

Joint Work Session

**Cary Town Council
Chatham Board of Commissioners**

Joint Land Use Plan

September 18, 2007

Agenda

- 1. Welcome & Introductions**
- 2. Approval Of Agenda, Meeting Purpose**
- 3. History Of Joint Planning Effort**
- 4. Presentation Of Joint Staff Plan**
- 5. Water Quality, Land Use, & Density**
- 6. May '07 BoC Plan, Areas Of Agreement**
- 7. Resolution Of Remaining Plan Areas**
- 8. Update & Discussion – Moratoria**
- 9. Next Steps & Project Schedule**

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3. History of the Joint Planning Effort

**Joint Resolutions Adopted - Dec.'05.
Specified Plan Approach:**

- a) Joint Plan To Be Developed
Independently By A Joint Staff Team**
- b) 1st Public Hearing By June '06,
Adoption By Aug. '06**
- c) Public Involvement - Two Community
Meetings**

3. History of the Joint Planning Effort

- | | |
|---|-------------------|
| a) Research Phase | Spring '06 |
| b) 1st Community Meeting -
Project Introduction | June '06 |
| c) Joint Staff Charrette - Two
Plan Options | Aug. '06 |
| d) 2nd Community Meeting –
Public Feedback | Oct. '06 |
| e) Joint Staff Charrette –
Developed Proposed Draft Plan | Jan. '06 |
| f) 1st Joint Work Session | Feb. '07 |

3. History of the Joint Planning Effort

- g) Chatham BoC Public Hearing April '07**
- h) Chatham BoC Revised Plan Recommendation May '07**
- i) Cary Council Work Session Jul. '07**
- j) 2nd Joint Work Session Sep. '07**

Agenda

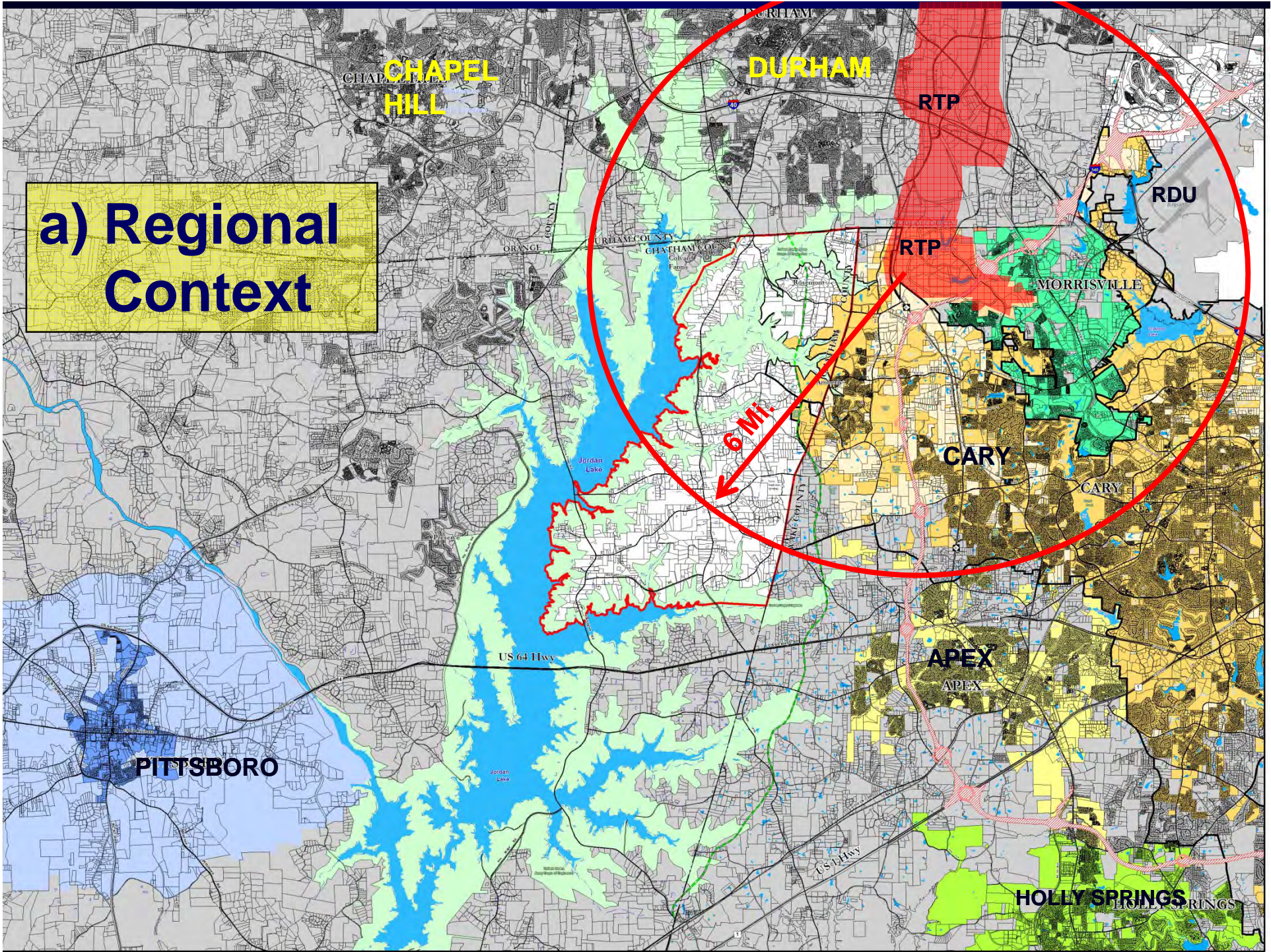
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Joint Staff Considerations

Land Use

- a) Regional And Market Context**
- b) Transportation Connections**
- c) NC WRC Recommendations**
- d) Density Transitions**
- e) Contiguity To Town Limits**
- f) Efficient Provision Of Services**
- g) Well & Septic Rescue Exposure**
- h) Zoning Precedents**

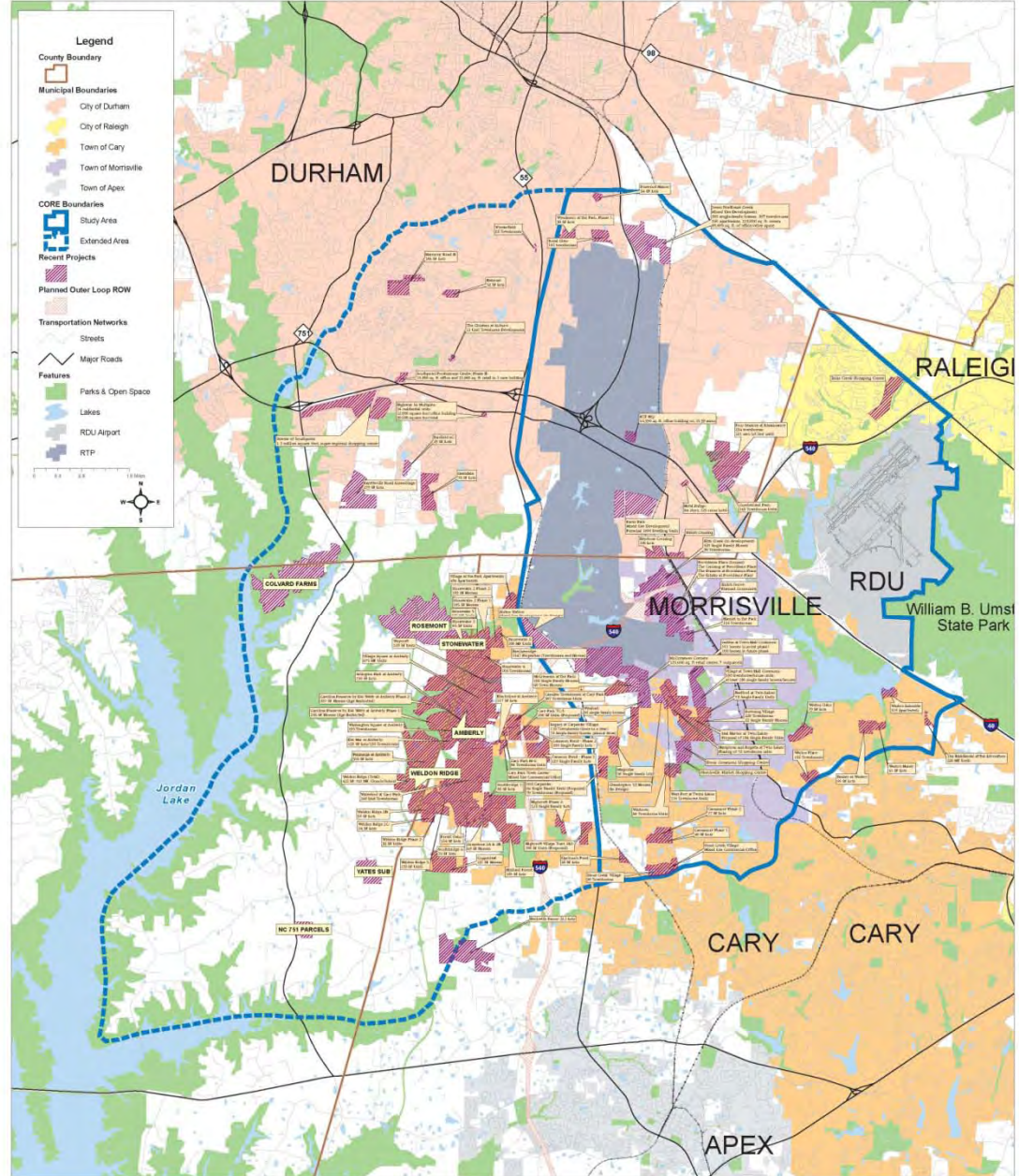
a) Regional Context



a) Regional Context

- Map is from RTP Web Site →
- Outer Blue Line is the Extended CORE Boundary
- *Entire Joint Study Area is Included*

Recent and Planned Development near RTP Last Updated: 1/18/2007



Date Sources:
Triangle J COG
Wake County Planning Department
Research Triangle Foundation
Contract: RTP/ wabidm.org

Triangle J Council of Governments
Geographic Information Systems

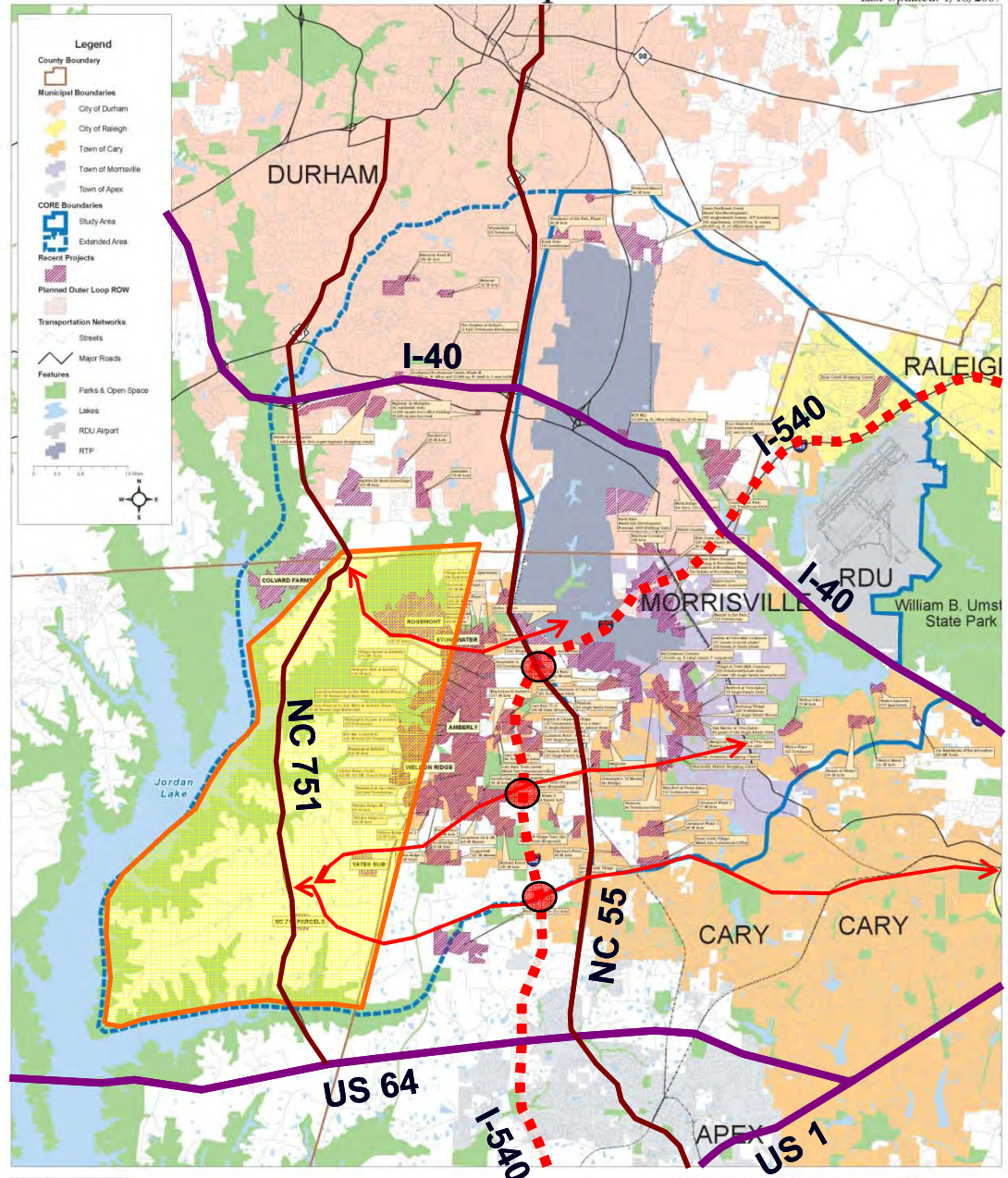


b) Transportation Context

- RTP Web Map →
- I-40
- NC Hwy 55
- US Hwy 1 & 64
- NC Hwy 751
- Future I-540 / Western Wake Pkwy
- Thoroughfare Connections

Recent and Planned Development near RTP

Last Updated: 1/18/2007



Data Sources:
Triangle J COG
Wake County Planning Department
Research Triangle Foundation
Contract: RTPD_wakebldg.mxd

