EXECUTIVE SUMMARY

The proposal by Alexandria City Public Schools (ACPS) to build a new T.C. Williams High School provides the City with a singular opportunity. This state-of-the art facility will allow ACPS to deliver a school that, over the next decades, will represent the best in educational programming and design, all while addressing the particular makeup and needs of Alexandria's high school population.

Prospects for Alexandria students are especially exciting in light of the recently proposed and completed improvements to other city schools, including George Washington Middle School, Hammond Middle School, and Minnie Howard Ninth Grade Center. The educational edge provided to the students of these schools, through modern additions and technology upgrades, will be fully realized as they continue learning at a new, equally modern T. C. Williams High School.

Staff endorses the T.C. Williams High School project, and recommends approval of the land use requests discussed in these reports, subject to staff's recommended conditions.

Land Use Issues

The new high school, proposed to be built on a relatively small site, presents several issues from a land use perspective. Some of the land involved must be rezoned to accommodate the school; the increased size and height of the building require special use permit approval; and the distance between the building and its neighbors on two sides is narrower than required for a building of this size, which requires zoning modifications.

City staff, ACPS staff, and ACPS consultants have worked extensively over the last several months on this complex project, to collaboratively produce the best possible facility and site improvements. In response to concerns expressed by City staff and property owners neighboring the school site, the following issues have been addressed:

- maximizing open space and recreational facilities
- reducing the perceived mass of the building through architectural techniques
- landscaping to soften the appearance of the building and enhance outdoor spaces
- addressing parking needs
- ensuring the smooth flow of traffic on school property and King Street
- creating usable streetscape and pedestrian environments
- reducing noise and other impacts on adjoining properties
- securing the building and grounds for safe educational and community use
- phasing construction so as to minimize disruption for students, neighbors, and the greater community

Each of the above issues is discussed in detail in the reports that follow. The most significant issues and solutions are summarized below.

The Proposed School Site

The planning process for the school has been guided by two decisions: to build the new school only on school land, west of Chinquapin Drive; and to allow the existing school to operate while the new school is built, thus not requiring a temporary, off-site school facility during the construction period. Also guiding the process are the desire to preserve open space and retain the school's existing track and stadium in their current locations. All of these factors effectively limit the available land to the area east of the existing school building and west of Chinquapin Drive.

With such a large building (460,000 square feet) in such a small allowable area, the result is a school with a massive appearance.



New T.C. Building (Chinquapin Center bottom left)

In order to address the impact of the proposed building, staff has worked with ACPS to create a welcoming yet highly functional facility for students and the community.

Open Space and Recreational Uses

While the proposed new building is large, and will be located close to King Street and Chinquapin Drive, it will be framed by significant open spaces. Chinquapin Park is adjacent to the building on the east side, and city staff has collaborated with ACPS to create a broad open space, with a new athletic field, along King Street on the school's west side.

The new open space serves a dual purpose: to provide relief from the prominence of the school building, and to provide shared athletic and recreational facilities, which has been another driving factor in designing the new school building. In addition, the school's interior has been rearranged to place the gymnasium and athletic facilities close to the Chinquapin Recreation Center, to maximize joint student/community use of both facilities.

Green Building

The new school complex is being built as a "green" building, in keeping with the Leadership in Energy and Environmental Design (LEED) program. The LEED rating system for environmentally-friendly construction sets a standard for determining the environmental components of a project. ACPS voted to support a sustainable design, and its consultants have designed a variety of features for the school that meet the LEED requirements. The school's green facilities include a large underground cistern for capturing and reusing rainwater, landscaping with native species, reduced light pollution and use of natural light, a recycling program for building materials, reduced energy and water use, and use of chemical-free and recycled interior materials.

Architecture

City staff has worked with the school architects to preserve their building design concept, while minimizing the perceived mass of the building through architectural treatments. Those treatments include adding recesses and projections along the long building walls, designing special entry elements, adding architectural details to provide a smaller visual scale, and varying the roof line. The alterations provide as much visual relief as possible given the expanse of the structure, and help achieve a well-proportioned, dignified appearance appropriate for a prominent civic building.



Front of Building - King Street



Front West Side of Building

Pedestrian Environment

One of the most significant areas of design focus has been on the pedestrian who uses the school building and grounds. The goal has been to achieve functional, convenient, and attractive places for people to walk between functions within the school site (for example, from the parking garage to the building or an event venue), as well as between the school facilities and Chinquapin Park and Recreation Center. Additional design improvements to the pedestrian plan are recommended by staff and additional work will be completed as part of the final site plan.

The outdoor spaces on the overall site will be enhanced with landscaping, and the site plan includes several important pedestrian areas for access and gathering. Some examples are:

• A large arrival plaza located at the center of the site, between the entrance to the school and the parking lot. The plaza is adjacent to the student drop-off area and the bus loading area, and provides a direct path to the track and stadium field. Designed to include trees and decorative pavers, the plaza pulls together several functions and creates an attractive ceremonial entrance for vehicles and pedestrians.



Main Entry Plaza

- A rear pedestrian walkway along the east/southeast of the site. Students and citizens will be able to follow a decoratively paved and landscaped path from Chinquapin Park to the stadium field, and from the field to the parking garage.
- A formal streetscape along King Street, with a 10-foot sidewalk and street trees along the long, 1000-foot frontage.
- A student commons area, on the King Street frontage and in the middle of the building, which provides architectural interest in addition to a screened outdoor dining/meeting area adjacent to the cafeteria.

Parking

The question of parking for the high school has been central for ACPS and the city. ACPS is committed to providing adequate parking for all the school's uses, which include a comprehensive after-hours adult education program, athletic events, and community functions.

The proposed parking plan calls for a two-floor parking garage to occupy the land west of the new school facility (where the current building stands). The garage will provide 416 parking spaces for staff and for students with parking permits. Additional on-site parking will be allotted for visitors and staff, for a total of 431 – nearly 25 percent more spaces than are available at the school today.

While there is some concern regarding the need for overflow parking, during such times as when two events occur simultaneously, the school will continue its current utilization of off-site parking to augment its own.

Community Concerns

Seventeen single-family homes are located on the rear (Bishop Lane) and west (Woods Avenue) boundaries of the school site. The owners of these and other nearby properties continue to be impacted by living so close to a large, active high school. To provide a venue for concerns, City and school staff have held meetings with many community groups, and several issues raised during these meetings have become staff conditions for development approval. Specific recommendations include a prohibition on permanent lighting at the stadium, limits on vehicular access at Woods Avenue, and provision of landscaped buffers.

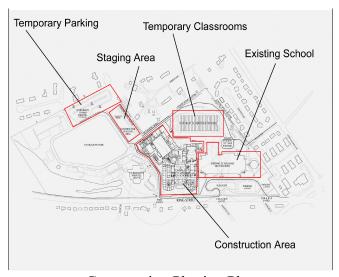
ACPS is also collaborating with neighboring property owners on a series of operational issues for the future, which address the use of the stadium and other athletic fields; the use of the sound system for the fields and the school; parking for the Oakland Baptist Church; and hours for deliveries.

Perhaps the most important development to come from the neighborhood meetings is the establishment of two advisory committees. These committees, composed of representatives from ACPS, the City recreation department, and neighborhood groups, provide a forum for discussion and resolution of issues that may arise during construction or after the new school has opened. ACPS has agreed to coordinate the committees, and City staff has included a condition ensuring the coordination.

Construction Phasing

Staff is aware that construction of a new high school at this centrally located site on King Street will cause disruption for students, teachers, neighbors, and the greater community. Under ACPS' current schedule, construction will begin in 2004, with the new main school building opening in September 2007 but with construction continuing through much of 2008.

During that time, there will be new routes for traffic to enter and leave the school site, temporary parking facilities, and temporary classroom facilities for some students.



Construction Phasing Plan

City staff is working closely with ACPS to address concerns regarding each of these disruptions. Detailed phasing plans, completed early in the final site plan review process, are required by the staff conditions.

Generalized phasing plans are included with the current ACPS application and show the use of the stadium field for school trailers or temporary buildings. T. C. football games will take place at an alternative location, likely at a Fairfax County school facility. In addition, the practice fields behind the school, along the Chinquapin Drive loop, will be used for temporary parking and construction staging.

