EMPLOYEES</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.07</b>
<b>TAX BASE (\$1000)</b>	<b>2250</b>	<b>4538</b>	<b>4538</b>	<b>6115</b>
<b>COUNTY BUDGET (\$)</b>				
Revenues	21570	41242	41281	54032
Expenditures	11086	11275	11467	7644
<b>BALANCE</b>	<b>10483</b>	<b>29967</b>	<b>29814</b>	<b>46387</b>
<b>SCHOOL DISTRICT BUDGET (\$)</b>				
Revenues	12810	17267	17267	17333
Expenditures	11385	11578	11578	7719
<b>BALANCE</b>	<b>1425</b>	<b>5688</b>	<b>5688</b>	<b>9614</b>
<b>COMBINED BUDGETS (\$)</b>				

Revenues	34380	58508	58548	71364
Expenditures	22471	22853	23045	15363
<b>ALANCE</b>	<b>11909</b>	<b>35655</b>	<b>35503</b>	<b>56001</b>

## SECTION 7 - SUMMARY OF PROJECTED PUBLIC SCHOOL CAPACITY IMPACTS

SCHOOL DISTRICT DATA:				
School District:			School Attendance:	
Orange County	NO	)	Elementary School	45%
Chapel Hill-Carrboro	YES	)	Middle School	23%
			High School	32%
YEAR	2013	2014	2015	2016
SCHOOL CHILDREN				
Elementary	0	0	0	0
Middle	0	0	0	0
High School	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
SCHOOL CAPACITIES - ALL SCHOOLS			CURRENT ENROLLMENT - ALL SCHOOLS	
Elementary	5244	Elementary	5296	
Middle	2840	Middle	2722	
High School	3876	High School	3640	
<b>TOTAL</b>	<b>11960</b>	<b>TOTAL</b>	<b>11658</b>	
YEAR	2013	2014	2015	2016
PROJECTED ENROLLMENT				
Elementary	5557	5727	5752	5821
Middle	2879	2894	2951	2993
High School	3768	3846	3911	3997
<b>TOTAL</b>	<b>12204</b>	<b>12467</b>	<b>12614</b>	<b>12811</b>

MINUTES  
ORANGE COUNTY PLANNING BOARD  
NOVEMBER 7, 2012  
REGULAR MEETING

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**MEMBERS PRESENT:** Larry Wright (Chair), At-Large, Cedar Grove Township; Peter Hallenbeck (Vice-chair), Cheeks Township Representative; Maxecine Mitchell, At-Large Bingham Township; Alan Campbell, Cedar Grove Township Representative; Buddy Hartley, Little River Township Representative; Rachel Hawkins, Hillsborough Township Representative; Dawn Brezina, Eno Township Representative; Tony Blake, Bingham Township Representative; Andrea Rohrbacher, At-Large Chapel Hill Township; Lisa Stuckey, Chapel Hill Township Representative;

**MEMBERS ABSENT:** Johnny Randall, At-Large Chapel Hill Township;

**STAFF PRESENT:** Craig Benedict, Planning Director; Michael Harvey, Current Planning Supervisor; Glenn Bowles, Planner II; Perdita Holtz; Special Projects Coordinator; Tom Altieri, Comprehensive Planning Supervisor; Tina Love, Administrative Assistant II

**OTHERS PRESENT:** Edward Yahner, Pat Yahner, Timothy McAvinney, Tom Heffner

**HANDOUTS GIVEN AT MEETING:** *PowerPoint Presentation for Item 7; Email from NCDOT District Engineer*

**Agenda Item 7: Major Subdivision Concept Plan** - To review and make a decision on a major subdivision concept plan application (Annandale at Creek Wood) Located off Whitfield Road.  
**Presenter: Glenn Bowles, Planner II**

Glenn Bowles: Reviewed abstract.

Michael Harvey: Reviewed Development Process, Schedule and Action on page 20.

Tom Heffner: I am Tom Heffner of Heffner Properties. I have been in the development business in Orange County for about 30 years. I developed the Northfield of Creekwood and Woodkirk Subdivision on Highway 86. This property belongs to an LLC, the heirs of Charles Johnston. . The Johnston Family has owned property in this area since the 1750s. They were one of the original in Orange County to receive a land grant from King George II in 1752. I was honored to develop Creekwood property and in conjunction we were able to set aside Johnston Mill Nature Preserve with Triangle Land Conservancy. Some of the family had a desire to keep their land in Orange County. Our goal, as developers, was to find a plan that made good use of the property as a residential development but also was sensitive to the creek and existing wild life. We feel we have done that with the flexible concept plan we have submitted. Drainage is an issue so I have Tim McAvinney from Earth Centric Engineers in Mebane. There are not trails at this time but based on discussions there is some interest in developing the trail system. We have also provided an internal easement. Earth Centric met with Chuck Edwards (District Engineer) in looking at those street locations and DOT advised us that the locations are acceptable to them. We would like to have a lower posted speed limit.

Alan Campbell: Do you have a homeowner's association?

Tom Heffner: Yes. The HOA will be I charge of the open space.

Lisa Stuckey: It sounded like the folks advocating for a conventional plan were worried about septic field sufficiency.

Tom Heffner: That was the health department. The area set aside for the septic field is the same in both fields. The health department's view was the bigger the lot, the better.

Tony Blake: What is the typical size regarding bedrooms?

56  
57 Tom Heffner: Typically four not more than five bedrooms. There is a market-wide tendency for smaller houses.  
58 These may be more in the 3,000 square foot range.

59  
60 Tony Blake: Regarding lot 7, is that the only way the driveway can work? There is no flexibility if we approve the flex  
61 plan.

62  
63 Tom Heffner: The reason we chose that location is that was the gentlest part of the slope. We were trying to find a  
64 potential crossing.

65  
66 Tony Blake: If someone purchased lot 7, they couldn't negotiate a DOT access?

67  
68 Tom Heffner: No because that frontage would be in open space that was deeded to the homeowners association.

69  
70 Peter Hallenbeck: I have one comment. The 35 foot diameter on the cul-de-sacs bothers me from a fire apparatus  
71 point of view, fire trucks are 28-33 feet long and there is also a comment from the solid waste people that they were  
72 concerned about that diameter for the trucks to pick up the trash, etc. A 40 foot cul-de-sac wouldn't be much of a  
73 change but it would make it much easier for the garbage collection and fire department turning around.

74  
75 Tom Heffner: We will look at that. Our motivation was to try to reduce the amount of street there as much as we  
76 could.

77  
78 Lisa Stuckey: Have you thought about the noise from I-40?

79  
80 Tom Heffner: The noise from I-40 at the front of the subdivision is loud. On this property when you get back into the  
81 back, the noise is significantly less. It is a risk for a developer but it becomes a tradeoff, for some people it is a no  
82 and others look at it as I am a minute from I-40.

83  
84 Larry Wright: I am going to ask questions and make comments because this Board has not been through this. I  
85 would like to commend you for adding up the acres per lot and getting them correct. I went through the numbers  
86 where you have 33.7 and I came up with 38% of the roads and buffers and then calculated how much you said the  
87 linear feet were of the roads which I think was 1,700 and 50 foot wide and I estimated that the roads and gutters  
88 would be 3% of your total and that makes 38%. Are your buffers and woodlands part of your open space?

89  
90 Tom Heffner: The buffers are not included in the open space.

91  
92 Larry Wright: On these lots, what is the flood plane?

93  
94 Tom Heffner: Part of our submittal package was the FEMA flood map for the area and there is no FEMA designated  
95 flood plain there.

96  
97 Glenn Bowles: That doesn't mean it doesn't flood, it hasn't been mapped as a flood plain.

98  
99 Larry Wright: *Referenced Colonial Heights.*

100  
101 Tom Heffner: I think effectively Glenn was right. It is not currently mapped as a flood zone. I agree with you that  
102 does not necessarily mean the area will not be inundated by flood waters. All the lots are at a significantly higher  
103 elevation so there should not be a problem.

104  
105 Peter Hallenbeck: Are these two or four foot contours.

106  
107 Tom Heffner: Those are two.

108  
109 Larry Wright: This would include the house with the driveway across the street?