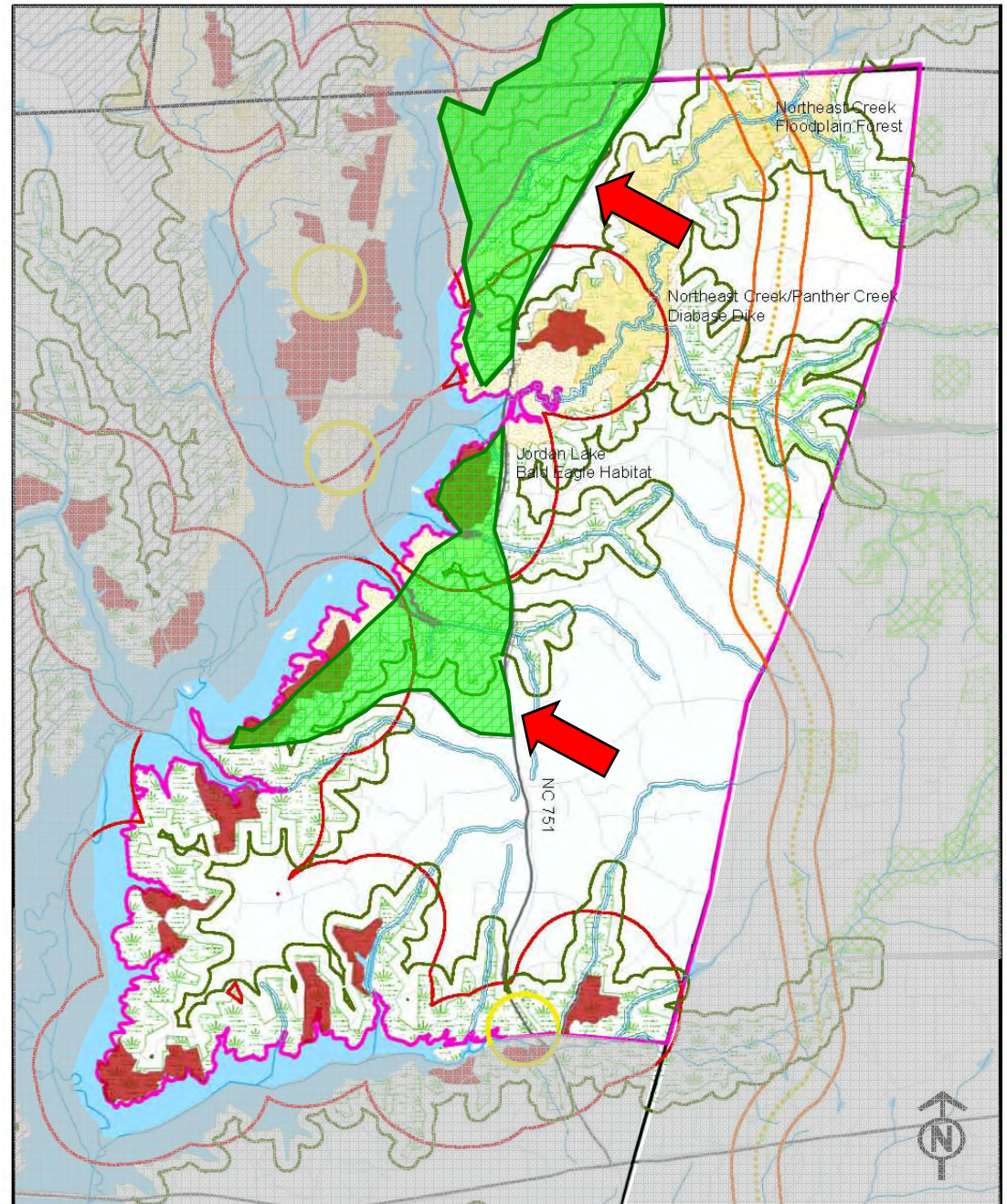
Triangle J Council of Governments
Geographic Information Systems

THE RESEARCH
TRIANGLE PARK

c) Feedback From NC Wildlife Resources Commission

⇒ The Nature
Conservancy
EcoRegional
Portfolio Sites
Are Adjacent to
Game Lands

Conservation Opportunities: Chatham-Cary JLUP Study Area

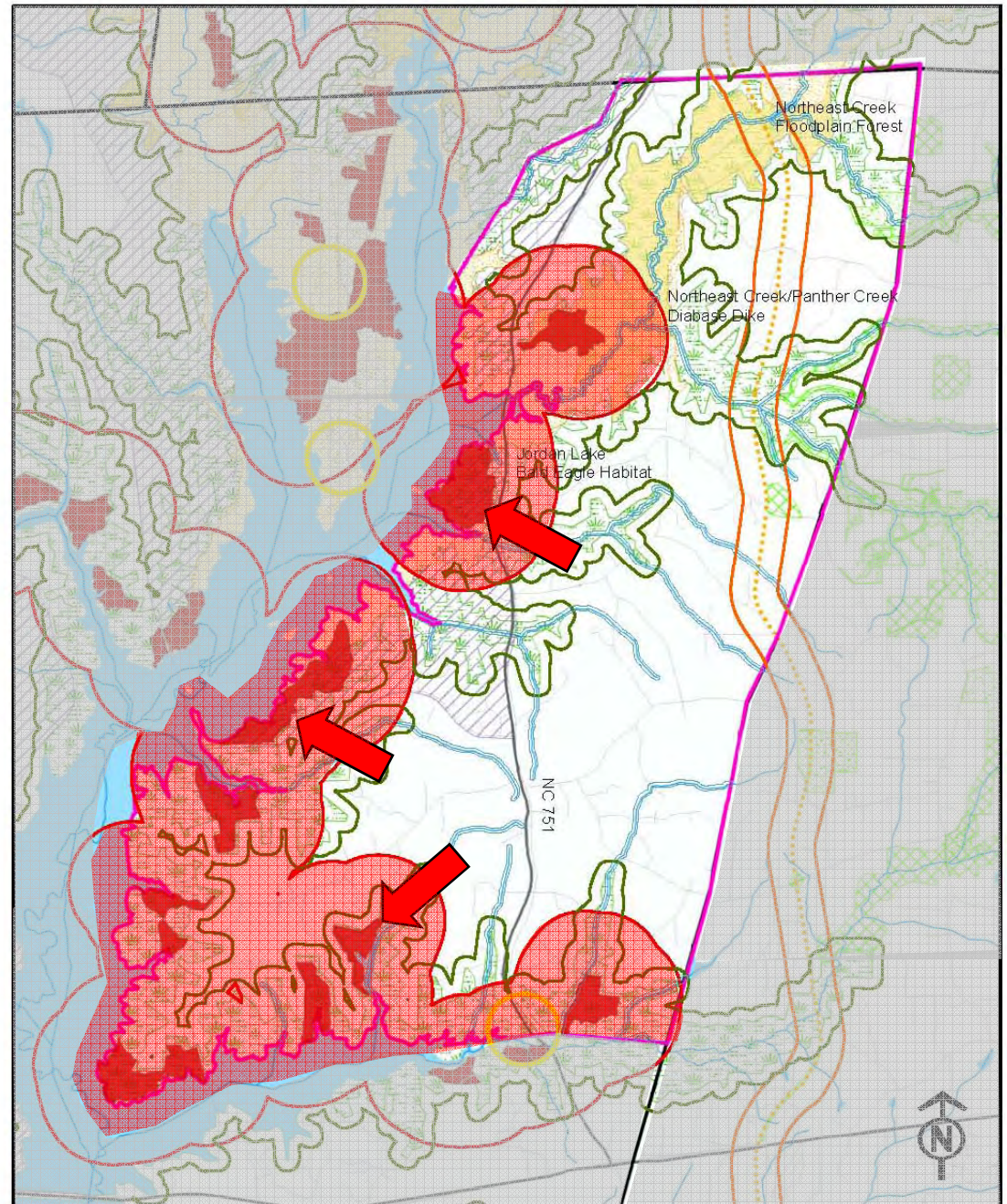


Conservation Opportunities: Chatham-Cary JLUP Study Area

**c) Feedback From
NC Wildlife
Resources
Commission**

⇒ **Jordan Game
Land Burn
Blocks (Shaded
Dark Red)**

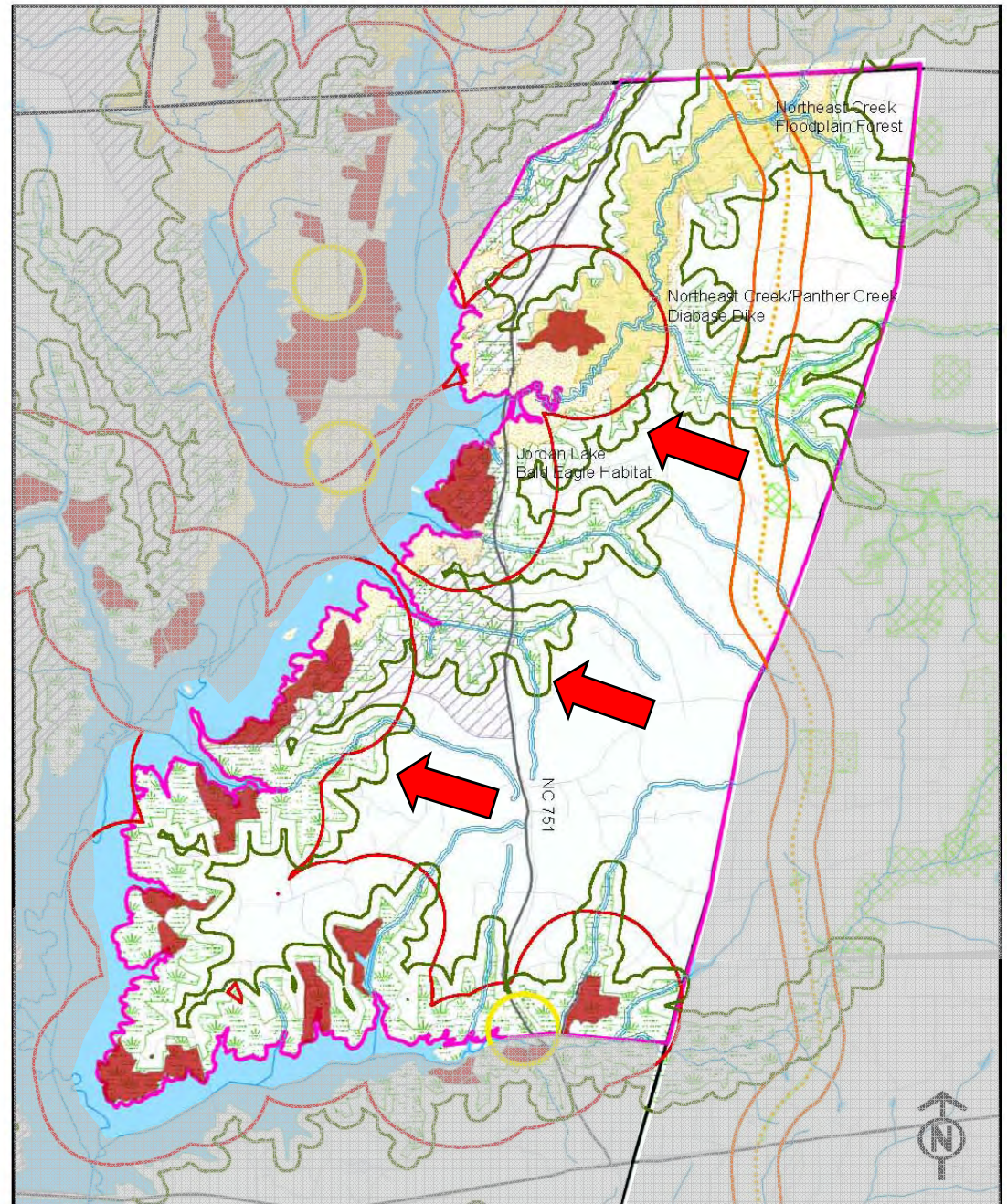
⇒ **1/2 Mile Buffer
Suggested**



Conservation Opportunities: Chatham-Cary JLUP Study Area

**c) Feedback From
NC Wildlife
Resources
Commission**

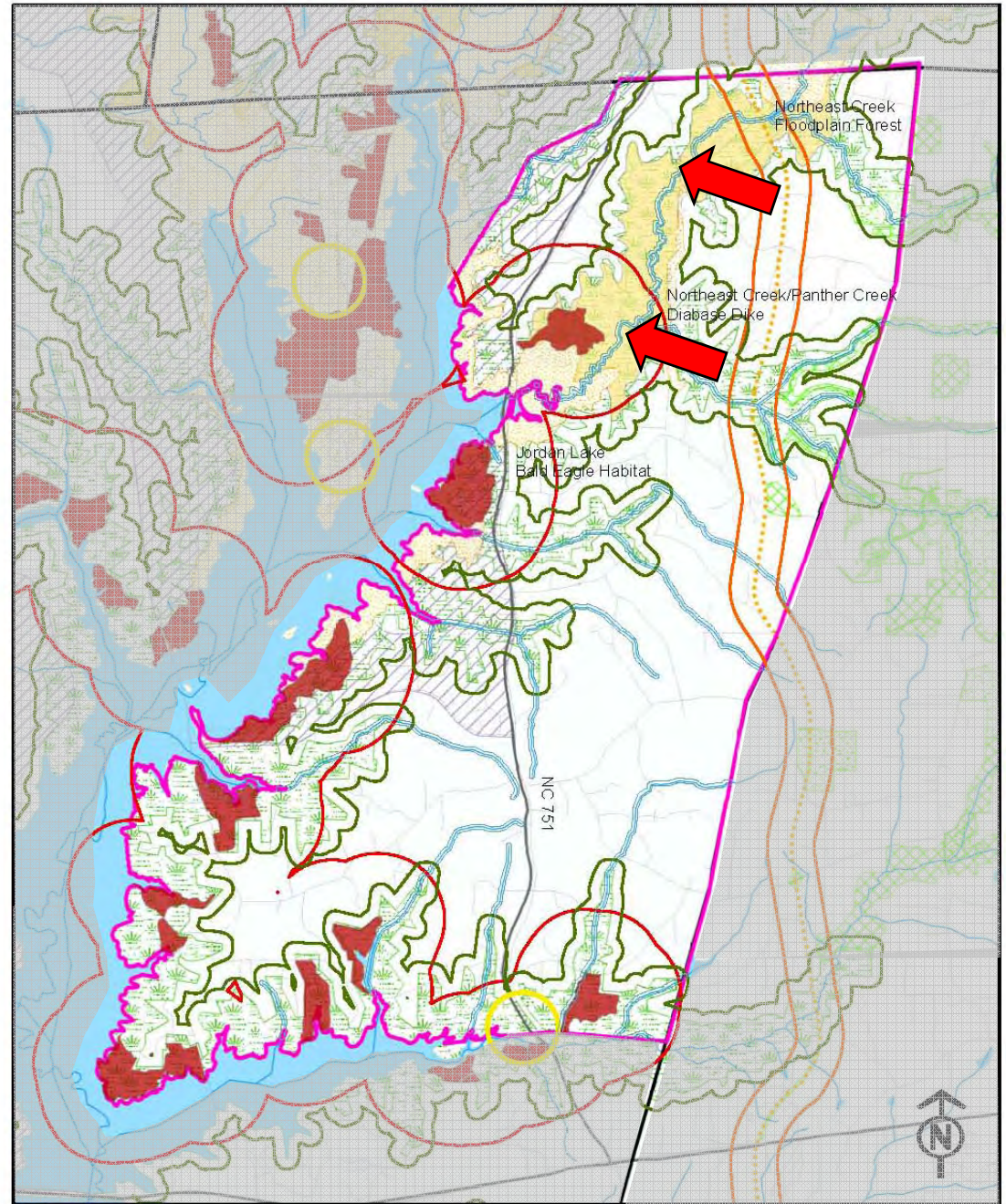
⇒ **150-Yard
Hunting Buffer
Recommended
Next To U.S.
Army C.O.E. &
NC Game Lands**



