



Z-15-11-001

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

Zoning Commission Hearing Date: November 16, 2015

GENERAL INFORMATION

APPLICANT	Charter Development Company, LLC on behalf of Habitat for Humanity of Greater Greensboro, LLC
HEARING TYPE	Rezoning Request
REQUEST	CD-RM-18 (Conditional District-Residential Multifamily) and CD-RM-18 (Conditional District-Residential Multifamily) to CD-RM-18 (Conditional District-Residential Multifamily)
CONDITIONS	1. Uses shall be limited to an elementary/secondary school.
LOCATION	127 & 123-133 Flemingfield Road & 116,118 & 118-R1 Elsielee Road
PARCEL ID NUMBER(S)	7895021497; 78859297; 7885929242; 7885928148; 7885928348
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). 49 notices were mailed to those property owners in the mailing area.
TRACT SIZE	~13.676 Acres
TOPOGRAPHY	Undulating
VEGETATION	Wooded & Residential

SITE DATA

Existing Use	Undeveloped & Single-family dwellings	
	Adjacent Zoning	Adjacent Land Uses
N	CD-RM-18 (Conditional District-Residential Multifamily)	Undeveloped property and single family dwellings
E	County-AG (Agricultural)	Undeveloped
W	CD-RM-18 (Conditional District-Residential Multifamily)	Single family dwellings and undeveloped property
S	County-RS-30 (Residential Single-Family) City-CD-C-M (Conditional District-Commercial-Medium)	Single family dwellings & undeveloped property Retail sales and services

Zoning History

Case #	Date	Request Summary
3497	12/31/2006	A portion of the property was included in a 31.815 acre annexation and original zoning request from County-RS-30 to City-CD-RM-18 with the following conditions: 1. Uses limited to single family homes and townhouses designated for sale. 2. Total density shall not exceed 4.5 dwelling units per gross acre.
3876	2/5/2013	Approximately 1.798 acres was subject to an annexation and original zoning request from County-RS-30 to City-CD-RM-18 with the following conditions: 1. Uses: Limited to single family detached dwellings and/or townhomes not to exceed 4.5 dwelling units per acre.
3877	2/5/2013	Approximately 1.16 acres was subject to an annexation and original zoning request from County-RS-30 to City-CD-RM-18 with the following conditions: 1. Uses: Limited to single family detached dwellings and/or townhouses not to exceed 4.5 dwelling units per acre.

ZONING DISTRICT STANDARDS

Zoning District Designation:	Existing (CD-RM-18)	Requested (CD-RM-18)
Max. Density:	Conditions to 4.5 units per acre or less	N/A
Typical Uses	Conditioned to accommodate low density single family detached residential development.	Conditioned to accommodate an elementary/secondary school only.

District Summary *

**These regulations may not reflect all requirements for all situations; see the City of Greensboro Development Ordinance for all applicable regulations for site requirements for this zoning district.*

SPECIAL INFORMATION

Overlay District Ordinance/Historic Preservation

n/a.

Environmental/Soils -

Water Supply Watershed Site drains to South Buffalo Creek, non-watersupply watershed

Floodplains N/A

Streams Perennial streams require a 50ft stream buffer measure from top of bank each side. See LDO Chp. 30-12-3.9 for Allowances and Restrictions with the stream buffer zones.

Other: If >1acre is disturbed and Built Upon Area is increased, site must meet current Phase 2 requirements. Water Quality and water quantity must be addressed.

Utilities

- Potable Water Available, depending upon development water and sewer may need to be extended/upgraded, funding by developer.
- Waste Water Available, depending upon development water and sewer may need to be extended/upgraded, funding by developer.

Airport Noise Cone

n/a

Landscaping & Tree Conservation Requirements

Street Yard: Street planting yards must be installed abutting public street rights-of-way. The required street planting yard must have a minimum width of 10 feet (as measured from the outside edge of the right-of-way or the back of the sidewalk, whichever is further from the street centerline) and include at least 2 canopy trees and 17 shrubs per 100 linear feet of required street planting yard, not including allowed driveways.

Buffer Yard: Adjacent to single-family and multi-family residential lots: Type B buffer yard with an average width of 25' that includes 3 canopy trees, 5 understory trees, & 25 shrubs per 100 linear feet.

Adjacent to vacant property: Vehicular Use Area buffer yard (see below) between any parking lots or drive aisles and the adjacent property line.

Parking lot: 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 for required parking spaces: 1 canopy tree per 12 spaces, in islands or medians within the parking lot.

