



Z-10-11-002

**City of Greensboro Planning Department  
Zoning Staff Report and Plan Amendment Evaluation**

**Zoning Commission Hearing Date: November 8, 2010**

**GENERAL INFORMATION**

**APPLICANT** Guilford County Board of Education for Rachel G. Norton and Reedy Fork Baptist Church

**HEARING TYPE** Original Zoning

**REQUEST** **County AG** (Agriculture) and **County RS-40** (Residential-Single Family) to City **CD-PI** (Conditional District- Public and Institutional)

**CONDITIONS** 1. Uses: Limited to educational facilities.

**LOCATION** **4617-4621 and 4701-4703 Yanceyville Road**, generally described as west of Yanceyville Road and south of Cinder Road

**PARCEL ID NUMBER(S)** **7877183393 and 7877186792**

**PUBLIC NOTIFICATION** The notification area for this public hearing was 600 feet (Chapter 30-4-1.4 of the Land Development Ordinance requires notification of the owner of that parcel of land and the owners of all parcels of land adjoining and contiguous to that parcel of land as shown on the County tax listing). **166** notices were mailed to those property owners in the mailing area.

**TRACT SIZE** ~32.93 Acres

**TOPOGRAPHY** Undulating

**VEGETATION** Heavily wooded

**SITE DATA**

<b>Existing Use</b>	Undeveloped	
	<b>Adjacent Zoning</b>	<b>Adjacent Land Uses</b>
N	County RS-40 (Residential-Single Family) and County AG (Agricultural)	Reedy Fork Baptist Church
E	County RS-40 (Residential-Single Family)	Single-family dwellings
W	R-3 (Residential-Single Family)	Undeveloped
S	R-5 (Residential-Single family)	Undeveloped

**Zoning History**

Case #	Date	Request Summary
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N/A

**ZONING DISTRICT STANDARDS**

**District Summary \***

Zoning District Designation:	Existing County (AG)	Existing County (RS-40)	Requested City (CD-PI)
Max. Density:	N/A	1 dwelling unit per acre	N/A
Typical Uses	Primarily intended to accommodate uses of an agricultural nature including farm residences and farm tenant housing. It also accommodates scattered nonfarm residences on large tracts of land. It is not intended for major residential subdivisions	Primarily intended to accommodate single-family detached dwellings on large lots and is intended solely for properties having one (1) or more of the following characteristics: (a) Lies within the 65 Ldn noise contour line; (b) Lies in a public water supply watershed and where an outfall to provide public sewer service is not available. (c) Lies in a portion of a watershed critical area to which an outfall to provide sewer service has been made available pursuant to an agreement, approved by the City and by another governmental jurisdiction, designed to limit development density to approximately that obtainable prior to sewer service.	Primarily intended to accommodate mid- and large-sized public, quasi-public, and institutional uses which have a substantial land use impact or traffic generation potential.

*\*These regulations may not reflect the actual requirements for all situations; see the City of Greensboro Zoning Code for actual regulations for site requirements for this zoning district.*

**SPECIAL INFORMATION**

**Overlay District Ordinance/Historic Preservation – N/A**

**Environmental/Soils**

Water Supply Watershed      Site is in Greensboro Watersupply Watershed Critical Area Tier 3. Site drains to Lake Townsend basin.

Floodplains                      N/A

Streams                            100ft stream buffer for perennial streams, Zone 1 30ft Undisturbed, Zone 2 20ft Vegetated Zone, Zone 3 No BUA in WS-III

Other:                                With sewer, High Density is 30%BUA, Low Density is 12%BUA. No sewer, no HD option, LD 4%.

**Utilities**

Water                                N/A

Sewer                                N/A

**Airport Noise Cone**

The subject property is not located in the Airport Noise Cone.

**Landscaping Requirements**

**Yanceyville St.** - Street Yard – minimum width 10’; 2 canopy trees per 100’, 17 shrubs per 100’

**South Property Line** - Type B Yard – average width 25’; 3 canopy trees per 100’, 5 understory trees per 100’, 25 shrubs per 100’

**West Property Line** - Type B Yard – average width 25’; 3 canopy trees per 100’, 5 understory trees per 100’, 25 shrubs per 100’

**North property Line – NA**

**Parking Lot** - 1 canopy tree per every 12 spaces

**Vehicular Use Area Screening –**

When a parking lot or other vehicular use area abuts a vacant site or a site with the same land use classification as the subject site, a planting yard with a minimum width of 5 feet must be provided between the parking lot/vehicular use area and the abutting (interior) property line. This required planting area must be landscaped with at least 2 understory trees and 18 evergreen shrubs per 100 linear feet.