The existing school building and some of its parking lots will remain operational for buses and staff during construction.

Conclusion

Staff recommends approval of the development special use permit (including the associated rezoning, master plan amendment, and zoning modifications and approvals required) for the T. C. Williams High School project. Although the building is large, particularly given the limited available land area, ACPS and the City have worked collaboratively to enhance the facility's appearance while preserving its intended functionality.

Docket Item # 16 DEVELOPMENT SUP # 2003-0044 T.C. WILLIAMS HIGH SCHOOL

Planning Commission Meeting January 6, 2004

ISSUE: Consideration of a request for a development special use permit, with site

plan, subdivision, and site plan modifications, for construction of a new high

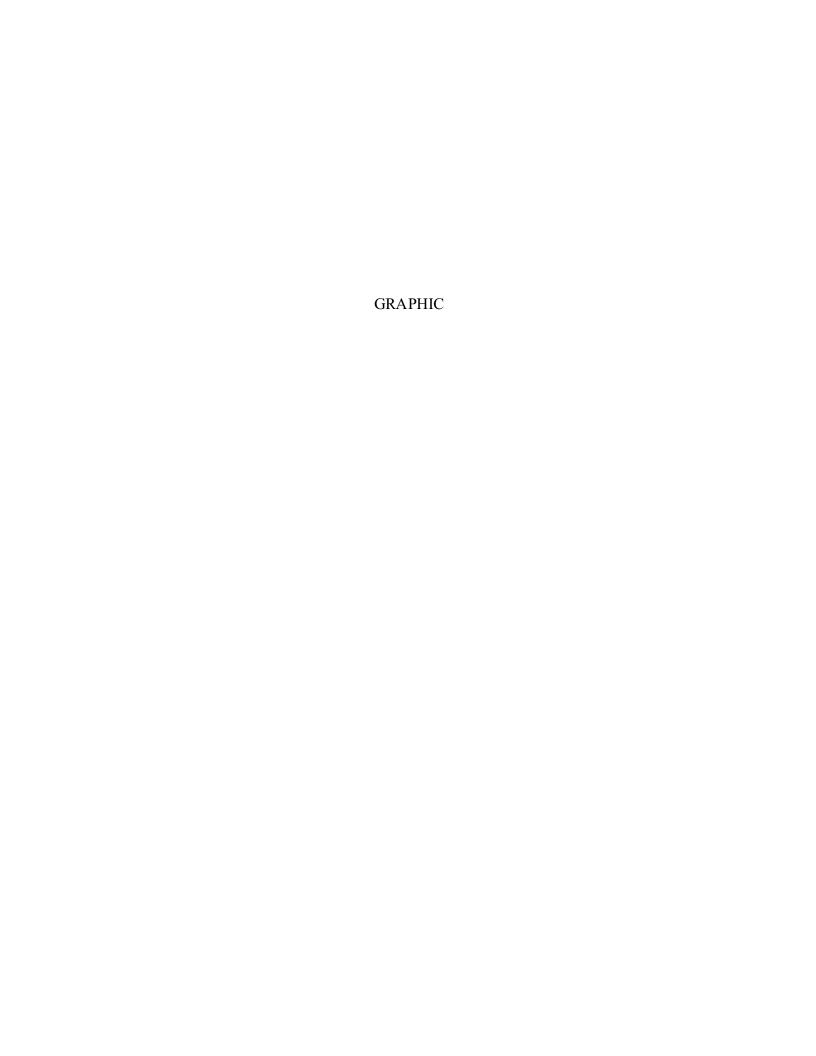
school which exceeds the FAR and height in the R-20 zone.

APPLICANT: Alexandria City Public Schools, by J. Howard Middleton, attorney

LOCATION: 3330 King Street

ZONE: R-20/Residential zone

POS/Public Open Space zone



I. BACKGROUND

A. T.C. WILLIAMS HIGH SCHOOL SITE

1. Land Parcels

At the geographical center of the City is a 51-acre site that includes T. C. Williams High School, Chinquapin Park, and Chinquapin Recreation Center. This complex of open space and buildings includes schools, parks, and recreational and community facilities, and comprises the largest single area in the City devoted to civic use. It is fitting that the City's one high school be located there.

The school's 28-acre portion of the site consists of two separate parcels: a 19.8-acre tract, where the existing T. C. Williams building, the stadium, and most of the Career Tech Wing and parking lots are located; and an adjacent 8.5-acre tract of open space, which forms an "L"-shaped land area along Chinquapin Drive and includes the remainder of the Career Tech Wing, temporary classroom trailers, and additional playing fields. The school property is separated from the City's park lands by Chinquapin Drive.



School Owned Parcels

2. History of the Site

Since 1965, T.C. Williams High School, named for the ACPS Superintendent who retired in 1963, has been the defining landmark at King Street and Quaker Lane. But before the school existed, this triangle of land was defined by the Chinquapin Village government housing development and the African-American neighborhood known as Mudtown.

<u>Chinquapin Village</u>. The Chinquapin Village development was built in 1941 by the federal government as housing for Alexandria's torpedo factory workers, occupying part of what is now Chinquapin Park. After World War II, Chinquapin Village was purchased by the Alexandria Redevelopment and Housing Authority, providing housing for war veterans and later becoming the City's first subsidized housing development.

<u>Mudtown</u>. Neighboring Chinquapin Village to the west was the neighborhood of Mudtown, or Macedonia as its residents knew it. Mudtown formed circa 1900 on the City's western edge as an outgrowth of the limited availability of housing options in Alexandria for African-Americans. Nicknamed for its muddy, undedicated access lanes, Mudtown had formed before most building codes were in place and had no sewers, paved streets, or fire hydrants. In order to accommodate a new high school there, residents of Mudtown were relocated, many to new houses built adjacent to the school site as part of one of the country's first urban renewal projects.

<u>Chinquapin Park.</u> In 1965, the City's Department of Planning began to design Chinquapin Park as a reuse of the Chinquapin Village land. The final tract of land for the park included Chinquapin Village plus adjacent parcels acquired by the City between 1968 and 1971. Efforts to expand T.C. Williams High School into the park were prevented by the City Council in 1976, in order to preserve open space.

3. Land Use Context

The large, triangular-shaped T. C. Williams/Chinquapin site is surrounded by a variety of uses, primarily residential, with single-family houses, townhomes, and apartments adjacent to the school site. A number of institutional uses are also in the vicinity. The Oakland Baptist Church and First Baptist Church sites are located on King Street, adjacent to the site; and nearby, on Braddock Road, are the Everly Wheatley Funeral Home, Scottish Rite Temple, and Blessed Sacrament church.

Perhaps the most defining characteristic of the site's land use context is its ideally centralized location on King Street, close to Braddock Road and Quaker Lane. These major arteries link the school to all areas of the City and provide students, staff, and citizens with easy access to the school and the adjacent complex of recreational and community facilities. The site is also close to several light commercial centers, which include a variety of uses – doctors' offices, gas stations, dry cleaners, garden nurseries, grocery stores, restaurants, and other small retail outlets.

B. EXISTING T.C. WILLIAMS FACILITY

The T.C. Williams complex was constructed in 1965 (Site Plan #63-086); the Career Tech Wing was added in 1976 and the Sports Barn in 1982.

1. General School Program

T.C. Williams High School serves grades 10 through 12 and had an enrollment of 2,037 students and 192 teachers as of September 2003. T.C. Williams currently offers a curriculum of 188 academic courses, as well as offering Career and Technology education programs such as business, marketing, health occupations, trade, technology, and work and family studies. The school is the site for the Secondary Training and Education Program



Existing School Entrance

(STEP), an alternative education center designed to meet the academic and social needs of 125 secondary school students who may not be achieving success in the regular school programs. The City's adult education program is also based at T.C. Williams, with approximately 585 students utilizing the school's facilities after hours.

Students at T.C. Williams participate in 17 interscholastic sports, with approximately 25 percent of students involved and making use of the athletic facilities and fields on the site. There are also more than 55 clubs and organizations in which students participate.

