

George Wythe High School

Urban Design Committee Project Narrative

In August 2021, Richmond Public Schools issued a Request For Proposal (RFP) for the design of a new 1,600 student George Wythe high school totaling approximately 260,000 square feet. The intent of the RFP was to provide a prototypical design that would allow for a new school to be situated on the existing site while the current school remained in operation while accomplishing a reduced design timeline to achieve an earlier occupancy. Two prototypes were presented to the School Board and school administration, and the plans presented here represent the selected prototype. By way of a City Ordinance, the design was required to increase/accommodate an 1,800 student capacity with the ability/potential to increase the capacity to 2,000 students.

Site Description

The site is located at 4314 Crutchfield Street in the City of Richmond and is approximately 27.82 acres. It is bound to the north by Crutchfield Street, to the west by Westover Hills Boulevard, to the south by the Midlothian Turnpike and to the east by a residential development. Currently, the site contains the existing George Wythe High School, sports fields, paved parking areas, and concrete sidewalks. The new development will have the same features at different locations. Concrete sidewalks will be constructed throughout the site to provide pedestrian circulation and will allow ADA access to all areas of the site. Places for bicycle parking will be provided. The location of any bus stops will be coordinated with GRTC and some existing bus stops may be enhanced or relocated.

The selected site is approximately 27.8 acres, with a major grade change between the building area and the football field. Improvements will be provided to allow ADA access to all areas of the site. Primary vehicular and bus traffic will access the site from Crutchfield with a secondary gated entrance/exit servicing the loading/delivery area located off Midlothian Turnpike. Parking for 41 buses and 270 staff/visitors have been provided based on code required calculations and conversations with RPS staff.

Parking Requirement Calculation Methods (Whichever is Greater)

Auditorium (1 parking space per 8 seats in main auditorium)

- 1,650 auditorium seats divided by 8 seats equals 207 parking spaces

Classrooms (3 parking spaces per classroom)

- 88 classrooms multiplied by 3 parking spaces equals 264 parking spaces

Asphalt roadways and concrete curb are provided for all vehicular areas. Pedestrian areas will be concrete. Buffers consistent with the city's requirements will be provided as shown to screen the parking areas from adjacent properties and roadways. Landscaping within the parking areas will also be provided, consistent with the City's requirements. Additional foundation plantings will be provided along the building face to enhance those areas. All plantings will be based on native or adaptive species to minimize the watering requirements. It is anticipated that the new school will be designed to meet LEED Silver certification.

Access to the property from Midlothian turnpike will be limited, and it is important to separate access between buses and cars. Therefore, the access points shown on the plan represent the continued discussions and coordination with both DPW and RPS.

Architectural

The overall layout is based on a prototypical design of a previous high school built in Chesapeake, VA. The program calls for the school to accommodate 1,800 students, with the core designed to accommodate future growth up to maximum capacity of 2,000 students. The site is extremely tight with the original building situated in the center of the property. This necessitates the new building being located on the current athletic fields with the remainder of the site amenities being constructed after they move into the new facility and the existing school is demolished.

The 2-story high school facility is organized around a central, secure courtyard with the more public spaces located on one side of the building and the more private classroom spaces on the other side. Security will be a prominent feature in the design, attempting to balance a safe educational environment with a bright and inviting one. The main entrance fronts Crutchfield Street and will feature a prominent design directing visitors to the main administration offices for check-in. A secondary entrance along the same side will become the main point of entry into a gym lobby for evening sporting events. The gymnasium and locker rooms will be adjacent to the athletic play fields for easy access to outdoor sporting events.

The building exterior will feature a predominately red brick façade with a dark brown accent brick used at the base and minor vertical accents. Architectural metal wall panels will also be used as an accent to help break up some of the long masonry walls creating a pattern and rhythm at an appropriate scale. Thermally broken aluminum storefront framing with high performance insulated glazing will help to allow daylight to brighten the interior environment, while maintaining an excellent building envelope. Due to the floor plan layout and size of the building, the design includes a low slope roof with single-ply roof membrane, which helps to maintain a lower scale building next to the residential properties that surround the site.

Construction Sequence

The existing school building will need to remain in operation while the new building is being constructed, therefore demolition of the site will need to be phased. For the new site layout, the high school building will be located where the existing sports fields are (at the east part of the site) and the new sports fields will be built where the existing school building is located (at the west part of the site). Therefore, the existing sports fields will be demolished first. Then construction of the new high school building will proceed and when construction is complete and the building is operational the existing building and parking areas will be demolished. Finally, the sports fields will be constructed.

There will be no offsite improvements to the existing streets except for the construction of 4 driveways. Three driveways will be on Crutchfield Street and one driveway will be on Midlothian Parkway. The two existing driveways will be demolished.

Stormwater Management

The development of the site will minimize the amount of impervious surfaces. The land available for surface BMP's is minimal, therefore below ground stormwater detention may be utilized beneath the proposed parking areas to reduce the quantity of runoff leaving the site and can also provide treatment.

An existing 36" storm drain traverses the east portion of the site through the existing sports field. It will conflict with the location of the new building therefore the storm drain will need to be re-routed through the paved areas east of the building.