Chatham County/Cary Joint Issues Committee July 14, 2009 Jordan Lake Auditorium Visitor Center 280 State Park Road Apex, NC 9:00 AM

Members Present: Co-chair Sally Kost; Members George Lucier, Jennifer Robinson, and Ervin Portman

Cary Staff Present: Ben Shivar, Town Manager; Jeff Ulma, Planning Director; Steve Brown, Public Works and Utilities Director; Joe Moore, Associate Director of Engineering; Bill Moore, GIS Manager; and Susan Moran, Public Information Officer

Chatham County Staff Present: Charlie Horne, County Manager; Cynthia Van Der Wiele, Director of Sustainable Communities Development; Fred Royal, Environmental Resources Director; Jason Sullivan, Assistant Planning Director; Benjamin Howell, Planner; Sandra B. Sublett, Clerk to the Board; and Elizabeth Plata, Deputy Clerk to the Board

Kost called the meeting to order at 9:12 AM and explained that Co-Chair Robison would not be in attendance due to illness.

The agenda for the meeting follows:

- 1. Call to Order
- 2. Approval of agenda
- 3. Approval of the June 16, 2009 meeting minutes
- 4. Update on the Comparison of Chatham County and Cary Land Development Regulations
- 5. Review and discussion of proposed draft Land Use Plan
 - Review prior meeting discussion
 - Discussion of Issues & Concerns
 - Decisions/Recommendations
- 6. Land Use Plan Process
 - Next steps in process
 - Citizen Participation/Involvement/Input
 - Review of timelines
- 7. Updates:
 - Dates for next subcommittee meeting

- Dates for next joint meeting
- 8. Topics for next meeting

*Remind committee of scheduled Town Council public hearing for 09-CPA-04 on July 23. This case involves a Cary Comprehensive Plan Amendment that affects three properties located in Chatham County.

- 9. Next meeting details
- 10. Adjournment

ACTION: Robinson moved, seconded by Portman, to approve the agenda. The committee granted unanimous approval.

ACTION: Portman moved, seconded by Lucier, to approve the June 16, 2009 minutes. The committee granted unanimous approval.

Those in attendance provided self-introductions.

Comparison of Chatham County and Cary Land Development Regulations Update

Fred Royal updated the comparison of Cary, Chatham County, and the State of North Carolina development regulations which follows:

Comparison Chart of Environmental Quality Regulations for the Town of Cary, Chatham County, and the State of North Carolina

Stormwater Nitrogen Rules	Town of Cary Yes – Required to treat for Nitrogen down to 3.6 Ib/acre/year with no buy down option	Chatham County No nitrogen reduction requirements currently. Recent Jordan Lake TMDL will require Nitrogen and Phosphorous load reductions for Upper and Lower New Hope and Haw Watersheds.	State of NC No regulations concerning nitrogen. New Jordan Lake TMDL Rules are to take effect that will impact certain watersheds in both Cary and Chatham County.
Stormwater TSS Rules	Yes – Have to treat for 85% TSS	Yes – Have to treat for 85% TSS	Required to treat 1 st inch of runoff

	for areas that are more that 24 percent impervious treatment in bmp's	for projects that disturb greater than 20,000 square feet treatment in BMP's	for TSS. Based on high density option. Yes - density
Watershed Rules	development based on density and use of structural bmp's	based development	based development and use of structural bmp's
Riparian Buffers and Urban Transition Buffers	Yes – has 100 foot buffers on blue line streams indicated on USGS perennial and intermittent and 50 feet on Soil Survey Maps; also require connectivity for underground streams and linear wetlands TOC does not allow lots to be platted in the buffers	Yes – has 100 feet on perennial indicated streams or be the full extent of area of the Special Flood Hazard Area; 50 feet on intermittent streams;30 feet on ephemeral stream; 50 feet on wetlands; and 30 feet on seeps and springs. All surface water features must be field located using DWQ and Chatham County methods. USGS quad and soil survey used only as general guidance as they tend to underrepresent actual streams and surface water features.	No buffers on streams within the Jordan Lake Watershed The State has watershed buffers on perennial streams based on density 100 foot at high density and 30 foot at low density
Stormwater Peak Attenuation 10year/24 hour	Yes- Cary requires the attenutation of the 1year/24 hour	Yes – requires attenuation up to the 10 year/24 hour event	None
	storm and The	analysis of the	