110

111 Glenn Bowles: At least 10 foot above what you expect a flood to occur here.  
112  
113 Tony Blake: Where does the water flow from?  
114  
115 Tom Heffner: Chapel Hill North, Timberlyne drains a tremendous across on the southern side of I-40.  
116  
117 Tim McAvinney: Over 100 acres.  
118  
119 Tom Heffner: You are draining south to the north.  
120  
121 Peter Hallenbeck: It is only 100 acres?  
122  
123 Tom Heffner: Approximately 150 with ours.  
124  
125 Larry Wright: If we go with the flexible development, I noticed in the plan, that driveway goes into .... right angles to  
126 the streambed and I would encourage you to maintain that if we go with that plan.  
127  
128 Tim McAvinney: The Orange County Erosion Control will look very closely at that.  
129  
130 Larry Wright: When you talk to DOT about the speed limit, maybe we could discuss the option with DOT.  
131  
132 Tim McAvinney: More road area and turning lanes sometimes encourages people when they have more space to go  
133 faster.  
134  
135 Maxecine Mitchell: I am glad you decided to take that driveway into the cul-de-sac because that would be a concern.  
136  
137 Larry Wright: The gutters and curbs where does that water eventually flow?  
138  
139 Tom Heffner: It will eventually flow into the stream.  
140  
141 Maxecine Mitchell: Where will the school bus stop be?  
142  
143 Tom Heffner: The school will typically determine the stop.  
144  
145 **Motion** made by Alan Campbell to make a recommendation that the applicant proceed with the flexible concept plan.  
146 Seconded by Lisa Stuckey.  
147 **Vote:** Unanimous  
148

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**ORANGE COUNTY  
PLANNING BOARD  
ACTION AGENDA ITEM ABSTRACT**

**Meeting Date:** March 6, 2013

**Action Agenda  
Item No. 8**

**SUBJECT:** Unified Development Ordinance Text Amendments – Modification of Site Plan Submittal Requirements

**DEPARTMENT:** Planning and Inspections

**PUBLIC HEARING:** (Y/N)

No

**ATTACHMENT(S):**

1. Comprehensive Plan and Unified Development Ordinance Amendment Outline Form (UDO/Zoning 2012-016)
2. UDO Amendment Package

**INFORMATIONAL:**

3. Map of Watershed Protection Overlay Districts and Explanation/Regulations

**INFORMATION CONTACT:**

Michael D. Harvey, Planner III (919) 245-2597  
Reynolds Ivins, Erosion Control (919) 245-2586  
Craig Benedict, Director (919) 245-2575

**PURPOSE:** To make a recommendation to the BOCC on a Planning Director initiated text amendment(s) to the Unified Development Ordinance (UDO) in regards to the submission of formal, professionally prepared, site plans.

**BACKGROUND:** This item was presented at the February 25, 2013 Quarterly Public Hearing. As indicated during the hearing these amendments seek to clarify existing language within the UDO denoting when a formal site plan is required and add language requiring formal site plan submittal in those instances where proposed land disturbance exceeds established stormwater management thresholds.

Comments made during the hearing, and staff responses, are in Section C.1 (b) of Attachment 1.

Attachment 2 contains the proposed amendments with additions shown in **red text** and proposed deletions are shown in **red strikethrough text** as well as footnotes documenting the rationale for the proposed modification.

During the hearing staff identified 3 options with respect to addressing existing regulations contained in Section 2.4.1 requiring the submittal of a professionally prepared site plan for properties located within the University Lake Watershed Protection Overlay Districts. These options are:

- A. Leave section as is (i.e. only properties in the University Lake Watershed impacted) and include language referencing the need for a professionally site plan when stormwater land disturbance thresholds are exceeded.
- B. Amend section as originally suggested by staff, and as currently contained in Attachment 2, requiring all watershed overlay districts with a 6% impervious surface limit be treated the same (i.e. require professional site plan regardless of the amount of land disturbance). This option also involves including language referencing the need for a site plan when stormwater land disturbance thresholds are exceeded.
- C. Eliminate requirement all together and only require professionally prepared site plans when stormwater land disturbance thresholds are exceeded.

As requested during the hearing staff will be soliciting input from OWASA on this matter and provide the information to the Planning Board. Staff has taken the liberty to provide additional information on our watershed management program, Attachment 3, in an effort to address some of the comments from the hearing.

Staff will reiterate, however, development standards associated with the Watershed Protection Overlay Districts are not being changed as part of this amendment package. All staff is attempting to do is modify existing language within the UDO to either expand the list of watershed overlay districts, specifically those with a 6% impervious surface limit (i.e. Upper Eno Critical, Cane Creek Protected and Critical, Little River Protected) where property owners are required to submit a professionally prepared site plan as part of a development application regardless of the proposed amount of land disturbance or eliminate the requirement altogether and base the submission of a professionally prepared site plan on existing stormwater land disturbance thresholds.

Procedural Information: In accordance with Section 2.8.8 of the Unified Development Ordinance, any evidence not presented at the public hearing must be submitted in writing prior to the Planning Board's recommendation. Additional oral evidence may be considered by the Planning Board only if it is for the purpose of presenting information also submitted in writing. The public hearing is held open to a date certain for the purpose of the BOCC receiving the Planning Board's recommendation and any submitted written comments.

Planning Director's Recommendation: The Planning Director recommends **approval** of the proposed text amendments based on the following:

- a. Staff is in favor of option C, as detailed above, with respect to basing the need for a professionally prepared site plan on stormwater management standards rather than on the impervious surface limit of a particular watershed overlay district.

If, however, it is a choice between option(s) A and B, staff would recommend option B and encourage all watershed overlay districts with a 6% impervious surface limit be treated the same.

- b. The amendments eliminate existing inconsistencies and provide additional clarification on the submission of professionally prepared site plans.
- c. The amendments provide reference to recently adopted stormwater management standards, and
- d. The amendments are consistent with the overall intent of the adopted 2030 Comprehensive Plan.

For additional information please refer to Section B.1 and 2 in Attachment 1.

**FINANCIAL IMPACT:** See Section C.3 in Attachment 1.

**RECOMMENDATION:** The Planning Director recommends the Planning Board:

1. Deliberate as necessary on the proposed amendments;
2. Consider the new information supplied since the public hearing and the Planning Director's recommendation to approve the UDO amendments contained in Attachment 2; and,
3. Make a recommendation to the BOCC on the proposed amendments in time for the **May 7, 2013** BOCC meeting.

# COMPREHENSIVE PLAN/ FUTURE LAND USE MAP AND UNIFIED DEVELOPMENT ORDINANCE (UDO) AMENDMENT OUTLINE

UDO / Zoning-2012-016

Amendment(s) requiring submittal of formal site plans and stormwater management plans for residential and non-residential projects

## A. AMENDMENT TYPE

**Map Amendments**

- Land Use Element Map:  
From: ---  
To: ---
- Zoning Map:  
From:- --  
To:---
- Other:

**Text Amendments**

- Comprehensive Plan Text:  
Section(s):
- UDO Text:
  - UDO General Text Changes
  - UDO Development Standards
  - UDO Development Approval Processes
 Section(s):
- Other:

## B. RATIONALE

**1. Purpose/Mission**

In accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the UDO, the Planning Director has initiated a text amendment to modify existing language requiring the submittal of formal stormwater plans as part of subdivision and development applications.

The State recently implemented stormwater management and nutrient reduction strategies. As part of these strategies, the County recently modified existing regulations mandating the preparation and submittal of formal, engineered, stormwater management plans as part of any development project where proposed land disturbance reached the following thresholds:

<b>Watershed/River Basin</b>	<b>Stormwater – Non-residential</b>	<b>Stormwater – Residential</b>
Cape Fear (includes the Back Creek, Haw River, Cane Creek, Jordan Lake, and University Lake protected and critical watershed overlay districts as well as those properties within the basin not located in a watershed overlay district).	Projects proposing over 21,780 square feet of disturbance are required to submit a stormwater management plan.	Projects proposing over 43,560 square feet of disturbance are required to submit a stormwater management plan.
Neuse (includes Flat River, Little River, Upper and Lower Eno protected and critical watershed overlay districts as well as those properties within the basin not located in a watershed overlay district).	Projects proposing over 12,000 square feet of disturbance are required to submit a stormwater management plan.	Projects proposing over 21,780 square feet of disturbance are required to submit a stormwater management plan.
Roanoke (includes South Hyco Creek protected watershed overlay district).	Projects proposing over 20,000 square feet of disturbance are required to submit a stormwater management plan.	Projects proposing over 43,560 square feet of disturbance are required to submit a stormwater management plan.

These changes were incorporated into the UDO on April 17, 2012. The agenda packet for this meeting can be found utilizing the following link: <http://orangecountync.gov/OCCLERKS/120417.htm>

Currently there are conflicting requirements within the UDO detailing when a formal, professionally prepared, site plan is required.

For example Section 2.4.1 requires a professionally prepared site plan for single-family developments on property located within the University Lake Protected and Critical Watershed Overlay Districts. Section 2.5.2, the section of the UDO addressing site plan application requirements, specifically exempt single-family development projects from submitting a professionally prepared site plan.

Problems also arise in those instances where a project’s proposed overall land disturbance requires submission of a formal stormwater management plan.

Staff does not want there to be conflicting information provided to the public as to when a formal site plan is required nor do we want the staff of Current Planning and Erosion Control to potentially be looking at 2 different sets of plans proposing the development of a given property.

This proposed amendment is designed to:

1. Require formally prepared site plans for those projects exceeding established stormwater disturbance thresholds for residential projects.

