# STATEMENT OF JUSTIFICATION for SPECIAL USE PERMIT MODIFICATION

# ELEMENTARY SCHOOL #11 CHAPEL HILL-CARRBORO CITY SCHOOLS

Chapel Hill Township PIN 9788-18-1797 April 16, 2009

# **Introduction**

Chapel Hill-Carrboro City Schools requests a modification of the existing Special Use Permit (SUP) for the subject property, to allow re-development of the property for a new elementary school. The property consists of 7.89 acres situated between Caldwell Street and McMasters Street, in the north-central portion of the Northside neighborhood. This historic neighborhood has been designated a Neighborhood Conservation District (NCD) by the Town of Chapel Hill.

The subject property is currently used in a moderately intensive non-residential manner, for child care and governmental office purposes. The property was previously used as a school site. Re-development of the property for the intended purpose will be consistent with the historical educational use of the property, and also consistent with the current institutional use. The Applicant proposes to replace the current uses with a more neighborhood-oriented educational facility, which will reflect leadership in energy efficiency and environmental responsibility, and have relatively high-density urban characteristics for a neighborhood elementary school.

# **Justification**

The Applicant believes that the requested SUP modification is justified by all of the required findings prescribed in LUMO Sec. 4.5.2. Evidence in support of these findings is presented as follows:

Finding # 1: 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.

#### General

The proposed elementary school will promote the public's general welfare by providing high-quality public education for local children. The school building and grounds will be a

safe and healthy environment for students, workers, and visitors, in accordance with all applicable zoning, building, health, food-service, and life-safety codes.

# **Emergency Services**

Fire protection and "first responder" emergency medical services will be provided by the Town of Chapel Hill. The Town's Fire Station #1 is located less than one-half mile from the site, as measured along the most likely approach route.

The school building will be equipped with a fire suppression sprinkler system, and will be designed using conventional fire-prevention and fire-management strategies. The site and building plans will be reviewed and approved by the Town's Fire Department, to verify conformance to applicable regulations and standards.

# **Security Measures**

Chapel Hill-Carrboro City Schools operates its school facilities with a very strong emphasis on security for students, workers, and visitors. The facility will be designed and constructed with passive and active security features, and it will be operated with rigorous security protocols as appropriate for an elementary school.

The facility will be designed to provide very good visibility to outdoor areas from the building interior; and to achieve appropriate sight lines around the site and areas adjacent to the site. This design strategy will allow visual monitoring and supervision of outdoor activities by school staff. Where abrupt changes in elevation will occur on the site, guardrails and other safety barriers will be used. Vehicular areas on and adjacent to the site have been designed, and will be managed, to provide separation from student activity areas and pedestrian routes, as practical.

Landscape buffer modifications and alternates will be necessary as visibility from neighboring streets will be crucial in providing for additional monitoring of the site during and after school hours.

In response to several comments generated during the preliminary project reviews, a special emphasis will be placed on reviewing the existing vegetation within the Resource Conservation District (RCD) area on the property for security concerns. In consultation with Town staff, the Applicant proposes to selectively remove or thin certain types of invasive species and other vegetation in this area to increase the general level of visibility, and reduce the potential for hidden activities on this portion of the site. In addition, the project scope will include the removal of existing trash and junk material that has been previously dumped in this area.

## **Utility and Solid Waste Services**

The school facility will obtain public potable water and sanitary sewer service by connection to existing OWASA utility systems, meeting all public health standards related thereto. Solid waste collection for the facility will be provided by the Town of Chapel Hill.

The school's solid waste management methods and facilities will be reviewed and approved by the Orange County Solid Waste Department, for conformance to all applicable regulations and standards.

# **Traffic**

A traffic study has been conducted for the project, in accordance with analytical requirements and study criteria provided by the Town of Chapel Hill. The proposed site improvements and adjoining roadway improvements will comply with traffic study recommendations.