c) Feedback From NC Wildlife Resources Commission

⇒ Lower Densities
Next to Natural
Heritage
Inventory Sites

Conservation Opportunities: Chatham-Cary JLUP Study Area



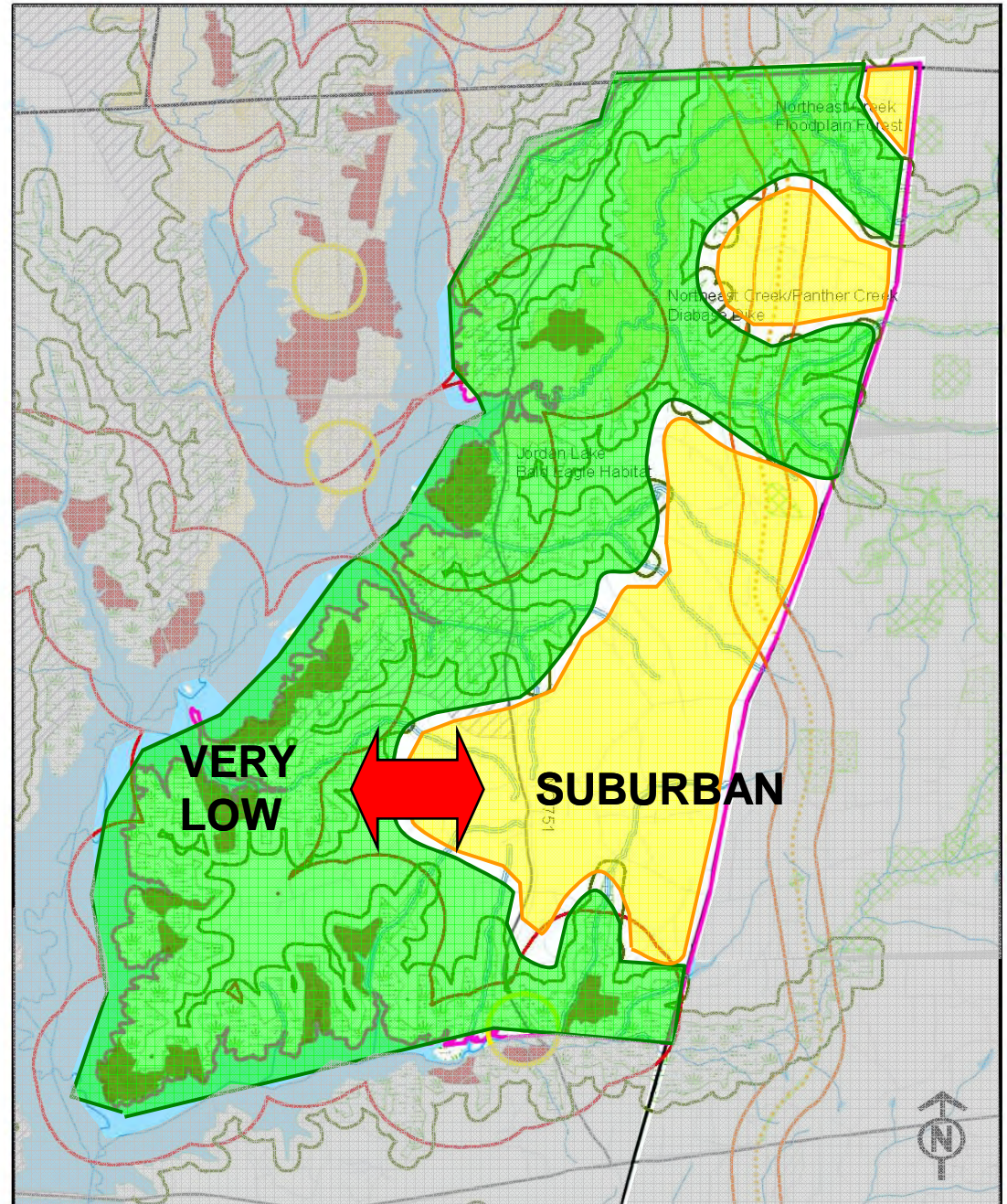
c) Feedback From NC WRC

d) Density Transitions

⇒ Use “Zoning Extremes,” e.g.:

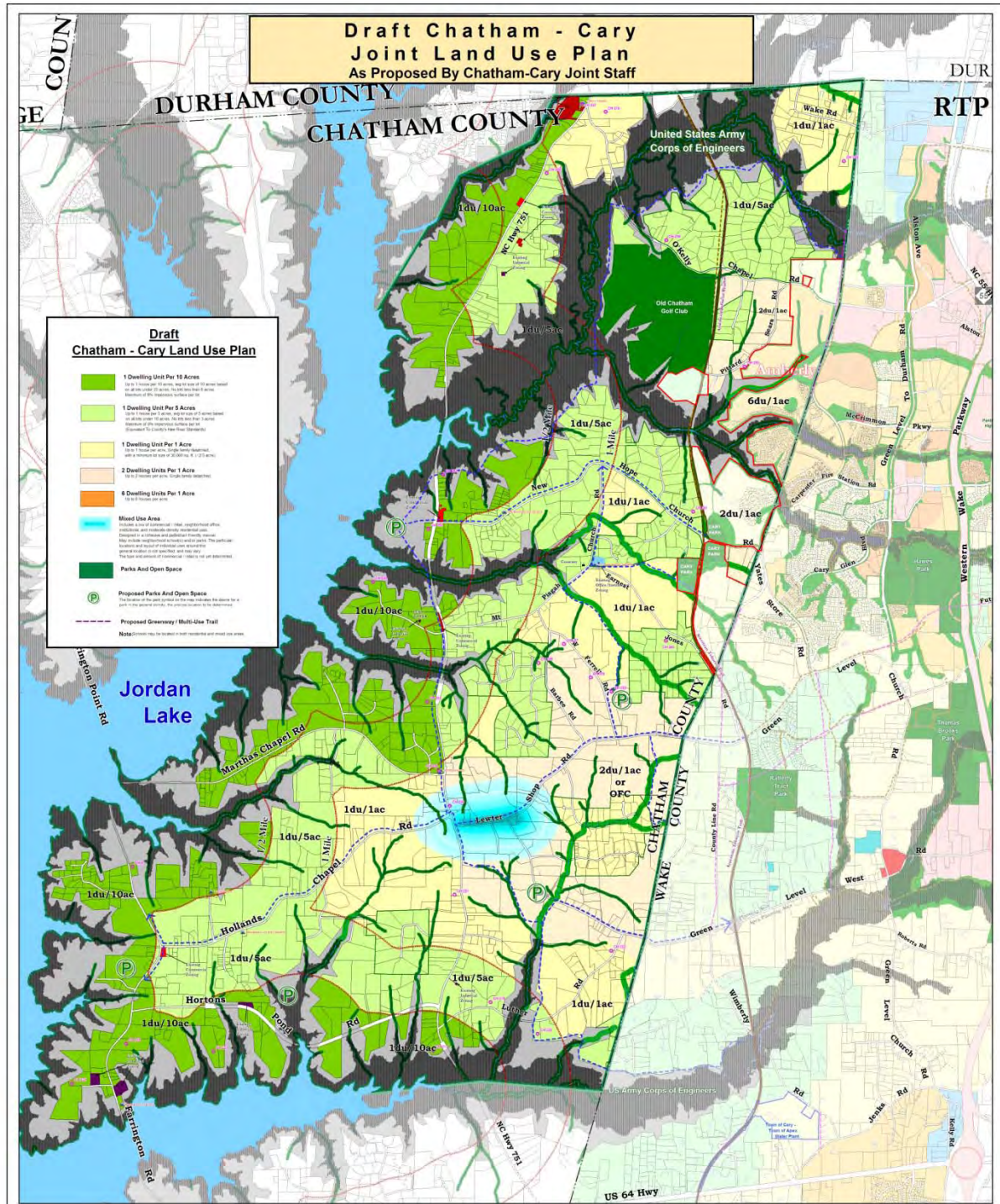
⇒ 5-10 ac. lots near lake, then...

⇒ ...“Jump” to Higher Densities Going East



Joint Staff's Draft Plan

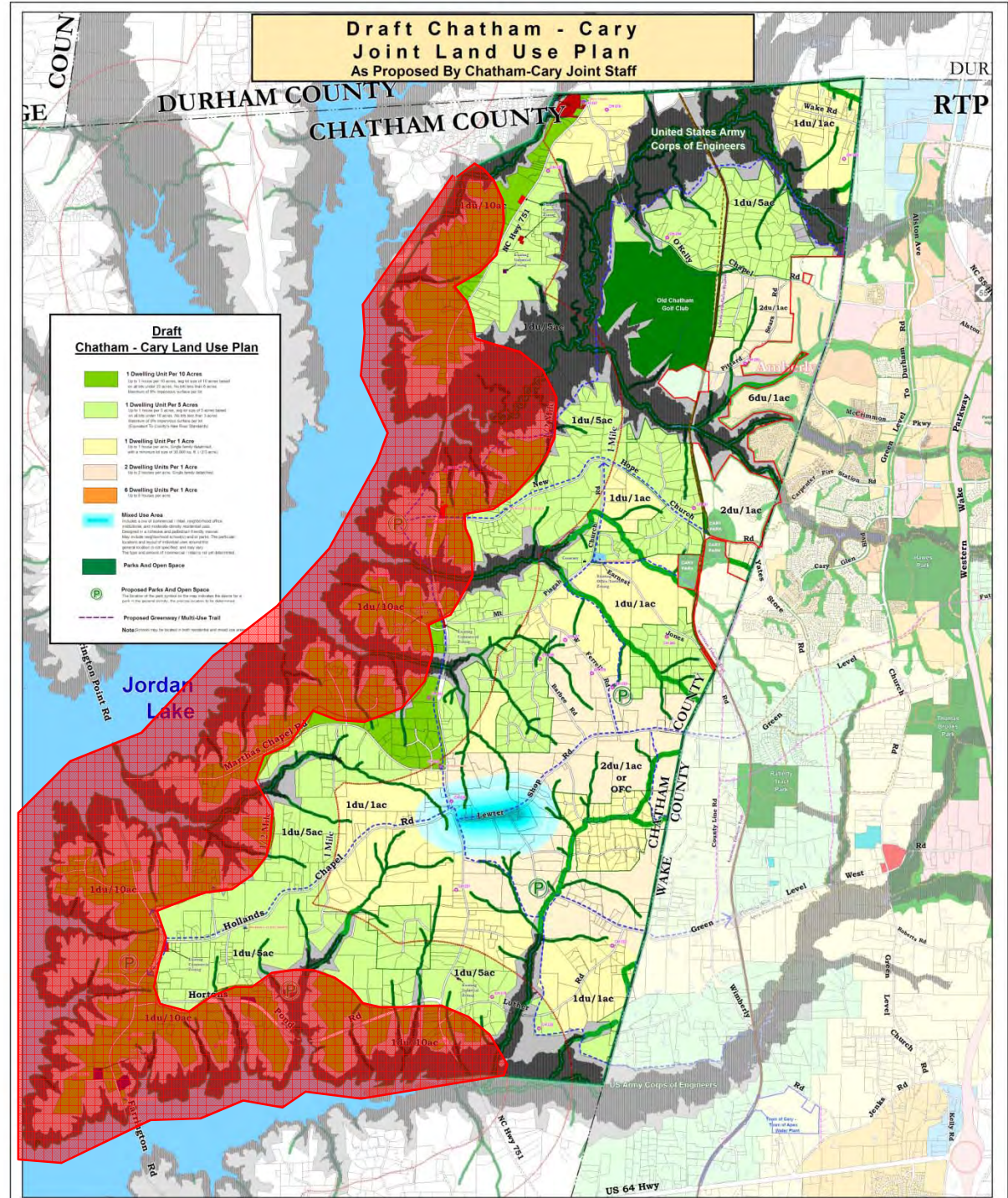
Feb. 2007



Draft Plan

Within the 1st Half Mile From Lake:

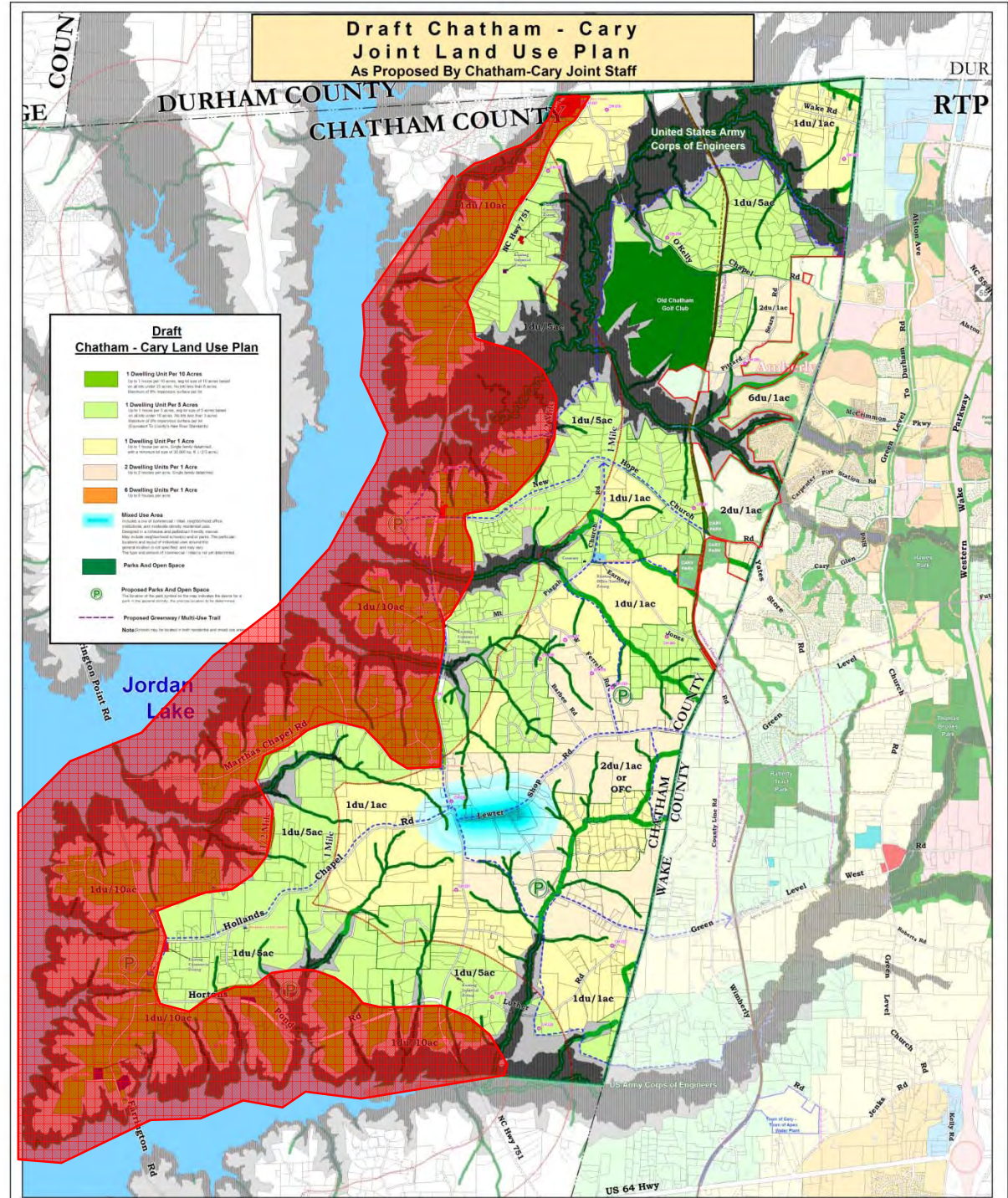
- 1 dwelling per 10 acres, avg.
- No lot < 6 ac.
- Impervious Limit of 8%
- Based on Species Habitat Impacts (WRC)



Draft Plan

Adjacent to 1st Half Mile From Lake:

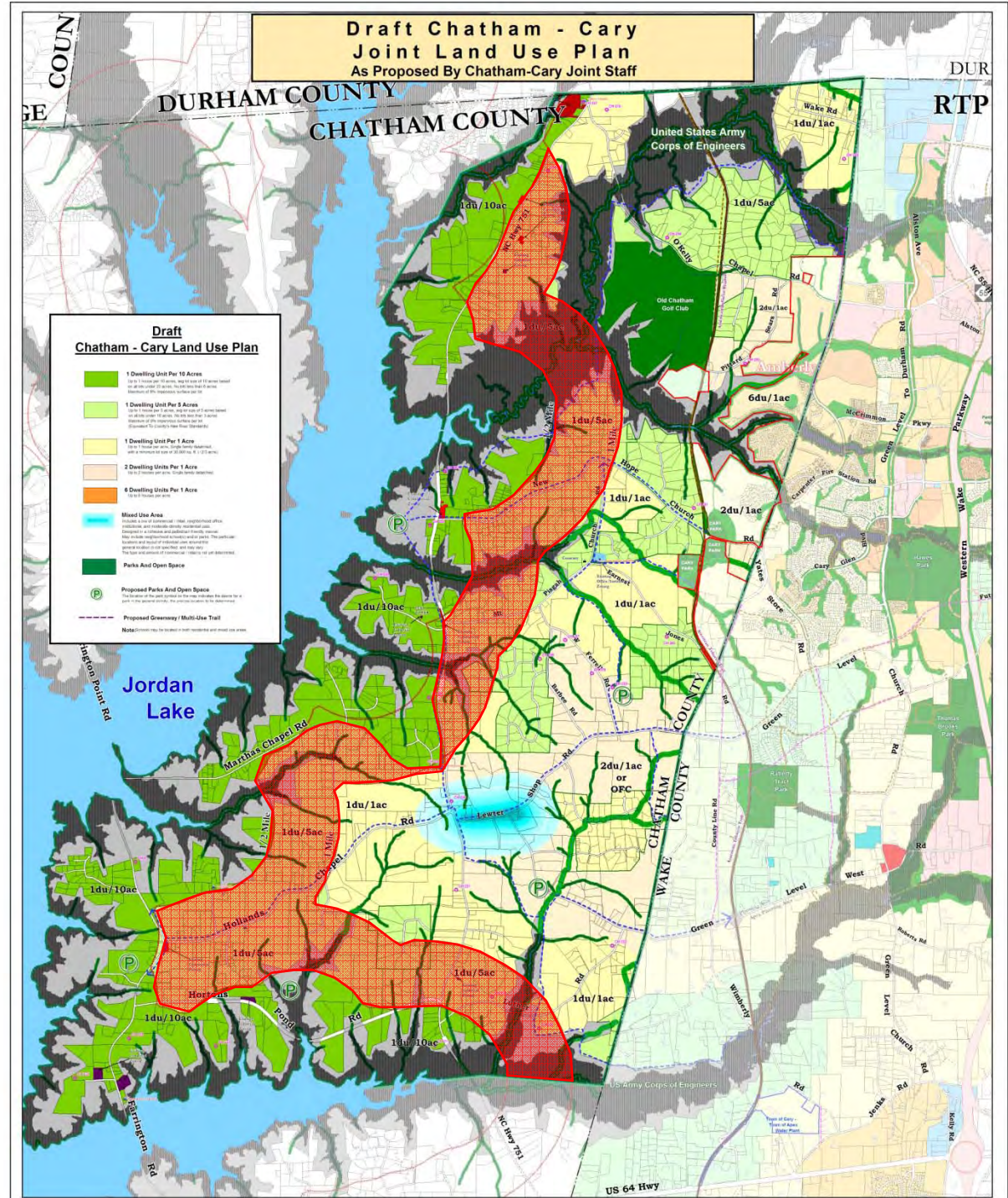
➤ Land Use Category Was Extended Eastward to Conform with TNC Portfolio Sites, per the WRC



Draft Plan

Within the 2nd Half Mile From Lake:

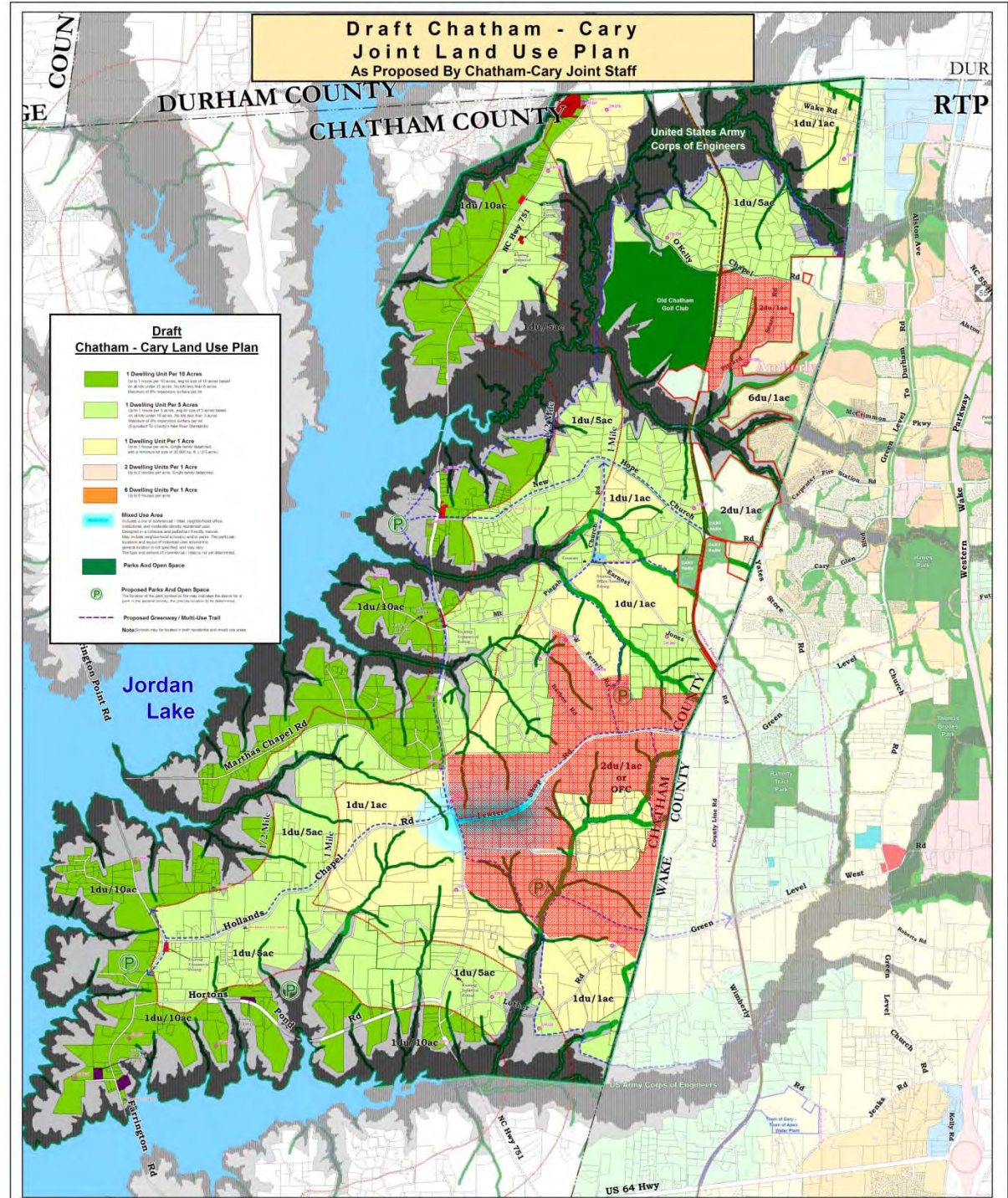
- 1 dwelling per 5 acres, avg.
- No lot < 3 ac.
- Impervious Limit of 8%



Draft Plan

Densities Continue to Transition Eastward:

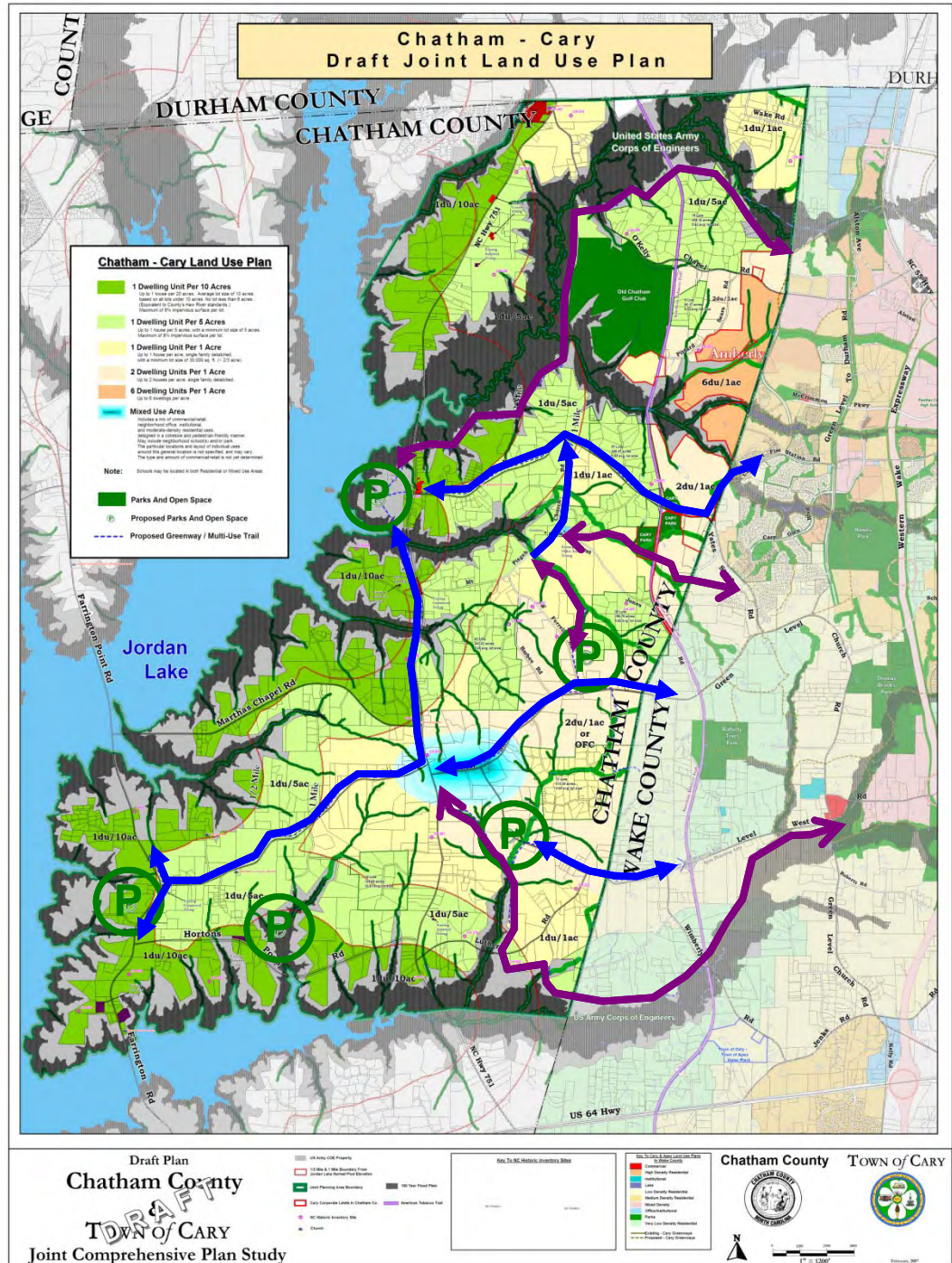
⇒ 2 dwellings per acre



New Draft Plan

Public Parks & Greenways

- Parks Distributed At Key COE Sites, and on Greenways
- Greenways Along Stream Buffers
- Multi-Use Paths Along Roads



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Water Quality

- **Current State Requirements**
- **Current Cary Requirements**
- **Future State Requirements**
- **Water Quality and Density**

State Requirements for Reservoir Watershed Protection WS-IV

- **Low Density Option**
 - 24% impervious
 - No BMPs for Stormwater Treatment
 - 30' Buffers on Perennial Streams
 - Provision to go to 36% without curb and gutter

State Requirements for Reservoir Watershed Protection WS-IV

- **High density option**
 - **70% Impervious**
 - **BMPs for Stormwater Treatment**
 - 85% TSS
 - 1st inch of runoff
 - Draw down below the water surface
 - **100' Buffers on Perennial Streams**

Cary Stormwater Requirements

- **Mirrors Neuse Nutrient Sensitive Waters Rules**
 - **Uses BMPs to meet 3.6 Nitrogen Target**
 - **Peak Discharge mitigated to predev. 1 yr 24 hr storm**
 - **Stream Buffers**
 - 100' if shown on USGS maps
 - 50' intermittent streams (soils maps)

Jordan Lake TMDL Proposed

- Reduction Below 2001 Conditions
- Upper New Hope
 - New Development N 2.2, P .82
 - Existing Development 35% Reduction
 - Agriculture 35% Reduction

Jordan Lake TMDL Proposed

- **Lower New Hope**
 - **New Development N 4.4, P 0.78**
 - **Existing Development Capped at Baseline**
 - **Agriculture Capped at Baseline**

Water Quality & Density

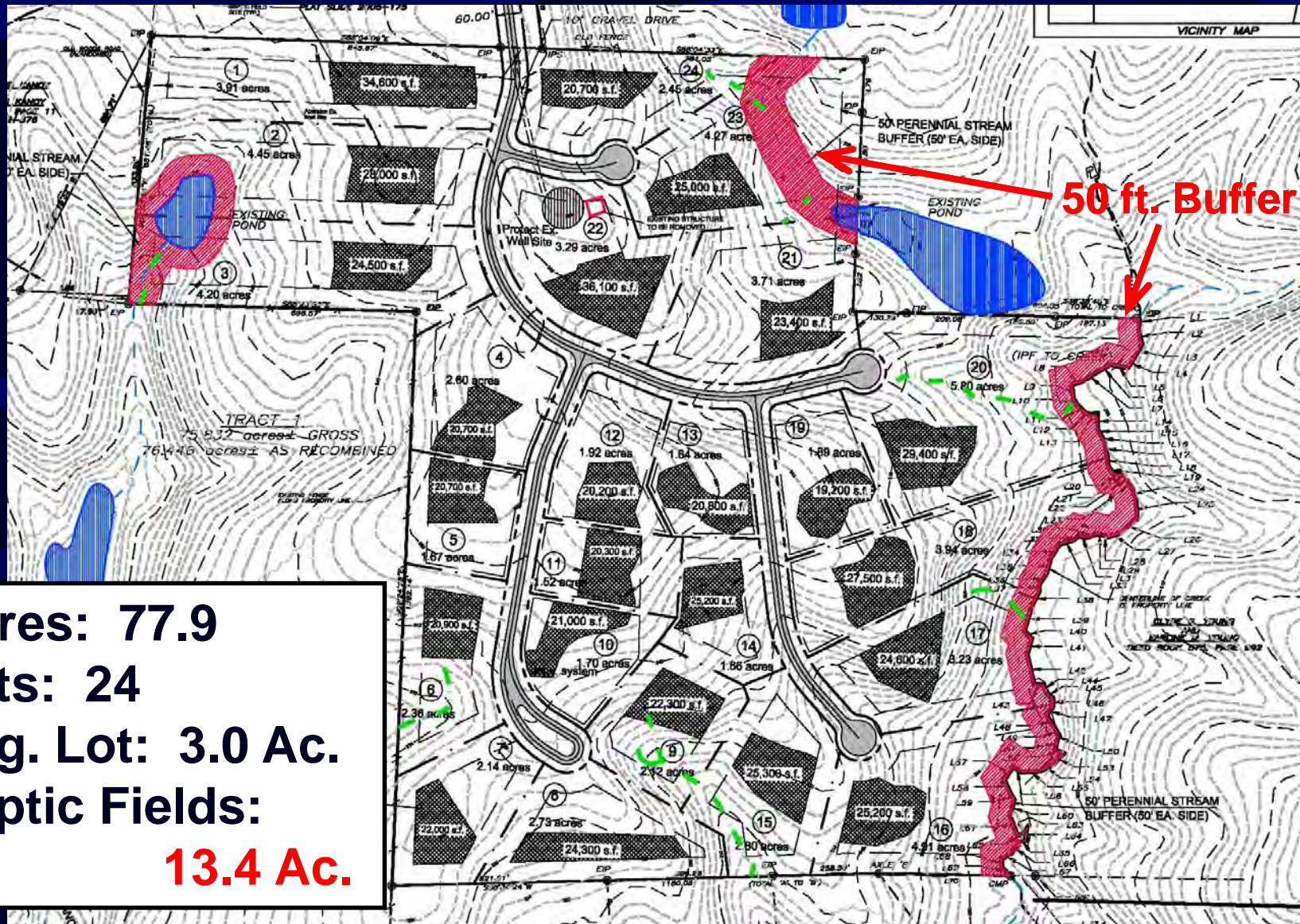
Protecting Water Resources with Higher Density Development – EPA 206