Submittal of formal site plans is already required for all non-residential projects regardless of the proposed land disturbance activity.

2. Incorporate references within various locations of the UDO identifying which land development projects need to comply with these standards in an effort to eliminate confusion and provide definitive application submittal standards.

3. Add language requiring stormwater management plans for minor and major subdivisions where anticipated land disturbance activities would exceed established thresholds.

Both Planning and Erosion Control staff agree potential problems can be eliminated if there is a formal stormwater management plan approved during the subdivision review and approval process.

## 2. **Analysis**

As required under Section 2.8.5 of the Orange County Unified Development Ordinance, the Planning Director is required to: *'cause an analysis to be made of the application and, based upon that analysis, prepare a recommendation for consideration by the Planning Board and the Board of County Commissioners'*.

The proposed amendment is designed to incorporate established stormwater management land disturbance thresholds into existing language within the UDO requiring formal site plan preparation and submittal by an applicant when said thresholds are exceeded.

By modifying existing language we hope to eliminate unnecessary cost for the applicant, with respect to the completion of multiple site plans, and provide sufficient detail to residents, property owners, and developers on when formal site plan preparation is necessary.

The amendment is also designed to provide a 'central site plan' for review to ensure staff is reviewing and taking action on the same document to avoid confusion and unnecessary duplication of effort.

## 3. **Comprehensive Plan Linkage (i.e. Principles, Goals and Objectives)**

This amendment is designed to provide additional references to existing development standards already contained within the UDO.

## 4. **New Statutes and Rules**

This amendment is designed to reference compliance with recently adopted

modifications to the UDO related to stormwater management and nutrient reduction standards consistent with the following State regulations:

- 15A NCAC 2B. 0277 Falls Lake Stormwater New Development Rule
- 15A NCAC 2B. 0265 and Session Law 2009-484 Jordan Lake Stormwater New Development Rules

## C. PROCESS

### 1. TIMEFRAME/MILESTONES/DEADLINES

#### a. BOCC Authorization to Proceed

November 8, 2012. The BOCC voted unanimously to authorize staff to proceed with the amendment. Board members also requested staff present the proposed amendment to the Commission for the Environment (CFE) for its input. Staff presented this item to the CFE at its January 14, 2013 regular meeting. The CFE had no comments or concerns related to the proposal.

#### b. Quarterly Public Hearing

February 25, 2013. During the hearing the following comments were made:

1. A BOCC member asked staff to clarify the difference between impervious surface and land disturbance limits.

*STAFF COMMENT:* Land disturbance limits identify the total amount of land area that can be disturbed/cleared without the benefit of a formal erosion control or stormwater management plan being approved by the County.

Impervious surface limits establish the overall limit of 'development' that can occur on a given parcel (i.e. driveway, house, shed, etc.) based on its designated Watershed Protection Overlay District.

You can disturb more land area than you can actually develop.

Ultimately both regulations are an attempt by the County to address water quality issues through limiting the overall amount of 'impervious' surface placed on a parcel and requiring stormwater management devices in those cases where they are necessary.

2. A BOCC member expressed concern over the potential for increased costs to be incurred by property owners seeking to develop single-family residences with the submittal of professionally prepared site plan.
3. A BOCC member indicated she did not want existing regulations, specifically the requirement of a professionally prepared site plan for development within the University Protected and Critical Watershed Overlay districts, to change.

*STAFF COMMENT:* Staff reiterated the amendment would not alter development limitations (i.e. impervious surface limits) within

### Watershed Protection Overlay Districts.

The only potential impact of the proposed amendment would be an expansion, or elimination, of the requirement for a professionally prepared site plan in watershed areas within an impervious surface limit of 6% depending on which course of action is chosen.

As written, the amendment package would still require a professionally prepared site plan if established stormwater management land disturbance thresholds were exceeded.

4. There was a general concern the proposal would allow for an increase in development opportunity within the various watershed districts.

*STAFF COMMENT:* The proposal would not impact existing impervious surface limits in any Watershed Protection Overlay District.

The text amendment merely seeks to clarify when a professionally prepared site plan is required and does not increase allowable impervious surface area throughout the County.

5. There was a general comment made over the need to have uniformity within the UDO with respect to when a professionally prepared site plan would be required.

A BOCC member indicated he felt requiring a professionally prepared site plan when land disturbance thresholds, consistent with existing stormwater management standards, were exceeded was a reasonable standard versus basing the submission on impervious surface limits.

6. A Planning Board member asked why the Haw River Protected Watershed Overlay District was not included within staff's recommendation for the submission of a professionally prepared site plan.

*STAFF COMMENT:* The Haw River Protected Watershed Overlay District has an impervious surface limit of 24%.

Staff's proposal seeks to amend the UDO to require overlay districts with a 6% impervious surface limit to submit a professionally prepared site plan.

7. A BOCC member indicated he felt there ought to be a reevaluation of impervious surface limits within respect to any watershed feeding into a public water intake for local residents.

The concern was the County was treating certain water supply watersheds differently from others, specifically focusing on the Haw River Protected Watershed Overlay District which serves as a public water source for Chatham County residents.

*STAFF COMMENT:* This can be undertaken at some point in the future if the BOCC directs staff to do so. It should be remembered that any such review will need to take existing State requirements into account.

8. A BOCC member asked staff to consider modifying provisions of Section

2.4.1 to include additional rationale for the submission of a universal site plan into the proposed text. This BOCC member indicated she felt language within a footnote ought to be incorporated to provide additional 'explanation' on the need for the amendment.

*STAFF COMMENT:* Staff does not believe additional modification is necessary.

When the UDO was developed there was a conscious effort to eliminate explanatory language in an effort to streamline existing regulations and condense existing land use regulations.

The UDO is not intended to serve as a technical manual providing detailed insight into every 'standard' associated with a given development. It is, ultimately, staff's responsibility to educate local residents and developers with respect to the rationale behind a given regulation.

Unless specifically directed by the BOCC to begin re-inserting explanatory language, staff recommends keeping the language regulatory in nature.

9. While there was no formal consensus, a few BOCC members favored leaving language within the UDO requiring submission of a professionally prepared site plan for property located only within the University Lake Watershed Protection Overlay District.

Other BOCC members expressed support for eliminating the requirement altogether and basing the need for a formal site plan on established land disturbance thresholds for stormwater management plans.

10. Staff was directed to solicit comments on the proposal from OWASA to ascertain if they have any concerns.

*STAFF COMMENT:* Staff will contact OWASA as requested.

c. BOCC Updates/Checkpoints

January 9, 2013 - BOCC members can view materials to be reviewed by the Planning Board's Ordinance Advisory Committee (ORC) as part of the Planning Board materials posted on-line each month. Packet materials can be viewed utilizing the following link: <http://orangecountync.gov/planning/documents/PBPacketJan2013.pdf>

February 5, 2013 – BOCC members approved the legal advertisement for the February 25, 2013 Quarterly Public Hearing with this item on the agenda.

May 7, 2013 - Receive Planning Board recommendation.

d. Other

## 2. **PUBLIC INVOLVEMENT PROGRAM**

**Mission/Scope:** Public Hearing process consistent with NC State Statutes and

Orange County ordinance requirements.

a. Planning Board Review:

January 9, 2013 – Ordinance Review Committee (ORC).  
 A Planning Board member identified a punctuation error in Section 2.4.1 of the proposed amendment. An error was also identified within the site plan flow chart contained in Section 2.5.2. Staff has modified the proposal accordingly.  
 There was also a general discussion over staff’s recommendation to modify Section 2.4.1 expanding the list of Watershed Protection Overlay Districts requiring a professionally prepared site plan allowing for development. Staff agreed to solicit guidance from the BOCC at the public hearing.  
 March 6, 2013 – April 3, 2013 (recommendation)

b. Advisory Boards:

Commission for the Environment (CFE) – January 14, 2013. The CFE had no comments related to the proposed amendment.

c. Local Government Review:

Courtesy Review – Town(s) of Chapel Hill, Carrboro, Hillsborough, City of Mebane in November of 2012. As of this date no comments have been received.

At the February 25, 2013 Quarterly Public Hearing staff was directed to solicit input from OWASA on the proposed text amendment.

d. Notice Requirements

Legal advertisement was published on February 13 and 20, 2013.

e. Outreach:

- General Public:
- Small Area Plan Workgroup:
- Other:

**3. FISCAL IMPACT**

While these proposed amendments are merely designed to incorporate necessary references with respect to complying with established thresholds, and requiring the submission of formal site plans in the event a stormwater management plan is

required, staff had previously identified compliance with these new State required standards will impose additional costs for development projects and require additional staff resources.

Workload for Current Planning and Erosion Control staff to review and approve stormwater management plans required by the rules is expected to increase. Workload for staff with respect to the inspection of stormwater management features is also expected to increase. This may necessitate an increase in fees charged to developers.

