



Transportation Special Use Permit Report

Meeting Dates: February 22, 2010

Reference Name	New Middle School - Treyburn (T0900003)	Jurisdiction	County
Request	Transportation Special Use Permit (TSUP)		
Site Characteristics	Tier	Suburban	
	Zoning District	Rural Residential (RR)	
	Overlays	Falls-Jordan Watershed District - B (F/J-B), Lake Michie/Little River Watershed District- A (M/LR-A)	
	Site Acreage	148.89	
Applicant	Durham Public Schools	Submittal Date	November 24, 2009
Location	923 Snow Hill Road, located on the north of Snow Hill Road, east of US 501, west of Snow Hill Drive, and south of Vintage Hill Parkway		
PINs	0835-01-38-4685, 0835-01-29-3261, 0835-02-57-2763		
Recommendations	Staff	Approval, based on technical conformance with Ordinance requirements. Staff will make a final recommendation following the hearing.	

A. Summary

Durham Public Schools requests approval of a Transportation Special Use Permit (TSUP) associated with an 850 student middle school with 169 parking spaces proposed on the north side of Snow Hill Road. Unless exempted by Section 3.3.8.B of the Unified Development Ordinance (UDO), a Transportation Special Use Permit is required for site plan projects that generate at least 600 vehicle trips in a single peak hour. The full build-out of the project crosses this threshold and will generate an estimated 711 AM peak hour trips.

The Traffic Impact Analysis (TIA) for this proposal was prepared by the applicant’s traffic consultant, Martin/Alexiou/Bryson (MAB). It was reviewed by both the City of Durham Transportation Department and the North Carolina Department of Transportation (NCDOT). The attached review memos evaluating the TIA have identified improvements deemed necessary to mitigate the project’s impacts (attachment #4 and #5). All of the necessary improvements are shown provided and noted as Special Conditions of Approval on the proposed site plan (attachment #6) associated with this request. The staff recommends these improvements be included as conditions of the TSUP.

The Development Review Board (DRB), on January 8, 2010, recommended approval of the overall site plan. The request also requires a zoning map change (Z08000034) and major special use permit (M09000005) for the school use. These approvals must be obtained prior to the approval of the TSUP. Because the proposal is within the County and City jurisdictions, approval by both governing bodies is required.

B. Section 3.3.8D – Criteria for Approval

The Governing Body may grant the Transportation Special Use Permit only if each of the required findings identified in Section 3.3.8.D can be made:

1. The traffic generated by the development and associated improvements to the street system will not have a significant adverse impact on the surrounding area. Significant adverse impact shall include:
 - a. Substantial increases in traffic on local residential streets such that the majority of the traffic is not associated with the residential properties which front on the street; or
 - b. The need to widen local residential streets which would detract significantly from the character or basic function of the nearby streets.

Staff Technical Findings: A middle school with 850 students is proposed for this site. Vehicular access for parent pick-up/drop-off, visitor parking, and staff parking is shown provided via a private driveway connection (Site Access #2- see sheet SD 0.1 of attached site plan) through the adjacent City of Durham parcel to the east. The proposed private driveway is shown to connect to Snow Hill Road via a proposed public street (approximately 240 linear feet) on the north side of Snow Hill Road located approximately 1,275 feet west of Snow Hill Drive. Bus and service access to the site will be provided via a private driveway connection (Site Access #1) through the adjacent City of Durham parcel to the west. A public street extension of Novaglen Drive (approximately 350 linear feet) is shown constructed north of Snow Hill Road to connect the proposed private driveway to Snow Hill Road.

The school is expected to generate 711 AM peak hour vehicle trips and 276 school PM peak hour trips. The trip generation rates are based on the NCDOT Municipal and School Transportation Assistance (MSTA) Unit's spreadsheet model, which generally reflects a conservative scenario. According to the City Transportation Department, the NCDOT rates better reflect North Carolina school traffic rates than those specified in the ITE Trip Generation Manual.

With the recommend roadway improvements listed in item #4 below, the adjacent streets and intersections are all expected to operate at an acceptable Level of Service (LOS) with full build-out of the proposed site.

Snow Hill Road is designated as a major thoroughfare on the adopted Durham Thoroughfare Plan. There are no widening improvements to residential streets or adverse effects on residential streets.

2. Adequate provisions have been made for safe and efficient vehicular circulation, parking and loading, and pedestrian access.