Phase 2 Rules	Town of Cary requires attenuation of the 2, 5, and 10 year storm event at each point of discharge Yes – Town of Cary has a NPDES Phase II permit for stormwater – requires implementation, public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site runoff controls, post construction controls, pollution prevention and good housekeeping for municipal operations	1year/1 hour storm (P=1.43"), 2, 5, and 10 year/24 hour event shall be submitted for the project as a whole Chatham County is a tipped in Phase 2 community and meets the minimum requirements pursuant to the water supply watershed rules. The countywide stormwater ordinance exceeds these rules.	NA State does not have a MS4 area
Illegal Discharge	Yes – regulations concerning the enforcement of illegal discharges and enforcement and watercourse protection	Yes – Has regulations on illegal discharge and illicit connections	Yes – enforce general statutes
Stormwater Plan Submittal Threshold	Yes – The Town of Cary requires that a project submit a stormwater plan if	Yes – Chatham County requires a project to submit a stormwater plan if disturbing more	Yes - if required as part of other permit issues (404/401 permits)

	they are disturbing more that 12,000 sq ft.	than 20,000 sq ft.	Voc. allows for
LID	Yes – Town of Cary allows for the use of LID techniques in development so that the stormwater management is achieved as part of the ordinance	Yes – Chatham allows conservation planning with the use of LID techniques in the subdivision plans	Yes – allows for the use of LID techniques in development
Single Family Home Regulations	Yes – Cary requires single family lot controls within a subdivision requires signoff on building permit	Yes-the construction of any new home, disturbing up to 25,000 sq ft, requires a residential lot disturbance permit. The construction of any new home disturbing greater than 25,000 sq ft requires a full land disturbing permit.	None
Sedimentation Erosion Control Plan	Yes – If a disturbance is 12,000 sq ft or greater you are required to get plan approval and permit	Yes – If disturbance is 20,000 sq ft or greater you are required to get plan approval and permit (and single family homes as specified above)	Yes – If disturbance is 1 acre or greater you are required to get plan approval and permit
Steep Slope Ordinance	Yes – requires that slopes be stabilized using criteria based on slope steepness; steep slopes have priority as open space	Yes – Recognizes steep. Moderate and gradual slopes and specifies requirements for SESC devices, ground cover timing, grading limits, plan scales	None

		and self inspection	
		in each category.	
Phased Grading Regulation	Yes – Requires a 25 acre limit on low and medium density subdivisions	Yes – Requires limits on grading based on slope category: Steep-1 ac; Moderate- 10 ac; Gradual- 15 ac.	None
Open Space Requirements	Yes – there is a open space requirement for site plans that require 500 sq ft of open space per dwelling; requirement for the location of open spaces and restrictions on what is allowed in open spaces	Yes – required to have open space as part of the development with allowed uses within the open spaces. Has Conservation Subdivision requiring 50% open space/natural space with 10% density bonus.	None
Flood Plain Regulations	Yes – Requires that lots are not allowed to be platted into the floodplain, require a flood study if stream on project drains more than 50 acres no development allowed in flood plain.	Yes – requires no new construction within the Special Flood Hazard Area. Has a 2 foot freeboard requirement.	Yes – State has guidelines for flood plain regulations regarding development

Royal stated that the Town of Cary and Chatham County have very similar environmental and floodplain regulations. He noted the key differences are:

➤ Riparian Buffers in Chatham County are based on specific field determination policies and the NC Division of Water Quality Method for Classifying streams and additionally, ephemeral streams, wetlands, seeps and springs are classified and buffered accordingly. The Town of Cary buffer rules are based on the identification of streams from the USGS Quadrangle Maps and Soil Survey. Research has shown that these maps underestimate the existence of perennial and intermittent streams and they do not indicate the existence of ephemeral streams, wetlands, seeps or springs.