As reported at the February 27, 2012 Quarterly Public Hearing, it is expected that enforcement of the new regulations will require, at a minimum, up to one additional full time employee for Erosion Control with an approximate cost of \$65,000.

Staff is continuing to evaluate workload and needs as the process moves forward.

## D. AMENDMENT IMPLICATIONS

The amendments are in response to recent modifications to the UDO relating to compliance with stormwater and nutrient management requirements and staff's desire to ensure proper reference for compliance with these aforementioned new standards.

As previously indicated by staff, compliance with these required standards is expected to increase the cost of development and increase staff workload.

## E. SPECIFIC AMENDMENT LANGUAGE

Please refer to [Attachment 2](#).

### **Primary Staff Contact:**

Michael D. Harvey

Planning

(919) 245-2597

mharvey@orangecountync.gov

## ATTACHMENT 2

**UDO AMENDMENT PACKET NOTES:**

The following packet details staff's proposed modifications to existing regulations governing the submittal of professionally prepared site plans for projects requiring stormwater plan approval. These amendments are based modifications to the UDO, approved on April 17, 2012, incorporating State stormwater management and nutrient reduction standards into County regulations.

The intent of the proposal is to incorporate appropriate references to these new development standards to avoid the submission of multiple site plans adding to the overall cost of a development project and creating confusion for the property owner/developer.

As the number of affected pages/sections of the existing UDO are being modified with this proposal staff has divided the proposed amendments into the following color coded classifications:

- **Red Underlined Text**: Denotes new, proposed text, that staff is suggesting be added to the UDO
- **Red Underlined Bold Text**: Denotes new, proposed text, added to address peer or advisory board comments
- ~~Red-Strikethrough Text~~: Denotes existing text that staff is proposing to delete

Staff has included footnotes within the amendment package to provide additional information/rationale concerning the proposed amendments to aid in your review.

Only those pages of the UDO impacted by the proposed modification(s) have been included within this packet. Some text on the following pages has a large "X" through it to denote that these sections are not part of the amendments under consideration. The text is shown only because in the full UDO it is on the same page as text proposed for amendment or footnotes from previous sections 'spill over' onto the included page. Text with a large "X" is not proposed for deletion.

**Please note that the page numbers in this amendment packet may or may not necessarily correspond to the page numbers in the adopted UDO because adding text may shift all of the text/sections downward.**

Users are reminded that these excerpts are part of a much larger document (the UDO) that regulates land use and development in Orange County. The full UDO is available online at: <http://orangecountync.gov/planning/Ordinances.asp>

- (D) Amendments initiated by Orange County shall not be subject to time limitations other than those specified by the Board of County Commissioners during the public hearing process.
- (E) Evidence not presented at the public hearing may be submitted in writing to the Planning Board for consideration prior to the Planning Board's recommendation to the Board of County Commissioners. The Planning Board may consider additional oral evidence only if it is for the purpose of presenting information also submitted in writing.

### 2.3.11 Action by Board of County Commissioners

- (A) The Board of County Commissioners shall not consider enactment of the proposed amendment until the Planning Board either makes its recommendation or takes no action on the application as prescribed in this section.
- (B) In making its decision, the Board of Commissioners shall consider all relevant evidence presented at the public hearing and any submitted written evidence that was considered by the Planning Board in making its recommendation.
- (C) The Board of Commissioners, upon receipt of a recommended Comprehensive Plan or portion thereof from the Planning Board, shall consider such recommendations and adopt them by resolution, either unchanged or with modifications.

## SECTION 2.4: ZONING COMPLIANCE PERMITS

### 2.4.1 Applicability

- (A) As required by this Ordinance, a Zoning Compliance Permit must be issued before any new site development, building, structure, or vehicular use area may be erected, constructed or used.
  - (B) Submittal and approval of a site plan (see Section 2.5) is required for issuance of a Zoning Compliance Permit except for:
    - (1) Single-family detached dwellings and duplexes, and accessory structures to those residential uses ~~provided, however, when such uses are located in the developed on property located outside of the Upper Eno Critical, Little River Protected, University Lake and Cane Creek Protected and Critical Watershed Protection Overlay Districts. In these instances a Plot Plan, as detailed within Section 2.4.3 of this Ordinance, shall be required.~~<sup>1</sup> ~~site plan approval shall be required.~~
      - (a) ~~Single-family detached dwellings and duplexes outside of the University Lake Watershed Protection Overlay District and accessory structures to those residential uses shall be required to submit a Plot Plan (see Section 2.4.3 for Plot Plan specifications).~~
- In those instances where the proposed level of land disturbance exceeds established thresholds detailed within Section 6.14.5 of the Ordinance a formal site plan, prepared in accordance with Section 2.5, shall be required for submittal and approval regardless of the proposed land use or Watershed Protection

<sup>1</sup> The existing wording of the UDO has created confusion in the past over when a site plan is required. We have streamlined existing language in an attempt to eliminate confusion and specifically spell out when a plot plan versus a site plan is actually required. Staff is also proposing to add language requiring formal site plans in other Watershed Protection Overlay Districts having similar characteristics to the University Lake Protected and Critical Watershed Protection Overlay Districts in order to establish greater uniformity within the Ordinance. Specifically staff is modifying the UDO to require a formal site plan in those overlay districts where a 6% impervious surface limit is enforced. There will need to be discussion on this item as there are implications to expanding the list, most notably more property owners will be required to secure a professionally prepared site plan than ever before. The BOCC may wish to revise this section in its entirety to limit submittal of site plans in those instances where formal stormwater management plans are required.

Overlay District designation of the subject property.<sup>2</sup> **This site plan may contain all required elements associated with obtaining a Zoning Compliance, Erosion Control, and Stormwater permit as detailed herein,<sup>3</sup>**

- (2) Interior renovation or repair of an existing structure, provided the use of the lot and/or structure has not changed.
- (C) Issuance of a Zoning Compliance Permit is required prior to beginning the excavation for the construction, moving, alteration, or repair, except ordinary repairs, of any building or other structure, including an accessory structure. The Zoning Compliance Permit shall include a determination that plans, specifications and the intended use of the structure conforms to the provisions of this Ordinance.
- (D) Issuance of a Zoning Compliance Permit is required to change the type of use or type of occupancy of any building, or to expand any use on any lot on which there is a non-conforming use. The Zoning Compliance Permit shall include a determination that the proposed use conforms to the provisions of this Ordinance.

#### ~~2.4.2 Requirements and Conditions~~

- ~~(A) In cases where the development and/or commencement of a land use requires the issuance of a Special Use or a Conditional Use Permit, a Zoning Compliance Permit shall not be issued until the aforementioned permit has been issued by the responsible board in accordance with the review and approval procedures detailed herein.~~
- ~~(B) Issuance of a Special Use or Conditional Use Permit does not negate the requirement for a Zoning Compliance Permit.~~
- ~~(C) Issuance of a Zoning Compliance Permit does not establish a vested right to begin and complete construction or change the use/occupancy of a lot or building should regulations change subsequent to issuance of said permit.~~
- ~~(D) Application for Zoning Compliance Permit shall specify the method of disposal of trees, limbs, stumps and construction debris associated with the permitted activity. Open burning of trees, limbs, stumps, and/or construction debris associated with the permitted activity is expressly prohibited.~~
- ~~(E) No building, structure, or zoning lot for which a Zoning Compliance Permit has been issued shall be used or occupied until the Building Inspector has, after final inspection, issued a Certificate of Occupancy indicating compliance with all the provisions of this Ordinance.~~
- ~~(F) No building, structure, or zoning lot for which a Zoning Compliance Permit has been issued shall be used or occupied until the Orange County Health Department has approved the water supply and sewage disposal systems serving that use.~~

<sup>2</sup> There is an existing disconnect between permit submittal requirements for a Zoning Compliance Permit and a Stormwater management plan. Staff of Current Planning and Erosion Control could, essentially, be looking at 2 different proposals as there is not an appropriate reference to the stormwater permitting requirement in this section of the UDO. There is also a disconnect with respect to the required level of site plan detail (i.e. professionally prepared versus scaled plot plan) to obtain a land disturbing permit. Staff is proposing to add language requiring a formal site plan, completed by a land surveyor or engineer, in all instances where proposed land disturbance thresholds require the development of a formal stormwater plan. The hope here is we will avoid the duplication of submittal information and ensure all County review agencies are utilizing and reviewing the same development proposal to avoid unnecessary confusion and error.

<sup>3</sup> The **red bold text** was added to address comments from the January 9, 2013 ORC meeting where members wanted some language encouraging the submittal of a single site plan complying with all zoning and erosion control/stormwater permit requirements.

