#### CHAPEL HILL STAFF REPORT

- SUBJECT: Public Hearing: Elementary School #11 at 350 Caldwell Street Extension -Application for Special Use Permit Modification
- DATE: September 21, 2009

#### **INTRODUCTION**

Attached for consideration is an application for Special Use Permit Modification to deconstruct and demolish four buildings and to construct a 3-story elementary school building on 8 acres of land on Caldwell Street Extension. The site is identified as Orange County Parcel Identifier Number 9788-18-1797, and is located on Caldwell Street Extension between Church Street and Edwards Street in the Northside Neighborhood Conservation District, the Residential-3 (R-3) zoning district, and partially within the Resource Conservation District (RCD).

The Special Use Permit Modification application is accompanied by an application for a Zoning Atlas Amendment to rezone the property from Residential-3 (R-3) to Office/Institutional-3 (OI-3).

#### BACKGROUND

1951 to 1970	The first local public school for African Americans, the Orange County Training School (later known "Northside"), operated on this site and served 7th to 12 <sup>th</sup> grade students
December 13, 1976	Special Use Permit for 3 buildings and 83 parking spaces granted by the Town Council for the OPC Mental Health Clinic for "quasi-public building."
1980 - Present	The Orange Person Chatham (OPC) mental health clinic housed from the 1980's until recently. The School for People Under Six operated on the site since 1999.
September 9, 2008	Town Council granted expedited processing for Special Use Permit Modification application from the Chapel Hill-Carrboro City Schools.
September, 2008	Design Advisory Group for this project met for the first time, including Northside residents, Town staff, Town Council members, County Commissioners, school board members, teachers, school district officials, and the project design team to facilitate information exchange between all stakeholders.
November 12, 2008	Community Design Commission Concept Plan Review of the project.
December 8, 2008	Town Council Concept Plan Review of the project.

# **EXISTING DEVELOPMENT**

*Location*: The 8-acre site is bounded on the north by McMasters Street and on the south by Caldwell Street Extension, west of Church Street and east of Mitchell Lane. The site is located in the Residential-3 (R-3) zoning district, the Northside Neighborhood Conservation District, and partially in the Resource Conservation District.

*Existing Structures*: The 8-acre campus of the mental health clinic and School for People Under Six includes three brick one- and two-story buildings, a modular unit, and a community garden.

*Surrounding Neighborhood:* The Town of Chapel Hill Housing office is directly across Caldwell Street Extension. All other surrounding properties are of residential use (Residential-3 zoning district).

*Vehicular, Bicycle, and Pedestrian Circulation*: Vehicular access to 83 on-site parking spaces is from three full-access driveways – two from McMasters Street and one from Caldwell Street Extension.

There are currently sidewalks on the south side of Caldwell Street Extension and along part of the McMasters Street frontage. Along the western edge of the site is a segment of the Tanyard Branch Trail, part of the Town's greenway system. A greenway easement associated with this trail extends from Caldwell Street to McMasters Street. Attached are maps from the Northside Mobility Plan which provide visual explanations of existing and planned pedestrian and transit routes.

*Transit Bus Stops, Routes*: The closest public bus stops are located along Caldwell Street Extension for the "A" Route (MLK Jr. Boulevard/Northside route).

*Vegetative Cover, Significant Trees:* There is a steep wooded area along the western property line which includes a section of the Tanyard Branch Trail. In the northeast corner of the site there are canopy trees and an open area with a community garden.

*Topography, Drainage*: Most of the site slopes down from east to west. A small area in the northeast corner of the site drains to the northeast. The bulk of the lot, which is not vegetated, has an average slope of 6 percent. The western third of the site is wooded with an average slope of 15 percent, and contains the Resource Conservation District associated with Tanyard Branch. Slopes of 25% or more are found in this vicinity, as well as in narrow strips along the northern and southern property lines. A stone retaining wall addresses the 5-7 foot grade change between the southern property line and Caldwell Street Extension.

*Utilities, Infrastructure*: Storm drainage is piped from the northern and southern ends of the buildings westward to the wooded creekside area on the western edge of the site. Waterlines exist in both Caldwell Street Extension and McMasters Street. This site taps into a sewer line along Tanyard Branch at the western edge of the site. There is an overhead electrical line

immediately east of the buildings, running to Caldwell Street Extension.

#### PROPOSED DEVELOPMENT

**Development Description**: The applicant proposes to construct a three-story 100,000 square foot building for 585 elementary students in the eastern two-thirds of the site. Access would be from both street frontages. The driveway on McMasters Street is proposed in approximately the same location as an existing driveway. Two driveways would provide access from Caldwell Street Extension, one on the west side of the building, and one on the east side to serve the visitor parking and a student dropoff loop at the eastern edge of the building. A bulb-shaped paved area in the northeast corner of the site would serve as an "overflow stacking loop" during peak traffic hours and would serve as a paved play area during school hours.

A 47-space staff parking lot would be located between the western side of the building and the greenway. A 34-space visitor parking lot would be located on the eastern side of the building. Three parking spaces would be located on the southern side of the building in the service area. The total parking space number would be 84.

Thirty bicycle parking spaces are proposed near the eastern building entrance; 20 near the northwestern building entrance; and 30 spaces at the northern building entrance, for a total of 80 bicycle spaces. The applicant has agreed to provide 80 spaces initially, and space for 40 more spaces should they be needed in the future. The annual Transportation Management Plan report to the Town Manager is to include a bike parking needs assessment so that additional bicycle parking can be added as needed.

An art patio, three play areas, a basketball court, and a community garden are proposed adjacent to the building.

A screened dumpster area is shown in the service area on the southern side of the building, enclosing three refuse dumpsters and several recycling containers.

The applicant proposes to install two stormwater detention tanks under the westernmost parking lot to slow the runoff rate and improve the water quality of the run-off from the site's impervious areas. In addition, an underground cistern is proposed off the western side of the building.

Existing vegetation is to serve as the required landscape buffers along the eastern and western property lines. New landscaping would be provided along the northern and southern property lines.

If the applicant determines geothermal wells would be feasible, they would be located in the northeast corner of the site, under the proposed grass playfield/overflow parking area.

**Deconstruction/Demolition**: The applicant proposes to deconstruct the building walls, pavement, and windows so that the materials may be reused or recycled. Masonry and concrete from the existing buildings will be ground up on-site and used for backfill and base material for the new building. Demolition of the building remains would follow.