2. Land Use and Building

The existing school complex consists of a number of connected structures. The main building is a two-story, 355,000 square-foot concrete-frame building with brick infill panels and a prominent, canopied main entrance in the center of the King Street frontage. The main building is situated about 250 feet back from King Street and measures about 525 feet in length. The school has a number of other attached structures, including the music pavilion on the west side of the building, the vocational training wing on the east, and the athletic field house extending southward toward the stadium.

The building complex is situated close to Woods Avenue on the west, and set back approximately 200 feet from Chinquapin Drive. Many mature trees grow in front of the building, within the curving, symmetrical vehicular drop-off drive, which serves as the principal bus loading zone and a parking area for 340 cars. Service to the school is through an access point on Woods Avenue, on the west side of the building. The stadium, with its bleachers, main playing field, and 440-yard track, are to the southwest of the main building, as are tennis courts and other playing areas.

ACPS has determined that the a new school is warranted because the T.C. Williams facility has grown antiquated. Its classroom facilities are proving inadequate, its building design no longer affords the institution of innovative educational techniques, and its infrastructure does not permit the implementation of the technological advancements required for the education of today's high school students. The new high school building will address these deficiencies, allowing for increases in student enrollment and enabling ACPS to stay in step with progressive education. (See Attachment 3 for ACPS' assessment of the need for a new school.)

3. Recreational Facilities

The existing school complex features athletic facilities for its students, including several playing fields and the City's only football stadium. The school complex is also an important recreational facility for the community, used regularly by the City's Department of Recreation, Parks and Cultural Activities (RPCA) for summer and vacation camps, spring/fall youth soccer games and practice, and summer football camp. An annual citywide cheerleading event and the Hershey Track and Field event are also held at the school.

The school's sports barn is used by youth soccer, youth baseball, youth basketball, and other organizations, and the neighboring residential community uses the stadium track for exercise. A

large community park and public facility also occupy the T.C. Williams/Chinquapin site.

4. Additional Community Uses

ACPS identifies the following groups as regular users of the school building:

- Alexandria Harmonizers
- Chris Collins Youth Talent Conference
- *Alexandria Singers*
- Rep. Jim Moran Womens Conference
- Campagna Center
- Delta Sorority
- Port City Playhouse
- Yohnex Sports Body Building Competition
- City of Alexandria Housing Fair
- Alexandria Business and Professional Women's Association
- Crowe Dream Builders
- Pro-Bolivia Committee
- Various church services

The school building is also used widely by the community for City-sponsored events such as Student Career Day and the Home Ownership Fair, and instructional programs such as Continuing Education. A number of plays, musical performances, and other cultural events are held in the school auditorium.

C. PROCESS FOR PLANNING A NEW SCHOOL

When ACPS determined that the physical facility of the current T.C. Williams High School would limit the ability of ACPS to continue to provide a superior educational experience, it began a lengthy, collaborative process by which it arrived at the current proposal for a new high school. Beginning in 2001, ACPS met with a variety of interested educational, community, and City groups to outline issues and options, and in late 2001, architectural consultants were hired to add expert guidance to the planning process.

1. Location of new school

An early issue in the planning process was whether to use the existing T.C. Williams site for the new school or, in conjunction with the City, use the Chinquapin Park site in for a new school and create a new City park on the existing school site. After a September 2002 joint work session of the School Board, the City Council, the Planning Commission, and the Parks and Recreation Commission, and after a Town Meeting on September 19, 2002, the School Board unanimously approved the location of the new building on the its existing site.

For a more detailed chronology of the planning for the new school, along with several early site options that were considered, see Attachment 4.

2. Joint Recreational Use

Another issue central to the planning effort was designing the new school to maximize its joint function with the adjacent Chinquapin Park and Recreation Center. Starting in late 2002, ACPS, the City, and their respective architects began collaborating with the Parks and Recreation Commission, the Commission on Aging, and City Council representatives towards this goal. The resultant T. C. Williams building design places all athletic and recreation functions, including the gymnasium and locker room facilities, in the southeastern corner of the school plant, adjacent to Chinquapin Park and Recreation Center.

The group continues to work together on the potential future uses for a renovated Chinquapin Recreation Center.

II. PROJECT DESCRIPTION



King Street/Western Approach

ACPS describes the new T.C. Williams as a state-of-the-art high school housed in an architecturally attractive building that will meet the educational needs of the community. The new school is designed to accommodate 2500 students and 300 staff members. Building plans indicate a facility with approximately 460,000 square feet of floor space, consisting of a core academic area with approximately 100 classrooms; a media center and communications cluster; a visual arts area; performing arts classrooms and a 1200-seat auditorium; physical education and athletics areas, including three gymnasiums; a career technical education center; a student center; a building and ground services area; and an administration area.

The existing track and football field will remain in their current locations.

The school includes a large new kitchen, which will serve the other ACPS schools, and a cafeteria of sufficient size to allow a closed campus for students. Other facilities at the school include the STEP program, automobile shop, and a day care center for students' children.

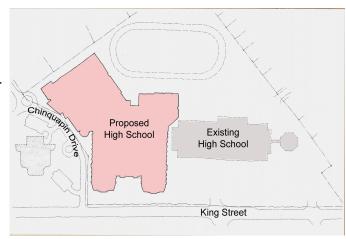
The school will be served by a 416 space parking garage on the west part of the site.

A landscape plan is included in the proposal with the goal of providing an attractive frontage along King Street and a buffer for the adjacent homes.

Designing a building with these and other features on the land available, and making it attractive, convenient, and compatible with neighboring uses, has been a challenging but exciting endeavor.

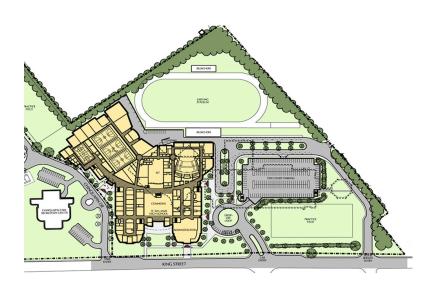
A. SITE DESIGN

The decision to locate the new T.C. Williams school building at the site of the existing school, combined with the need to maintain the current high school building for its students during the four years of construction, results in a constrained land area on which to construct a large facility.



Proposed (left) and Existing (right) Buildings

After the new high school building is completed, the existing school will be demolished. The west part of the site will then be developed with a two-story parking garage and a new playing field.



Proposed T.C. Williams Site Plan

B. SCHOOL BUILDING ORGANIZATION

The proposed high school building presents a 370 feet King Street facade, and features a pair of three-story pavilions which make the building's main impression and provide five academic "houses," or subdivisions, within the school. One of the pavilions acts as the ceremonial entrance for pedestrians from King Street.



Proposed T.C. Williams Front Elevation

The front part of the building also includes the administration wing and the media center on the second floor. A large central cafeteria, including a "commons" area outside the building, connects the two academic wings, and a 60-foot recess between the wings provides a visual break in the building facade.

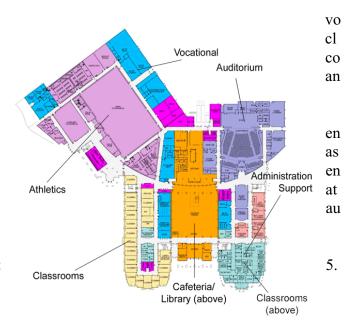
The height of the building varies dramatically at different locations, depending on the function. Although the academic pavilions are three stories tall, many of the building operations and assembly functions (including the auditorium, athletic area, cafeteria, and service areas) are on the first floor and are connected by a circulation spine—or "main street"—that runs through the building from west to east.

The auditorium is located behind the administrative offices in the southwest corner of the building. Opposite it in the southeast corner of the building are the large athletic spaces, including three gymnasiums and locker rooms. The gyms and the auditorium are necessarily higher internal spaces and occupy the equivalent of two stories.

The remainder of the first floor includes the cational training areas and performing arts assrooms, as well as service areas for the entire mplex, including the delivery dock, kitchen, d mechanical areas.

The athletic wing has a fully developed trance on Chinquapin Drive which also serves one end of the circulation corridor; the other d of the internal street is the main student entry the arrival plaza and is directly adjacent to the ditorium.