# Pedestrian and Bike Accommodations

The proposed school facility will be pedestrian oriented by design. The school's location within an established neighborhood is purposeful, with regard to optimizing opportunities for alternative forms of access. A network of public sidewalks already exists in the neighborhood, along the streets fronting the subject property. Building entry locations and onsite pedestrian routes will be designed to encourage and safely accommodate pedestrian access to and within the site. Additional sidewalks and pedestrian crossings will be constructed onsite to achieve a high degree of pedestrian emphasis. In addition, a pedestrian connection will be constructed from the school facility to the existing greenway trail located along the western edge of the property.

Bicycle access to the site will be accommodated by the local street network, and an appropriate number of bicycle parking spaces will be constructed on the site to encourage and accommodate biking as a viable means of transportation to and from the facility.

#### **Modal Separation**

The site design provides separation of various transportation modes and activities as appropriate. For example, bus traffic will be segregated from passenger car traffic, and bus movements will be effectively managed with virtually no impact to internal site circulation patterns. The parking areas for parents/visitors and the parking area for staff will be located in different portions of the site, and accessed from separate locations, with no interconnection. Service vehicles will primarily access the building in a location that is remote and disconnected from student and parent/visitor areas, and that does not unnecessarily interact with staff parking areas. Student drop-off locations will allow most students to enter the building without crossing vehicular travel lanes. Pre-kindergarten students will be escorted into the building by a parent or other adult. And pedestrians approaching the building from sidewalks along the street will have a direct means of entry into the building without having to cross vehicular parking areas. These design features and operational protocols will provide an inherent degree of onsite safety while allowing for the wide variety of activities and transportation modes that the site will experience.

Finding # 2: That the use or development complies with all required regulations and standards of this Chapter, including all applicable

provisions of Articles 3 and 5, the applicable specific standards contained in the Supplemental Use Regulations (Article 6), and with all other applicable regulations.

#### General

The proposed project will comply with all applicable regulations and standards. No supplemental use regulations are identified in the LUMO for the proposed use.

# **Zoning**

With approval of the requested zoning amendment, and modifications to dimensional regulations as requested, the proposed use will conform to all zoning parameters set forth in LUMO Article 3. The primary building height in the Northside Neighborhood District is 20 feet at the setback line. The proposed OI-3 zoning district does not have restrictions on secondary building height. The slope formula which creates the building envelope is 1:2 for this site. Approximately 1% of the proposed design exceeds the height limit per the slope formula. The proposed building will require modification of the slope formula to allow for a maximum height of 10 feet above the building envelope. This height is required in order to provide the most effective design given the project purposes and site constraints.

The requested height modification is a result of protecting the site area for use by the school in recreation and as a service to the community. The site area is limited and in an effort to optimize as much open spaces as possible, the building is designed as a three story facility to minimize the impact of the building footprint. The design layout has the building angled to the street to limit the impact of the building height on the street edge and to provide open green space adjacent to the street buffers.

#### **Design Development Standards**

The proposed use will be designed consistent with the requirements of LUMO Article 5. In accordance with this article, the facility will be designed to "protect and conserve environmental resources" such as the RCD area on the site, and to reasonably "maximize energy efficiency and conservation". The building has been configured to take advantage of the site's topography, to minimize grading requirements. Retaining walls are proposed in strategic areas to avoid unnecessary horizontal disturbance adjacent to slopes. Natural steep slope areas on the site are not proposed to be graded, and erosion and sediment control methods will be used to mitigate the effects of land disturbance associated with the new facility.

Rainwater management techniques will be employed to meet or exceed Town standards for runoff rate, volume, and quality control. Landscaping, screening, and buffering will be provided to meet the stated purposes in Article 5.6.1. These purposes will be accomplished by the preservation of existing trees where practical, and by providing a substantial amount of new plantings and other landscape features.

Limited work within the RCD is proposed, consistent with current regulatory allowances. A small existing area of vehicle parking is located in the outer edge of the RCD. This area will be re-constructed and used for parking and service purposes, resulting in a substantial reduction in impervious area within this portion of the RCD. We will also be adding a ten foot wide paved greenway path that will meander through the upland zone and the managed use zone within the RCD. The trail will add approximately 5,000 square feet of impervious surface. Existing outfall pipes located within the RCD will be utilized for stormwater discharge. Runoff rates and volumes will be reduced to these discharge points therefore disturbance due to stormwater discharge should be minimal. Disturbance associated with enhancement to the existing outfall conditions will be based on final design parameters to obtain stormwater approval through the Town of Chapel Hill In addition, limited clean-up work in the RCD is proposed as described above (ref. Finding #1, Security Measures) to respond to safety issues raised by multiple stakeholders, and to make the area more suitable as an outdoor classroom environment for curriculum enhancement.