<u>Off-Site Improvements</u>: The applicant proposes to extend the sidewalk along the north side of Caldwell Street Extension east from the site to Church Street and west from the site to Mitchell Lane. The greenway would be improved not only on site but also southward to Cotton Street.

**<u>Payments-in-lieu</u>**: The applicant also proposes to provide a \$10,000 payment-in-lieu to improve the existing bus stop on the south side of Caldwell Street Extension, or to relocate it. A \$2,000 payment-in-lieu for signal timing adjustments is also proposed.

# **EVALUATION**

The Town staff has reviewed this application for compliance with the themes from the Comprehensive Plan, the standards of the Land Use Management Ordinance and Design Manual, and offers the following evaluation:

Comprehensive Plan: The following are themes from the Comprehensive Plan:

- 1. Maintain the Urban Services/Rural Buffer boundary;
- 2. Participate in the regional planning process;
- 3. Conserve and protect existing neighborhoods;
- 4. Conserve and protect the Town's existing natural setting;
- 5. Identify areas where there are creative development opportunities;
- 6. Encourage desirable forms of non-residential development;
- 7. Create and preserve affordable housing opportunities;
- 8. Cooperatively plan with the University of North Carolina at Chapel Hill;
- 9. Promote the vitality of downtown;
- 10. Work toward a balanced transportation system;
- 11. Complete the bikeway/greenway/sidewalk systems;
- 12. Provide quality facilities and services; and
- 13. Develop strategies to address fiscal issues.

For additional information on how this proposed development addresses these and other goals, objectives, and strategies of the Comprehensive Plan, please refer to the applicant's Statement of Justification (see attachments).

*Land Use Plan:* The Land Use Plan, a component of the Comprehensive Plan, designates the subject site for Institutional Use. The applicant's proposed use is an elementary school.

*Northside Neighborhood Conservation District:* The Northside Neighborhood Conservation District was enacted February 23, 2004 as an appendix to the Town's Land Use Management Ordinance and applies to this property. A copy of the study is provided as an attachment. Below are several statements from the applicant describing how this proposal complies with the preceding bulleted text taken from the Northside Neighborhood Conservation District Vision Statement:

• Protect the family atmosphere and ensure that all future development is comparable with

the majority of the neighborhood in scale, function, and appearance. [Northside Neighborhood Conservation District Vision Statement]

"The building architecture will provide design elements that coordinate with the community aesthetic....Variations in the school's roof edges and details will reflect the various roof elements and slopes expressed in the neighborhood homes... The basic exterior design concept will be to provide a school atmosphere with detailing that will blend with the neighborhood." – *Applicant's Response* 

"In early design discussions with the Design Advisory Committee that included district staff, administration, parents, board of education members, and neighbors, a consensus decision was made that the facility will respect the community in which it will be located. The advisory group came up with the following Project Vision Statement at the initial design meeting that reflects this vital requirement: 'The new Elementary School #11 shall be a child-centered, welcoming, and environmentally sensitive facility that respects and supports the Northside community." – *Applicant's Response* 

For more detail on the Northside Neighborhood Conservation District, including specific regulations, please refer to the following website link: http://www.townofchapelhill.org/index.aspx?nid=1328

# **Concept Plan/Special Use Permit Modification Application Comparison**

A Concept Plan proposal for this project was reviewed by the Community Design Commission on November 12, 2008, and by Town Council on December 8, 2008. The summary of Community Design Commission comments is attached. The minutes of the December 8, 2008 Town Council meeting are not yet available, but we have reviewed the videotape of the meeting. We have summarized the Council's comments below:

# Town Council Comments:

- Provide a site layout and building architecture less "suburban," more suitable for older Northside neighborhood;
- Provide a more compact building footprint, more outdoor unpaved area;
- Present building rather than parking lot as focal point, presence from Caldwell Street;
- Justify the bulb-shaped extension of pavement, east side of building;
- Justify adherence to NCDOT vehicle stacking standard;
- Describe parking overflow plan during school events;
- Applaud plan to deconstruct existing buildings;
- Keep east-west orientation for daylighting;
- Incorporate more greenbuilding features and meet 50% above ASHRAE standards;
- Incorporate greenbuilding/sustainability concepts/features into educational programming;
- Provide metal tree protection fencing; and
- Stormwater management and reduction of impervious surface are important.

The above Council comments are addressed in the pertinent sections of this staff report and in the applicant's materials, attached. For more detail on the Council's comments, please refer to

the following web page link: <u>http://chapelhill.granicus.com/MediaPlayer.php?view\_id=3&clip\_id=379</u>

*Overall Applicant Response to Concept Plan Review Comments:* Following Concept Plan review, the applicant has changed the site plan in the following ways:

- realigned the parking overflow loop in the northeast corner of the site;
- reduced the number of parking lot entrances along Caldwell Street;
- added sidewalk along McMasters Street, Caldwell Street, around the building and from the street frontages to the building;
- reduced the building footprint;
- added a paved greenway trail;
- revised the service area location; and
- added a community garden.

In addition, the accompanying rezoning application now proposes to rezone the site from Residential-3 (R-3) to Office/Institutional-3 (OI-3) rather than to Residential-6 (R-6).

Please see the attached applicant's responses to the Town Council and Community Design Concept Plan comments (see attachment).

#### **Ordinance Requirements**

**Zoning:** The applicant proposes to rezone this site to the Office/Institutional-3 (OI-3) zoning district. This zoning district and its associated floor area ratio (.566) are required in order for the applicant to construct the proposed 100,000 square foot building on this 7.89 acre site.

*Intensity Standards (floor area):* Using the floor area ratio of .566 for the Office/Institutional-3 (OI-3) zoning district, the maximum floor area allowed on this site would typically be 288,480 square feet.

However, a portion of the proposed development is subject to the reduced floor area ratios associated with the *Transitional Control Intensity Modification* and a portion is subject to the *Resource Conservation District* sections of the Land Use Management Ordinance. Therefore, the maximum floor area permitted on this site is 122,096 square feet. For information on reduced floor area ratios associated with the *Transitional Control Intensity Modification* and the *Resources Conservation District*, please refer to discussion of these topics later in this staff report and the applicant's worksheet showing calculations.