Detailed floor plans are included at Attachment



Proposed General Floor Plan

C. PEDESTRIAN CIRCULATION



Pedestrian access to the building site is proposed as a system of sidewalks connected to the King Street sidewalk, the central arrival plaza, and throughout the campus. The exterior entrances connect to the internal circulation corridor, providing a connection between the garage and the auditorium or gymnasium.

Pedestrian Circulation (in red)

D. PARKING

One early decision in the design work for the new school was to provide a parking garage rather than surface parking, in order to accommodate the large number of requisite parking spaces without using more land area than necessary. The open space preserved by the garage is significant – the school's engineer calculates that to achieve the same number of garage spaces on a surface lot would require 178 percent of the surface land area needed for the garage.

The school site includes a total of 431 parking spaces. In addition to the parking garage, which includes 416 parking spaces for students and staff, the site has two small surface parking areas with specific designations: eight visitor spaces are located near the front entrance; seven spaces behind the cafeteria and loading area are available for service staff.

E. VEHICULAR CIRCULATION

There are three main vehicular entries proposed for the new school.

1. Kenwood Avenue

The principal vehicular entry for parents, students, and staff will be from the existing intersection of King Street and Kenwood Avenue. Kenwood Avenue will extend south into the site in a split driveway, and provide access to the parking garage, the surface visitor parking spaces, and the main visitor entrance to the building. The extension ends in an entry court, which will serve as a major drop-off and pick-up location for students and as the main student entrance.



Vehicular Entries

2. Chinquapin Drive

A second means of vehicular entry to the site is on the east side of the high school property, from the existing Chinquapin Drive, which currently provides access to the Chinquapin Drive loop and the Chinquapin Recreation Center. There are several points of entry along this side of the building, most notably the proposed drop-off and plaza area at the connection between the academic and athletic wings.

Further south on Chinquapin Drive there is a proposed turn-around, to provide an opportunity for cars to discharge or collect passengers and to leave the site again without continuing around the Chinquapin Loop or entering the recreation center property.

3. Radford Street

An additional entrance will be located at Radford Street, and will be restricted to school buses and service vehicles driving to the bus loop behind the parking garage or the service area behind the school. The separation of buses and trucks from private vehicles on the school site is intentional, and an important safety element of the proposed site plan.

III. ZONING AND LAND USE APPROVALS

ACPS is requesting approval of a development special use permit, with a site plan, for the new T.C. Williams High School complex. In a separate case, the applicant seeks a rezoning and master plan amendment for some of the land on which the new school will be built. See MPA #2003-10 and REZ#2003-06.

A. Zoning

The main school site is zoned R-20/Residential, similar to the single-family land areas to the south and west of the school. Public schools are a permitted use within the R-20 zone.

However, locating the new school between the existing building and Chinquapin Drive has required that the building site include a 3.8-acre parcel of land now zoned POS/Parks and Open Space and used currently for parking and classroom trailers. ACPS is requesting a rezoning of the parcel to R-20, to allow construction and to consolidate the parcel with the main school site.

ACPS also proposes to subdivide the rezoned parcel from the remaining ACPS land, which will retain its POS zoning and continue its use as parks and open space.

B. REQUIRED SPECIAL USE PERMIT AND ZONING MODIFICATION APPROVALS

Special use permit approval is required for the new school building because the floor area ratio (FAR) and height of the building exceed the amount allowed in the R-20 zone. In addition, the building requires approval of modifications of the required zoning setbacks at the front of the new building along King Street and on the east side of the building next to Chinquapin Drive. SUP approval is also required for temporary classroom trailers, which will be used during construction, and for the main T. C. Williams High School freestanding sign, to be located on King Street.

1. FAR

If the 3.8-acre parcel of POS land along Chinquapin Drive is changed to R-20, the FAR of proposed school building and covered floor of the parking garage will be .51. The R-20 zoning permits a .25 FAR, but public schools may achieve up to a .6 FAR with special use permit approval.

2. Height

Under R-20 zoning, the allowable maximum height for a school building is 40 feet; with a special use permit, a height of up to 60 feet is allowed. To accommodate the school's programming needs, the building is three stories high, with a maximum height of 52.8 feet at the planetarium near the center of the school. The applicant is therefore requesting a height increase of 12.8 feet under this SUP.

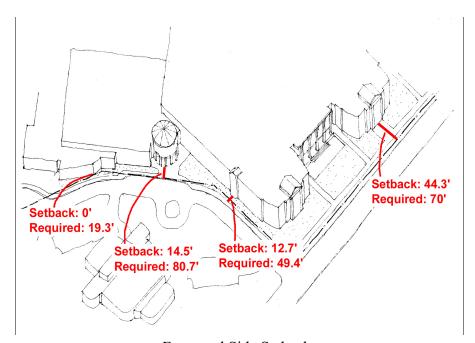
3. Front Setback

The school building projects toward King Street to varying degrees, with a portion of the main

building as close as 44.3 feet, instead of the 70 feet required by the R-20 zone. The zoning ordinance permits a modification of the setback rule where warranted. The applicant is requesting approval of a 26-foot modification of the front yard requirement.

4. Side Setback

On the eastern edge of the site, the building is very close to Chinquapin Drive and the Chinquapin Park property line. The distance here also varies, but at one point the setback is zero. A modification is necessary of the required ratio of one foot of setback for each foot of height at each point.



Front and Side Setbacks

5. <u>Temporary</u> Trailers

The new high school will require significant relocation of classrooms during construction. Because the zoning ordinance requires an SUP for approval of temporary classroom trailers, ACPS has included a request in this application for the 25 to 40 trailers it proposes to place on the stadium field during construction.

6. School Sign

The zoning ordinance requires SUP approval for any freestanding sign at a school. The new T.C. Williams High School plan includes a proposal for a freestanding sign near the school's entrance along King Street.

T.C. Williams High School SUMMARY OF PROPOSED DEVELOPMENT*

Property Address: 3330 King Street

Total Site Area: 28.3 acres

Zone: R-20 (23.7 acres) and POS (4.62 acres)

Current Use: Public High School
Proposed Use: Public High School

	Permitted/Required	<u>Proposed</u>	
Floor Area	258,093 sf/619,423 sf w/SUP	547,000 square feet	
FAR	.25/.6 with SUP	.51**	
Yards			
Side	25 ft. (1:1)	0 ft.	
Rear	25 ft. (1:1)	42.2 ft.	
Front	70 ft.	44.3 ft.	
Height	40 ft/60 ft. with SUP	53 ft.**	
Parking	250 (1 space/10 students)	444	

^{*} Zoning shown is based on rezoning approval

^{**}SUP required for increased FAR and height

IV. ANALYSIS

Staff supports this proposal for a new high school, including the requisite zoning changes and approvals. Over the last several months, City staff, ACPS staff and their consultants have worked together extensively to address the significant issues involved in this complex undertaking and, in addition, have worked with the community to address their concerns. The goal has been to find ways to design a school facility that is functionally sound and is appropriate for its context on the site, as a prominent feature in the neighborhood, and as an important civic building for Alexandria.

The following major issues have been City staff's focus.

Site and building design

Maximizing Open Space Creating a Strong Streetscape Along King Street Making Pedestrian Spaces Enhancing the Architectural Design Landscaping as a Site Feature

- Parking and transportation management
- Neighbors' concerns
- Special features of the new school

Green Building Technology Security ADA Access Public Art

• Construction Phasing

These and the other issues that have attended the development of this site plan and building project are each discussed below.

A. SITE AND BUILDING DESIGN

The building's location on the school site results in a very large building that is located very close to King Street and Chinquapin Drive. Therefore, significant time and effort has been spent attempting to ensure the most appropriate building and grounds possible on a site that functions well for both the users of the school and the community at large.

The proposed building is large – almost 500, 000 square feet – with a 370-foot long facade along King Street. The western face of the building extends about 490 feet toward the stadium area. The east side of the building along Chinquapin Drive is about 625 feet in length; it extends roughly 275 feet to where it angles directly south another 340 feet. The rear building elevation is 320 feet long, and the portions of the building facing the stadium are 280 feet (facing due west) and 265 feet long (facing southwest).