The new facility will provide for adequate access and circulation for both pedestrians and vehicles, in accordance with the recommendations of a traffic impact analysis conducted for the project. Onsite parking and service areas will be provided, balancing the need to provide vehicle storage with the strong desire to emphasize and encourage alternate forms of transportation. In addition, lighting, utilities, signage, and solid waste management facilities will be designed to conform to applicable Town requirements.

#### Landscaping

The school site will be designed to respect the existing vegetation on site. There are several rare and specimen trees on site which will remain after construction is complete. The existing buffers along the eastern and western property lines will remain intact and supplemental landscaping will be added to these areas as necessary to meet the requirements of the LUMO. Buffers required per OI-3 zoning within the LUMO along McMaster's Street and Caldwell Street do not serve the public purpose within the Northside district, and should be modified to create a safe and inviting environment and to help blend the new school into the fabric of the Northside community. There are four areas in which require modification and alternates to the required buffers. Locations of these buffers can be found on drawings C-5 and L-2. The ordinance requires a 20' wide external type "C" buffer with 5 large trees, 10 small trees, and 36 shrubs per 100 linear feet of road frontage. Landscaping this dense would create a hedge that would limit visibility into the site and would not be appropriate within the Northside community. Given the site as a school, the design should focus on optimizing safety. The alternate landscape buffers will provide appropriate visual screening while still providing line of sight into the property so that in the area can be better supervised as a protection measure for the occupants and the public. The modifications will allow better visual by public service officials when approaching and observing the site. Modification requests are as follows:

Buffer area "A" - 20' wide external landscape buffer with 2.5 large trees, 6 small trees, and 30 shrubs per 100 linear feet of road frontage. (Necessary to provide visibility into site)

Buffer area "B" - 15' wide external landscape buffer with 0 large trees, 9 small trees, and 30 shrubs per 100 linear feet of road frontage. (Necessary to omit large trees because of potential shading of proposed community garden)

Buffer area "C" - 7.5' wide external landscape buffer with 0 large trees, 6 small trees, and 30 shrubs per 100 linear feet of road frontage. (Necessary because of location of proposed retaining wall to provide enough room for Pre-K play area. Large trees have been removed because of lack of planting area between proposed sidewalk and retaining wall)

Buffer area "D" - 15' wide external landscape buffer with 2.5 large trees, 6 small trees, and 30 shrubs per 100 linear feet of road frontage. (Necessary to provide visibility into the site and to minimize conflicts with proposed geothermal wells)

# Sustainability - General

The school building and site will be designed to accommodate the Applicant's special emphasis on sustainability for its facilities. The school will have numerous sustainable features, including but not limited to generous daylighting of interior spaces, rainwater collection and re-use systems, solar energy collection, solar-heated hot water, high-efficiency equipment, energy management systems, cool roof characteristics, and alternative paving treatments.

The sustainable features and characteristics of the facility will meet the Applicant's Policy 9040, which stipulates a high degree of sustainability for new facilities. The Applicant intends that the project will meet the highest level of LEED certification possible within the project parameters. More importantly, sustainable features will also be expressed and presented within the facility in a manner that can be integrated into the school's educational curriculum.

# **Building Configuration and Siting**

The primary building orientation is generally along an east-west axis, which allows the classrooms to face direct north or south depending upon the side of the building. This configuration optimizes daylighting for the majority of academic spaces within the facility. The building's main classroom wing is linear along the east-west axis. Most public spaces such as the gymnasium, media center, dining area, and kitchen are located along a north-south circulation corridor. The spaces that will be occupied as academic space for the majority of the day have been given priority for maximizing daylighting.