**Dimensional Standards (setbacks):** Typically there are no setbacks requirements in the Office/Institutional-3 (OI-3) zoning district. However, because this site is adjacent to a residential zoning district, a street setback of 24-feet is required by the **Transitional Control Intensity Modification** section of the Land Use Management Ordinance. Therefore the street setback for this proposed development is increased from zero setback to a 24-foot setback along McMasters Street and Caldwell Street Extension. The proposed building is located within the required setbacks along the two public streets and the eastern and western property lines. However, a canopy is proposed to extend midway into the 24-foot setback to cover a segment of the sidewalk leading from the north side of the building to the sidewalk along the McMasters

# Street frontage.

For information on setback requirements associated with the *Transitional Control Intensity Modification* please refer to discussion on this topic later in this staff report.

At *Council Concept Plan Review*, it was suggested that the building could be shifted to become more of a focal point and presence on Caldwell Street Extension. The applicant noted topographical concerns and advised that a three-story building at the site's street edge, which is elevated about 7 feet above the street pavement, might feel too dominant in this neighborhood typified by one-story homes. Please refer to the Existing Development section above for further discussion of this existing condition.

*Dimensional Standards (height):* Primary height is the height of the building envelope at the setback line. Secondary height limit is graduated, depending on distance from setback lines, up to a maximum height towards the center of a zoning lot.

Typically there are no primary or secondary building height limits in the OI-3 zoning district. However, the Northside Neighborhood Conservation District restricts primary height to 20 feet for zoning districts other than Town Center-2 and Office/Institutional-1 (OI-1). Therefore the 20-foot primary height limit applies at the 24-foot street setback lines along McMasters Street and Caldwell Street Extension and along the zero lot lines at the eastern and western property lines.

Because a portion of the proposed building exceeds the building envelope and the proposed canopy over the sidewalk encroaches into the building setback, the applicant is asking for modifications to the regulations. For additional information on this topic, please refer to further discussion later in this memorandum of *Modifications to the Regulations*.

At *Council Concept Plan Review*, comments included a request that the applicant investigate compressing the building footprint, which would result in increased building height. The current proposal includes a building that is partially two-story and partially three-story, the tallest portion of the building proposed at 60 feet. The applicant notes that a multi-story building provides the advantages of greater potential for energy efficiency as well as a smaller building footprint, resulting in larger outdoor and vegetated areas.

Please refer to checklist of Project Fact Sheet requirements for additional information about Ordinance requirements (see attachment).

*Transitional Control Intensity Modification:* Subsection 3.8.4 of the Land Use Management Ordinance (Transitional Control Intensity Modifications) provides that for development (buildings) in the OI-3 zoning district that are located within 100 feet of a residential zoning district, a reduced floor area ratio of .264 shall be applied to this portion of the site. Approximately 3.13 acres of this site are located within this 100 foot area. Applying the reduced floor ratio of .264 to this portion of the site reduces the overall permitted floor area on this 8-acre site by 41,123 square feet. The proposed floor area complies with the Ordinance restrictions on floor area.

Subsection 8.4 also provides that where the OI-3 zoning district is across the street from residential zoning, the street setback must be the same as that for the nearby residential district. Therefore the street setback for this proposed development is increased from a zero setback to a 24-foot setback along McMasters Street and Caldwell Street Extension. A section of sidewalk canopy would be located within the required setback.

*Shading Considerations:* Planning Board members requested the applicant provide a shading study showing whether the McMasters Street neighbors across from northwest corner of building would be affected by the shadow cast by the building (shadow angle as calculated for winter solstice sun). Attached to this memorandum is an hour-by-hour winter solstice shading study provided by the applicant. It shows that on the winter solstice, when the sun's path is at its lowest arc, eight homes on the north side of McMasters Street would be shaded by the school building from dawn (7:22 a.m.) to some point between 8:00 and 9:00 a.m. The front yards of six of these homes would be shaded from dawn to sometime between 9:00 and 10:00 a.m. In the late afternoon, five homes to the east of this site would be shaded by the building 4:30 p.m. (one hour before sunset).

Based on the attached study, we believe the shading effects on neighbors will be brief and for a few weeks during the winter.

*Modifications to the Regulations:* The attached drawings provided by the applicant show that the northwest corner of the proposed building (about 1% of the building footprint) would exceed the primary height limit by about 10 feet. For comparison purposes, the applicant has provided illustrations showing the building envelopes under current regulations and under the proposed request for modification to the height regulations. In addition, a canopy over a segment of sidewalk is proposed within the building setback from McMasters Street. The proposed modifications are discussed below.

# Modification of Height Limit

Primary height limits are the height limits measured at the setback lines of a zoning lot. Secondary height limits are higher and follow a 1:2 slope from the setback lines towards the center of the lot. In most cases, there is a maximum secondary building height. The Office/Institutional-3 (OI-3) zoning district is atypical in that in under most circumstances there are zero setbacks and no height limits associated with this district.

However, the school site, if rezoned to OI-3, would be subject to two circumstances that create setback and height limits: Appendix B – Neighborhood Conservation Districts (NCDs) and subsection 3.8.4 of the Land Use Management Ordinance. In the Northside NCD, Section 1.1 specifies a maximum primary height limit of 20 feet for zoning districts other than Town Center-2 and Office/Institutional-1 (OI-1). At this site, if it is rezoned to OI-3, the 20-foot height limit would apply at the eastern and western property lines. Along the street frontages, the street setbacks would be 24 feet, and the 20-foot primary height limit would apply at this 24-foot setback line.

A small portion (less than 1%) of the proposed building (at the northwest corner) would not meet the height limits in accordance with the 1:2 slope formulas which create the building envelope for this site. (Please see the attached illustrations of the building envelope submitted by the applicant for comparing the proposal to Ordinance requirements.) The applicant is requesting a modification to the regulations to exceed the building envelope prescribed in the Ordinance with respect to height limits.