Tree Conservation Acreage

Requirements

- >10 ac. 10% of lot size for a new development; 10% of disturbed area for an expansion

Transportation

- Street Classification: Flemingfield Road – Minor Thoroughfare. Elsielee Road – Local Street.
- Site Access: All access(s) must be designed and constructed to the City of Greensboro standards.
- Traffic Counts: Flemingfield Road ADT = 1,676 (GDOT, 2014).
- Trip Generation: AM Peak Hour = 1088, PM Peak Hour = 528.

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. Sidewalk does not exist along the frontage of this property.
Transit in Vicinity:	No.
Traffic Impact Study: (TIS)	Yes, required per TIS Ordinance. Please see the end of this staff report for the Executive Summary of the TIS.
Street Connectivity:	N/A.
Other:	N/A.

IMPACT ANALYSIS

Land Use Compatibility

The proposed **CD-RM-18 (Conditional District-Residential, Multi-Family-18 du/ac)** zoning, as conditioned, 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 **Moderate Residential (5-12 d.u./acre)** and **Mixed Use Commercial**. The requested **CD-RM-18 (Conditional District-Residential, Multi-Family-18 du/ac)** zoning district, as conditioned, is generally consistent with the **Moderate Residential (5-12 d.u./acre)** and **Mixed Use Commercial** GFLUM designations. The Growth Strategy Map designates the subject site as being partially within **Growth Tier 1, Current Growth Area (2013 – 2019)**. The Growth Strategy Map also designates the subject site as being partially within the **East Market Street / Burlington Road Reinvestment Corridor**.

Connections 2025 Written Policies

Land Use Goal 4.1 – Growth Strategy: Promote sound investment in Greensboro's urban areas, including Center City, commercial and industrial areas, and neighborhoods.

Policy 4A: Remove present impediments to infill and investment in urban areas.

Policy 4B: Target capital investments to leverage private investment in urban areas.

Policy 4C: Promote new patterns and intensities of use to increase economic competitiveness and enhance quality of life in urban areas.

Policy 4D: Identify potential opportunities and selectively target, plan and promote development/reuse initiatives.

Community Character, Goal 5.2 – Man-Made Environment: Preserve and enhance the character and visual quality of Greensboro's built environment, including historic resources, private developments, and public landscapes.

Policy 5E: Improve the aesthetic quality of publicly owned and maintained landscapes.

Policy 5F: Implement and improve design standards governing the appearance of development from public roadways.

Housing and Neighborhoods, Goal 6: Meet the needs of present and future Greensboro citizens for a choice of decent, affordable housing in stable, livable neighborhoods that offer security, quality of life, and the necessary array of services and facilities.

Policy 6 C: Promote the diversification of new housing stock to meet the needs of all citizens for suitable, affordable housing.

Economic Development, Goal 7: Promote a healthy, diversified economy with a strong tax base and opportunities for employment, entrepreneurship and for-profit and non-profit economic

development for all segments of the community, including under-served areas such as East Greensboro.

Policy 7A: Target city investment and regulatory policies for economic development.

Policy 7C: Ensure that city land use policies and regulations allow for an adequate supply of land to accommodate economic development.

Transportation, Goal 8: Develop and maintain a safe, efficient, and environmentally sound transportation system that provides convenient choices for accessing destinations throughout Greensboro and the Triad, including a range of well-integrated transit, pedestrian, and bicycle linkages.

Policy 8A: Maintain a roadway network that safely and efficiently accommodates vehicular traffic while supporting other community objectives defined in the Comprehensive Plan.

Connections 2025 Map Policies

Moderate Residential (5-12 d.u./acre): This category accommodates housing types ranging from small-lot, single-family detached and attached single-family dwellings such as townhomes to moderate density, low-rise apartment dwellings.

Mixed Use Commercial: This designation is intended to promote a mix of uses, of which various commercial uses remain predominant, but where residential, service, and other uses are complementary. Where applied to older highway corridors characterized by “strip” commercial uses, the intent is to encourage infill and redevelopment for a more diverse and attractive mix of uses over time. Examples include residential units over commercial uses or a wider array of economically viable uses to replace obsolete uses. Such areas also may represent opportunities for the introduction of substantial higher density and/or mixed-income housing, with negligible impacts on, or resistance from, nearby single-family neighborhoods. Ensuring that buildings are of the appropriate scale and intensity is critical, as is ensuring that sites are designed in a coordinated, as opposed to a lot-by-lot, manner. New “strip” commercial development is discouraged.