The optimized building orientation places the building on the site at an angle to the existing streets, providing open areas adjacent to the facility for playfield and play grounds. The angle allows sufficient area for the entry drive and drop off lane at the front of the facility. At the lower level, the angle provides yard area for playground and open space directly outside of the multipurpose and dining rooms. Along the western edge, lower level parking is provided for staff use. The building orientation along the lower edge of the site allows

the service access and kitchen dock area to be tucked into the slope while providing vehicular access from Caldwell Street.

# Northside Design Guidelines

The Northside Design Guidelines primarily anticipate residential development on small lots. Many of the specific guidelines are therefore not applicable to the proposed project. However, the project design will reflect appropriate neighborhood design criteria, such as those relating to lighting and landscape standards.

The building architecture will provide design elements that coordinate with the community aesthetic. The design endeavors to break down the scale of the facility by providing variation in the exterior wall plane. The design will include brick wall elements with punched window openings alternating with walls segments of lighter materials such as windows and horizontal siding. The exterior walls will shift back to provide porch style roof overhangs on exterior areas at the classroom exit doors. These areas may be used as exterior learning space. Roof details are important features within the neighborhood and will also be important in the school design. Variations in the school's roof edges and details will reflect the various roof elements and slopes expressed in the neighborhood homes. The building materials will be reflective of the neighborhood, utilizing brick in at least two different colors, windows with multiple mullions, horizontal ribbed siding, and some accents of light concrete at sills and for major building elements.

The building spaces that require high interior volumes have been placed at the lower level to minimize their effective scale. These elements, including a multipurpose room and dining area, face the western parking area. The basic exterior design concept will be to provide a school atmosphere with detailing that will blend with the neighborhood. 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."

# **Environmental Protection**

The project's design will conform to all applicable environmental regulations, including but not limited to regulations and policies relative to streams, Resource Conservation District, steep slope areas, and existing trees.

No published floodplain exists on the property, and no structural feature is proposed in any low-lying area. A large area of RCD exists along the entire western edge of the property. No structure is proposed within the RCD, but limited vegetation management and clean-up is proposed in this area to address expressed security concerns and to make the area more suitable as an outdoor classroom environment as previously described.

# Rainwater Management

Rainwater runoff from onsite improved areas will be captured and managed to meet or exceed Town requirements for runoff quantity, rate, and quality. Some rainwater from the roof will be collected and re-used for gardening and for beneficial building purposes.

# Demolition, Deconstruction, and Construction Waste Management

The Applicant has begun coordination with Orange County Solid Waste staff to identify practical ways to deconstruct and re-use existing building materials. Based on preliminary indications, the Applicant expects to be able to divert most of the existing onsite building materials away from the traditional landfill waste stream. For example, the Orange County Public Works Department has expressed a desire to remove some of the existing HVAC equipment and use it for other public facilities. And some existing materials, such as bricks from the buildings and stones from some of the onsite walls, may be stockpiled and re-used in the new facility.

During new construction, solid waste materials will be recycled and/or disposed in a manner consistent with Orange County and Town of Chapel Hill requirements. The Applicant intends to divert at least 75% of the waste from new construction activities to sources other than the landfill.

#### **Energy Efficiency**

One of the project's goals is to achieve a high level of energy use reduction. The design team expects to achieve a thirty-five percent reduction in usage below ASHRAE 90.1, which is the baseline measurement standard. Alternative energy producing elements will be used such as photovoltaic cells and thermal solar collectors. Other systems will be explored and used as appropriate, including solar-heated hot water, high-efficiency HVAC and lighting equipment, energy management systems such as central building controls and occupancy sensors, etc. These system approaches will work together to achieve the highest energy reduction possible within the project parameters.

# Finding # 3: 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.

The subject property has been used in the past as a public school, and is currently used in a fairly intensive manner for a childcare facility and public agency offices. The existing land use is a well established and significant non-residential fixture in the neighborhood, and the presence of this type of land use is already reflected in the market value of contiguous properties.

The school building and site will be a physically attractive facility that sensitively responds to site conditions and to the concerns of local residents. Existing environmentally sensitive areas will be preserved, while being made more secure and attractive by selective removal

of undesirable vegetation and removal of accumulated trash. Perimeter buffers will be provided to mitigate impacts to adjoining properties, and site lighting will be carefully designed to avoid detrimental glare. Site and building design will be in accordance with the adopted Design Guidelines for Northside, as applicable, thereby conforming to preestablished design criteria for the neighborhood.