- ~~(G) Issuance of a Certificate of Occupancy by the Building Official or the approval of a water supply and sewage disposal system by the Health Department shall in no case be construed as waiving any provision of this Ordinance.~~
- ~~(H) Zoning Compliance Permits shall become null and void after 18 months from the date of issuance if a building permit is not applied for or land disturbing activities are not commenced in accordance with the provisions of this Ordinance.~~

**2.4.3 Plot Plan Specifications**

- (A) For development types requiring a plot plan rather than a site plan, the plot plan shall contain the following:
  - (1) A scaled drawing denoting the length of all property lines,
  - (2) A north arrow denoting the orientation of the lot and all proposed structures,
  - (3) The location of the proposed structure(s) and distances from all property lines,
  - (4) The location of the proposed driveway,
  - (5) The location of the proposed septic system and proposed drain lines on the property,
  - (6) The location of the proposed well, and
  - (7) The location of any protected features on the property (i.e. stream buffers, flood plain, wetlands, etc).
- (B) Base plot plans are available from the Planning Department and can be printed for a fee in accordance with the established fee schedule. Applicants may also use other sources of base plot plans provided the requirements of this Section are met.
  - (1) Planning staff is available to discuss compliance matters but shall not complete plot plans.



**SECTION 2.5: SITE PLAN REVIEW**

**2.5.1 Review and Approval Flow Chart**

The review and approval process for a Site Plan is shown in the procedure's flowchart. <sup>4</sup>

**2.5.2 Application Requirements**

<sup>4</sup> At the January 9, 2013 ORC meeting Planning Board members expressed concern over duplication of language within the flow chart. The language is being deleted.

- (A) Each site plan shall be prepared and sealed by an appropriately licensed professional with the following exceptions:
- (1) Proposed additions to existing permitted non-residential structures where the use of the structure and lot has not changed and the floor area is not increased more than 25%.
  - (2) Accessory structures to existing permitted non-residential structures where vehicular use area is not extended and changes to existing grade are not more than one foot in elevation.
  - ~~(3) Single family detached dwellings and duplexes, and accessory structures to such uses.<sup>5</sup>~~
  - ~~(4)(3) Large day care homes, as defined in Article 10, Definitions.~~
  - ~~(5)(4) Rural Guest Establishments with three guestrooms or less - Bed & Breakfasts.~~
- (B) The applicant shall submit to the Planning and Inspections Department:
- (1) Three copies of the site plan prepared in accordance with the provisions detailed in this Section. Additional copies may be required depending on the nature and location of the proposed development);
  - (2) The completed site plan application form;
  - (3) A copy of the Orange County tax map with the subject property identified;
  - (4) Legal documentation, to be approved by the County Attorney, establishing entities responsible for control over common areas and facilities.
  - (5) Three copies of the Environmental Assessment and/or Environmental Impact Statement, if required under Section 6.16 of this Ordinance.
  - (6) A statement regarding the method of disposal of trees, limbs, stumps and construction debris associated with the permitted activity. Open burning of trees, limbs, stumps, and/or construction debris associated with the permitted activity is expressly prohibited.
- (C) Other items which should be submitted simultaneously, but are not required as part of the site plan application are:
- ~~(1) Erosion control and grading plans as necessary to be approved by the Erosion Control Officer for a grading permit,~~
  - ~~(4)(2) Stormwater management plans as necessary to be approved by the Erosion Control Officer prior to the issuance of a Zoning Compliance Permit, and~~
  - ~~(2)(3) Building construction plans to be approved by the Building Official prior to issuance of a building permit.~~

### ~~2.5.3 Plan Specifications~~

~~Each site plan shall be drawn at a scale adequate to show required detail and shall contain the following information:~~

- ~~(A) The boundary of the lot(s) to be developed labeled with bearings and distances;~~
- ~~(B) The name, address, and phone number of the applicant and the property owner;~~
- ~~(C) Name of project, vicinity map, north arrow, scale, tax map reference number, date of plan preparation, and subsequent revision dates;~~
- ~~(D) Zoning of the property to be developed and all adjacent zoning and existing adjacent land uses;~~

<sup>5</sup> Staff is eliminating contradictory language within this section of the UDO.

- (2) The estimated cost of the required improvements must be itemized and certified by the applicant's licensed professional engineer or licensed professional surveyor, if the surveyor was the original preparer of the plans for the subdivision.
- (3) In the case of minor subdivisions, the subdivider's licensed professional engineer or licensed professional surveyor may provide the itemized cost estimate.
- (4) Cost estimates must be based on industry norms within Orange County.
- (5) The Planning Director or Planning Board may require a higher guarantee amount when deemed necessary to address higher potential correction costs due to the subdivision's size and site characteristics, but in no event may the amount exceed 25% of estimated construction costs.
- (E) The guarantee shall have a term of two years and shall provide an option for annual renewal if the subdivider/developer has:
  - (1) Arranged for County inspection of the improvements,
  - (2) Submitted to the County an acceptable estimate of the costs necessary to correct any deterioration or defects discovered by the inspection, and
  - (3) Increased the amount of the security by the amount of said estimate.
- (F) The subdivider/developer shall pay a fee in accordance with the Fee Schedule adopted by the Board of County Commissioners at the time of the initial posting of the guarantee and for each subsequent renewal or extension to cover the County's administrative costs.

#### SECTION 7.5: SUBDIVISION AGREEMENTS

- (A) The subdivider of all minor and major subdivisions shall record a subdivision agreement outlining the limitations associated with the development of created lots at the Orange County Register of Deeds at the same time the Final Plat is recorded.
- (B) The purpose of the subdivision agreement is to provide detail on various development limitations that will regulate the overall development of property consistent with the approval of the subdivision.
- (C) This subdivision agreement shall, at a minimum, outline the following development criteria for property within the subdivision:
  - (1) Required development setbacks for lots within the project.
  - (2) Impervious surface limits for the lots within the development.
  - (3) The presence of identified environmental features (i.e. stream buffers, flood plain, wetlands, etc) and an explanation on how development of the lot(s) is impacted.
  - (4) The presence of identified cultural features listed by the North Carolina Heritage Program, or identified in "An Inventory of Sites of Cultural, Historic, Recreational, Biological, and Geological Significance in the Unincorporated Portions of Orange County" or "Inventory of the Natural Areas and Wildlife Habitats of Orange County, North Carolina".
  - (5) Identification of soil and septic limitations, if any, for each lot.
  - (6) Access restrictions for the project and individual lots.
  - (7) Limitations on land uses.
  - (8) Maintenance requirements for all roadways as well as references to the project's road maintenance agreement, if required.

#### SECTION 7.6: GENERAL DESIGN STANDARDS

The avoidance of congestion and overcrowding and the creation of conditions essential to public health, safety and the general welfare may be best accomplished through the application of design standards

providing for the distribution of population and traffic, safe and coordinated street systems, approved water supply and sewage disposal systems, usable lots and conformance to plans for Orange County as recommended by the Planning Board and adopted by the Board of Commissioners. The following general requirements and principles of land subdivision shall be observed:

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### 7.6.1 Minimum Lot Size

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- (A) All lots shall contain the minimum lot area required by Article 3 of this Ordinance and shall comply with all applicable development standards.
- (B) Any lot which provides an easement for individual septic disposal for use by a separate lot shall contain an additional 20,000 square feet to accommodate the septic easement.

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### 7.6.2 Residential Density

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The allowable density on a given parcel of property proposed for subdivision shall comply with the residential maximum density requirements in Section 4.2.4.

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### 7.6.3 Land Suitability

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- (A) In reviewing subdivision proposals, the Planning Department and Planning Board shall consider the overall design of the subdivision with the suitability of the land for development to insure that the platting and development of the subdivision will not create a danger to the health, safety, and welfare of Orange County residents.
- (B) Land suitability shall be determined by an investigation of conditions including but not limited to flood prone areas, soil drainage, drainage patterns, slope, historic sites, [maximum anticipated levels of land disturbance for the project and all proposed individual lots](#), and unique natural areas. The investigations shall be carried out by the Planning Board, the Planning Department, or other agencies or individuals having the appropriate technical expertise.
- (C) Special Flood Hazard Areas shall be considered during the review process.
- (D) Soils shall be evaluated for suitability or provisional suitability for septic tanks according to guidelines established in the Laws and Rules for Ground Absorption Sewage Disposal Systems, incorporated herein by reference.
  - (1) Each lot that does not contain a suitable building site shall be designated on the plat as being of restricted development potential and by instrument recorded in the Orange County registry as specifically prescribed by Section 7.14.3(E)(1) of this Ordinance.
- (E) **Drainage**
  - (1) Soil suitability, including slope and drainage, shall also be evaluated according to soil characteristics indicated by the Orange County Soil Survey and topography indicated by the U.S. Geological Topographic Maps.
  - (2) Each lot shall contain a suitable building area safe from inundation and erosion.
  - (3) Sanitary sewer systems, septic tank drainfields, water systems, wells, and adjacent properties shall be protected from inundation by surface water.
  - (4) Roads, driveways and utilities shall be protected from damage caused by improper stormwater management.
  - (5) Mechanical devices, drainage easements, natural buffers, large lots, and/or other technical means may be used to achieve these drainage objectives. Natural drainageways are a preferred means of stormwater run-off removal. The characteristics (including capacity) of natural drainageways shall be protected.
  - (6) Runoff levels from the 25-year storm after the site is developed shall not be greater than the rate of runoff on the same site in its natural state.