Trees used to satisfy the planting requirements for parking lot areas may not be counted toward the planting requirements for other required plantings on the site.

**Tree Preservation Requirements**

<p><b>Acreage</b></p> <p>43.91 ac.      <b>10% of lot size</b></p> <p>Combined</p> <p>ac.</p>	<p><b>Requirements</b></p>
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## Transportation

Street Classification:	Yanceyville Street – Major Thoroughfare.
Site Access:	All access(s) must be designed and constructed to the City of Greensboro and NCDOT standards.
Traffic Counts:	No current ADT's available.
Trip Generation:	24 Hour = 1,059, AM Peak = 692, PM Peak = 278.
Sidewalks:	Sidewalks are a requirement of the Development Ordinance. 5' sidewalk with a 5' grass strip is required along both sides of thoroughfares. 5' sidewalk with a 3' grass strip is required along one side (at a minimum, collectors may require sidewalk on both sides) of all other street types. There is no sidewalk along the frontage of this property or are there any plans to build any in the area.
Transit in Vicinity:	No transit in the area.
Traffic Impact Study: (TIS)	Yes, required per TIS Ordinance. Please see the Executive Summary at the end of this staff report.
Street Connectivity:	N/A.
Other:	N/A.

## **IMPACT ANALYSIS**

### **Land Use Compatibility**

The proposed City **CD-PI** (Conditional District- Public and Institutional) zoning would allow land uses that are compatible with the general character of the area.

### **Connections 2025 Comprehensive Plan Policies**

The Generalized Future Land Use Map designates this location as **Interim Residential (generally at, or above 3 du per acre)**. The requested City CD-PI (Conditional District- Public and Institutional) zoning district is consistent with this GFLUM designation.

### **Connections 2025 Written Policies**

*Community Facilities Goal:* Provide community facilities, services, and infrastructure in a cost-effective manner to meet citizens' needs, contribute to quality of life, and support desired land use patterns.

*POLICY 9C.3:* Ensure that service delivery departments are provided with adequate new resources to serve newly annexed areas.

*POLICY 9A.5:* Continue to link City-initiated annexations and approvals of annexation petitions for water/sewer extension policies regarding designated growth areas.

*Growth at the Fringe Goal:* Provide a development framework for the fringe that guides sound, sustainable patterns of land use, limits sprawl, protects rural character, evidences sound stewardship of the environment, and provides for efficient provision of public services and facilities as the City expands. Development will increase density and mix land uses at a pedestrian scale with sidewalks, bikeways, and where possible, public transit.

**Connections 2025 Map Policies**Interim Residential (generally at or above 3 dwelling units per acre):

Areas with a mix of all types of residential densities and uses (single family detached, single family attached and multi-family), with some limited local-serving non-residential uses (schools, churches, convenience services). It is assumed that most of the new housing developed in the Water Sewer Service Area would be connected to water and sewer.

**CONFORMITY WITH OTHER PLANS****City Plans –**

**Other Plans - N/A**

**Staff/Agency Comments**

**Water Resources – See above.**

**Housing and Community Development**

This proposed rezoning and school site development is located within an area with significant existing residential development, and a generally well-connected roadway network. If approved, it will be important to ensure that development of this proposed school site incorporates safe walking and bicycling routes (including: connection to the planned Utility Line Greenway #4 as described in the BiPed Plan and installation of required sidewalks), and a sufficient number of secure, convenient bicycle parking spaces. The applicant is strongly encouraged to consult with representatives of the adjacent Storrington Neighborhood.

**Planning**

The 30.13-acre subject site is part of a larger tract of land totaling about 40.10 acres, which is being considered by the Guilford County School Board for a future elementary school. The remaining 10.98 acres, referenced as zoning case # Z-10-11-001 is contiguous to and located just south of this subject site. This original zoning request is in conjunction with an annexation petition submitted by the applicant.

Approving this request will help meet the needs of present and future Greensboro citizens by way of providing community facilities, services, and infrastructure in a cost-effective manner to meet citizens' needs, contribute to quality of life, and support desired land use patterns. It will also provide a development framework for the fringe that will guide sound, sustainable patterns of land use, limit sprawl and provide for efficient provision of public services and facilities as the City expands.

Staff believes that this request is consistent with the intent and purpose of the zoning code and the Comprehensive Plan (Connections 2025). Staff is also of the opinion that the request is generally compatible with the existing development and trend in the surrounding area.