- **Low Density Alone Does Not Protect Water Quality**
- **To Protect Water Quality**
 - **Preserve Open Space**
 - **Preserve Ecologically Sensitive Areas**
 - **Minimize Impervious Cover and Land Disturbance**

NC DWQ Jordan Lake Model

Land use description	TN	TP
Barren	45.96	29.92
Commercial/Heavy Industrial	24.05	3.70
Forest	1.59	0.33
Office/Light Industrial	16.47	2.63
Pasture	5.69	1.08
Residential <0.25 ac per du (sewered)	15.03	2.47
Residential – 0.25-0.5 ac per du (sewered)	11.86	2.00
Residential – 0.5-1.0 ac per du (sewered)	11.72	1.94
Residential – 0.5-1.0 ac per du (unsewered)	41.42	2.03
Residential – 1.0-1.5 ac per du (sewered)	10.89	1.81
Residential – 1.0-1.5 ac per du (unsewered)	28.71	1.86
Residential – 1.5-2.0 ac per du (sewered)	9.37	1.71
Residential – 1.5-2.0 ac per du (unsewered)	22.09	1.74
Residential – 2.0+ ac per du (sewered)	2.49	0.60
Residential – 2.0+ ac per du (unsewered)	11.40	0.63
Row Crop	13.37	5.32
Urban Green Space	3.57	0.61
Water	0.00	0.00
Wetland	2.20	0.40

Typical Subdivision Septic Impacts



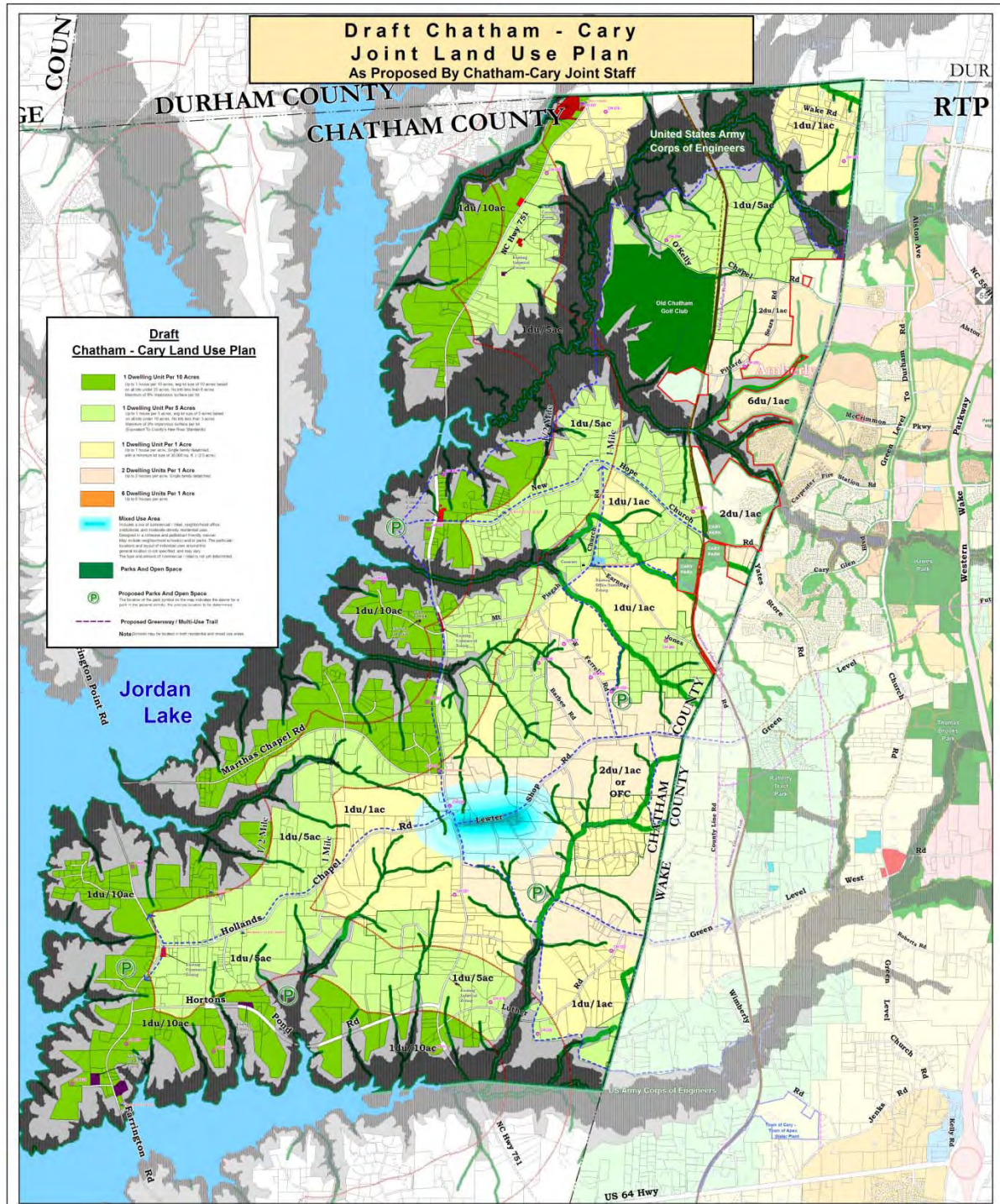
Acres: 77.9
Lots: 24
Avg. Lot: 3.0 Ac.
Septic Fields:
13.4 Ac.

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Joint Staff's Draft Plan

Feb. 2007



FYI: Land Use Comparison

Land Use	Acres	
	Staff Plan	BoC Plan
1 Unit Per 10 Acres	2,262	0
1 Unit Per 5 Acres	3,958	10,741
1 Unit Per Acre	2,716	0
2 Units Per Acre	1,746	0
Mixed Use Area	~60	0

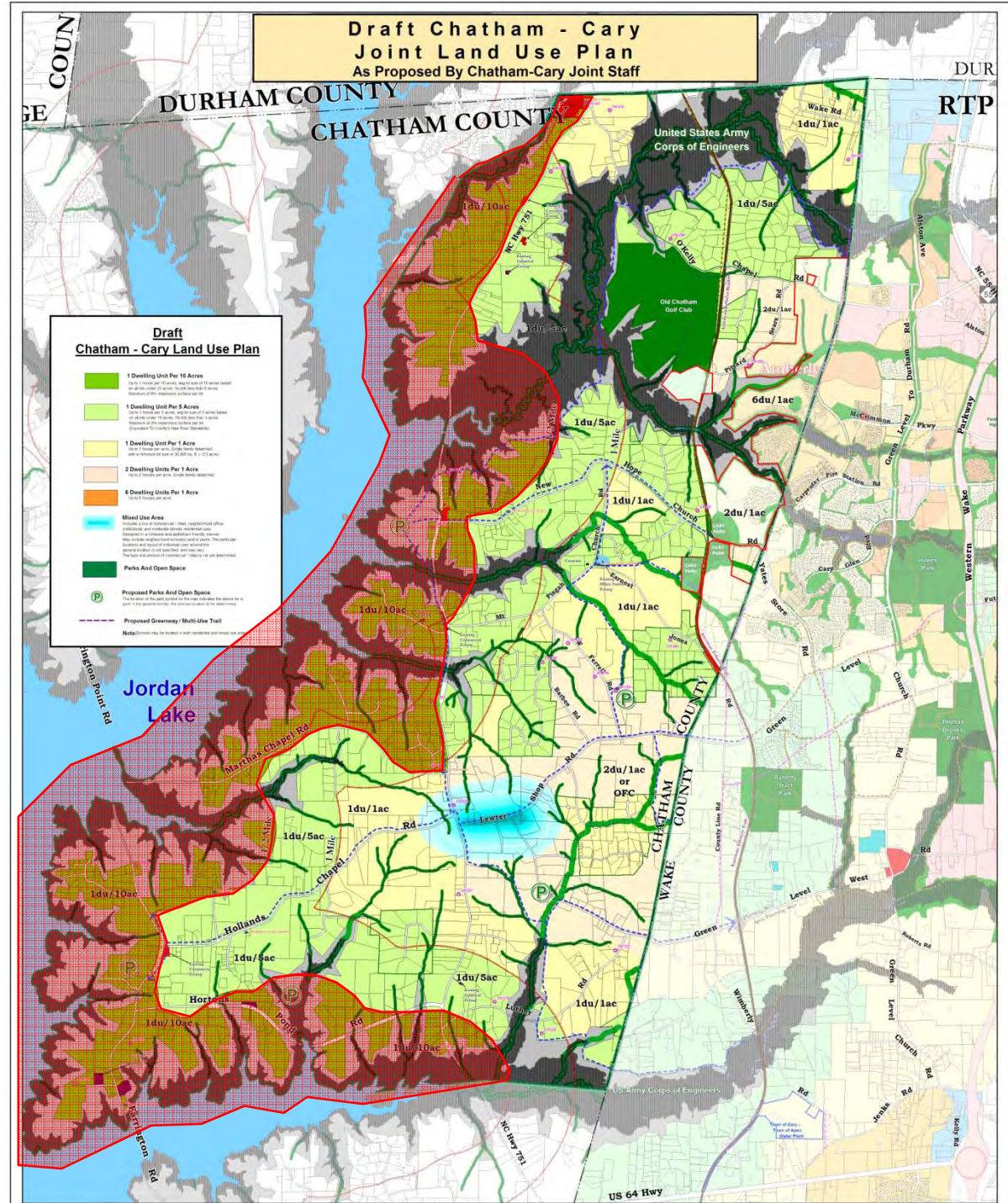
FYI: Buildout Comparison

(Theoretical *Maximums*)

Plan Scenario	Units
Current Zoning (R40)	9,200
Joint Staff Plan	7,500
Current Zoning, w/ Min. Lot Size = 3 Ac. For Septic	3,500
BoC Plan	2,200-2,400

Discussion Topic #1

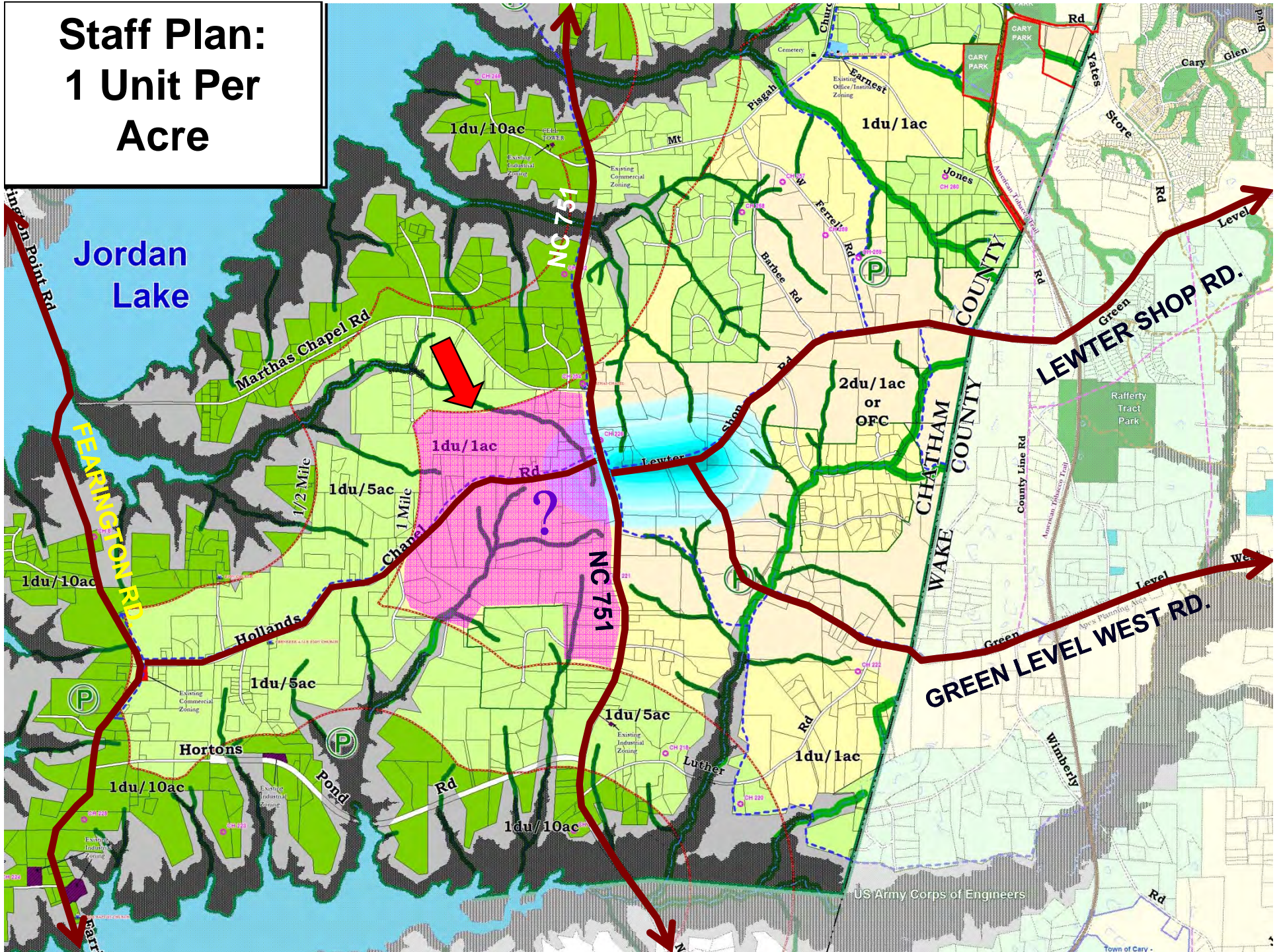
Is the B.o.C.
willing to
down-zone the
area within
 $\frac{1}{2}$ mile of the
lake to 1 house
per 10 acres?