(7) In cases where anticipated land disturbance for the subdivision and the proposed lots will cumulatively exceed established thresholds denoted within Section 6.14.5 of this Ordinance, a formal stormwater management plan shall be required as part of the application submittal.<sup>6</sup>

**(F) Resource Protection**

- (1)** Applications for subdivision shall be evaluated by the Planning Department and Planning Board for potential impairment of habitat of rare and endangered species or unique natural areas.
- (2)** A strategy shall be developed to protect resources listed by the North Carolina Heritage Program, or identified in "An Inventory of Sites of Cultural, Historic, Recreational, Biological, and Geological Significance in the Unincorporated Portions of Orange County" or "Inventory of the Natural Areas and Wildlife Habitats of Orange County, North Carolina".
  - (a)** The strategy shall provide protection of identified natural and cultural resources from impacts which could result from development of the subdivision, and shall include one or more of the following:
    - (i)** Dedication of conservation easements,
    - (ii)** Restrictive covenants prohibiting clearing or disturbance of the resource areas,
    - (iii)** Dedication of resource areas to Orange County,
    - (iv)** Clustering of lots to minimize land disturbance and preserve the special features of the property,
    - (v)** Other restrictions or development options which provide an adequate level of protection.
- (3)** The Planning Department shall review available documentation of the particular site and determine if the proposed strategy adequately protects the identified resources.
- (4)** Maps, studies, and reports which are relevant to this section shall be maintained by the Planning Department.

**SECTION 7.7: LOTS**

**7.7.1 Generally**

All lots shall conform to all of the requirements of this Ordinance for the zoning district and any overlay district in which they are located.

**7.7.2 Shape and Orientation**

- (A)** The shape and orientation of lots shall be appropriate to the location of the subdivision and the development intended.
- (B)** Interior lot lines extending from a street should be approximately perpendicular or radial to the street right of way line.
- (C)** Lot lines shall be located to permit efficient installation and maintenance of utility lines on utility easements, to maximize buildable area, and, where applicable, to provide a suitable area for septic systems.

<sup>6</sup> Staff would prefer comprehensive stormwater management plans rather than multiple plans, multiple systems, on individual lots that all have to be inspected by Erosion Control on a semi annual basis and maintained by individual property owners. Through this process staff is hoping to encourage neighborhood wide stormwater management plans to avoid unnecessary development and maintenance costs on individual property owners and encourage a comprehensive approach to stormwater and nutrient management.

## ARTICLE 4: OVERLAY ZONING DISTRICTS

### SECTION 4.1: GENERALLY

#### 4.1.1 Description, Standards, and Conflicts

- (A) Overlay districts are supplemental to general zoning district classifications and are applied in combination to address special situations or to accomplish specific planning and land use goals.
- (B) Unless otherwise expressly stated, all applicable regulations of the underlying district apply to property in an overlay district.
- (C) Unless otherwise stated, all applicable standards of this Ordinance apply to property in an overlay district.
- (D) When overlay district standards conflict with standards that otherwise apply in the underlying district, the regulations of the overlay district always govern.

### SECTION 4.2: WATERSHED PROTECTION

#### 4.2.1 Purpose and Intent

- (A) The purpose of the Watershed Protection Overlay Districts is to prevent significant future water quality deterioration in existing or potential future drinking water reservoirs which receive stormwater runoff from land within Orange County.

- (1) Protection of all water supplies within the State in accordance with minimum standards was mandated by the Watersupply Watershed Protection Act passed by the General Assembly in 1989.
- (2) The quality of water in drinking water reservoirs can be affected by human activities including farming, construction of highways and roads, subdivision development, industrial development, and other land-disturbing activities. Types of water pollutants resulting from these activities include sediment, bacterial contamination, heavy metals, synthetic organic compounds and low-level radioactivity.

The intent of the Watershed Protection Overlay Districts is to apply a set of regulations involving land use and, in some cases, structural best management practices which protect the watersheds by reducing the pollution from future development which enters drinking water supplies.

- (1) Land use management practices involve minimum lot size and impervious surface restrictions, since impervious surfaces such as roads, roof tops and driveways are a major source of pollution.
- (2) Structural best management practices allow for more intensive land use by providing for temporary detention of stormwater runoff so that pollutants may settle.

#### 4.2.2 Applicability

- (A) The Watershed Protection Overlay Districts as established herein overlay other zoning districts established in this Ordinance. The new use of any land or new structure within any Watershed Protection Overlay District shall comply with the use regulations applicable to the underlying zoning district as well as the requirements of the applicable Watershed Protection Overlay District.
- (B) A Watershed Protection Overlay District shall be applied to the Orange County portion of watersheds which have been classified as WS-II, WS-III or WS-IV watersheds by the North Carolina Environmental Management Commission in its implementation of the

**Staff Note:** This information is being provided to offer additional context with respect to the definition/designation of various watershed districts (i.e. critical versus protected) throughout the County. Staff will reiterate these regulations/standards **are not** being altered under this proposal.

Watersupply Watershed Protection Act of 1989. In accordance with the State Mandate, 13 Watershed Protection District Overlays, as listed in the table in subsection (D), are hereby established.

- (C) Areas designated as “Critical Area” under the Orange County designation are hereby established using the following criteria:
- (1) The land area in the Upper Eno watershed (straight line distance) within one-half mile of the normal pool elevation (NPE), or nearest available contour line used for the calculation, of an existing Class I or Class II reservoir or proposed water supply reservoir designated for protection, or the ridgeline of the sub-watershed, whichever is less; and
  - (2) The land area within one-half mile on each side for an upstream distance of 2.5 miles (straight line distance) of any fifth order or higher stream flowing into a Class I reservoir, or the ridgeline of the sub-watershed, whichever is less; and
  - (3) The land area within one-half mile on each side of a fourth order or higher stream flowing between any Class II and Class I reservoir; and
  - (4) The land area within one-half mile on each side for an upstream distance of 1.5 miles (straight line distance) of a third or fourth order stream flowing directly into any Class I reservoir; and
  - (5) The land area within one-half mile on each side for an upstream distance of 1.0 mile (straight line distance) of a third or fourth order stream flowing into a fourth order or higher stream that is within 1.0 miles (straight line distance) of a Class I reservoir; and
  - (6) Any isolated areas within the overall critical area boundary that drain into any of the streams listed above.
  - (7) Areas designated as Transition Areas on the Land Use Element Map of the Orange County Comprehensive Plan are excluded from designation as a Critical Area, except for land areas located within one-half mile from the normal pool elevation of a Class I reservoir.
  - (8) The land area north of the centerline of West Ten Road and west of the centerline of the Interstate 85/U.S. 70 Connector is excluded from designation as a Critical Area, except for land areas located within one-half mile from the normal pool elevation of a Class I reservoir.
- (D) The designation of “Protected” applies to areas of watersheds classified as WS-II, WSIII, or WS-IV outside of areas designated as “Critical Area.”
- (E) **General Locations of Watershed Protection Overlay Districts**

TABLE 4.2.2.E: WATERSHED PROTECTION OVERLAY DISTRICTS		
DISTRICT		GENERAL LOCATION
UNIV-CA	University Lake Critical Area	One-half mile from the normal pool elevation of University Lake, or to the ridgeline of the watershed, whichever is less.
UNIV-PW	University Lake Protected Watershed Overlay District	The portion of the drainage basin of University Lake not covered by UNIV-CA.
CANE-CA	Cane Creek Critical Area Overlay District	One-half mile from the normal pool elevation of Cane Creek Reservoir, or to the ridgeline of the watershed, whichever is less.
CANE-PW	Cane Creek Protected Watershed Overlay District	The portion of the drainage basin of Cane Creek Reservoir not covered by CANE-CA.
U-ENO-CA	Upper Eno Critical Area Overlay District	One-half mile from the normal pool elevation, or to the ridgeline of the watershed, whichever is less, of the following Class I reservoirs: Corporation Lake (538' actual NPE, 540' contour line used) and Lake Ben Johnson (515' NPE and contour line used). One-half mile (straight line measurement) from the normal pool elevation, or to the ridgeline