Staff considered the alternatives to exceeding the height limits. There appear to be two options: 1) scale down the school size, which would accommodate fewer students, or 2) reduce the building height, which would enlarge the building footprint. We believe the school district has demonstrated the need for a school of the proposed student population. Enlarging the footprint could result in one or more of the following: less vegetated and play area, encroachment into the Resource Conservation District, and reduction in energy efficiency, reduction in parking, and vehicle stacking room during student drop-off/pickup. In weighing the height as a visual intrusion on one hand against environmental consequences and the likelihood of traffic overflowing into neighborhood streets on the other, we believe the additional height is preferable. We recommend approval of the applicant's request to modify the regulations to, on one corner of the building, exceed the building envelope with respect to height.

# Modification of Setbacks

The building setback along the McMasters Street frontage is 24 feet, in accordance with LUMO subsection 3.8.4, the OI-3 Transitional Control Intensity Modification as described in a previous section of this report. The applicant proposes a canopy encroaching about 12 feet into the 24-foot setback to cover a segment of sidewalk leading from the north side of the building to the McMasters Street sidewalk. The applicant is requesting a modification of the regulations to encroach into the Ordinance requirements with respect to building setbacks.

We believe this relatively minor encroachment into the setback is reasonable in order to provide rain shelter to waiting bus riders.

# Modification of Regulations by the Council

The Council has the ability to modify the regulations, according to Section 4.5.6 of the Land Use Management Ordinance. The Council could modify the regulations if it makes a finding in the particular case that public purposes are satisfied to an equivalent or greater degree. We believe that with respect to the applicant's request to modify the building height limit, the Council could make a finding that public purposes are satisfied to an equivalent or greater degree because 1) the multistory design allows for improved energy efficiency; and 2) the greater height results in a more compressed building footprint, allowing more outdoor vegetated and play area, and more vehicle stacking room on site. We believe that with respect to the applicant's request to encroach in the building setback with a canopy over a 12-foot segment of sidewalk, the Council could make a finding that public purposes are satisfied to an equivalent or greater degree because 1) the encroachment is relatively small in scale; and 2) the canopy would provide rain shelter for schoolchildren.

The Council may deny the proposed modifications of regulations at its discretion. If the Council chooses to deny a request for modification to regulations, the applicant's alternatives are to comply with regulations or request a variance from regulations.

#### **Access and Circulation**

**Traffic Impact Analysis:** The Town's traffic consultant prepared the Traffic Impact Analysis (TIA) for this development. The TIA (see attachment) examined the no-build and build-out scenarios and analyzed the transportation impacts of replacing the existing day care with an elementary school. The predicted effects on traffic focused on Martin Luther King Jr. Boulevard, Columbia Street, Caldwell Street Extension, and McMasters Street.

The analysis assumed 10% of the 585 students and 88 staff would walk or ride the bus. The remaining 90% of the site users were predicted to generate a total of 388 daily weekday trips. The TIA did not take into consideration the number of students (estimated at 300) who would arrive and depart by school bus. It is noted that while the morning a.m. peak hour of 7:30 a.m. would be similar to the existing day care's a.m. peak hour, the afternoon peak hour would be around 2:30 p.m. instead of the typical 5:30 p.m. peak hour. The TIA recommendations did not include any off-site improvements.

At the June 16, 2009 Planning Board meeting, the board expressed concerns about the school bus routing on Church Street, citing the street's narrow width and substandard pavement depth as possible problems. The applicant agreed to amend the bus route such that only one block of Church Street would be used.

Church Street was last resurfaced in 2000. The Town hired the Institute of Transportation Research and Education (ITRE) to rate the pavement conditions on a number of Town streets, including Church Street. In May, 2009, Church Street was given a rating of 95 out of 100. Under current traffic conditions, resurfacing is not anticipated to be necessary again until year 2015. However, if traffic volume and loads increase due to the school's opening and/or other factors, pavement damage could occur sooner. The Town believes the initial stages of pavement damage if any would likely be discernable by the second year after the school opens. We have included in Resolution A a stipulation calling for the Town Manager to monitor the pavement design as needed.

The proposal includes a bus drop-off area along the McMasters Street frontage. The applicant states that the bus routes are being studied but have not been finalized provided as an attachment is a map (SK-6) of proposed school bus routes currently being considered). Bus arrival times are expected to be between 7:10-7:20 a.m. and bus departure times are expected to be about 2:20-2:30 p.m. on weekdays. The applicant anticipates that approximately 300 students would arrive and depart via school buses.

*Off-Site Traffic Improvements*: We recommend that McMasters Street be improved to accommodate the new school bus lane and to withstand daily bus traffic. We recommend that the bus lane be constructed in accordance with the Town's Design Standards, including a 10-foot lane width, reinforced 30-inch curb and gutter, and 8-foot sidewalk at the back of curb along the

bus lane abutting a 3-foot utility strip. The pavement design calculations shall be provided by an engineer licensed in North Carolina.

The applicant has agreed to repair any construction-related damage to McMasters Street and/or Caldwell Street Extension.

The applicant has agreed to provide a \$2,000 payment-in-lieu for retiming the traffic signals at the Church Street/Rosemary Street intersection and the North Roberson/Rosemary Street intersection.

These improvements and payments have been included as stipulations in Resolution A.

*School Buses:* The proposal includes a bus drop-off area along the McMasters Street frontage. We recommend that the bus lane be constructed in accordance with the Town's Design Standards, including a 10-foot lane width, reinforced 30-inch curb and gutter, and 8-foot sidewalk at the back of curb along the bus lane abutting a 3-foot utility strip.

The applicant states that the bus routes are being studied but have not yet been finalized. (Provided as an attachment is a map (SK-6) of proposed school bus routes currently being considered.) Bus arrival times are expected to be between 7:10-7:20 a.m. and bus departure times are expected to be about 2:20-2:30 p.m. on weekdays. The applicant anticipates that approximately 300 students would arrive and depart via school buses.

*Public Bus Stops, Routes:* On the "A" route, there is a bus stop on the north side of Caldwell Street Extension at the western end of the site and a bus stop across the street at the Town's Housing Department. Two additional Caldwell Street bus stops are located 100 feet west and 700 feet east for the "A" Route. Additional bus stops are located 1,000 feet east of the site on Columbia Street and a third of a mile south on Rosemary Street. A "J" Route bus stop is located about 2,200 feet south on Franklin Street.

The applicant has agreed to provide a payment in-lieu of \$10,000 to upgrade or relocate the existing bus stop and shelter across the street on the south side of Caldwell Street Extension. This has been included in Resolution A. We note this bus shelter may need to be relocated, depending on whether a new speed table and crosswalk are installed in this vicinity.