Growth Tier 1, Current Growth Area (2013 – 2019): Where infrastructure systems are in place, can be economically provided and/or will be proactively extended and where continued annexation and consolidation of the City’s development pattern shall be encouraged over the next six years.

Reinvestment Corridor: Reinvestment Areas and Corridors represent priority opportunities for combined public and private sector reinvestment and the application of policies described in Section 4.5.1 (Reinvestment/Infill). More specifically, Reinvestment Corridors are older commercial corridors that would benefit from significant public and private investment to enhance their economic viability and strengthen adjacent neighborhoods.

CONFORMITY WITH OTHER PLANS

City Plans

Sustainability Action Plan

Element 1) Transportation and Land Use:

Policy 1) Encourage increased density, a mix of land uses and more integrated links between transportation and land use through changes to Greensboro’s Comprehensive Plan, Development Ordinance and other related plans.

Element 2) Green Jobs and Buildings:

Policy 3) Develop a coordinated City program to provide technical support, energy audits and education and outreach to increase energy efficiency and conservation in commercial and residential buildings.

Policy 4) Use a combination of code changes, incentives, partnerships and education to promote green building in Greensboro.

Policy 6) Promote more efficient use of water through education, partnerships and pilot projects.

Element 3) Waste Reduction and Recycling:

Policy 7) Employ a combination of expanded recycling infrastructure, regulations and incentives to increase Greensboro's solid waste diversion and recycling rates.

Element 6) Education and Outreach:

Policy 11) Provide technical support, awards and recognition to individuals and organizations furthering Greensboro's energy and sustainability efforts.

Other Plans

n/a

STAFF ANALYSIS AND RECOMMENDATION

Community Outreach

Applicant is strongly encouraged to discuss this proposed rezoning and development with owners of surrounding properties.

Based on the absence of complete sidewalk connections in the vicinity, long term safety and quality of life for residents of the subject site would be greatly enhanced by the presence of continuous sidewalks along both sides of Flemingfield Road and Burlington Road.

The subject site is located (or partially located, as denoted by *) within the area(s) eligible for the following economic development incentive or assistance program(s):

- Urban Development Investment Incentives* (local), and
- Economic Development Impact Zone 2 (local).

Staff Analysis

This 13.676-acre subject site is currently a combination of dilapidated single family dwellings and undeveloped property. North and west of the request is zoned CD-RM-18 and contain both single family dwellings and undeveloped property. South of the request is zoned County-RS-30 (single family dwellings and undeveloped property) and City-CD-C-M (retail sales and services). East of the request is zoned County-AG (undeveloped property).

The Generalized Future Land Use Map designates this site as both Moderate Residential and Mixed use Commercial. The Moderate Residential designation accommodates housing types ranging from small lot, single-family detached and attached single-family dwellings such as townhomes to moderate density, low-rise apartment dwellings. The Mixed Use Commercial designation is intended to promote a mix of uses, of which various commercial uses remain predominant, but where residential, service, and other uses are complementary.

The RM-18, Residential Multi-Family District is primarily intended to accommodate multi-family and similar residential uses at a density of 18.0 units per acre or less.

As conditioned, this CD-RM-18 request limits uses to an elementary/secondary school that is consistent with residential and commercial development in the area. Although the RM-18 zoning district generally is intended to accommodate residential uses, schools are permitted in all zoning districts, subject to development standards outlined in Section 30-8-10.2(G). Schools are also considered a neighborhood supporting use that is consistent with the all of the Comprehensive Plan's residential Future Land Use classifications.

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.

This request is consistent with the intent and purpose of the zoning code, the Comprehensive Plan (Connections 2025) and is generally compatible with the existing development and trend in the surrounding area.

Staff Recommendation

Staff recommends **approval** of the requested **CD-RM-18** (Conditional District-Residential Multifamily) zoning district.

Additional Information

Traffic Impact Study

EXECUTIVE SUMMARY

National Heritage Academies (NHA) is proposing to construct a new school along the west side of Flemingfield Road, north of Burlington Road in the City of Greensboro, North Carolina. The proposed school, which is unnamed at this time, is located along the south side of the Eagle's Trace residential development. The school will offer Kindergarten through 8th grade upon full build out of the school which is expected for the fall of 2019 school year. It is expected that school would open with Kindergarten through 5th grade and 520 initial students in the fall of 2016. The school will add a grade each year until full build out of the school at 772 students for the fall of 2019 school year.