The height of the building varies dramatically at different locations, depending on the function. The

academic pavilions along King Street are three stories tall, but there are two story spaces, including the gym and auditorium behind the pavilions and one story portions of the building in the rear. The height of the building along its southern perimeter is 19.3 feet.

The typical height of the three-story volume of the building is about 45 feet from the average grade around the building. However, due to the slope of the site, the building appears taller from the northeast and shorter from the southwest. Along King Street at the Chinquapin Drive entrance where the building roof is higher, the building height is 58.6 feet above the grade, but that does not include the 12 feet of additional berming to be installed above sidewalk level.

In addition, the building is located extremely close to King Street and Chinquapin Drive. Although the setbacks on each frontage vary, the King Street setback area is reduced to 44 feet at one location and, on Chinquapin, there is a point with no setback at all. By comparison, the existing high school building is setback approximately 250 feet from King Street and the area in front of the school contains a number of mature trees that now screen the building.



Aerial View from the East

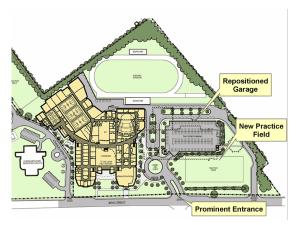
The challenge in this case has been to create a building and a setting that reduce the visual intrusion of such a large school building, and make it and the school grounds an attractive location, compatible with its surroundings. Specifically, staff has worked to balance the large size of the building by maximizing open spaces, creating a strong King Street frontage, and enhancing pedestrian areas and landscaped spaces; it has attempted to minimize the perceived mass of the building by working with the schools' architects to refine the building's design.

1. Maximizing Open Space

Given the mass and scale of the proposed building, its location close to King Street, and the loss of so many mature shade trees from the front of the school, staff reviewed the site itself to find ways to maximize open spaces, green areas and other outdoor spaces. When an initial concept plan was submitted to the City's land use process for consideration, planning staff worked with the architects for ACPS to redesign the site significantly in order to achieve additional open space and a more prominent entryway, consistent with the importance of the building.



Original Site Plan



Site Plan with Staff Changes

In addition to creating a large, central and visible entry for vehicles as well as pedestrians, the change in orientation of the parking garage has created open space opportunities. With the parking garage located 250 feet back from King Street on the western side of the site, space is available for a new playing field. The addition of a field fills a critical need for the school and City, and its location on the site creates an open space buffer between the street and the parking garage.

Matched by the large open space of Chinquapin Park on the east side of the proposed school, the two buffer areas begin to balance the mass of the large school building.

2. Creating a Strong Streetscape along King Street

The building's location on King Street gives it a prominent address and central location in the community. Consistent with its important and visible location, significant effort has been placed on the physical development of the King Street frontage to create a formal presence and to soften the appearance of the school and parking garage. An additional concern is the loss of the many existing mature trees located now between King Street and the existing school building. Several elements of the proposed site plan coupled with staff's conditions address these issues.

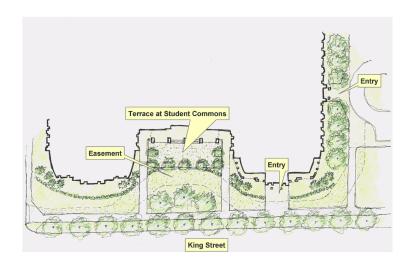
The proposed landscape treatment for the King Street frontage is intended to be a consistent but relaxed design as a foreground to the entire high school site. In order to create a green edge to the site's 1300-foot frontage, and to buffer the tall school building, the proposed site plan includes a typical City standard of street trees – willow oaks in this case – along the King Street right-of-way, as well as a ten-foot sidewalk for pedestrians. Inside the property, the main landscape design idea is

to create a buffer of curving evergreen hedgerows intermittently in front of the school as well as in front of the practice field on the west. These curving hedge elements are proposed to be complimented by other less formal vegetation, particularly on the west side of the entry drive.

Together, this landscaping provides buffer to the property from King Street traffic, and screens views of school activity from the street.

In addition, in order to maximize green area, staff has included a condition requiring that the driveway entrances be reduced to the minimum width required for safety.

Staff has also worked extensively with schools staff regarding the setback area immediately in front of the school building along King Street.



King Street Setback

The setback area in front of the school has been a challenge in the site plan design work, because it functions as both a green lawn area and a location required to be structurally strong enough to withstand the weight of emergency vehicles. ACPS proposes to treat the surface area here with a structured grass material, but there is concern about whether, given the slopes from west to east in the front of the school, the product will withstand such a function over time. ACPS staff has indicated its intent and commitment to a green alternative, including the addition of a retaining wall if necessary – a less desirable feature, but one that would allow reducing grades and ensure that a structured turf product would endure. The alternative, that the area required for emergency vehicles be paved, is an unacceptable solution for the school's front lawn.

The school's commitment that the area be green is critical, and will be supplemented with additional landscaping outside the emergency access area, so that the area in front of the building will be as pleasant and graceful as possible. The green area in front of the building will then relate to the large

open area west of Kenwood Avenue, with extensive landscaping to be planted there, and the planting of formal street trees along the entire frontage, creating a connected series of green spaces along King Street.

3. Making Pedestrian Spaces

Working with City staff, the consultants for ACPS have agreed to incorporate several features in the proposed design to enhance the pedestrian environment at the school. In addition to the broad sidewalk with street trees along King Street and sidewalk areas throughout the campus, the plan includes the following special pedestrian areas:

Entry plaza. Although the school has a formal pedestrian entrance on King Street, there is also a large plaza entrance area between the western facade of the building and the parking garage.

This plaza is an important element of the school, from both a functional and design standpoint, serving as the main entrance and arrival point on the western side of the building. It acts as a pedestrian connection and a natural gathering place for students, by nature of its location at the south end of the main driveway entrance and at the north end of the school bus drop-off area and pedestrian route to the stadium.

Landscaped with plantings and trees, and paved with decorative hardscape, the entry plaza should become an important feature of the outdoor space at the school complex.



Main Entry Plaza

Rear pedestrian way. In the original site plan, the school building extended to the rear of the property, with no opportunity to walk between Chinquapin and the school stadium, except along King Street. Given the extensive use of the adjacent area for physical education, athletic events, and community leisure activities, City staff recommended, and ACPS agreed, to change the design of the rear of the building to include an attractive walkway.

The proposed walkway will extend behind the athletic wing of the school. At 40 feet in

width, it will be wide enough to provide an attractive pedestrian addition to the site and will be closed to vehicles except for emergency purposes.

Emphasis on pedestrian sidewalk areas. The proposed design includes enhancements to the proposed site plan, including wider sidewalks on the north south axis between the central entry plaza and the stadium area, an additional exit point from the garage for easy access to the stadium, and increased green area with reduced pavement for vehicles.

In addition, staff is recommending that there be stamped crosswalks at each vehicular entrance on King Street, and stamped crosswalks and pedestrian countdown signs at the King Street and Kenwood Street intersection. Staff is also recommending that the schools work with City staff in the final site plan phase in order to achieve even greater sensitivity to pedestrians walking through the site, and from any one point, such as the parking garage, to another.

<u>Decreased drive areas.</u> While there have been serious efforts to increase the size and functions of open space and pedestrian areas on the site, the proposed site plan includes some paved areas for vehicles that are not essential. Staff has included a condition requiring that roadways and other unnecessary paved areas be reduced to their minimum required sizes.

3. Enhancing Architectural Design

A primary issue raised by staff from the outset was that the building is too massive for the site given the adjacent uses, the scale of the required setbacks, and the space requirements for circulation, parking, and athletics. In addition, there was a concern that the City's one public high school appear dignified, well-proportioned, and built of high-quality materials in order to create a civic building appropriate to the context, traditions, and aspirations of Alexandria.

Staff met with the applicants numerous times to advance and refine the building's architectural design. The approach recommended by staff to treat the scale of the building was twofold: *to break up the perceived mass with recesses and projections; and to include architectural details that connote a smaller visual scale.*

<u>Two projecting pavilions</u>. The two academic pavilions on King Street are treated as pedimented fronts with hipped roofs; their width on the end faces of the academic wings helps to reduce the apparent breadth of the wings. The effect of the design is dignified and is derivative of traditional architecture without being literally neo-classical. The student commons/media center element is more transparent, with larger areas of glass and metal canopies – making a counterpoint to the more traditional treatment of the twin pavilions. The commons area is severely recessed, helping to break the King Street frontage of the building.