- The Town of Cary has a nitrogen performance standard for stormwater and Chatham County does not, but will have after the stormwater ordinance is amended to meet the Jordan Lake TMDL Rules.
- ➤ Chatham County requires sedimentation and erosion control features for individual lots, no matter what the area of land disturbance is.

<u>Update on the Comparison of Chatham County and Cary Land Development</u> Regulations

• Jeff Ulma gave an overview of the updated maps and changes to Option 2A which changes the 10-acre lots sizes to 5 acres. Everything else remained unchanged. 2B eliminates the business area along Lewter Shop Road and Highway #751. Option 2C reduces the commercial/business by ½ size (from roughly 800 to 400 acres).

A copy of the "Description of Conceptual Plan Changes" follows:

Description of Conceptual Plan Changes

Chatham-Cary Joint Issues Committee July 14, 2009 Meeting

Joint Plan Concepts 2a, 2b, and 2c

Staff has prepared three alternate concept plans for the Joint Plan study area, based on input and direction from the June 16 meeting of the Chatham/Cary Joint Issues Committee. The three alternate plans are identified as Joint Plan 2a, 2b, and 2c. The draft plan presented at the June 16 meeting for feedback is referred to below as Joint Plan 1. Highlights of the new plan options are given below, along with comparisons to the original February 2007 Joint Staff Team draft plan, and the May 2007 Board of Commissioners proposed draft plan.

Statistical Comparison of Alternate Plan Drafts/Concepts

	Feb. 2007 Joint Plan	May 2007 BOC Plan	Joint Plan 1	Joint Plan 2a	Joint Plan 2b	Joint Plan 2c
Min. avg. lot size 1/4 –mile buffer of all US ACOE land, in acres	n/a	n/a	10	5	5	5
Min. avg. lot size within ½ mile of mean pool elevation of Jordan Lake, in ac.	10	5	10	5	5	5
Min. avg. lot size within 1 mile of mean pool elevation of Jordan Lake, in ac.	5	5	5	5	5	5
Total acres at 1 dwelling per 10 acres	2,357	0	6,374	0	0	0
Total acres at 1 dwelling per 5 acres	3,958	10,42 8	1,095	7,469	7,469	7,472
Total acres at 1 dwelling per 3 acres	0	0	213	213	213	213
Total acres at 1 dwelling per acre	2,308	0	667	667	667	667
Total acres at 2 dwellings per acre	1,746	0	1,182	1,182	2,079	1,609
Total acres for Old Chatham Golf	408	408	408	408	408	408
Total acres for office/employment "park" along Lewter Shop Road	0	0	840	840	0	427
Total acres for commercial/mixed -use node at NC	60	0	57	57	0	40

Hwy 751 & Lewter Shop Rd. ¹						
Number of joint	3	3				
public school/park	(parks	(parks	2	2	2	2
sites	only)	only)				
Total estimated dwellings (maximum) ²	7,067	2,086	3,958	4,596	6,390	5,450
Total estimated population (maximum) ³	19,807	5,846	11,095	12,881	17,90 9	15,276
Total estimated K- 12 student population (maximum) ⁴	2,050	605	1,149	1,333	1,853	1,580
Total estimated nonresidential floor space ⁵	231,95 7	0	6,850,24 6	6,850,24 6	0	3,568,65 3
Total estimated employment ⁶	729	0	25,450	25,450	0	13,153

Other Plan Characteristics:

- Proceeding eastward from the 1-mile lake buffer and ¼-mile COE buffer, residential densities generally transition upwards, first to 1 dwelling per acre, and then to 2 dwellings per acre.
- For Plans 1, 2a, 2b, and 2c, in some cases, where a limited amount of land or a subdivision is "surrounded" by lower residential densities based on the buffers described above, the residential density has been dropped to reflect the surrounding densities. Also, in some cases the recommended residential density for an existing subdivision was reduced in order to reflect the actual average lot sizes in that subdivision.
- The above figures are exclusive of any sites that Chatham County has already zoned for nonresidential purposes.