Staff Technical Findings: The proposed site plan has been reviewed for general layout and circulation and is in conformance with all UDO requirements. Site circulation is provided within the site via proposed private drives. The site plan indicates 169 parking spaces which exceeds the 98 spaces required under Section 10.3.1 of the UDO. One hundred and fourteen (114) are dedicated to the school, with the excess 55 spaces allocated for the proposed park on the west side of the school site.

The vehicle stacking requirement for the pick-up/drop-off area is based on the NCDOT Municipal and School Transportation Assistance (MSTA) Unit's spreadsheet model, accepted by the City Transportation Department. This model estimates 1,425 feet required for appropriate stacking length. Based upon the proposed layout, the associated site plan provides approximately 3,800 feet of on-site vehicle stacking, exceeding the amount required per the MSTA estimates. For the proposed use, designated service loading areas are not required, however all service vehicles and service loading can be accommodated within the bus staging area.

The proposed site plan is shown to provide for pedestrian access to the site by constructing sidewalks along one side of the internal private driveways and the two proposed public street connections to Snow Hill Road. The proposed internal sidewalk system will form a continuous sidewalk through the site to the two external connections to Snow Hill Road.

3. The traffic generated by the proposed development and any proposed improvements to the street system will not have a significant adverse impact on the environment. Significant adverse impacts shall include but not be limited to undue concentration of air pollutants, or excessive noise or vibrations.

Staff Technical Findings: The surface parking lot does not meet the minimum size threshold (1,500 surface parking spaces) to require a Transportation Facility Permit (for point source air quality conformance) issued through NCDENR. Based on the TIA results, the anticipated vehicle delays are not expected to produce any significant adverse impacts of air pollution (emissions). Noise and any associated vibrations are anticipated to be typical of the type of traffic generated by the use, such as buses, automobiles, and other services vehicles. This traffic is shown nearest to residential structures within the Novaglen and Glacier rights-of-way. The nearest house from the paved portion of Novaglen Road measures

approximately 120 feet, and the nearest house from the paved portion of Glacier Avenue measures approximately 90 feet.

4. The traffic generated by the development can be accommodated by the existing or funded transportation system, or adequate traffic mitigation measures have been proposed as part of the development application. Proposed mitigation measures shall become conditions of the special use permit. The adopted level of service for the adjacent roadways may be considered in making this determination, but shall not be the sole factor considered by the governing body.

Staff Technical Findings: Based on the TIA and review by staff, several mitigation measures are necessary to accommodate the proposed use. These measures are listed below and are necessary to provide adequate safe ingress/egress to the site. The improvements are to be provided by the applicant and are noted and illustrated as Special Conditions of Approval on the proposed site plan. The improvements are to be completed prior to the issuance of any certificate of occupancy.

Summary of TIA Required Improvements

Roxboro Road and Snow Hill Road / Mason Road (signalized)

1. Extend the westbound left-turn lane on Snow Hill Road from 75 feet to 200 feet.
2. Extend the southbound left-turn lane from 125 feet to 275 feet.

Snow Hill Road and Site Access #1 (unsignalized)

1. Construct Site Access #1 with one ingress lane and two egress lanes with adequate storage and tapers.
2. Construct an eastbound left-turn lane with adequate storage and appropriate tapers.
3. Construct a westbound left-turn lane with adequate storage and appropriate tapers.

Snow Hill Road and Site Access #2 (unsignalized)

1. Construct Site Access #2 with one ingress lane and two egress lanes with adequate queuing storage and tapers.
2. Construct an eastbound left-turn lane with adequate storage and appropriate tapers.

Section 3.9.7.C

The Governing Body may place conditions on the use permit as part of the approval to assure adequate mitigation measures are associated with the use. The conditions become a part of the major special use permit approval. Violations of any of the conditions shall be treated in the same manner as other violations of the UDO.

C. Notification

Staff certifies that newspaper advertisements, letters to property owners within 600 feet of the site and the posting of a sign on the property has been carried out in accordance with the Unified Development Ordinance. In addition, the following neighborhood organizations were mailed notices:

- Partners Against Crime- District 2
- Friends of Durham
- Inter-neighborhood Council
- Unity in the Community for Progress

D. Staff Contact

Michael Stock, Senior Planner, 560-4137 ext.28227, or
michael.stock@durhamnc.gov

Bill Judge, Transportation Engineer IV, 560-4366 ext. 30420, or
bill.judge@durhamnc.gov

E. Attachments

1. Application
2. Context/vicinity map
3. Aerial photo
4. Transportation Impact Analysis memo
5. NCDOT Impact Analysis memo
6. Site plan reductions Case D08000219