Articulation. The basic skin of the building is made up of bays corresponding to the rhythm of the classrooms behind them, and is treated as a traditional brick masonry building. The

first and second stories of the building are treated together with large two-story arched openings between buttress-like piers, with precast concrete sill courses and accents. The third level of the building is clad in a lighter accent color of brick, to help the building appear less heavy at the top. There is a light-colored metal cornice which wraps around the top level of the building and is supported by a pair of columns on top of the two-story piers.



The least the project garage,

Proposed T.C. Williams (from the east)

articulated skin of occurs on the where the brick

piers and arched openings of the main building are recalled in a simple way.

Special entry elements. In addition to the pavilions facing King Street, there are numerous special entry elements around the perimeter of the building which are used to interrupt the mass of each facade. Several minor projecting bays on both the west and east face of the building project slightly from its face and, with their angled roofs, break the roof line to create a varied profile in the mass of the building. In addition, the major drum-shaped element on the Chinquapin Drive facade provides a transition on the east side of the building between the three-story academic block and the lower scale of the athletic wing. Located at one end of the "main street" internal circulation spine, this major feature provides relief along the longest building wall.

4. Landscaping as a Site Feature

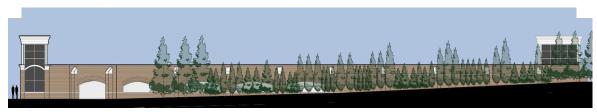
The applicant was encouraged from the beginning of the site design process to develop a strategy for the treatment of the landscape that would help the project harmonize with its context. In addition to the King Street frontage, discussed above, the major landscape elements now proposed by the applicant focus on entry conditions and gathering areas adjacent to the building; foundation and other plantings, intended to soften the appearance of the building; screening for the parking garage; and various areas of landscape buffer around the perimeter of the site.

As part of the school's commitment to environmental responsibility, the proposed landscaping employs a palette of native plant materials that are more likely to survive local climate conditions including periods of drought without irrigation.

The following landscaped areas are of particular note:

<u>Bus Loop/Rain Garden</u>. The western portion of the bus loop is lined with ash trees, and as part of the environmental program, is proposed to contain a "rain garden," or naturalistic wetland-type detention area for stormwater runoff.

Garage screening. The parking garage presents a 375 foot long facade to King Street. Although setback 250 feet from the street, and a portion of it located beneath the grade, without landscaping to screen the structure, it would present a long, unrelenting wall to the street. Therefore, the northern and western faces of the garage are planted with a combination buffer of evergreen shrubs and trees of numerous varieties in an informal pattern. Staff has recommended that those plantings be augmented to ensure sufficient screening.



Parking Garage (viewed from King Street)

<u>cape buffers</u>. Finally, landscape screening is proposed along the western and southern perimeter of the site to mitigate the visual impact of the school from the adjacent residential areas at the rear of the site. Along Woods Avenue to the west, some landscape buffer currently exists but will be increased with a variety of evergreen shrubs and trees. This treatment is continued at the perimeter around the entire stadium/track area to the south adjacent to the residences located on Bishop Lane and along the western edge of the practice field at the southeastern portion of the property.

With the extensive landscaping included in the proposed plan, and the staff's recommended conditions, along with the open spaces, architectural treatment, and enhanced outdoor pedestrian areas, staff believes ACPS has achieved the best possible complex of building and site design in the space provided.

B. PARKING

An issue that concerns the entire community is the ability of the new school complex to handle the parking demands it creates. To ensure adequate parking on site for its school use, and to minimize overflow parking which impacts the neighborhood, ACPS has committed to managing traffic to match the site's parking capacity. In addition, ACPS and City staff have reviewed extensively the existing and proposed parking needs for the new school complex, as well as methods for reducing the total number of drivers to the school.

1. Number of parking spaces

The proposed site plan for the new high school includes a total of 431 parking spaces, allocated as follows.

<u>Garage</u>. The first floor of the garage will have 198 spaces for staff. The second floor will have 218 spaces for students, adult student nurses, visitors, and staff).

<u>Surface</u>. Eight spaces will be available at the visitors' parking area. Seven spaces for staff will be available behind the kitchen and service areas.

An additional nine spaces are provided at the rear of the building for the auto mechanics program. There are 11 handicapped accessible spaces on site. 290 of the garage spaces are sized for compact cars.

The proposed number of parking spaces is more than the 250 required by the zoning ordinance. The number is also an increase over the parking at the high school today, which consists of a total of 340 parking spaces – 85 segregated for student parking and 255 spaces for staff, nurses and visitors. In addition, students are now permitted to park on the Chinquapin Drive loop road.

ACPS calculates that the number of spaces being built with the new school will result in 61 more spaces than needed to handle today's high school use, thus allowing some room for growth. ACPS also indicates that should changes occur that result in a greater need for parking than anticipated, it will act so as to limit student parking further.

Under the school's current parking policy, only students who are issued permits to park at the school or at Chinquapin may use the spaces. Permits now cost \$75.00 for a year. Although there are only 85 parking spaces on the school site for student parkers, the school issued some 118 permits for the 2003-04 school year. ACPS plans to continue its current student permit parking system when the new school is built. Only students with permits will be allowed to park on site.

2. Adult Education and Special Events

In addition to the daytime school population, the school is home to a sizeable evening adult education program, and to a series of special events that require parking. A few events each year attract significant numbers of people, such as graduation, Titan Expo, College Night, and home basketball and football games. Of special concern is the parking need that occurs on an evening when both adult education and a popular event, such as a basketball game, occur. Parking

consultants estimate that if the same ratio of growth occurs in the adult education student population as is proposed for the high school population, then 360 spaces are needed for the evening classes. There is also an estimated need for 320 parking spaces for home basketball games. While both the current and proposed high school parking plans can accommodate either one of those events, neither is sized to accommodate both occurring at the same time.

3. Parking at Chinquapin Park

There is the potential for the redesign of Chinquapin Park in the future, in which event some or all of the parking on the loop road could be lost. Currently, the loop road can accommodate approximately 225 parked cars; experience shows that about 90 of them are used by students on any given day. In addition, the loop road is used when special events occur at the school, especially in conjunction with regular adult education classes. ACPS is aware of the potential loss of parking at Chinquapin, and is fully committed to having the parking on its own site function adequately for its own uses. At the same time, ACPS and City officials have acknowledged that with the redesign and possible expansion of Chinquapin Recreation Center in the future, there may be both a need and an opportunity to create additional parking opportunities on the east part of the site for use by both the park and the T.C. Williams facility.

4. Parking study

A parking study was performed for ACPS in conjunction with its original proposal for a new high school, which determined that, if the school grew to a population of 2500 students, then many additional spaces would be required to handle the growth. The parking study's broad assumptions about the growth of faculty, staff, adult education and the student population were then refined with ACPS to include its plan to limit student permits, reduce the expansion of adult education and to control scheduling of events. The parking consultants then updated their findings (Attachment 6) to conclude that there is a need for 565 parking spaces to meet the needs of the school in the future, including 385 spaces for teachers, staff and visitors, and 180 spaces for students.

The proposed site plan only includes 431 spaces, for a deficit of 134 spaces. However, ACPS only issues 115 parking permits for students now, and parking is now available at Chinquapin Park. If in the future the parking availability at Chinquapin changes, or the student parking population increases, ACPS will have to change its parking permit system to reduce the number of student parkers. ACPS has indicated its willingness to do that.

5. Parking management plan

ACPS has devised a parking management plan to reduce the number of drivers to the campus, and to handle the drivers who do attend school and events there. The following are key components of the plan.

<u>Limits on student permits.</u>	ACPS will issue a	maximum of 18	0 student permits	for parking
in the garage. Additional per			•	1 0

Relocation of Adult Education classes. ACPS will relocate several Adult Education programs to other facilities, decreasing the number of spaces needed in the evening. ACPS

will also stagger the schedule for adult education programs. It will control the scheduling of major events in order to minimize conflicting peak crowds.