Footnotes:

For the Feb. 2007 Plan Draft, the 60 acres was split into 30 acres of medium-density housing, 15 acres of retail, and 15 acres of housing. For Plan Drafts 1, 2a, 2b, and 2c, the entire node acreage was assigned to commercial/retail uses.

² Figure given is the maximum number possible, if all plan areas were to be built to the maximum allowed densities.

³ Figure given is based on the maximum possible number of dwellings, and assumes 2.86 persons per single family dwelling, and an average occupancy rate of 0.98, based on U.S. Census figures for the area.

⁴ Based on 0.29 students per single family house, per the Chatham County Education Impact Fee Study. Figure includes public school and charter school students only.

⁵ Figure given is based on an average floor-to-area ratio (FAR) of 0.18, which is the typical suburban office park FAR found in Cary. The floorspace contribution from the commercial/mixed-use node varies by plan draft: In order to generate a "worst-case" forecast, for Plan Drafts 1, 2a, 2b, and 2c the table assumes that all the acreage in this category will be used for commercial/retail. The 2007 Joint Staff Plan, however, splits the node up into commercial/retail, office, and medium-density housing.

⁶ Figure is based on 3.80 employees per 1,000 sq. ft. of office space, and 2.50 employees per 1,000 sq. ft. of retail space. (Source: ITE *Trip Generation Manual*, and ULI's *Dollars and Cents of Shopping Centers.*) The employment contribution from the commercial/mixed-use node varies by plan draft: In order to generate a "worst-case" forecast, for Plan Drafts 1, 2a, 2b, and 2c the table assumes that all the acreage in this category will be used for commercial/retail. The 2007 Joint Staff Plan, however, splits the node up into commercial/retail, office, and medium-density housing.

The above figures do not account for land that might be used for public schools or parks. Land
for schools and parks would need to be subtracted from the table's land use category acreages,
which would in turn result in lower figures for housing, population, floor space, and/or
employment. The average size for a Chatham County elementary/middle school is 26 acres. The
NC Department of Public Instruction recommended size is 65 acres for high schools.

Build-out Statistics Details

Acreage Statistics and Projected Build-out for June 25, 2009 Concept Plan 2a

	Gross Acres	Max. Dwelling Units	Nonresidential Floorspace (Sq. Ft.)	Population Est.	K-12 Student Est.	Employment Est.
1 du per 10 ac.	0	0		0	0	0
1 du per 5 ac.	7,469	1,494		4,187	433	0
1 du per 3 ac.	213	71		199	21	0
1 du per 1 ac.	667	667		1,869	193	0
2 du per 1 ac.	1,182	2,364		6,626	686	0
Commercial	57	0	446,926	0		1,117
Office Park	840	0	6,403,320	0		24,333
Park/OS/Golf ⁷	408	0		0		0
Total Units:	10,836	4,596	6,850,246	12,881	1,333	25,450

Acreage Statistics and Projected Build-out for June 25, 2009 Concept Plan 2b

	Gross Acres	Max. Dwelling Units	Nonresidential Floorspace (Sq. Ft.)	Population Est.	K-12 Student Est.	Employment Est.
1 du per 10 ac.	0	0		0	0	0
1 du per 5 ac.	7,469	1,494		4,187	433	0
1 du per 3 ac.	213	71		199	21	0
1 du per 1 ac.	667	667		1,869	193	0
2 du per 1 ac.	2,079	4,158		11,654	1,206	0
Commercial	0	0	0	0		0
Office Park	0	0	0	0		0
Park/OS/Golf	408	0		0		0
Total Units:	10,836	6,390	0	17,909	1,853	0

Acreage Statistics and Projected Build-out for June 25, 2009 Concept Plan 2c

	Gross Acres	Max. Dwelling Units	Nonresidential Floorspace (Sq. Ft.)	Population Est.	K-12 Student Est.	Employment Est.
1 du per 10 ac.	0	0		0	0	0
1 du per 5 ac.	7,472	1,494		4,189	433	0
1 du per 3 ac.	213	71		199	21	0
1 du per 1 ac.	667	667		1,869	193	0
2 du per 1 ac.	1,609	3,218		9,019	933	0

⁷ Although the Chatham Golf Club may in fact have some on-site employment for grounds keeping, it is likely negligible and is therefore not included in the employment estimates.