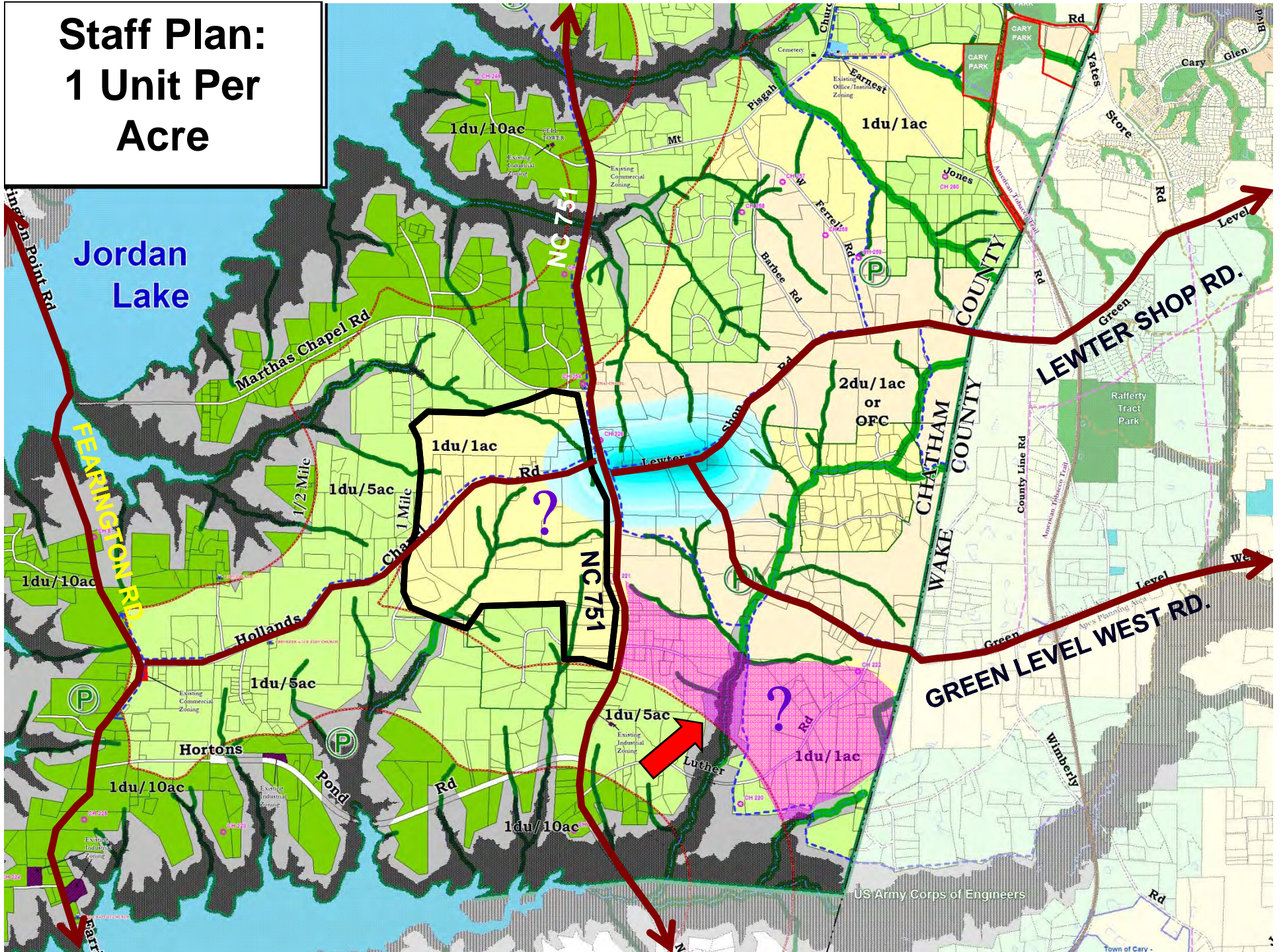
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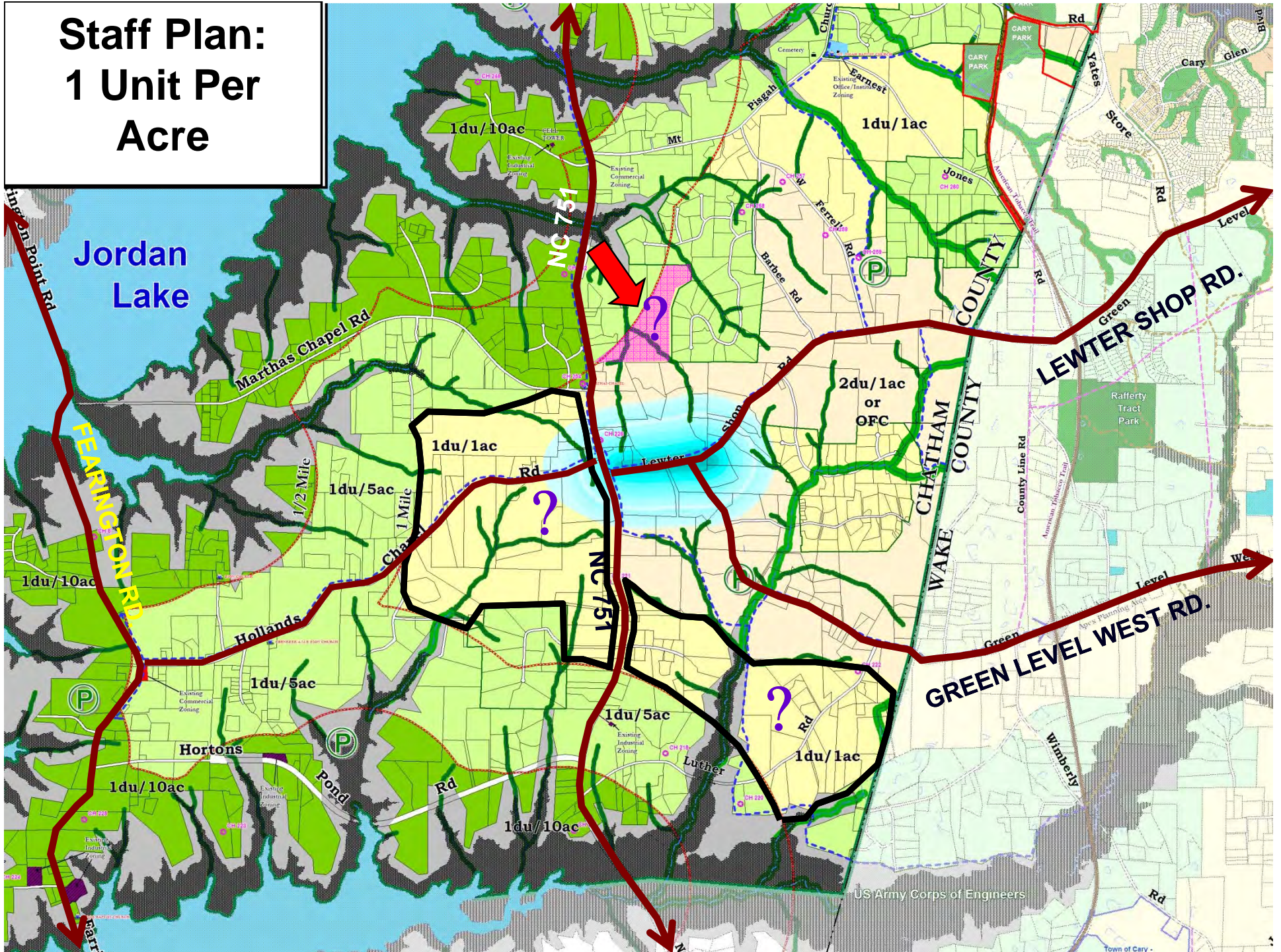
Staff Plan: 1 Unit Per Acre



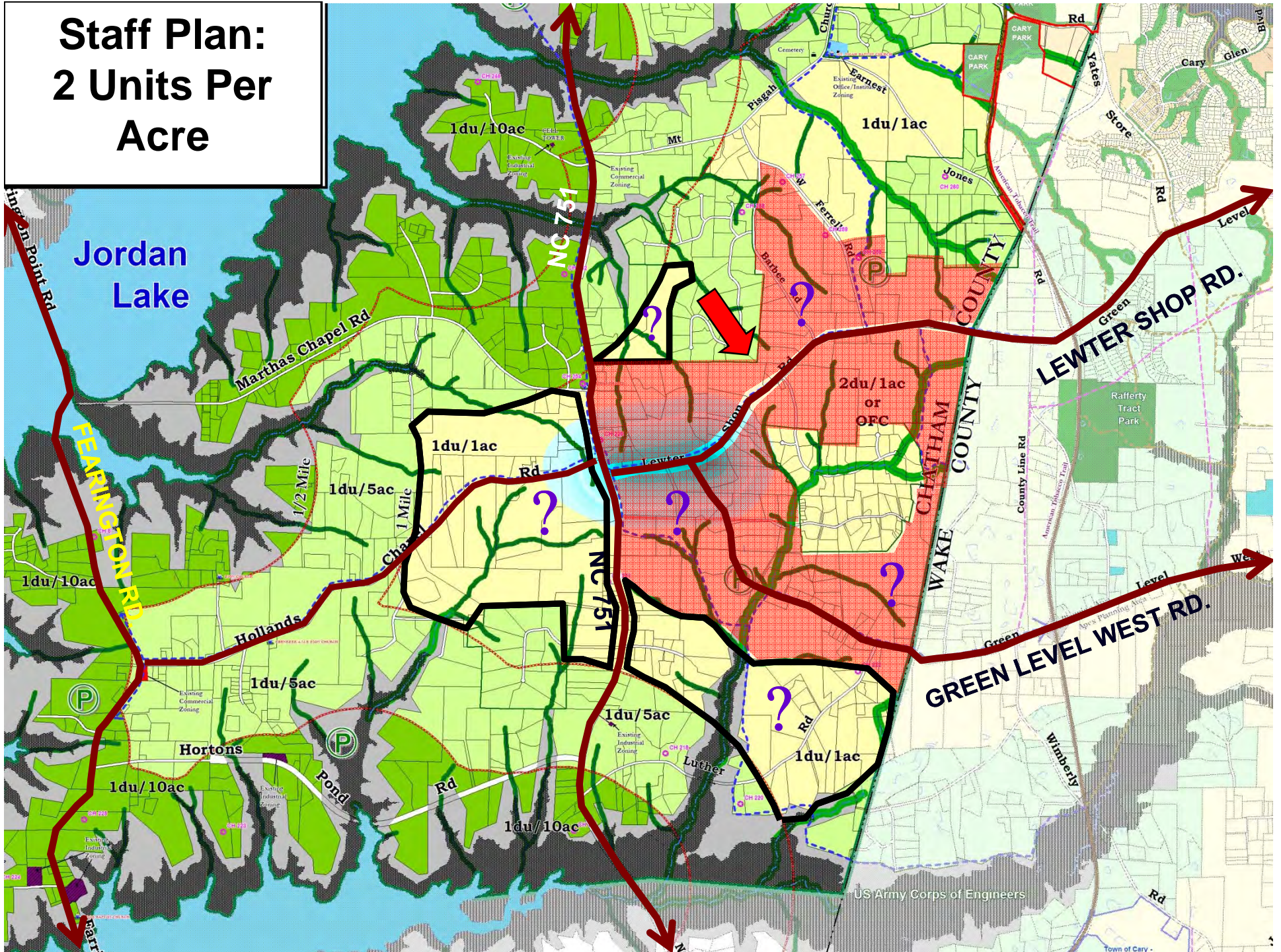
Staff Plan: 1 Unit Per Acre



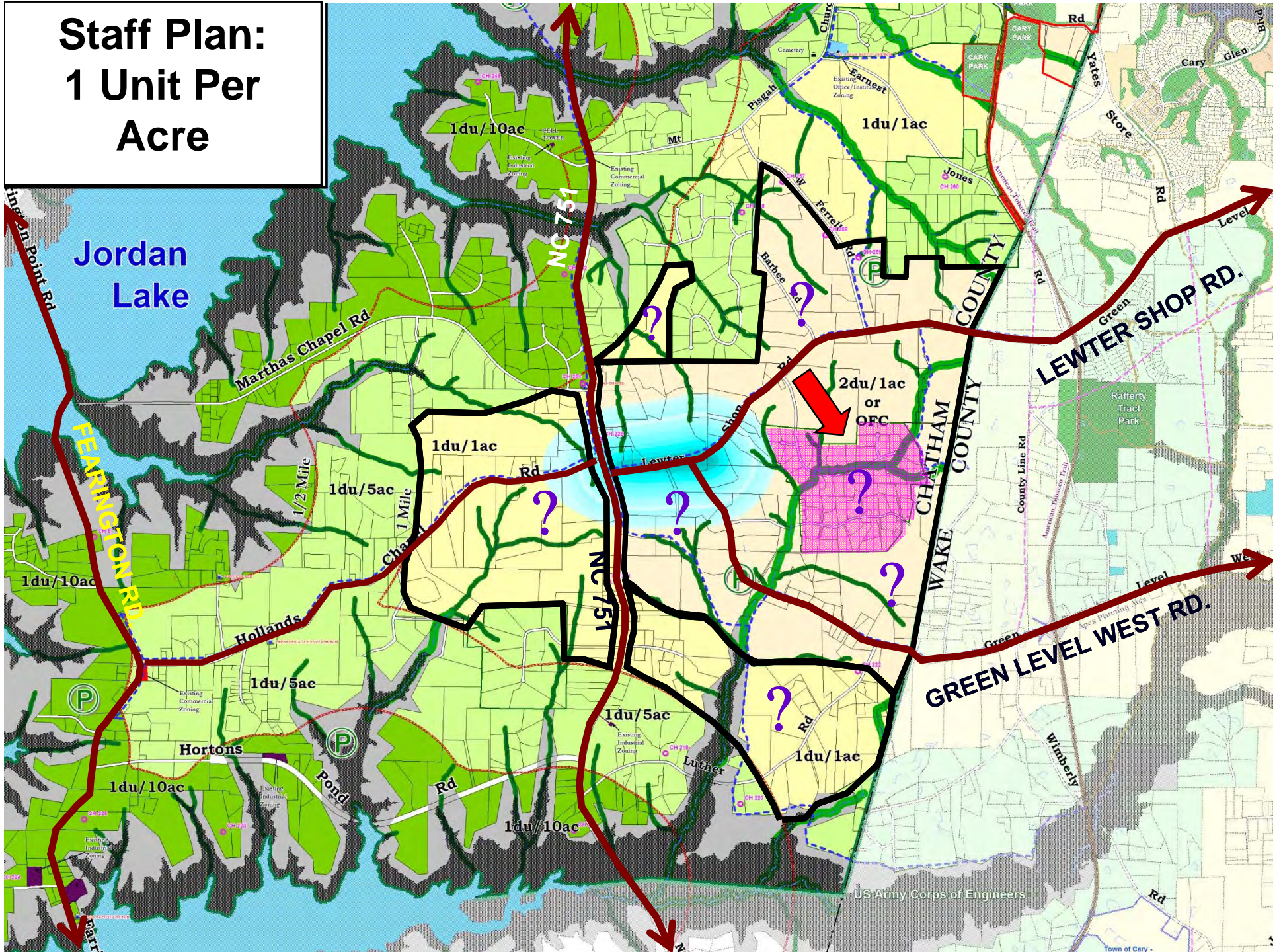
Staff Plan: 1 Unit Per Acre



Staff Plan: 2 Units Per Acre



Staff Plan: 1 Unit Per Acre



Staff Plan: 1 Unit Per Acre

Commercial / retail, neighborhood office, moderate-density residential uses and pedestrian friendly manner, neighborhood school(s) and/or parks. The particular mix of individual uses around this district is not yet determined.

Open Space

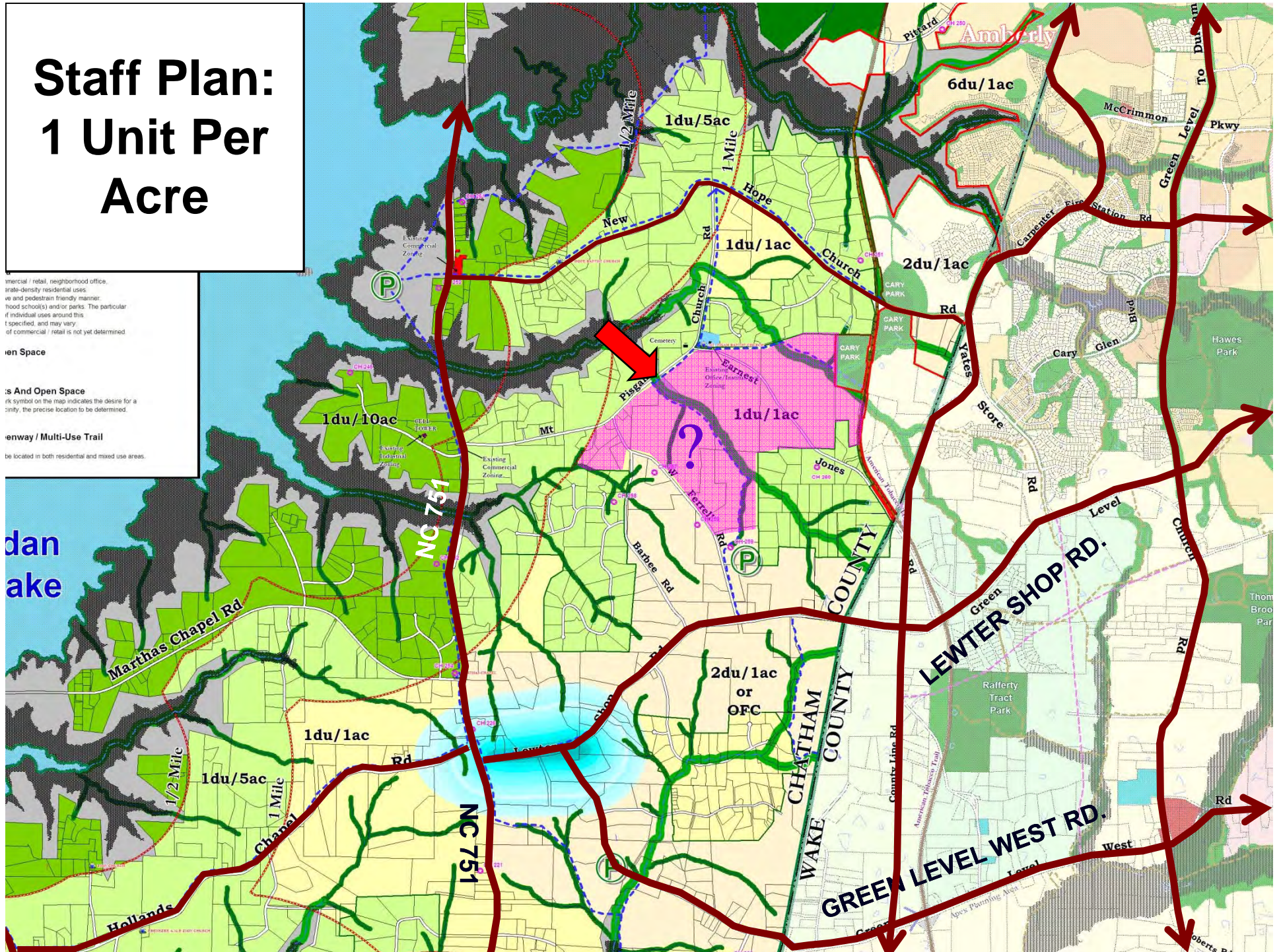
Open Space And Open Space

A pink symbol on the map indicates the desire for a park. The precise location to be determined.