Overflow parking. ACPS will continue to use neighboring large parking lots for such special events as graduation, Titan Expo, and other events requiring overflow capacity. T. C. Williams has in the past worked successfully with both the First Baptist Church on King Street and with the Scottish Rite Temple on Braddock Road to accommodate overflow parking on an event by event basis. Both organizations and ACPS have indicated a willingness to continue that arrangement.

<u>Alternative modes of transportation.</u> Finally, ACPS is committed to encouraging transit use, carpooling, and other means of avoiding single vehicle trips to the school, in order to reduce the need for parking.

6. Community Parking

The current parking lots at T. C. Williams High School are used by the community generally for events, but also by neighboring uses on a regular basis. For example, members of the Oakland Baptist Church regularly park in the lot closest to the church at the far west end of the site. In addition, the school allows residents at the Quaker Lane Apartments to park overnight at the school. Because there will be ample parking on the school site at the key times needed by the church and the apartment residents, ACPS has committed to continuing to make its parking available to those users.

ACPS plans to leave the garage open at all hours, in deference to the needs of the community, so that a variety of general users, from citizens attending events at the school or Chinquapin Park to early morning joggers, can continue to use the parking facilities at the school.

Staff has reviewed the extensive material submitted by ACPS regarding parking, has discussed it with school representatives at length, and believes that the 431 parking spaces provided – which is almost 100 more than provided today, and almost 200 more than required by zoning – should be adequate and should improve parking conditions over what exists at the school today. Staff is also mindful that, given the limitations of the land area, it would be unfortunate to see additional land or building devoted to parking in this increasingly urban environment. While staff acknowledges that there will be times when the demand for parking exceeds the number of spaces on site, ACPS is committed to minimizing any conflicts for the community, by arranging for overflow parking at nearby institutional uses, and by scheduling events to minimize the need for overflow parking.

With those arrangements, and the steps required by the parking management plan (which are included as a condition), staff finds, on balance, that the parking is sufficient.

C. TRAFFIC MANAGEMENT

With any school complex, there are concerns regarding traffic to and from the facility, and the high

numbers of cars and buses arriving as school opens and closes, and the use of the facility for special events. With the proposed school's three access points on King Street, it is imperative that each – and all three in combination – successfully handle the traffic that uses them.

ACPS commissioned a traffic study when it prepared its original site plan, and has since updated that study to reflect changes to the site plan during the concept review planning process with the City. While the traffic consultants have found overall that the arrangement of entry points, driveways, and parking areas will work from a traffic management standpoint, they do suggest that certain adjustments be made.

1. <u>Kenwood Avenue</u>

T&ES staff have insisted that the Kenwood entrance of the school be aligned with the portion of Kenwood Avenue across the intersection so that unwary drivers can maneuver the intersection crossing. In addition, there is concern that vehicles entering at Kenwood Avenue and qeueing while waiting to drop off or pick up students, will conflict with cars trying to enter (morning) or exit (afternoon) the parking garage. City and school staffs have discussed this issue and there are recommendations with this approval requiring that the entrance lane be one way, that signage be posted, and that traffic personnel be hired to manage the entry loop as necessary to alleviate any traffic conflicts.

2. Chinquapin Drive

A concern about the Chinquapin Drive entrance is the fact that there is now and will continue to be a back up and delay in exiting the site for drivers heading east on King Street. Although the school's main entrance for vehicles will be at Kenwood Street, Chinquapin Drive will continue to be used for drop off and pick up, and also for event traffic to athletic events. The schools' traffic consultants suggest creating an additional lane for traffic exiting the site, but neither the City nor the schools are interested in creating additional pavement, or taking land and trees from the entrance to Chinquapin Park. If, in the future, there is a need for additional road width, the issue will have to be addressed.

3. Radford Street

There is a potential traffic problem with the access point at Radford because buses entering the site from the east, or leaving the site and turning to the west, on King Street, will have to cross King Street traffic without a traffic light. While these turning conflicts occur only at a few times during the day, they could interfere significantly with King Street traffic management. Alternatively, buses would have a difficult time entering or leaving the site.

Again, staff has discussed the issue with ACPS staff and determined that the intersection should not be signalized, and that ACPS will hire or assign traffic management personnel to manage that intersection for arriving and departing buses at peak times.

With staff's recommended conditions and enhancements at each of the three site entrances, the site appears to be capable of managing the traffic to and from the site without undue impact on King Street or the community.

D. Neighbors' Concerns

Bordered by single family homes on two sides, and with additional residential development directly across King Street, T.C. Williams High School must coexist in harmony with its neighbors in addition to being functional and attractive. Significant time during the planning of the high school has been spent meeting with community groups, listening to their concerns, and addressing them as part of this proposal. Issues include:

- communication
- noise from the athletic fields
- activity at the athletic fields
- traffic on Woods Avenue
- lighting
- church parking

The Seminary Hill Civic Association created a task force of citizens to represent the homeowners who live adjacent to the school on Woods Avenue and Bishop Lane, and ACPS and City staff have met with the task force group many times. In addition, there have been presentations at North Ridge Civic Association, and meetings with Chapel Hill homeowners, who live in a townhouse development across King Street from the school.

1. Communication

The residents who border the school express some frustration with the history of communication between the T.C. Williams administration and ACPS regarding problems such as noise at the stadium, cut through traffic and loitering on Woods Avenue, and increasing activity levels at the athletic fields that border Bishop Lane homes. The current dialogue helps align differing perspectives and should be the beginning of a new relationship between the schools and the T. C. Williams neighbors.

The most significant result of the recent meetings with neighbors is the formation of two committees to provide a forum for discussion of ongoing issues. Specifically, ACPS will coordinate a Construction Advisory Committee to discuss issues during the three years of construction with neighbors. It will then create and coordinate a Community Advisory Committee. Each committee will include representatives of ACPS, the T.C. Williams administration, the City's Department of RP&CA, and neighbors of the school. These committees are required as conditions to this approval, but ACPS has already begun discussing and recommending solutions for the following issues with the neighbors.

2. Noise

The greatest complaint from neighbors on Bishop Lane is the noise generated from the school, including especially from the sound system or other amplified devices at the stadium and athletic fields. While neighbors understand that football and other sports and activities necessarily generate noise, they complain about unmonitored use of, for example, the stadium sound system.

ACPS has agreed to work with the neighbors on this issue, including by hiring an acoustic consultant regarding upgrades to the existing stadium sound system. ACPS has also agreed to restrict the use of the stadium sound system to sanctioned school and City recreation events, and to restrict its hours of use.

The school public address system will be designed so that there will be no exterior sound from it except for emergencies.

Another noise issue relates to the truck traffic making deliveries to the school, which must of necessity begin in the early morning. Working together, the neighbors and ACPS staff have agreed to limited hours for deliveries. Specifically, all deveries will occur after 7:00 a.m. during the week and after 9:00 a.m. on the weekends, except for food deliveries which may occur between 6:00 and 7:00 a.m. if necessary.

Finally, ACPS has agreed to limit noise from buses and other commercial vehicles on site by restricting the time they are allowed to have their engines idling to no more than five minutes.

3. Activity Levels

There is also concern by neighbors about what they perceive to be an increased use of the stadium and practice fields, and especially for activities not associated with the schools or the City. After a series of discussions with ACPS and City staff there is agreement about the general use and hours of the fields.

4. Woods Avenue Traffic

The Woods Avenue entrance to the school is now open to vehicles and must be in order to access the service and loading areas behind the existing school building, which are located very close to that entrance. With the redesign of the school site, there is no longer a need to use the entrance, and it will be blocked with a gate prohibiting vehicular traffic in the future, except for emergency vehicles and police personnel. Pedestrians will be able to continue to use the street for access to and from Ouaker Lane.

5. Lighting

There is concern among neighbors that the new school will be built with increased lighting levels, and specifically about the potential for night athletic events at the stadium. The schools have agreed that there will be no permanent lighting installed at the stadium behind the schools, or on any of the athletic fields on the site, and a condition is included in staff's recommendation reflecting that agreement. General lighting at the school for security and convenience is also the subject of several of staff's recommended conditions. ACPS will be required to submit a detailed lighting plan as to all site lighting, and it will be available for review by neighbors. The conditions specifically address the need for a balance among security concerns, aesthetics and impacts on the neighbors. It is important for example that light fixtures be directed so as not to shine onto adjacent properties, and also so as not to create a beacon effect for the community.