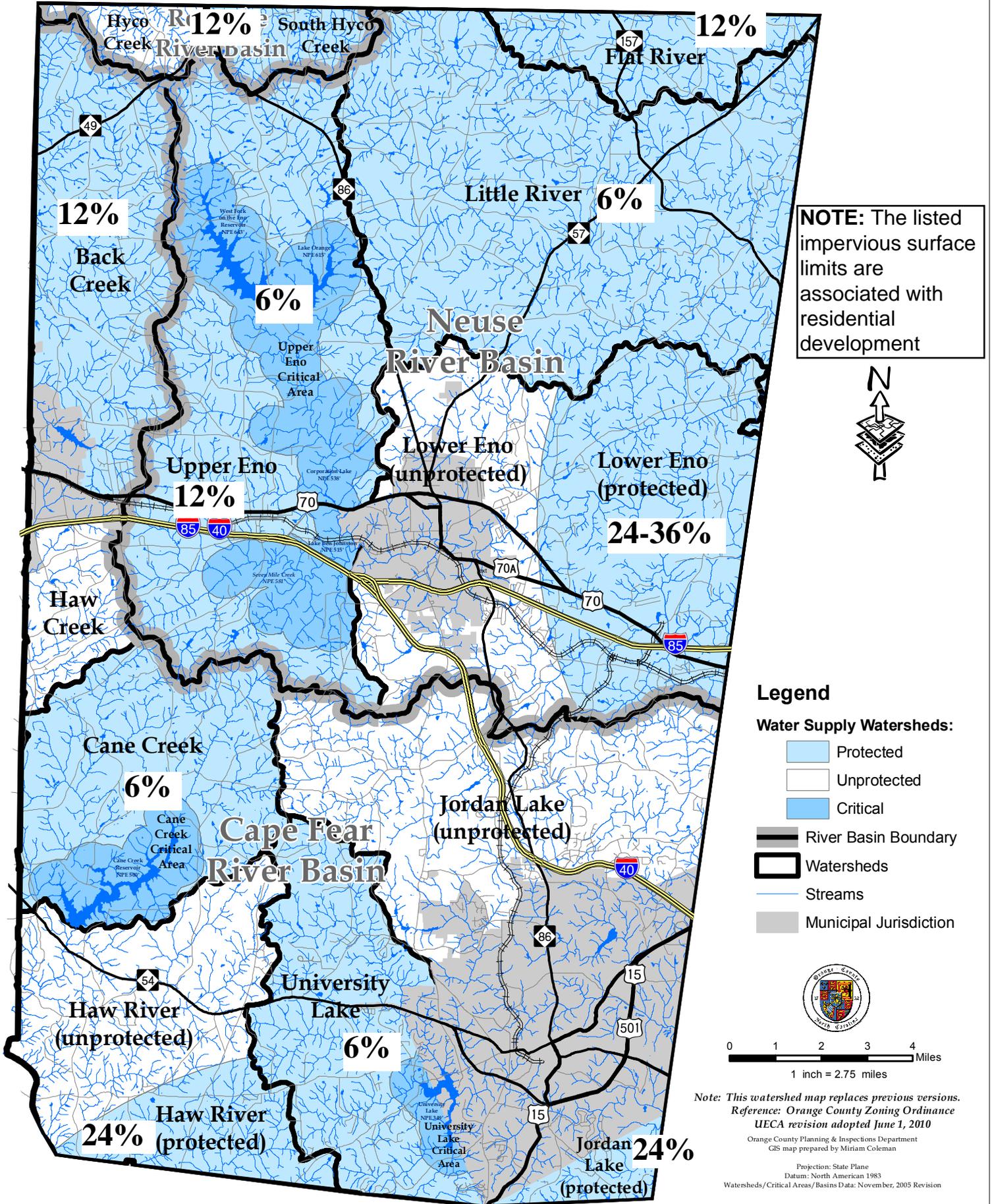
TABLE 4.2.2.E: WATERSHED PROTECTION OVERLAY DISTRICTS		
DISTRICT		GENERAL LOCATION
		of the watershed, whichever is less, of the following Class II reservoirs: Lake Orange (615' NPE and contour line used) and West Fork on the Eno (643' NPE, 640' contour line used); and the land area within one-half mile (straight line measurement) on each side of other streams designated for protection. These protected streams include portions of: Eno River, Seven Mile Creek, West Fork of the Eno River, East Fork of the Eno River, Rocky Run, Stream ID 1625, Stream ID 1498, Dry Run Creek, Crabtree Creek, and Stream ID 2109. (Source of elevation data: Atlantic Technologies Ltd., 1998 planimetric project approved by Orange County GIS).
U-ENO-PW	Upper Eno Protected Watershed Overlay	The portion of the Upper Eno drainage basin not covered by U-ENO-CA.
L-ENO-PW	Lower Eno Protected Watershed Overlay	The Orange County portion of the Eno River Watershed within ten miles of the City of Durham Emergency Water Intake east of US 501 (Roxboro Road).
LITTLE-PW	Little River Protected Watershed Overlay District	The portion of drainage basin of the Little River Reservoir which is located in Orange County.
BACK-PW	Back Creek Protected Watershed Overlay District	The portion of the drainage basin of Back Creek which is located in Orange County.
HYCO-PW	South Hyco Creek Protected Watershed Overlay District	The portion of the drainage basin of South Hyco Creek which is located in Orange County.
FLAT-PW	Flat River Protected Watershed Overlay District	The portion of the drainage basin of the Flat River which is located in Orange County.
HAW-PW	Haw River Protected Watershed Overlay District	The portion of the drainage basin for the Haw River which is located in Orange County
JORDAN-PW	Jordan Lake Protected Watershed Overlay District	The Orange County portion of the Jordan Lake Watershed which extends five miles from the normal pool elevation of the impoundment.

**(F) Existing Development**

The following residential or non-residential structures shall be considered existing development for the purpose of determining compliance with or applicability of Sections 4.2 and 6.13.3, 6.13.4, 6.13.6, 6.13.8, 6.14.4, 6.14.10, 6.14.11, and 6.15.7(B)(3):

- (1) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to January 1, 1994; or
- (2) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to October 19, 1999 with respect to the October 19, 1999 amendments related to the CANE-CA and CANE-PW districts, or
- (3) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to September 19, 2001 with respect to the Stream Buffer/Usable Lot amendments, or
- (4) Was either constructed prior to, or constructed in accordance with a valid building permit issued prior to, or was included as part of a Site Specific Development Plan approved by the Board of County Commissioners prior to May 20, 2003 with respect to the Stream Classification Amendments, or

# Orange County Watersheds



**ORANGE COUNTY  
PLANNING BOARD  
ACTION AGENDA ITEM ABSTRACT**  
**Meeting Date:** March 6, 2013

**Action Agenda  
Item No. 9**

**SUBJECT:** Amendments to Unified Development Ordinance Text: Revise Section 1.6.5 – (Planning Board) Rules of Procedure

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**DEPARTMENT:** Planning and Inspections

**PUBLIC HEARING:** (Y/N)

Yes

**ATTACHMENT(S):**

1. Comprehensive Plan/Future Land Use Map and Unified Development Ordinance (UDO) Amendment Outline Form (UDO/Zoning-2013-02)
2. Amendment Packet

**INFORMATION CONTACT:**

Perdita Holtz, 919-245-2578  
Craig Benedict, 919-245-2592

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**PURPOSE:** To make a recommendation to the BOCC on Planning Director initiated text amendments to the Unified Development Ordinance to revise Section 1.6.5 – (Planning Board) Rules of Procedure to be consistent with current County processes and procedures.

**BACKGROUND:** The Board of County Commissioners adopted a general advisory board policy document in 2012 and policies and procedures for the Planning Board in November 2012. This was part of an effort to standardize operations of the numerous boards which advise the BOCC. Because the UDO has a specific section relating to the Planning Board's Rules of Procedure, the section needs to be updated in order to be consistent with current County processes and procedures.

Attachment 1 contains additional information and analysis on these amendments and Attachment 2 contains the proposed amendments in a "track changes" format (**red text** for proposed additions and **red strikethrough** for proposed deletions).

Public Hearing

The proposed UDO amendments were heard at the February 25, 2013 joint public hearing. No members of the public spoke on the proposed UDO amendments and no questions were asked.

Procedural Information

In accordance with Section 2.8.8 of the Unified Development Ordinance, any evidence not presented at the public hearing must be submitted in writing prior to the Planning Board's recommendation. Additional oral evidence may be considered by the Planning Board only if it is for the purpose of presenting information also submitted in writing. The public hearing is held open to a date certain for the purpose of the BOCC receiving the Planning Board's recommendation and any submitted written comments.

### Planning Director's Recommendation

The Planning Director recommends **approval** of the proposed UDO amendments based on the following:

- These amendments are necessary in order to ensure that County policy documents and regulations are consistent with one another.

**FINANCIAL IMPACT:** See Section C.3 in Attachment 1.

**RECOMMENDATION:** The Planning Director recommends the Planning Board:

1. Deliberate as necessary on the proposed UDO amendments;
2. Consider the Planning Director's recommendation to approve the UDO amendments contained in Attachment 2; and,
3. Make a recommendation to the BOCC on the proposed UDO text amendments in time for the April 9, 2013 BOCC meeting.