New schools, particularly within school systems that are known to provide high-quality educational services, are generally considered to have a positive effect on the real estate value of nearby properties. The proposed school facility will be a beneficial addition to the local community. It will provide a local source of quality public education, provide job opportunities for neighborhood residents and other citizens, and be a venue for a wide range of community activities and gatherings.

Based on the foregoing, the Applicant believes that re-development of the subject property for the new elementary school will maintain or enhance property values for contiguous properties, and for properties in the neighborhood at large.

Finding # 4: That the use or development conforms with the general plans for the physical development of the Town as embodied in this Chapter and in the Comprehensive Plan.

# **LUMO and Comprehensive Plan**

The proposed elementary school use will be consistent with the Town's Land Use Management Ordinance (LUMO) and Comprehensive Plan (CP). The site is currently used as a public facility under an existing SUP. The Land Use Plan, which is an element of the CP, identifies the site as "Institutional Use". LUMO Article 1.5 outlines several major themes that are emphasized in the CP. The relevant themes to this request are:

- <u>Conserve and protect existing neighborhoods:</u> The new elementary school will provide a protective effect within the Northside neighborhood, by increasing the attractiveness of the neighborhood for families and owner-occupants, and encouraging longer-term residents to occupy the neighborhood residences, naturally leading to a neighborhood population that is more stable and invested. The new elementary school will thus be a stabilizing force that will have a protective effect on the social fabric of the Northside neighborhood. (Also see the "Statement of Justification for Zoning Atlas Amendment" for the subject property, incorporated herein by reference.)
- <u>Conserve and protect the Town's existing natural setting:</u> The proposed project design will protect and enhance the environmentally sensitive natural areas on the site, such as the RCD. In addition, the project will provide additional natural landscape elements within buffer areas, parking areas, a community garden, and other appropriate areas within the site.

- Encourage desirable forms of non-residential development: The proposed elementary school will not generate local tax revenue directly, but neither does the current governmental land use on the property. The new school will be a beneficial non-residential development with desirable attributes and positive community impact. It will serve vital public educational purposes, express leadership in sustainability and environmental responsibility, and provide a valuable neighborhood venue for secondary activities that will contribute to neighborhood identity and quality.
- <u>Complete the bikeway/greenway/sidewalk systems:</u> An existing greenway trail and easement is located on the western edge of the property within the RCD. These features will be preserved as the property is re-developed, and a new pedestrian connection will be constructed from the school to the greenway trail.
- **Provide quality community facilities and services:** Chapel Hill-Carrboro City Schools is recognized as a quality provider of educational services to the local community, and as a leader in the construction of high-quality educational facilities. The new school facility will continue the CHCCS record of providing a high level of service to the local community, within a facility that will be recognized for leadership in sustainability.

Northside NCD Plan: The Vision Statement contained in the Northside Neighborhood Conservation District Plan outlines several objectives to be accomplished by development in the neighborhood. Some of the objectives relevant to the proposed project are:

- <u>Preserve the history, charm and composition of a proud and historic community:</u>
  The proposed school will reinstate the historic educational usage of the property and will support the historic family-oriented composition of the neighborhood.
- <u>Protect the family atmosphere:</u> The new elementary school will serve neighborhood families in several important ways. It will provide a neighborhood source of high-quality elementary education, provide expanded education-related services such as after-school programs, serve as a venue for community meetings and activities, and be a source of shared community experiences for neighborhood children and parents.
- Nuture an environment that promotes community interaction: Pre-design meetings have been held with project stakeholders, which have included neighborhood representatives. Input and design guidance taken from neighborhood citizens have strongly influenced site and building design for the new school. This collaboration with the neighborhood will continue through the final design phase, giving voice and investment to neighborhood residents, and promoting an interactive community spirit in the design process.

# **Summary**

The Applicant believes that the requested SUP modification is justified by all of the required findings prescribed in LUMO Sec. 4.5.2; and further believes that these findings are supported by the materials contained in the SUP application for the subject project, including the written evidence presented above.