The report analyzes and presents the traffic impacts that the proposed school will have on the following intersections in the project study area:

- Flemingfield Road & Huffine Mill Road
- Flemingfield Road & Burlington Road
- Flemingfield Road & Proposed Site Access

The above mentioned intersections were analyzed for the morning school peak (7-9AM) and afternoon school peak (2-4PM) for the following conditions:

- Existing 2015 Conditions
- Future 2020 No Build Conditions
- Future 2020 Build Conditions
- Future 2020 Build Conditions with Improvements

The Greensboro Department of Transportation was contacted to obtain background information and to ascertain the elements to be covered in the traffic study. Per GDOT, build out year plus one year is required for future conditions analyses. The study followed the GDOT and North Carolina Department of Transportation (NCDOT) typical standards.

Existing 2015 Conditions

Based on the intersection counts, the morning peak hour was found to occur between the hour of 7:15 a.m. and 8:15 a.m. while the afternoon peak hour was found to occur between the hour of 3:00 p.m. and 4:00 p.m. for the overall study area intersections. These hours were selected for analysis of existing and future year conditions.

The capacity analyses for existing conditions revealed that all the study area intersections currently operate at acceptable levels of service during both peak periods examined, with the exception of the southbound Flemingfield Road approach to Burlington Road during the morning peak hour. This approach currently operates at a level of service F. It is common for unsignalized side-street movements onto major arterials to operate poorly. Burlington Road carries a significant traffic volume during the peak hours which makes it difficult for side-street movements to enter the traffic stream. The southbound approach could be widened to accommodate separate left and right turn lanes. Providing separate lanes for these movements would allow the overall approach to operate at a level of service E with the right turn movement at a level of service D and the left turn movement continuing to operate at a level of service F. All other approaches currently operate at a level of service C or better with acceptable v/c ratios during both peak periods examined.

Future 2020 No-Build Conditions

An evaluation of traffic impacts associated with the proposed school relies on an understanding of the future traffic conditions in the study area without development of the proposed school. Background traffic for the 2020 analysis year is expected to come from background traffic growth expected to occur on the street network between 2015 and 2020 and adding any approved developments in the area. In coordination with GDOT, it was determined that a 2% per year growth rate is reasonable for this area over the next five years and that no other committed developments need to be considered.

The results of the impact assessment analyses indicate that the level of service values will remain very similar to existing conditions in the study area.

Future 2020 Build Conditions

The projected traffic impacts for the school were determined based on the analysis of future year 2020 traffic volumes with full occupancy of the proposed school. The on-site school layout has been designed to provide maximum storage on-site for drop-off and pick-up operations in order to not impede traffic along Flemingfield Road. It has been designed for full build out of the school at 772 students. The MSTA student calculator was used to estimate the average and high demand queue lengths required for on-site traffic circulation and queuing at full build out. It was found that the NCDOT MSTA calculator requires an average of 2,565 feet of on-site queuing with a high demand length of 3,335 feet. Based on our extensive experience evaluating NHA schools across the Country, the estimated on-site queuing demand for a 772-student NHA school is 4,225 linear feet at full build out. The current site plan provides a dual lane queue of approximately 4,475 feet through the site.

Access to the school is proposed via one full movement driveway from Flemingfield Road. The driveway is proposed to be located approximately 1,000 feet north of Burlington Road and approximately 1,500 feet south of Talon Drive. The school driveway is proposed to consist of one inbound and two outbound lanes.

New trips expected to be generated by the school were estimated based on the NCDOT's MSTA *School Traffic Calculator*. MSTA has recently updated the school traffic calculator to include a public-private school calculator and an urban charter school calculator. MSTA has indicated that charter schools in higher populated urban areas of North Carolina have a significantly higher percentage of parents driving their student to and from school, thus the Urban Charter Calculator was developed. The proposed school location resides right on the border of the urbanized area. The MSTA School Traffic Calculator for an urban charter school is projected to generate a total of 1,088 and 528 vehicle trips during the morning and afternoon peak hours, respectively.

Trip generation estimates provided by the NCDOT MSTA school calculator were compared to trip generation estimates based on information and procedures contained in the Institute of Transportation Engineer's (ITE) report *Trip Generation, Ninth Edition, 2012*. This data comparison provides indication that the number of projected trips based on NCDOT MSTA school calculator provides an extremely conservative estimate of the number of expected trips for the new school during the morning peak hour. However, the NCDOT MSTA school traffic calculator estimates are required to be utilized for the traffic impact study.