6. Church Parking

The Woods Avenue neighbors, many of whom attend Oakland Baptist Church, have been concerned about their ability to continue to park on the school site. ACPS has agreed that the new parking garage will be available after regular school hours for church parking. In addition, parking will be allowed on the Radford Street service drive on Sundays for church members.

Each of the above issues, and others, are addressed either in the conditions which staff is recommending be attached to the approval of the new school, or in a separate document signed by Rebecca Perry, ACPS Superintendent, attached.

D. SPECIAL FEATURES OF THE NEW SCHOOL

The proposed new school includes a series of innovative and technologically advanced features, including:

1. Green Building Technology

The new T.C. Williams building is proposed to be "green"—meeting the certification criteria for The Leadership in Energy and Environmental Design (LEED). LEED's Green Building Rating System represents the U.S. Green Building Council's effort to provide a national standard for what constitutes a "green building." Through its use as a design guideline and third-party certification tool, it aims to improve occupant well-being, environmental performance, and economic returns of buildings using established and innovative practices, standards and technologies.

Projects are evaluated using a point system, earning one or more points toward certification by meeting or exceeding each credit's technical requirements. Points add up to a final score that relates to one of four possible levels of certification: Certified (26-32 points), Silver (33-38 points), Gold (39-51 points), and Platinum (52-69 points).

The system allots points for environmentally beneficial building materials and design in the following specific categories: Sustainable Sites; Water Efficiency; Energy and Atmosphere; Materials and Resources; Indoor Environmental Quality; and Innovation and Design Process.

Although there is no one technique for designing and building a green building to these specifications, certified buildings often preserve natural vegetation; contain no-toxic or recycled-content building materials; maintain good indoor air quality; use water and energy efficiently; conserve natural resources; feature natural lighting; include recycling facilities throughout; include access to public transportation; feature flexible interiors; and recycle construction and demolition waste.

The Alexandria City School Board voted unanimously on Thursday, April 3, 2003 to approve \$1.5 million in additional funds to support such sustainable design features in the construction of T.C. Williams High School.

"Green" features at the new high school will include a cistern that will capture and reuse rainwater that will be sanitized and then reused for toilet flushing, cooling and for irrigating athletic fields and

landscaping. In addition, Moseley Architects, the designers of the new T.C. Williams High School, is incorporating more than 30 other sustainable design elements, including but not limited to:

- Erosion and sediment control
- Reduced light pollution and increased use of natural daylight
- Recycled building materials
- Water efficient landscaping
- Light colored roofs ro reflect solar energy
- Using 30% less water overall through waterless urinals and other measures
- 20-40% reduction in energy usage
- Use of materials with recycled content
- Use of materials produced in a 500 mile radius to lower transportation/energy costs
- Increased fresh air ventilation
- Use of carpets with no formaldehyde outgassing
- Toxin-free pest management
- Use of arsenic-free pressure treated wood
- Green/garden roofs over central part of building

The combination of these elements could earn the building a silver LEED certification rating, which would be the highest rating attained by any high school in the country.

2. Security

Security is a key concern with any school facility and the planning for T.C. Williams includes several significant components designed to ensure a safe and secure environment for students, staff and visitors. Especially as to the parking garage, careful thought has attended the design of the facility and grounds.

Motion sensors and sound systems. As at existing schools in Alexandria, the new high school will be equipped with motion sensors which are designed to identify unexpected activity in any facility after hours. When the motion sensors are tripped, security officers who man a central security office located at Minnie Howard are able to use the reverse sound system in the schools in order to listen to sounds at the location of the motion.

Security cameras. The new high school will also include a comprehensive and Web based system of cameras to monitor the interior of the school building and parking garage, as well as the perimeter of the building. The cameras operate 24 hours a day, and are also connected to viewing machinery at Minnie Howard, where personnel can quickly view activity occurring at any location. Although every camera tape is not monitored in live time, if there is an incident, or if the motion sensors are activated or a noise is heard over the reverse sound system, the film allows security personnel to quickly view the activity and take appropriate action.

Personnel. The schools employ roving personnel who circulate among the various school properties after hours creating a visible deterrent to uninvited activity.

Lighting. An additional technique under consideration for the new T. C. Williams parking garage is a system of enhanced lighting connected to motion sensors, so that when activity occurs, increased brightness will be generated, indicating after-hours usage and providing a significant deterrent to unauthorized use.

3. ADA Access

The new T.C. Williams will be equipped with sufficient handicapped accessible features to be convenient to the disabled. The school design goes beyond the minimum requirements of the American for Disabilities Act to accommodate as many handicapped features as feasible. Representatives of the Commission for Persons with Disabilities have met with ACPS staff and architects and are actively involved in reviewing plans for the school.

4. Public Art

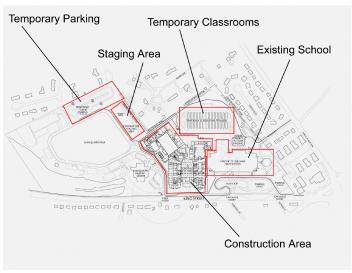
T.C. Williams High School will be an important new public building, and it is appropriate that it provide a setting for public art. The proposed central entry plaza can be the setting for an example of public art and, provided there is budget approval, staff has included a condition to this effect.

E. CONSTRUCTION PHASING

The construction of the new high school building will be an extremely complex project, made all the more so by the existing high school's uninterrupted operation during construction. There are a myriad of functions which must operate on site, such as school bus loading and unloading; parking for teachers, students, visitors, and construction workers; emergency access for police, fire and emergency medical services; access for recreation functions; construction staging and offices; and temporary classroom space.

City and ACPS share concerns regarding the handling of the construction process, and want to ensure that all aspects of the school operation and the construction project coexist without undue impact on students and the school operation, the adjoining recreation activities, the adjacent neighborhood, and King Street and the community in general.

In order to address the inevitable issues that will arise during this complicated, multi-year project, the School Board and City Council have established a joint task force, consisting of two Council members, two School Board members, and the City Manager and Superintendent of Schools. The group will meet to address project related issues, such as design, engineering, procurement or neighborhood issues.



The proposed site phasing plans stages of

Construction Phasing Plan

plan includes generalized which set out the four construction as follows.

1. Phase 1

Construction is scheduled to begin in late summer of 2004, with the creation of a construction staging area, temporary parking facilities on the athletic fields at Chinquapin, and the demolition of the Career Tech Wing. Temporary classrooms will be located on the stadium field in the form of trailers or modular buildings.

Athletic activity that regularly occurs on the stadium field or the practice fields will have to be curtailed. ACPS is now working on a plan for temporary locations for its programs. For example, football games are likely to occur at a Fairfax County facility.

2. Phase 2

After the temporary facilities are constructed and the improvements on the new school site are removed, active construction of the new building will occur. According to ACPS, that work will occur between August 2004 and August 2006.

3. *Phase 3*

After the new building is finished, students will move from the old high school building into the new space, scheduled to open in September 2007. Temporary classrooms will be removed and the stadium track and field restored. The construction staging area will, at that point, become a temporary bus pick up and drop off location. And the existing T. C. Williams building will be demolished.

4. Phase 4

With the existing high school building removed, the new parking garage, playing field and new

entrance to the school and entry plaza will be constructed. The practice fields at Chinquapin will then be restored. Construction is scheduled to be completed in 2007.

Staff has required that the phasing and construction plans be made more detailed, and that work will occur as part of the final site plan process with the City.

G. STAFF RECOMMENDATION

Staff recommends approval of the development proposal for the new T.C. Williams High School, including the special use permit approvals, the subdivision and the zoning modifications requested by ACPS.

Staff's recommendation is subject to the attached list of conditions for refining the plans and expects to continue to work with ACPS staff, architects and engineers in a collaborative way on the final stages of this exciting development project.

STAFF: Eileen Fogarty, Director, Planning and Zoning

Barbara Ross, Deputy Director Thomas Luebke, City Architect Laura Durham, Urban Planner