*Vehicular Access*: Vehicular access to the school is proposed at three locations. One vehicular access point would be from a driveway off McMasters Street in approximately the same location as an existing driveway. Two driveways would provide access from Caldwell Street Extension: one on the west side of the building; and one on the east side. The eastern access would serve the visitor parking and a student drop-off loop near the eastern edge of the building. Associated with the drop-off-loop is a bulb-shaped paved area in the northeast corner of the site. This area is proposed to serve as an "overflow stacking loop" during peak traffic hours and would also serve as a paved play area during school hours. The proposal also includes a bus drop-off area along the McMasters Street frontage.

During *Council Concept Plan Review*, the need for the "overflow stacking loop" area was questioned. The applicant noted that, in response to a request by the Department of Instruction

and the Traffic Impact Analysis based on the NCDOT school traffic calculator (a modeling tool), the recommendation for stacking room for schools of this size is 969 feet. The incorporation of the additional stacking area (about 500 feet) associated with the "overflow stacking loop" increased the available stacking queue from approximately 450 to 969 feet. (Please see the attached sketch SK-4.) In order to minimize vehicular stacking along Caldwell Street Extension, we recommend that the applicant provide the "overflow stacking loop" area.

*Vehicular Parking*: Unlike in other zoning districts, there are no parking requirements for development in the Office/Institutional-3 (OI-3) zoning district.

The applicant proposes 80 regular spaces and 4 handicap spaces. Forty-seven spaces would be provided for staff parking on the west side of the building; thirty-four visitor spaces would be provided on the east side of the building, inside the drop-off loop. Three service vehicle spaces are proposed at the southern end of the building.

**Overflow Parking**: At Council Concept Plan Review, questions were asked about plans for parking overflow during the 4-5 annual school events which entail above normal parking demand. The applicant stated that parallel parking in the bus pull-off area on the south side of McMasters Street (15 spaces) and the north side of McMasters Street (11 spaces) could accommodate overflow parking. The applicant proposal includes a 20-foot travel lane between the parked cars on McMasters Street to allow for fire truck and other emergency vehicle access.

The applicant's materials also show overflow parking (24 cars) on the grassed play area in the northeast corner of the site. With the proposed overflow areas, the parking space number would increase from 84 to 128 spaces.

We believe that parking on surrounding streets may prompt neighborhood complaints, and anticipate residents' requests for prohibiting on-street parking in the neighborhood. We are not recommending no-parking signs at this time, but if problem areas are identified in the future, we may recommend parking prohibitions in those areas. Resolution B directs the Town Manager to assess for parking problems on nearby streets at 3 months, 6 months, and 9 months after the school's opening.

*Service Area Parking:* The applicant proposes three service vehicle parking spaces in the service area on the southern end of the building, near the mechanical yard and dumpster area.

*Handicapped Parking and Access*: The applicant must comply with Americans with Disabilities Act standards, North Carolina Accessibility Code, and Town standards for handicapped parking and access. The applicant is proposing to meet these requirements by providing four handicapped parking spaces as shown on the site plan. We have included a stipulation in Resolution A to this effect.

*Northside Mobility Plan:* The Northside Mobility Plan was developed to promote safe pedestrian access and circulation throughout the neighborhood. Key to the Plan are the objectives of continuous sidewalk coverage in the neighborhood and promotion of pedestrian-friendly east-west corridors throughout the neighborhood, recognizing Hargraves Center as a central destination. The plan also recognized the need for improving public safety and security, and noted that traffic calming measures may be added to facilitate safer coexistence of vehicles

and pedestrians along the streets. For the school site and surrounding vicinity, the plan recommended sidewalks, crosswalks, and traffic calming measures along the major vehicle circulation routes, including Caldwell Street Extension and Church Street. The plan also called for reassessing the Town's bus service within the neighborhood. Please refer to the following website link and the attached Northside Mobility Plan maps for more detail: http://www.townofchapelhill.org/index.aspx?nid=1328

The applicant proposes to provide continuous sidewalk on the north side of Caldwell Street Extension along the site's frontage and eastward to Church Street; and on the south side of McMasters Street along the site's frontage. Please see the sections below addressing pedestrian access.

*Pedestrian Access*: Sidewalks exist along the north side and part of the site's McMasters Street frontage; and along the south side of Caldwell Street, across the street from the school. The applicant is proposing a new sidewalk as a continuation of the existing sidewalk along the south side of the McMasters Street frontage. In response to recommendations from advisory boards, the applicant has agreed to extend sidewalk on the north side of Caldwell Street Extension east to Church Street and west to Mitchell Lane.

The sidewalk along the street frontages will comply with ADA requirements where existing grades allow.

An advisory board also recommended that handicap access be provided along the Caldwell Street Extension frontage near the main entrance driveway. Due to topographical constraints, this may not be possible. For further details, please refer to the public hearing memorandum's Discussion section on pedestrian access.

For that portion of the site that will include a bus pull off lane, there will be an 8-foot wide sidewalk; along the remainder of the McMasters Street frontage, the sidewalk will be 5 feet wide. New 5-foot wide sidewalk is also proposed along the site's frontage on the north side of Caldwell Street Extension, and along the eastern property line, linking to the two street frontages.

Along the building edges, sidewalks are proposed which connect to other sidewalks interconnecting the student drop-off area, play areas, parking lots, and street frontages.

During *Council Concept Plan Review*, concerns were raised as to the adequacy and layout of the pedestrian network, and about the potential for vehicular/pedestrian conflicts. The applicant stated that traffic controls will be provided to encourage drop-off only along the front sidewalk in the designated drop-off area.

We have included these sidewalks, paths, and pedestrian traffic control plan as stipulations in Resolution A.

*Pedestrian Crosswalks:* Crosswalks are proposed across all the driveway entrances, as well as across Caldwell Street Extension and across McMasters Street. The applicant is proposing to coordinate with the NC Department of Instruction and Town staff to locate crosswalks in

accordance with state guidelines and the Town's Northside Mobility Plan, which includes traffic calming measures.

The applicant also noted that the school system will comply with Town recommendations in the Northside Mobility Plan, specifically a crosswalk and speed table on Caldwell Street Extension at the greenway trail entrance (roughly across the Chapel Hill Housing site, near the existing bus stop).