The Greensboro DOT Driveway Manual and NCDOT Policy on Street and Driveway Access to North Carolina Highways was utilized to determine if left and right turn lanes along Flemingfield Road are necessary for ingress into the school. Based on the warrants for right and left turns, it was found that a northbound left turn lane is warranted along Flemingfield Road at the site access. Due to the minimal right turns into the school, it was found that a southbound right turn lane is not warranted.

The results of the impact assessment analyses indicate that the Burlington Road and Flemingfield Road intersection will operate poorly during both the morning and afternoon peak hours. In addition to the southbound approach operating poorly as under existing and no-build conditions, the eastbound left-turn movement will also operate at a level of service F during the morning peak hour. The proposed site access to Flemingfield Road is expected to operate at acceptable levels of service except for the eastbound approach during the morning peak hour which will operate at a level of service F. The eastbound left turn from the school driveway will operate at a level of service F while the right turn will operate at a level of service D. It is common for an unsignalized left-turn movement from a side-street onto a major arterial to operate poorly. It is expected that the left turn volume will be minimal with 31

vehicles making this left turn during the morning peak hour and 16 vehicles during the afternoon peak hour. The proposed site plan has identified separate lanes for the right and left turn exiting movements with adequate storage to accommodate this left turn without impeding the right turn movement out of the site.

The peak hour volume requirements for traffic signal installation were examined for the Burlington Road and Flemingfield Road intersection based on our future 2020 traffic volumes. Our future 2020 volumes at this intersection indicate traffic signal installation is warranted under the peak hour warrant at this intersection during both the morning and afternoon peak hours whether one or two approach lanes are present along Flemingfield Road. In conjunction with a traffic signal, the southbound approach should be widened to a two-lane approach to separate the left and right turning movements. Poor level of service on a side street does not always result in a recommendation for signalization. If v/c ratios and queuing are acceptable, a poor level of service can be accepted. However, the v/c ratios, queuing, and level of service will not be acceptable at full build out of the school. Traffic signal control should be considered at this intersection in the future when the school is constructed and operational. Since Warrant 1 is typically used to determine if a traffic signal should be implemented, it is recommended that this intersection be carefully monitored upon completion of the site to decide if and when a traffic signal should be installed. Widening of the southbound approach to a two-lane approach to separate the left and right turning movements should be constructed regardless if a traffic signal is installed or not. In addition to the installation of a traffic signal and widening of the southbound approach, it is also recommended that a westbound right turn lane be constructed along Burlington Road at Flemingfield Road.

Highway capacity analyses were again conducted for 2020 projected year traffic volumes with the traffic signal installed, widening of the southbound Flemingfield Road approach to Burlington Road, and construction of a westbound right turn lane on Burlington Road at Flemingfield Road. An actuated three-phase traffic signal with a right-turn overlap for the southbound approach would provide acceptable operations during both peak hours. While the overall intersection and approaches are expected to operate at a LOS D, the individual southbound left-turn movement and eastbound left turn movement are expected to operate poorly during the morning peak hour due to the existing heavy westbound through volumes along Burlington Road and the expected school trips to/from the west along Burlington Road.

Wade Trim has provided traffic engineering services to NHA for over fifteen years and has vast experience with schools that rely solely on parent drop-off and pick-up. Based on our experience at NHA schools across the country, the proposed school will not generate the estimated morning peak hour trips that are associated with the MSTA Urban Charter School Calculator and presented in this report. Based on our experience and trip rates collected at NHA schools, it is estimated that the morning peak hour will have significantly less trips than what has been examined in this analysis which would result in acceptable operations through the study area.

Summary

The analysis results for the projected build scenario of the proposed school reveal that improvements along the site frontage and at the intersection of Burlington Road and Flemingfield Road will be needed upon full build out in order to mitigate the traffic impacts caused by adding the school traffic. The improvements that will be required include the following:

- Northbound left-turn lane along Flemingfield Road at the site driveway
- Separate left and right turn exiting lanes on the school driveway
- Westbound right-turn lane along Burlington Road at Flemingfield Road
- Widening of the southbound Flemingfield Road approach to include separate left and right turn lanes.
- Installation of a three-phase traffic signal at the intersection of Burlington Road and Flemingfield Road with a right-turn overlap for the southbound approach.

In order to construct the recommended left-turn storage lengths plus deceleration tapers along Flemingfield Road at the proposed site access and at the Burlington Road approach, it is recommended that Flemingfield Road be widened to accommodate a three-lane cross-section with center left-turn lane.

This study has reviewed the impacts of both background traffic and projected traffic from the proposed school and has determined that with the recommended improvements in place, the traffic generated by the proposed school can be accommodated on the surrounding road network.