Arterial / Multi-Use Trail

to be located in both residential and mixed use areas.

Dan
Lake



Staff Plan: 1 Unit Per Acre

Commercial / retail, neighborhood office, moderate-density residential uses in a walkable and pedestrian friendly manner, neighborhood school(s) and/or parks. The particular mix of individual uses around this area is not specified, and may vary.

Open Space

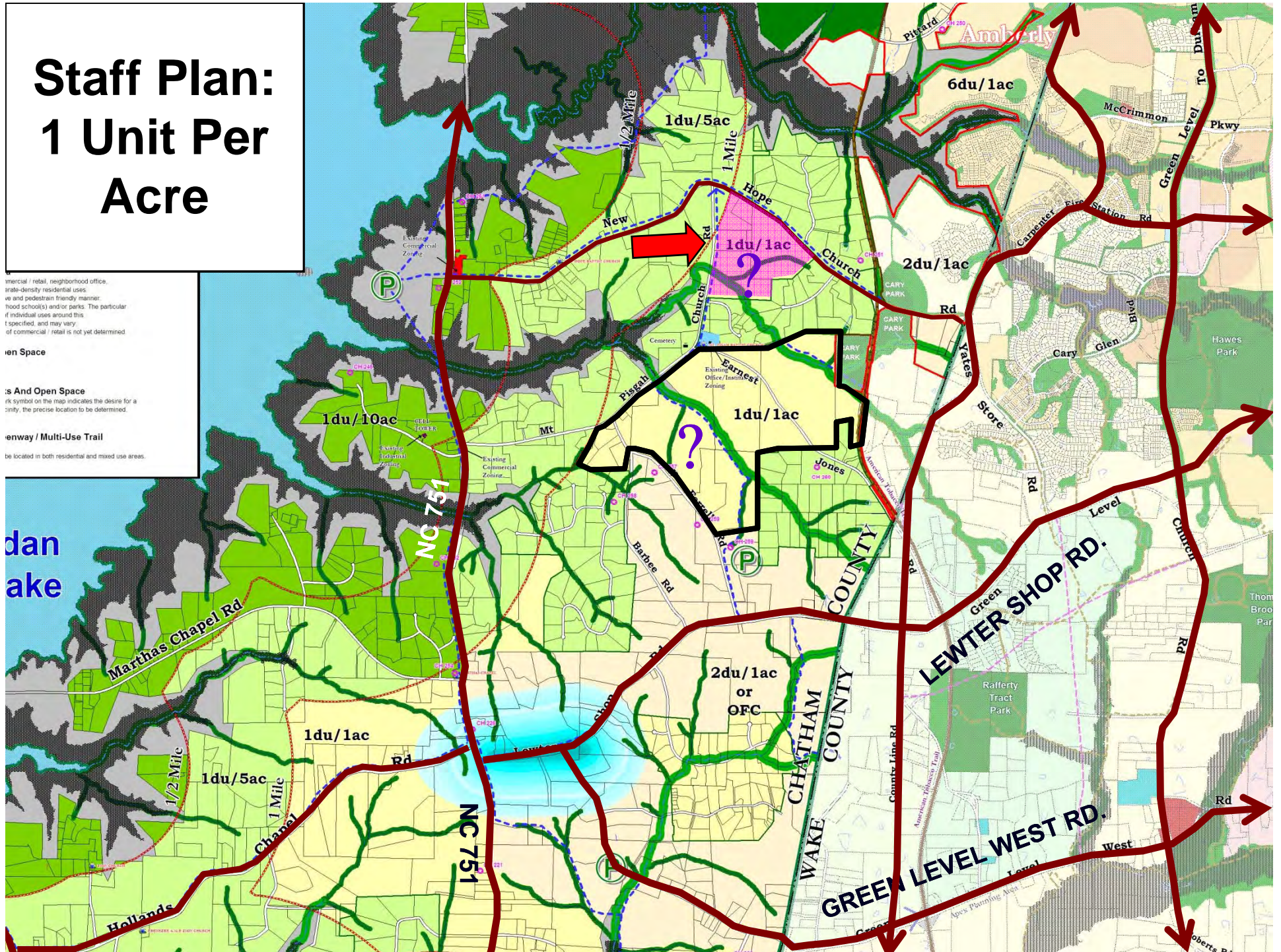
Open Space And Open Space

A pink symbol on the map indicates the desire for a park. The precise location to be determined.

Greenway / Multi-Use Trail

Greenways are to be located in both residential and mixed use areas.

Dan
Lake



Discussion

1du/1Ac
 1 acre, Single family detached,
 1 size of 30,000 sq. ft. (~2/3 acre)

2du/1Ac
 1 acre, Single family detached

1du/10ac
 1 acre

Commercial
 Commercial / retail, neighborhood office,
 medium-density residential uses
 and pedestrian friendly manner,
 neighborhood school(s) and/or parks. The particular
 if individual uses around this
 is specified, and may vary
 of commercial / retail is not yet determined

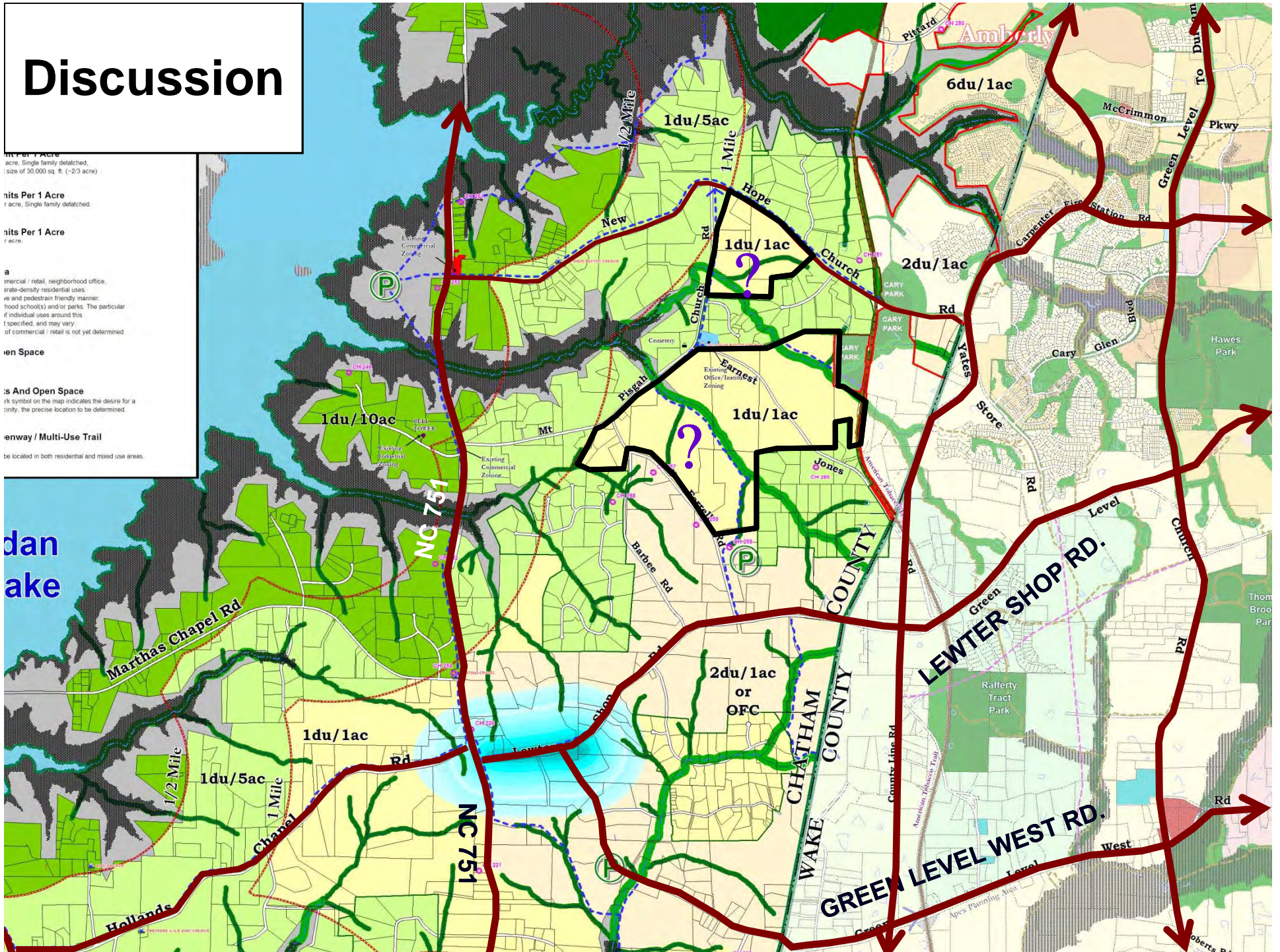
Open Space

Green Space
 Park symbol on the map indicates the desire for a
 park, the precise location to be determined.

Highway / Multi-Use Trail

to be located in both residential and mixed use areas.

Wade
lake



Marthas Chapel Rd

1du/5ac
 1 Mile
 1du/1ac

Hollands

1du/1ac

NC 751

NC 751

Barbee Rd

Shop Rd

Green Level

1du/5ac

1 Mile

1du/1ac

1du/1ac

2du/1ac
 or
 OFC

WAKE COUNTY
 CHATHAM COUNTY

GREEN LEVEL WEST RD.

LEWTER SHOP RD.

1du/1ac

1du/1ac

1du/1ac

2du/1ac

Green Level

6du/1ac

2du/1ac

1du/1ac

2du/1ac

Green Level

6du/1ac

2du/1ac

1du/1ac

2du/1ac

Green Level

6du/1ac

2du/1ac

1du/1ac

2du/1ac

Green Level

6du/1ac

2du/1ac

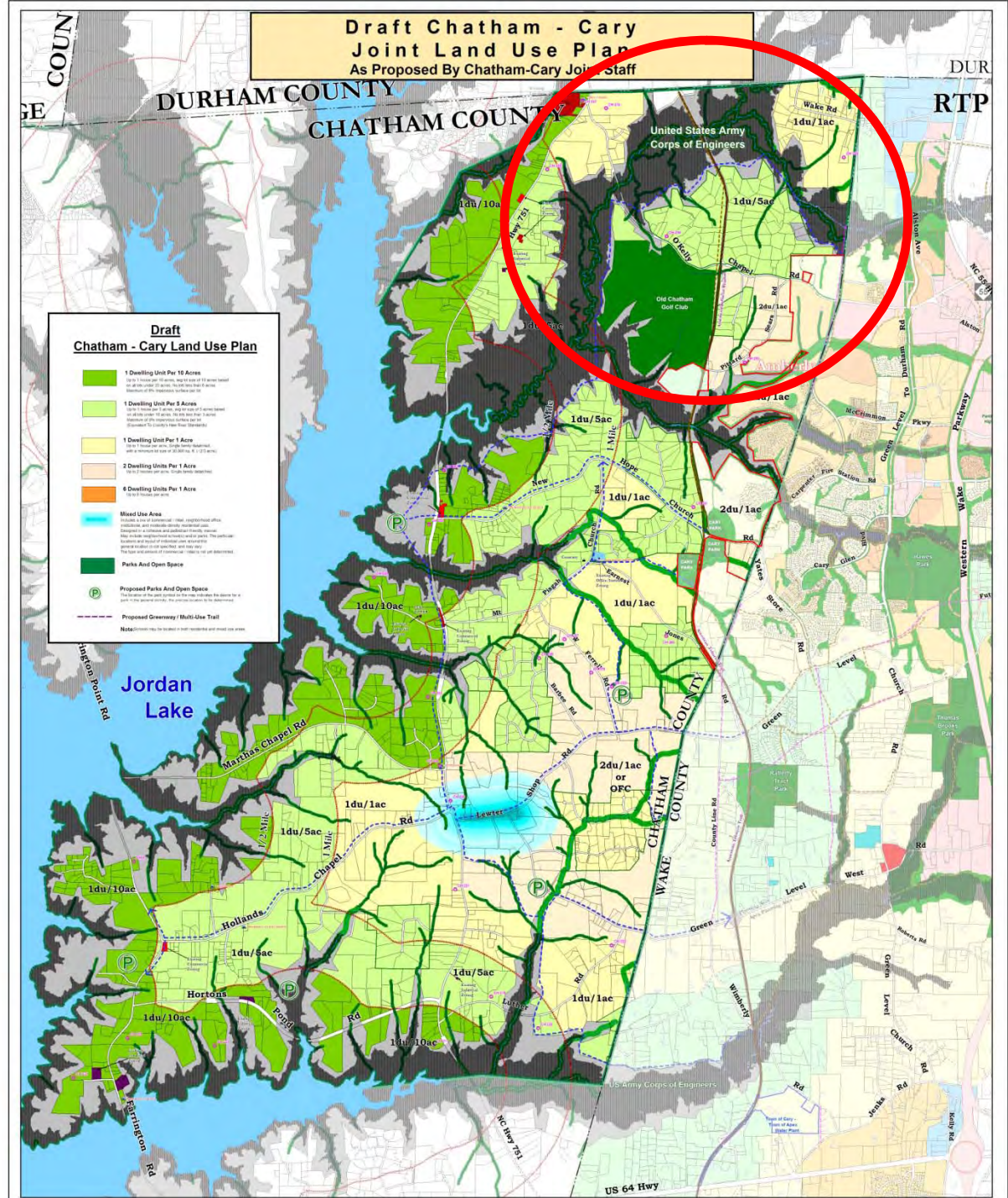
1du/1ac

2du/1ac

Green Level

Discussion Topic #5:

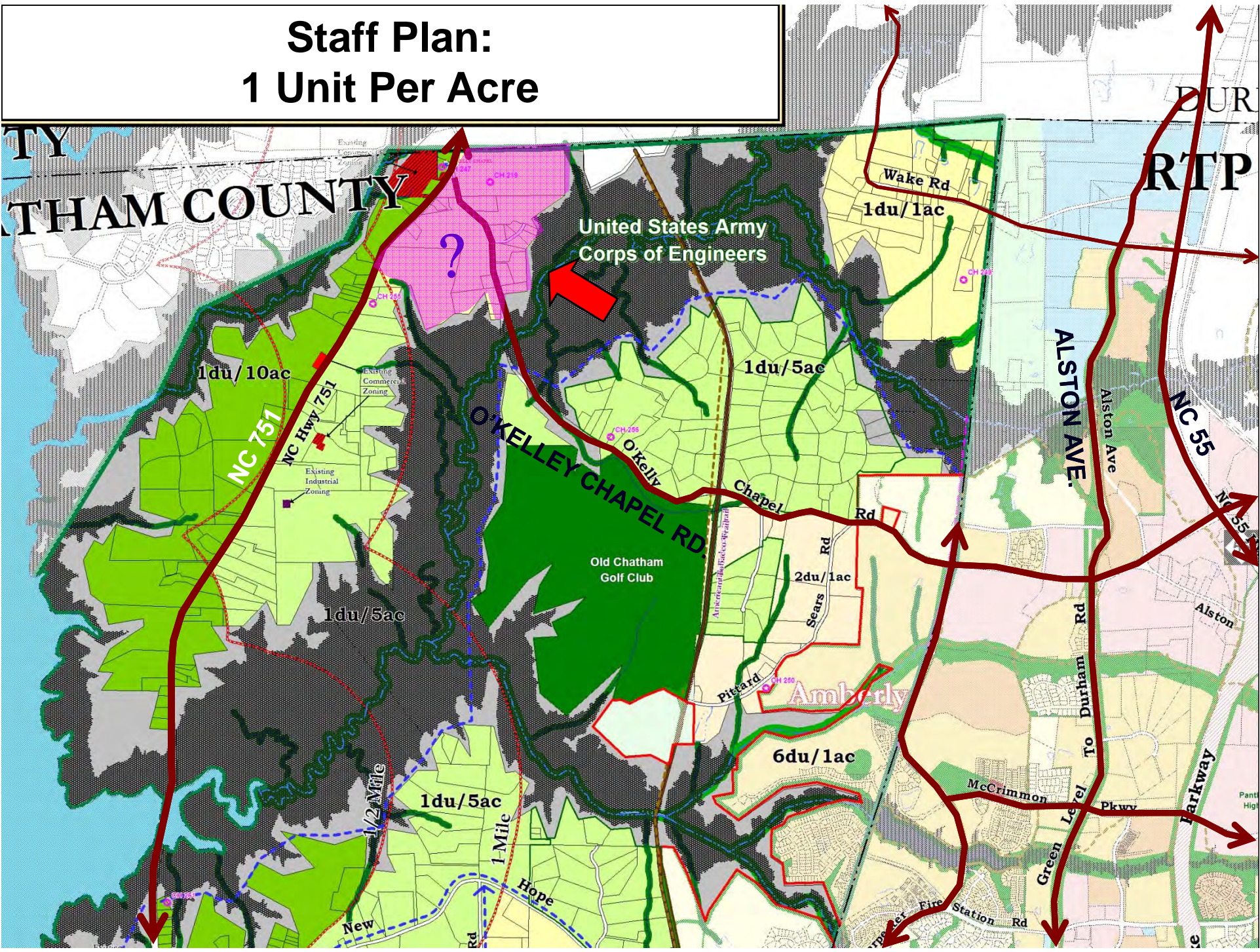
Resolution of Land Uses in Northern Area



Staff Plan: 1 Unit Per Acre

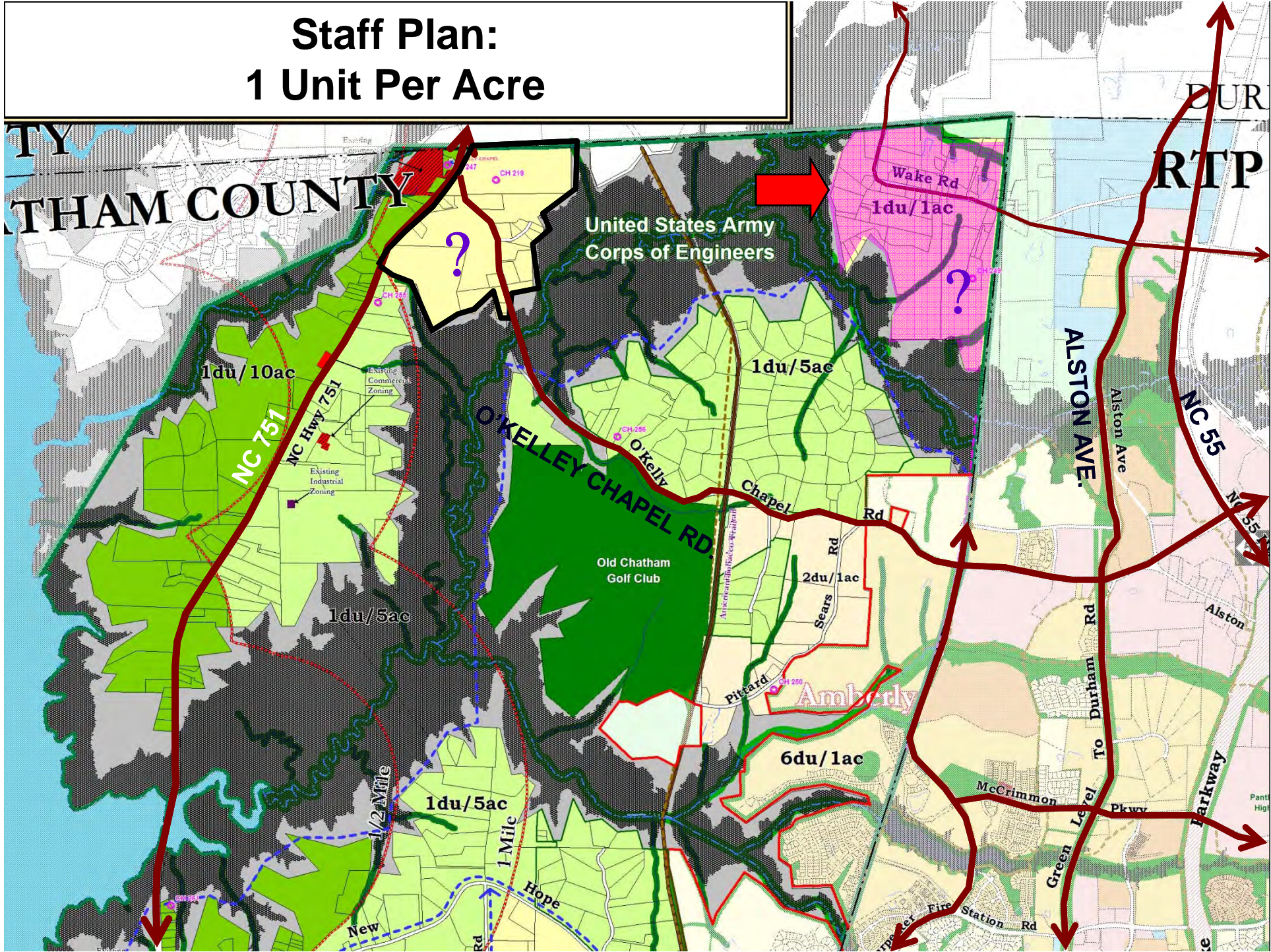
DURHAM COUNTY

DURHAM
RTP



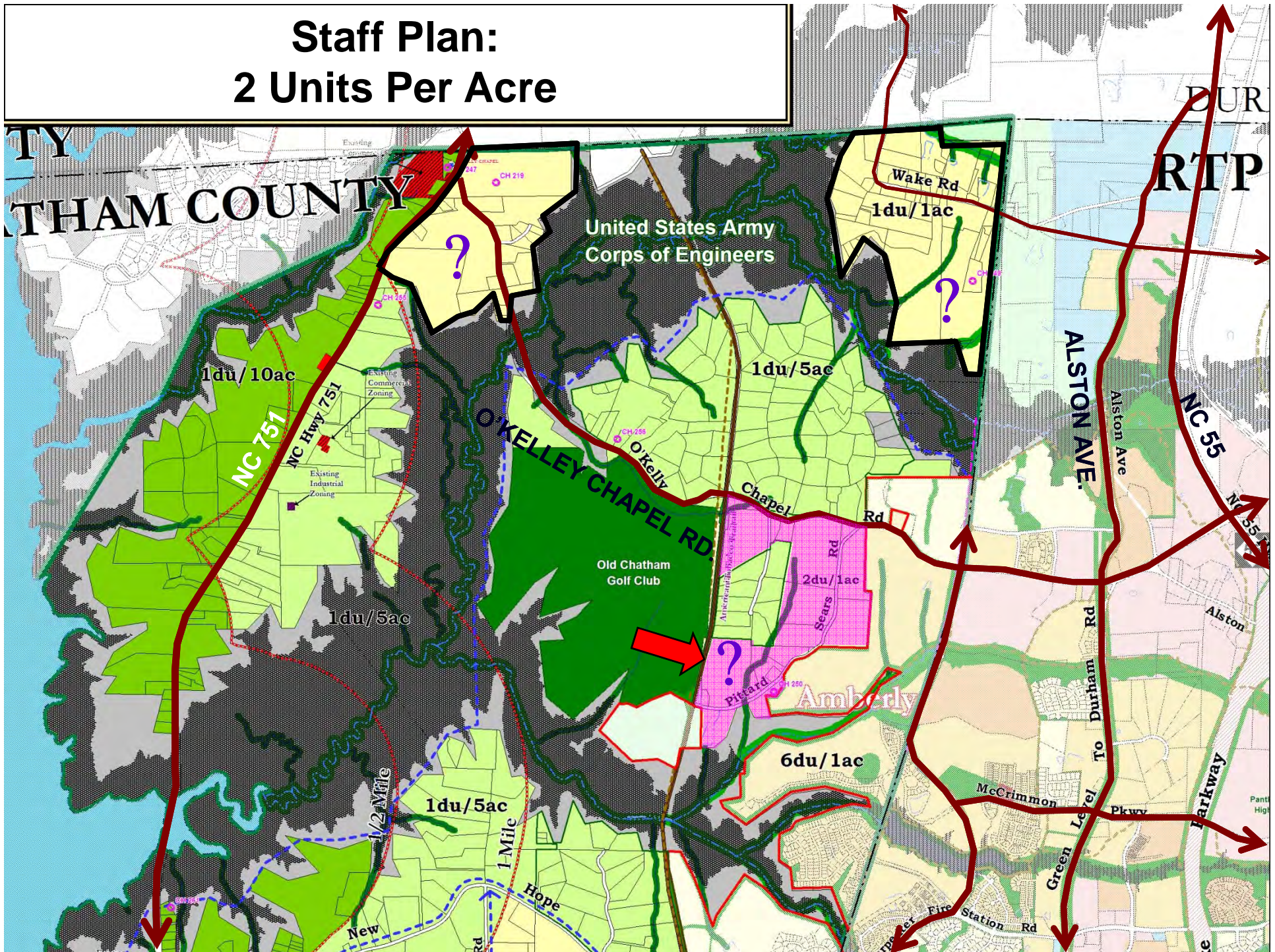
Staff Plan: 1 Unit Per Acre

CHATHAM COUNTY



Staff Plan: 2 Units Per Acre

CHATHAM COUNTY



DURHAM COUNTY
RTP

ALSTON AVE.

NC 55

United States Army
Corps of Engineers

Old Chatham
Golf Club

Amberly

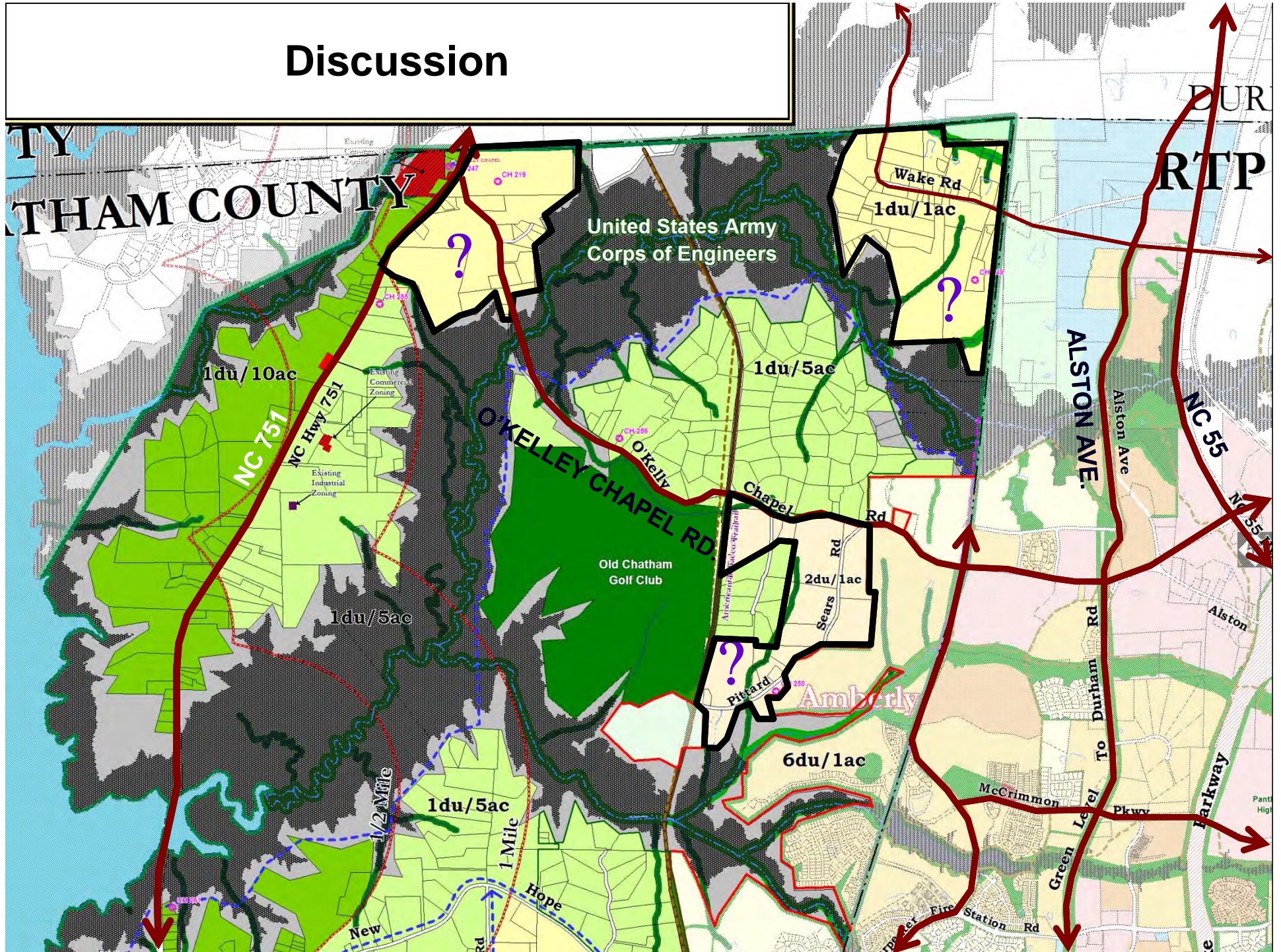
Pitcair

Green Level
To Durham Rd

McCrimmon
Pkwy

Fire
Station Rd

Discussion



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8. Moratoria

- a) Update on Chatham County Subdivision Moratorium**
- b) Update on Cary Annexation Moratorium (Expires Sep. 28)**
- c) Consider a Chatham County Rezoning Moratorium Within Study Area?**

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9. Next Steps - Schedule

- a) Joint Staff Will Revise The Schedule And The Plan Based on Tonight's Direction**
- b) 3rd Community Meeting**
- c) Staff Evaluates Public Input, then Makes Further Plan Revisions**
- d) *3rd Joint Work Session?***
- e) Commence Joint Public Hearing & Adoption Process**

9. Other Next Steps

Board And Council Will Need To Decide On:

- a) Joint Plan Adoption Procedures**
- b) The Plan's Official Policy Status**
- c) Implementation Methods and Procedures**

Closing Discussion