*Traffic Calming:* We recommend that traffic calming devices be installed on the public streets around the proposed school, with the location and types of traffic calming devices and the list of streets to meet the recommendations in the Northside Pedestrian Mobility Plan, or alternatives to be approved by the Town Manager.

**Tanyard Branch Greenway:** An unpaved greenway path exists along the western property line. A 10-foot wide paved path is proposed within the greenway, parallel to the western edge of the westernmost proposed parking lot. In response to advisory board recommendations, the applicant agreed to extend the paved greenway offsite southward to Cotton Street. We recommend that the paved path be built to AASHTO standards for mixed pedestrian/bicycle use. We recommend that if the Town Manager determines that expansion of the existing greenways easement is needed in order to include the new paved path, the applicant dedicate the necessary easement expansion prior to issuance of a Zoning Compliance Permit. We have included these recommendations as stipulations in Resolution A.

*Outdoor Recreation Area:* The proposal includes several small outdoor play areas, some grassed, and some paved; a community garden, and an art patio. In response to advisory board comments, the applicant has added a basketball goal, added protective fencing around the play areas, agreed to a mix of surfaces for the pre-kindergarten play area if budget allows, and stated that the school's play areas would be available for neighborhood residents to use during non-school hours. The Parks and Recreation Commission also recommended provision of a backstop or other formal play feature. Due to the play area's proximity to neighborhood houses, we do not recommend a backstop. For more detail, please refer to the public hearing memorandum Discussion section.

*Bicycle Parking and Circulation*: The Land Use Management Ordinance does not have a minimum bicycle parking standard for development in the Office/Institutional-3 (OI-3) zoning district. The applicant is proposing 80 bicycle parking spaces in three different rack locations on three sides of the northernmost half of the building. We believe that for 585 students and 88 staff, 80 bicycle spaces would be sufficient.

During advisory board review, it was recommended that the project include a minimum of 120 bicycle parking spaces. We have included stipulations in Resolution A calling for 80 bicycle spaces to be constructed initially, with an annual assessment of bike parking needs, and up to 40 bicycle parking spaces to be added as needed. For more detail, please refer to the public hearing memorandum Discussion section.

*Transportation Management Plan*: A Transportation Management Plan is a plan designed to decrease the amount of traffic generated by each site by promoting policies that will result in the

reduced use of automobiles. We recommend, and have included our standard stipulation in Resolution A, that a Transportation Management Plan be developed for this site according to the Town's Transportation Management Plan Guidelines and approved by the Town Manager prior to issuance of a Zoning Compliance Permit, and that the plan be updated and approved on an annual basis.

In response to advisory board recommendations, the stipulation in Resolution A pertaining to the TMP has been amended to include an annual report on bicycle parking needs. (See previous section.)

# Landscape, Architecture, Public Art

**Buffers**: Following are the Land Use Management Ordinance standards for landscape bufferyards on this site and the bufferyards proposed by the applicant:

Location	Bufferyard Required	Proposed Bufferyard
Most of Northern Property Line (McMasters Street)	20 ft. Type C	7.5-15 ft. Type C Alternative
Western 20% of the Northern Property Line	20 ft. Type C	20 ft. Type C
Eastern Property Line (Residential)	20 ft. Type C	20 ft. Type C
Most of Southern Property Line (Caldwell Street Extension)	20 ft. Type C	15 ft. Type C Alternative
Western 25% of the Southern Property Line (Caldwell Street Extension)	20 ft. Type C	20 ft. Type C
Western Property Line (Greenway and Residential)	20 ft. Type C	20 ft. Type C

**Bufferyards along Eastern and Western Property Lines:** The applicant proposes to use the existing vegetation along these property lines. The plans call for supplemental plantings as needed along the eastern property line to meet the standards of the Type C bufferyard.

*Alternative Bufferyards along Southern and Northern Property Lines:* Instead of a 20-foot bufferyard with 2.5 large trees, 6 small trees, and 30 shrubs per 100 linear feet, the applicant proposes to install alternative bufferyards ranging from 7.5 to 15 feet in width along most of the south property line (Caldwell Street Extension frontage); and 15-foot bufferyards along most of the north property line (McMasters Street frontage). The applicant states that a 20-foot bufferyard with the requisite planting density would limit visibility to such an extent that students' safety could be compromised.. We recommend that the alternative bufferyards be reviewed for approval by the Community Design Commission prior to the issuance of a Zoning Compliance Permit. We have included a stipulation to this effect in Resolution A.

*Landscape Protection Plan*: We have included our standard stipulation in Resolution A requiring Town Manager approval of a Landscape Plan, including landscape maintenance schedule, prior to issuance of a Zoning Compliance Permit.

At *Council Concept Plan Review*, the applicant was requested to use metal tree protection fencing and has included this feature in revised plans. We have included this as a stipulation in Resolution A.

*Landscape Screening and Shading Plan*: In addition to bufferyard requirements, we note that the applicant's proposal must meet the Land Use Management Ordinance landscaping standards for Section 5.9.6(a-d) which requires landscape areas between parking areas and buildings, landscape screening of ground-level parking facilities, and parking lot shading. We have included stipulations requiring compliance with these requirements in Resolution A.

**Building Elevation, Lighting, and Alternative Buffer Plans**: At Council Concept Plan Review, the proposed building concept and site layout were considered "suburban" in style. Requests were made for the building architecture to incorporate more of the architectural styles and features of a neighborhood school and of structures in the surrounding Northside neighborhood. The applicant indicates that the school is responding to these comments by including a main entrance at the media and gym areas with a radius roof facing the Caldwell Street Extension vehicular access point, and window and porch detailing on the classroom building which reflect details from neighborhood buildings.

We recommend that detailed building elevations, lighting plans, and alternative landscape buffer plan be approved by the Community Design Commission, prior to the issuance of a Zoning Compliance Permit. We have included a stipulation for Community Design Commission approval of: 1) building elevations, including the location and screening of all HVAC/Air Handling Units, 2) a lighting plan to ensure that the proposed lighting plan will minimize a) upward light pollution and b) offsite spillage of light; and 3) an alternative landscape bufferyard plan.

**Public Art:** The applicant notes that the school district intends to include an indoor or outdoor display outlining the history of the school site. The applicant also indicates the school district is open to discussing public art on the site. Resolution A does not include any stipulations with respect to Public Art.