**STAFF RECOMMENDATION**

Staff recommends **approval** of the requested City **CD-PI** (Conditional District- Public and Institutional) zoning district.

**North Greensboro Area Elementary School off Yanceyville Road  
Transportation Impact Analysis - Prepared for Guilford County Schools  
September 6, 2010**

*Executive Summary*

Guilford County Schools plans to build a new elementary school which will be located off Yanceyville Road in Greensboro, North Carolina. As currently planned, the elementary school will be designed for 700 students, but could accommodate additional students with the addition of mobile capacity to the site. For the purposes of this study, we have estimated a capacity of 800 elementary students. The school could have up to 90 staff members (with a population of approximately 800 students) and could be served by up to 16 buses with this total population.

This elementary school expects to attract students from areas of population in northern Greensboro and Guilford County. Access to the site will be provided by two (2) driveways on Yanceyville Road. One driveway will serve vehicular traffic and the other driveway will provide bus access to and from the school (see Figure 1 - Site Plan).

Davenport Transportation Consulting (DTC) was retained to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to accommodate the impacts of both background traffic and new development traffic. The following intersections were included in the study:

- Yanceyville Road at Peach Orchard Road (unsignalized)
- Yanceyville Road at Hillcroft Road (unsignalized)
- Yanceyville Road at Kalon Drive/Proposed Site Access 1 (unsignalized)
- Yanceyville Road at Proposed Site Access 2 (unsignalized)


The above intersections were analyzed at arrival and dismissal peaks under the following conditions:

- 2010 Existing Conditions
- Future No-Build Conditions
- Future Build-Out Conditions

Additionally, during the scoping of this development, GDOT requested that an internal circulation review should be carried out to ensure that on-site stacking issues are addressed for the proposed school. DTC has developed recommendations based on our findings to address the on-site stacking. The anticipated opening day for the school is August 2012. Traffic conditions were analyzed for both the Arrival and Dismissal peaks. School officials have indicated arrival time would be from 7:30 to 8:00 am and dismissal times would be from 2:30 to 3:00 pm. The Greensboro Department of Transportation (GDOT) was contacted to obtain background information and to ascertain the elements to be covered in this Traffic Impact Analysis (TIA). Information regarding the property was provided by Guilford County Schools.

*Level of Service Results*

Table A represents the summary of the level of service analysis for all study scenarios.

<b>Table A- Level of Service Summary</b>				
Arrival Peak	2010 Existing	2012 Future No Build	2012 Build	2012 Build v Improveme
Yanceyville Road @ Kalon Drive/Site Access 1	B (10.9) WB Approach	B (11.2) WB Approach	B (17.3) WB Approach	

Yanceyville Road @ Site Access 2/Private Driveway			F (214.5) EB Approach	
Yanceyville Road @ Hillcroft Road	B (11.6) WB Approach	B (12.0) WB Approach	F (53.7) WB Approach	
Yanceyville Road @ Peach Orchard Drive	B (14.5) EB Approach	C (15.5) EB Approach	F (158.4) EB Approach	
Dismissal Peak	2010 Existing	2012 Future No Build	2012 Build	2012 Build with Improvements
Yanceyville Road @ Kalon Drive/Site Access 1	A (9.5) WB Approach	A (9.6) WB Approach	B (10.6) WB Approach	
Yanceyville Road @ Site Access 2/Private Driveway			B (11.0) EB Approach	
Yanceyville Road @ Hillcroft Road	A (9.8) WB Approach	A (10.0) WB Approach	B (13.0) WB Approach	
Yanceyville Road @ Peach Orchard Drive	A (9.6) EB Approach	A (9.7) WB Approach	C (15.6) EB Approach	
LOS (delay in seconds)				
Note for unsignalized conditions, LOS and delay indicates only minor street approach with longest delay				

**Yanceyville Road at Kalon Drive/Site Access 1**

This unsignalized intersection is expected to operate at LOS B and LOS A during existing Arrival and Dismissal peaks, respectively. During the 2012 future no build analysis year, this intersection is projected to remain at LOS B and LOS A during Arrival and Dismissal peaks, respectively. With the addition of school site traffic, the intersection is projected to operate at LOS B during the Arrival peak and LOS B during the Dismissal peak.

The necessity of auxiliary turn lanes for this intersection was determined based on the figure titled "Warrant for Left and Right-Turn Lanes", found on page 80 in the NCDOT Policy on Street and Driveway Access to North Carolina Highways. Based on projected volumes, the turn lane warrant analysis shows that this intersection will warrant 50-foot northbound left turn lane. However NCDOT requires a 100-foot minimum northbound left turn lane on Yanceyville Road. Additionally, the analysis indicates that a right turn lane is not warranted at this location.