Commercial	40	0	313,632	0		784
Office Park	427	0	3,255,021	0		12,369
Park/OS/Golf	408	0		0		0
Total Units:	10,836	5,450	3,568,653	15,276	1,580	13,153

Acreage Statistics and Projected Build-out for Concept Plan 1

(Created for the June 16, 2009, Committee Meeting)

	Gross Acres	Max. Dwelling Units	Nonresi- dential Floor Space (in Sq. Ft.)	Pop. Estimate	K-12 Student Est.	Employ- ment Estimate (persons)
Residential, 1 unit per 10 ac.	6,374	637		1,787	185	0
Residential, 1 unit per 5 ac.	1,095	219		614	64	0
Residential, 1 unit per 3 ac.	213	71		199	21	0
Residential, 1 unit per 1 ac.	667	667		1,869	193	0
Residential, 2 unit per 1 ac.	1,182	2,364		6,626	686	0
Commercial	57	0	446,926	0		1,117
Office Park	840	0	6,403,320	0		24,333
Park/OS/Golf	408	0		0		0
Total Units:	10,836	3,958	6,850,246	11,095	1,149	25,450

Acreage Statistics and Projected Build-out for May 2007 Board of Commissioners' Conceptual Draft

	Gross Acres	Max. Dwelling Units	Population Estimate	K-12 Student Est.
Residential, 1 unit per 5 ac.	10,428	2,086	5,846	605
Residential, 1 unit per 1 ac.	0	0	0	0
Residential, 2 unit per 1 ac.	0	0	0	0
Golf	408	0	0	0
Total Units:	10,428	2,086	5,846	605

Acreage Statistics and Projected Build-out for Feb. 2007 Joint Staff Plan Draft

	Gross Acres	Max. Dwelling Units	Nonresi- dential Floorspace (in Sq. Ft.)	Pop. Estimate	K-12 Studen t Est.	Employ- ment Estimate (persons
Residential, 1 unit per 10 ac.	2,357	236		661	68	
Residential, 1 unit per 5 ac.	3,958	792		2,218	230	
Residential, 1 unit per 1 ac.	2,308	2,308		6,647	669	
Residential, 2 unit per 1 ac.	1,746	3,492		9,788	1,013	
Mixed Use - Retail	15	0	117,612		0	294
Mixed Use - Office	15	0	114,345		0	435
Mixed Use – Med. Density Resid.	30	240		673	70	
Golf	408	0			0	

Total Units: 10,836 7,067 231,957 19,807 2,050 7
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- Ulma stated that he worked with Chatham County to estimate school population which ranges from 1,000 to 2,000 additional students, depending on the plan.
- Lucier asked what is the student generation multiplier. Lucier clarified that the impact fee does not include charter schools.
- Robinson asked if we collect the impact fee on age-restricted housing.
- Jason Sullivan stated that because the Amberly Development is 55 years and older, that we do collect impact fees for that development. We do not collect the impact fee for housing for ages 65 and over.
- Robison asked if the impact fee funds any projects east of the lake.
- Lucier said that the new middle school under construction and the planned high school on Jack Bennett Road will serve students who live east of the lake.
- Ulma stated that the plan shows potential park and school sites. Lucier explained that Chatham County looks at co-locating schools and parks.
- Kost explained that the cost per acre is increasing east of the lake, to the range of \$50,000-100,000, and we will need to be aggressive in indentifying school/park sites.
- Ben Shivar reported on the recent meeting of developers, including Highwood Properties, Capitol Associates, and Tim Smith with Prestonwood Developers and two smaller developers who have been active in Western Wake. Shivar indicated that large land developments are unlikely because developers do not want to tie up their money with as much land. Future developments will likely be smaller and they noted that they are more interested in mixed-use which is typically higher densities and mixed-uses are looked at amenities. He explained that the type of model is North Hills with short commutes and mixed-uses. Shivar indicated that the area identified in the draft plans is likely too large and too isolated.
- Portman indicated that there is a need for higher density areas that need to be located along major transportation corridors and that Cary needs to consider this in their Southwest Area Plan. Portman asked if we have agreement on changing the 10 acre lots to 5 acre lots.
- Kost indicated that 5 acres will still protect water quality and although there was support from some groups to have 10 acre lot size, that with 5 acre lots, land owners would still be able to divide their land.