# **Environmental**

*Land Disturbance:* A net land area of 240,000 square feet is proposed to be disturbed as part of this site redevelopment. The applicant has stated that land disturbance will be kept to the minimum possible, especially in the Resource Conservation District and near the tree preservation areas.

*Impervious Surface:* There is currently 92,000 square feet of impervious surface on the site (25% of the site's Gross Land Area), which is slated to be removed. The school application proposes new impervious surface of 160,000 square feet (42% of the Gross Land Area). The Land Use Management Ordinance limits new impervious surface to 70% of a lot. Thus, the proposal is in conformance with the Ordinance.

*Significant Trees*: A declining 40-inch oak in the center of the site and a 29-inch oak on the northern property line are proposed to be removed, along with several smaller hardwoods along the northern and southern property lines. Along the eastern edge of the site are hardwoods of varying stages of maturity. The applicant proposes retaining most of these trees to serve as the required landscape bufferyard.

We recommend that the final plans identify the 13-inch Beech tree listed on Sheet C-4 as "T-44" as a rare tree in accordance with the Land Use Management Ordinance. This tree is slated to remain.

*Steep Slopes:* Approximately 15 percent of the site has slopes of 25 percent or greater, primarily within the greenway on the western edge of the site, and along the Caldwell Street Extension frontage. About 8 percent of the site has slopes of less than 10 percent along the eastern property line. The remaining portion of the site, where most of the construction is proposed, has slopes ranging from 10 to 25 percent slopes.

For the steep slopes area near the greenway, disturbance will be limited to construction of a segment of retaining wall proposed to support the western parking lot; a set of stairs from the parking lot to the greenway; and construction of three stormwater outfalls. For the narrow strip of steep slope area along McMasters Street, the slope will be shifted southward to accommodate a bus pulloff and sidewalk. Along the north side of Caldwell Street Extension, the slope will be crossed by two driveways and four sets of stairs.

*Watershed Protection District:* The proposed development is located outside the Watershed Protection District.

**Resource Conservation District**: The western quarter of the site lies within the Resource Conservation District (RCD). The school proposal calls for 12,500 square feet of disturbance within the upland and managed use zones of the RCD, for a segment of a retaining wall for the western edge of the staff parking lot, and for a paved 10-foot path recommended by Town staff within an existing flat "shelf" below the retaining wall.

Three stormwater outfall crossings exist within the RCD. Minimal additional disturbance is anticipated in the upland, managed use, and streamside zones for upgrading the stormwater outfalls (one outfall per zone).

Table 3.6.3-3 of the Land Use Management Ordinance (Dimensional Regulations in the RCD) provides for a reduced floor area ratio (.01 to .019) for land area located within the RCD. Approximately 1.99 acres of this site are located within the RCD. Applying the reduced floor ratio associated with the RCD reduces the overall permitted floor area on this 8-acre site by 33,414 square feet. The proposed floor area complies with the permitted floor area.

Wetlands: There are no wetlands on the site.

*Stormwater Management*: The proposed redevelopment would increase the impervious surface from 25% to 42%. At *Council Concept Plan Review*, it was indicated that keeping impervious surface to a minimum and that stormwater management were important aspects of site

development.

The submitted Stormwater Impact Statement indicates that the rate and volume of the proposed post-development discharge will be lower than the existing pre-development rate and volume of discharge.

The applicant proposes to provide and install two stormwater detention tanks under the westernmost parking lot to slow the runoff rate and improve the water quality of the run-off from the site's impervious areas. In addition, an underground cistern is proposed off the western side of the building which would contribute to slowing runoff but not necessarily to improving water quality.

This project must comply with the stormwater management requirements of the Land Use Management Ordinance. We have included this stormwater stipulation in Resolution A.

*Erosion Control*: We recommend that an erosion and sedimentation control plan for the site be approved by the State and a copy of the approval be provided to the Town Manager prior to the issuance of a Zoning Compliance Permit. We have included a stipulation to this effect in Resolution A.

*Lighting*: Section 5.11 of the Land Use Management Ordinance requires that "all streets, driveways, bikeways, sidewalks, pedestrian paths, parking areas, and other common areas and facilities shall be lighted where necessary to ensure the security of property and the safety of persons using such streets, driveways, bikeways, sidewalks, pedestrian paths, parking areas, and other common areas and facilities." We recommend that prior to the issuance of a Zoning Compliance Permit that the applicant submit site plans and other required documents to satisfy the lighting requirements in Section 5.11 including the submission of a lighting plan sealed by a Professional Engineer. We recommend that the applicant also consult with the Town's Police Department on lighting for safety. We have included these provisions as a stipulation in Resolution A.

It will be necessary that increases in illumination on off-site property shall not exceed 0.3 footcandles, measured at ground level. Where existing ambient off-site lighting levels are in exceed of 0.3 foot-candles, no increase in measurable off-site lighting levels will be allowed as a result of outdoor lighting in the development. It will be necessary to submit a lighting plan as part of the Final Plan approval process.

*Noise:* The Town of Chapel Hill Code of Ordinances allows for construction operations between the hours of 7:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 9:00 p.m. on weekends for projects for which building permits have been issued. In Resolution A, in the stipulation regarding the Construction Management Plan, there is a provision requiring the applicant to provide information about how the project construction will comply with the Town's Noise Ordinance.

*Energy Management*: At *Council Concept Plan Review*, the applicant was asked to incorporate greenbuilding features such as geothermal heating, porous pavement, and solar hot water

heating. It was noted that the east-west orientation of the building was favorable for incorporating daylighting in the building. The applicant was encouraged to retain this orientation, which is reflected in the current proposal. It was suggested that the energy management strategies could be used as part of classroom curriculum. The applicant was also asked to design to 50% beyond ASHRAE standards.

The applicant has thus far incorporated energy efficient features such as rainwater collection, rooftop solar panels, solar hot water heating, cool roofs, and community gardens. The applicant also states the intent to pursue LEED certification, including geo-thermal wells, and the school district's willingness to incorporate sustainability in the school curriculum. The applicant states that the district is pursuing a achievement of at least 37 LEED credits, with hopes of achieving 57 credits. The proposal includes meeting 35% above the 2004 ASHRAE 90.1 standards.