**Yanceyville Road at Site Access 2/Private Driveway**

This unsignalized intersection is expected to operate at LOS F and LOS B during 2012 future build Arrival and Dismissal peaks, respectively. The LOS F during the Arrival peak is mainly due to the eastbound approach school traffic from the proposed Site Access that is very typical for side street movements.

Our turn lane warrant analysis indicates that based on projected volumes, the turn lane warrant analysis shows that this intersection will warrant 350-foot northbound left turn lane on Yanceyville Road. Additionally, the analysis indicates that a right turn lane is not warranted at this location. In order to improve the queues at this intersection as a result of school traffic, we recommend the following:

- Provide a northbound left turn lane on Yanceyville Road with 350 feet of storage, appropriate deceleration length and appropriate taper
- Provide a separate left turn lane from Site Access 2 with 100 feet of storage and appropriate taper.

With the above-mentioned improvements in place, this intersection will remain to operate at LOS F however the queues will be reduced from 214.5 seconds of delay to 63.9 seconds of delay during the Dismissal peak.

**Yanceyville Road at Hillcroft Road**

This unsignalized intersection is expected to operate at LOS B and LOS A during existing and 2012 future no build Arrival and Dismissal peaks. In the future build scenario, LOS F and LOS B conditions are expected during the Arrival and Dismissal peaks, respectively. However, it should be noted that these delays are limited to the Arrival peak and are expected to be short-lived. This is a very typical condition for minor side street movements onto major streets like Yanceyville Road. No improvements are recommended.

**Yanceyville Road at Peach Orchard Drive**

Our LOS analysis indicates this intersection is projected to function at LOS B during the Arrival peak and LOS A during the Dismissal peak period. During the future no build conditions, the LOS drops to LOS C during the Dismissal peak and LOS continues to be LOS A during the Arrival peak. With the addition of school site traffic, this intersection is projected to function at LOS F for eastbound minor street movements during the Arrival peak and LOS C during the Dismissal peak period. It should be noted that these delays are limited to the Arrival peak and are expected to be short-lived. This is a very typical condition for minor side street movements onto major streets like Yanceyville Road. Additionally, it is GDOT policy that traffic signals be installed ONLY when warranted, and not based on anticipated future volumes. Based on this, no improvements are recommended at this time, however we recommend GDOT should monitor this intersection for signalization if/when warranted.

*Summary and Conclusion*

This analysis has been conducted based on the scope given by the City of Greensboro. We have identified all areas of deficiency and made recommendations for improvements where necessary.

Our trip generation indicates that based on the current site plan the North Greensboro Area Elementary School off Yanceyville Road is projected to generate a total of 1,059 trips per day. This is based on a total of 800 students, 90 staff personnel, and 16 school buses.

Table B below summarizes the recommended improvements for 2012 future build scenarios. In conclusion, should our recommendations be implemented, this project would not have a serious or detrimental effect on transportation capacity within the study area.

Table B - Recommended Improvement Summary	
Yanceyville Road @ Kalon Drive/Site Access 1	<ul style="list-style-type: none"> <li>• Provide a 100-foot (NCDOT minimum) northbound left turn lane on Yanceyville Road.</li> </ul>
Yanceyville Road @ Site Access 2/ Private Driveway	<ul style="list-style-type: none"> <li>• Provide a northbound left turn lane on Yanceyville Road with 350 feet of storage, appropriate deceleration length and appropriate taper</li> <li>• Provide a separate left turn lane from Site Access 2 with 350 feet of storage and appropriate taper.</li> </ul>



<p>Yanceyville Road @ Hillcroft Road</p>	<ul style="list-style-type: none"> <li>• No improvements are recommended</li> </ul>
<p>Yanceyville Drive @ Peach Orchard Drive</p>	<ul style="list-style-type: none"> <li>• No improvements are recommended at this time, however we recommend GDOT should monitor this intersection for signalization if/when warranted.</li> </ul>
<p>Site plan and internal circulation review</p>	<ul style="list-style-type: none"> <li>• The traffic circulation pattern as indicated on the site plan provides approximately <b>1900 feet</b> of stacking distance on Site Access 2 from the drop-off / pick-up location upstream to Yanceyville Road. <b>This satisfies the MSTA-expected queue of 1,323 feet.</b> Additionally, review of the site circulation using Synchro / Sim Traffic software does not indicate any queuing problems.</li> </ul>