# COMPREHENSIVE PLAN/ FUTURE LAND USE MAP AND UNIFIED DEVELOPMENT ORDINANCE (UDO) AMENDMENT OUTLINE

UDO / Zoning-2013-02

Amendment to revise Section 1.6.5 – (Planning Board) Rules of Procedure

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## A. AMENDMENT TYPE

### Map Amendments

- Land Use Element Map:  
From: ---  
To: ---
- Zoning Map:  
From:- --  
To:---
- Other:

### Text Amendments

- Comprehensive Plan Text:

Section(s):

- UDO Text:

- UDO General Text Changes  
 UDO Development Standards  
 UDO Development Approval Processes

Section(s): 1.6.5

- Other:

## B. RATIONALE

### 1. Purpose/Mission

In accordance with the provisions of Section 2.8 *Zoning Atlas and Unified Development Ordinance Amendments* of the UDO, the Planning Director has initiated text amendments to change the section of the UDO pertaining to the Planning Board's Rules of Procedure. The change is necessary to reflect the general advisory board policy document and the specific Planning Board policies and

procedures recently adopted by the BOCC. Section 1.6.5 now conflicts with the process utilized by the BOCC.

**2. Analysis**

As required under Section 2.8.5 of the Unified Development Ordinance, the Planning Director is required to: ‘cause an analysis to be made of the application and, based upon that analysis, prepare a recommendation for consideration by the Planning Board and the Board of County Commissioners’. The following information is offered:  
 This text amendment is necessary to ensure that County policy documents and regulations are consistent with one another.

**3. Comprehensive Plan Linkage (i.e. Principles, Goals and Objectives)**

No direct linkage to the Principles, Goals, and Objectives of the Comprehensive Plan. This amendment is proposed in order to engage in “good housekeeping” by ensuring the Ordinance does not conflict with current County processes and procedures.

**4. New Statutes and Rules**

The BOCC adopted an Advisory Board Policy in 2012 and adopted specific Planning Board Policies and Procedures in November 2012.

**C. PROCESS**

**1. TIMEFRAME/MILESTONES/DEADLINES**

- a. BOCC Authorization to Proceed  
 December 3, 2012
- b. Quarterly Public Hearing  
 February 25, 2013
- c. BOCC Updates/Checkpoints  
 February 5, 2013 – Approval of legal ad  
 April 9, 2013 – receive Planning Board recommendation
- d. Other

**2. PUBLIC INVOLVEMENT PROGRAM**

**Mission/Scope:** Public Hearing process consistent with NC State Statutes and Orange County ordinance requirements

- a. Planning Board Review:

March 6, 2013 (recommendation)

b. Advisory Boards:

N/A

_____	_____
_____	_____
_____	_____

c. Local Government Review:

N/A

_____	_____
_____	_____
_____	_____

d. Notice Requirements

Legal advertisement published on February 13 and 20 in the News of Orange and The Herald Sun.

e. Outreach:

General Public:

_____
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Small Area Plan Workgroup:

_____
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Other:

_____
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**3. FISCAL IMPACT**

Consideration and approval will not create the need for additional funding for the provision of County services. Costs for the required legal advertisement will be paid from FY2012-13 Departmental funds budgeted for this purpose. Existing Planning staff included in the Departmental staffing budget will accomplish the work required to process this amendment.

**D. AMENDMENT IMPLICATIONS**

No implications. The proposed amendments are solely a 'housekeeping' item resulting from advisory board policies recently adopted by the BOCC.

**E. SPECIFIC AMENDMENT LANGUAGE**

See Attachment 2. Proposed additions are shown in red text and proposed deletions are shown in red strikethrough text.

**Primary Staff Contact:**

Perdita Holtz

Planning Department

(919) 245-2578

pholtz@orangecountync.gov

- (E) Advise the Board of County Commissioners concerning the use and amendment of means for carrying out plans;
- (F) Exercise such functions in the administration and enforcement of various means for carrying out plans that the Board of Commissioners may direct;
- (G) Perform other related duties that the Board of County Commissioners may direct;
- (H) Approve and recommend for adoption by the Board of County Commissioners a Comprehensive Plan for the development of the county, as well as amendments thereto; and
- (I) The Planning Board, working with the Planning Director, shall from time to time, at intervals of not more than five years, examine the provisions of this Ordinance and the location of Zoning District boundary lines and shall submit a report to the Board of County Commissioners recommending changes and amendments, if any, which are desirable in the interest of public health, safety, and general welfare, mindful of the intent expressed in Subsection 1.1.5.

**1.6.4 Staffing**

- (A) The Planning Director, under the direction of the County Manager or his/her designee, shall serve as the professional staff to the Planning Board and shall be primarily responsible for completing any work product necessary to assist the Board in carrying out its duties.
- (B) The Board of County Commissioners must approve all work assignments or projects requested by the Planning Board outside of work product associated with this Ordinance prior to the commencement of work.

**1.6.5 Rules of Procedure**

~~The Planning Board shall adopt rules of procedure for the conduct of its affairs. The rules shall be maintained in the office of the Planning Director. Except as otherwise expressly stated in this Ordinance, the rules adopted by the Planning Board shall provide for:~~

- ~~(A) Selection of officers, specifically a Chair and Vice Chair, whose term of office shall be one year, with eligibility for re-election.~~
- ~~(B) Attendance requirements.~~
- ~~(C) Establishment of a quorum, which shall be a majority of the appointed members, to allow the Board to conduct business.~~
- ~~(D) Establishment of a monthly, at a minimum, date and time for a regular meeting.~~
- ~~(E) A procedure for calling special meetings as the need of the Board requires.~~

The Planning Board shall conduct of its affairs in accordance with the "Orange County Board of County Commissioners Advisory Board Policy" and the "Planning Board Policies and Procedures".

**1.6.6 Notification of Meetings**

All meetings shall be open to the public. The Planning Director shall cause notices to be given as required under:

- (A) Article 33-C, Chapter 143 of the North Carolina General Statutes;
- (B) 143-318.11 of the North Carolina General Statutes; and
- (C) Article 2 of this Ordinance.

**ORANGE COUNTY  
PLANNING BOARD  
AGENDA ITEM ABSTRACT**  
Meeting Date: March 6, 2013

**Action Agenda  
Item No. 10**

**SUBJECT:** Orange Unified Transportation Board

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**DEPARTMENT:** Planning and Inspections

**PUBLIC HEARING: (Y/N)**

No

**ATTACHMENT(S):**

None

**INFORMATION CONTACT:**

Perdita Holtz	919-245-2578
Craig Benedict	919-245-2592

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**PURPOSE:** To consider designation of a Planning Board member for appointment consideration by the BOCC to serve on the Orange Unified Transportation Board (OUTBoard).

**BACKGROUND:** Alan Campbell is the current Planning Board representative on the OUTBoard. Mr. Campbell's Planning Board term expires on March 31, 2013 and he has decided not to seek reappointment. Therefore, the position on the OUTBoard reserved for a Planning Board member will also be vacant. The OUTBoard is an Orange County advisory board that focuses on transportation topics. The board generally meets on the third Wednesday of each month at 7:00 p.m. in the West Campus Office Building (the same building in which the Planning Board meets). The charge of the board is as follows:

OUTBoard will advise the Board of County Commissioners and provide information and comments on major transportation issues; and provide to the Board recommendations regarding the overall planning and programming of transportation improvements in the County, including:

- Identify and prioritize the County's roadway and transit needs along with associated costs and specific sources of funding (will include participation in identifying needs within the Orange County Bus and Rail Investment Plan (OCBRIP);
- Assist in development and review of the transportation component of the Comprehensive Plan;
- Provide recommendations to the Board regarding Federal and State legislation affecting transportation in Orange County; and
- Explore and make recommendations on innovative techniques and methods to improve the efficiency and capacity of existing and future transportation systems.

Current members of this board are as follows:

<b>Member Name</b>	<b>Representation</b>
Alexander Castro	Bingham Township
Susie Enoch	Cheeks Township
Sam Lasris	Cedar Grove Township
Paul Guthrie (Chair)	Chapel Hill Township
Annette Jurgelski	Eno Township
Bryant Warren	Hillsborough Township
Theodore Triebel	Little River Township
(vacant)	Economic Development Commission
(will be vacant)	Planning Board
(vacant)	Commission for the Environment
Jeff Charles (Vice-Chair)	Bicycle Transportation Advocate
Jeff Miles	Pedestrian Access Advocate
Amy Cole	Transit Advocate

County policy is that citizens may serve on a maximum of two advisory boards. Current Planning Board members who do not serve on a second board are:

Tony Blake	Maxecine Mitchell
Buddy Hartley	Johnny Randall
Rachel Phelps-Hawkins	Andrea Rohrbacher
Herman Staats	

**RECOMMENDATION(S):** The Planning Staff recommends the Planning Board:

1. Designate a Planning Board member for appointment consideration by the BOCC to the OUTBoard.