It will be necessary to submit a detailed Energy Management Plan for review and approval prior to issuance of a Zoning Compliance Permit. (In the accompanying memorandum on the rezoning application, please see the attached Council resolution pertaining to energy management.)

The applicant and Town staff continues to discuss the applicant's energy management proposal. We will inform the Council of any changes to the proposed energy management plan when this item returns for Council action.

#### **Utilities and Services**:

**Refuse Management**: A screened dumpster enclosure is proposed to be located adjacent to the south end of the building. The enclosure will include three refuse dumpsters and several containers for recycling. It will be necessary for the site to comply with the Town of Chapel Hill and Orange County disposal ban on corrugated cardboard. Refuse and recycling collection services are proposed to be provided by the Town of Chapel Hill and Orange Community Recycling.

We recommend that all drive aisles used for access to the proposed refuse/recycling area be constructed of heavy-duty pavement. We have included these as stipulations in Resolution A.

*Solid Waste Management Plan*: We have included our standard stipulation in Resolution A requiring Town Manager approval of a Solid Waste Management Plan prior to issuance of a Zoning Compliance Permit.

*Utility Plans*: All of the necessary utilities are existing adjacent to the site and in some cases may require relocation as part of the construction process. The property owner will be responsible for assuring that these utilities are extended/relocated to serve the development. We have included a stipulation to this effect in Resolution A.

*Overhead Power Lines*: We recommend that all proposed or relocated utility lines other then 3-phase electric power distribution lines be located underground. We have included a stipulation to this effect in Resolution A.

Sewer Line Construction: We recommend all public water/sewer plans be approved by OWASA

and constructed according to its standards. Where sewer lines are located beneath drive aisles and parking areas, construction methods approved by OWASA shall be employed to ensure that sewer lines will not be damaged by heavy service vehicles. Final plans must be approved by OWASA and the Town Manager prior to issuance of a Zoning Compliance Permit. We have included a stipulation to this effect in Resolution A.

#### **Miscellaneous**

*Safety and Security:* The applicant notes that the Town's Fire Station #1 is less than one-half mile from the school, and would provide fire protection and "first responder" emergency medical services. In addition, the school will have a fire suppression sprinkler system. The applicant further states that passive and active security features and protocols will be designed and implemented. Pre-kindergarten students will be escorted into the building by parents or other adults. Visibility and visual monitoring are also part of the safety strategy.

*Construction Management and Traffic and Pedestrian Control Plans:* The applicant states that construction employees' vehicles will be parked on the site during the construction period. We recommend that a Construction Management Plan and Traffic and Pedestrian Control Plan be approved by the Town Manager prior to the issuance of a Zoning Compliance Permit. We have adjusted our standard stipulation to require information about how the project construction will comply with the Town's Noise Ordinance. We have included a stipulation to this effect in Resolution A.

**Deconstruction/Demolition Plan:** The existing buildings on the site are proposed to be deconstructed and demolished. If the applicant's construction plans include a phasing plan that delays the construction of the proposed building following the deconstruction and demolition of the existing structures, then a Deconstruction/Demolition Plan will be required as well as plans for the stabilization of the site during and following deconstruction/demolition. A stipulation has been included in Resolution A requiring a Deconstruction/Demolition Plan. We have also included a stipulation requiring the applicant to work with Orange County Solid Waste staff regarding deconstruction/demolition of the existing structure to maximize recycling of deconstruction/demolition waste.

*Fire:* We recommend that the applicant to install fire protection systems as required by Town Ordinance, the NC Fire Code, and in accordance with NFPA 13. We also recommend that the pavement and all driving surfaces be designed and built to withstand fire apparatus weighing at least 75,000 pounds. We have included these as stipulations in Resolution A.

*Special Use Permit Modification Findings*: For approval of a Special Use Permit Modification, the Council must make the following findings, as set forth in Article 4.5.2 of the Land Use Management Ordinance:

- (a) That the use or development is located, designed, and proposed to be operated so as to maintain or promote the public health, safety, and general welfare;
- (b) That the use or development complies with all required regulations and standards of this Chapter, including all applicable provisions of the Land Use Management Ordinance;

- (c) That the use or development is located, designed, and proposed to be operated so as to maintain or enhance the value of contiguous property, or that the use or development is a public necessity; and
- (d) That the use or development conforms with the general plans for the physical development of the Town as embodied in the Land Use Management Ordinance and in the Comprehensive Plan.

Upon review of the application and information that has been submitted to date, our preliminary judgment is that these findings can be made.

#### CONCLUSION

Based on information available at this stage of the application review process, we believe that the proposal, with the conditions in Resolution A, meets the requirements of the applicable sections of the Land Use Management Ordinance and Design Manual; the standards in the Northside Neighborhood Conservation District; and fulfills the purposes of the Comprehensive Plan.

Resolution A would approve the application with conditions. Resolution B would direct the Town Manager to monitor on-street parking and school-related pavement damage on nearby streets after the school opens. Resolution C would deny the application.

ELEMENTARY SCHOOL #11	STAFF EVALUATION		
350 CALDWELL STREET	COMPLIANCE	NONCOMPLIANCE	
Use Permitted	Х		
Minimum Gross Land Area	X		
Minimum Lot Width	X		
Maximum Floor Area	X		
Minimum Recreation Space	N/A		
Impervious Surface Limits	X		
Minimize Land Disturbance in RCD	X		
Minimum # Vehicular Parking Spaces	N/A		
Maximum # Vehicular Parking Spaces	N/A		
Minimum # Bicycle Parking Spaces	N/A		
Minimum # Loading Spaces	X		
Minimum # Handicapped Spaces	Х		
Maximum # Dwelling Units	N/A		
Minimum Street Setbacks	X (with modification of the regulations)		
Minimum Interior Setback	X		
Minimum Solar Setback	X		
Maximum Height Limit	X (with modification of the regulations		
Minimum Landscape Bufferyards	X (with alternative buffers)		
Steep Slopes	X		
Parking Lot Screening	X		
Public Water and Sewer	X		
Adequate Public School Facilities	N/A		

**PROJECT FACT SHEET REQUIREMENTS** Check List of Regulations and Standards - *Special Use Permit Modification Application* 

N/A = Not Applicable

Prepared:, September 4, 2009