- Lucier agreed in that we need to be consistent on both sides of the lake and the ordinances that we have in place will protect water quality.
- Portman and Robinson agreed.
- Kost indicated that she had envisioned mixed-use for the commercial area but she
 would still like to see this type of development at the Highway 64/751 intersection
 because this area has been identified in our Land Use Plan as an area for
 commercial growth. It also makes more sense from a transportation standpoint.
- Robinson asked how far it is from Lewter Shop Road/751 to Highway #64. Lucier responded that it was three miles.
- Portman indicated that this is an opportunity for an unemployment center. Lucier said that there has been a bit of miscommunication and that his intent has always been mixed-use and not an isolated office park. Lucier indicated that the area is too large and that we will want to have something at 751/64 and the question is, "Does it make sense to have both?"
- Portman clarified that Option 1 and Option 2A are out and we are now talking about Options 2B and 2C.
- Robinson said we have an opportunity to plan for something very unique.
- Ulma clarified that it would be an easy fix to change the use back to mixed-use.
- Kost indicated that citizen input is important and it has been three years since we reached out to citizens. She indicated that Chatham County would like to sponsor a public forum before the next sub-committee meeting because it is critical to get input.
- Robinson said that this is reasonable.
- Portman said the public vetting process is important and what we are discussing now is not the final product.
- Lucier said we need citizen input now so that it will be meaningful and not too late in the process. He said we now have multiple options to present to citizens.
- Robinson asked if we plan to take multiple options to the public. Lucier and Kost responded, yes.
- Kost said we have focused only on land use up to this point and we might want to consider some type of overlay.

- Portman said that we need to give the public the full benefit of seeing all the options being considered but also give them the benefit of the thought that has gone into the plan.
- Cynthia Van Der Wiele indicated the citizen's forum would be on August 10th.
- Ulma questioned whether the citizen forum should be a joint effort.
- Portman and Robinson said they have no problem with this being a Chatham event.
- Lucier said that Cary staff and elected officials are invited to attend.
- Kost indicated that there needs to be some minor modifications to the maps to make for smoother transitions and to provide protection for the American Tobacco Trail.
- Ulma indicated that we need to refine the maps looking at roads, streams, and property boundaries.
- Portman said it is important to look at the table at the population projections and the student population projections. The impacts of 2A, 2B, and 2C are vastly different than the original Chatham plan.
- Lucier indicated that now the commercial area is now mixed-use, the impact will be greater.
- Kost indicated that it is not realistic to meet the original population projections.
- Robinson said we need to discuss the plan amendment coming before the Cary Town Council coming July 23rd.
- Lucier indicated that the Commissioners will discuss this item at their July 20th Board of Commissioners' meeting
- Robinson asked that we send a representative to the July 23rd meeting.
- Portman said we value Chatham's opinion and want to hear from the Chatham Board.
- Kost indicated that the main topic for the next meeting will be discussion of the feedback received at the citizen's forum.
- Robinson said that the next sub-committee meeting will be on August 14th at the Jordan Lake Visitor's Center. The Town Council and the Chatham County Board of Commissioners will meet jointly on September 17th, location to be determined.

ADJOURNMENT • Robinson adjourned the meeting at 10:33 AM.