

NEW FIRE STATION #21



2505 RICHMOND HIGHWAY – RICHMOND, VIRGINIA

PROJECT DESCRIPTION

The current Fire Station #21 is a 1-story facility, located at 2505 Richmond Hwy, and has honorably served the citizens of this surrounding community for numerous decades. However, the existing facility has well exceeded its life expectancy, and can no longer accommodate increases in staffing, apparatus needs and continued population growth of the area.

The new Fire Station #21 will be built on the current site of the existing fire station #21, located at 2505 Richmond Highway, Richmond, VA. The City feels this property represents the most ideal location for constructing the new fire station, which is designed to better accommodate current and future staffing needs, along with larger fire trucks and emergency service apparatus, and will provide for more appropriate types of program spaces to enable the staff to work effectively meet today's more stringent response time performance standards.

SITE DESCRIPTION

The site is approximately 0.5 acres and includes an emergency traffic signal. The site is relatively flat and drains to the south into Broad Rock Creek. Rear alley access is to the north off of Atwell Drive, with primary access via Richmond Highway at the front of the site. The project proposes to maintain access from Richmond Highway to the garage bays, and provide through parking access from the alley and Richmond Highway. The existing fire station pre-dates requirements for stormwater management controls and as such, the proposed design does include stormwater quality and quantity controls.

ARCHITECTURAL DESIGN

Building Description

The new facility will be a 3-story structure (about 18,350sf), and will feature three (3) drive-through apparatus bays to accommodate new fire and emergency service equipment, administrative offices, multi-purpose room, sleeping and living quarters, kitchen and dining areas, along with a staff fitness room and other related support spaces. The new facility will be classified as a Type-IIB building, B – Business Occupancy, and include a fire alarm and full sprinkler system.

Building Architecture (Program Principals & Design Features)

Recognizing the current fire station 21 facility has always been, and the New Fire Station #21 will continue to serve as a 'cornerstone' to the surrounding community, the new fire station design includes a prominent 'architectural tower' feature that emphasizes the main public entrance location. The sloped slate roof on the tower is similar size and shape to the existing sloped roof element on the current fire station – to pay tribute the original fire station. The suspended entry canopy and curved masonry bench seat with architectural pavers offers a 'pedestrian friendly' entrance plaza.

The exterior facades includes a balance of traditional masonry materials and colors, along with accent brick, vertical bump-outs, architectural precast trim features, and pleasing 'windows-to-wall' ratios. Collectively, these design elements provides visually pleasing patterns and human scale that invokes a 'sense of space' from the pedestrian's perspective.

Security control and other important public safety measures were carefully taken into consideration as well. Design strategies were implemented to strike a good balance between providing a safe and secure facility, that's also complimentary to the overall architecture, and still provides a warm and welcoming environment for visitors.

The exterior building lights are architectural style fixtures that are visually pleasing, and will provide the appropriate level of illumination around the exterior building façade to ensure the safety and well-being of all visitors and station staff during non-daylight hours. The exterior building lights will be energy efficient LED fixtures, designed to direct desired illumination at the main drive-aisles, parking spaces, connecting sidewalks, along with the main building entrance and other building entry points. Exterior lights will have anti-glare features to minimize excess light pollution as well.

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PUBLIC OUTREACH

Project is a replacement in kind. The site is not located within the boundaries of a civic association. The City has reached out to adjacent property owners including the James River Villas apartment complex to share information regarding the replacement project.

BUDGET FUNDING SOURCE

Funding for this project will come from City CIP budget

CONSTRUCTION - SEQUENCE OF WORK

The project will be completed in multiple phases. Phase 1 work will consist of the demolition of the existing fire station facility and related site elements, along with selective early site preparation work. Phase 2 will include the construction of the new fire station building and all related new sitework improvements.

SUSTAINABILITY CONSIDERATIONS

The City intends for this facility to be designed and constructed as a high-performance green building, with a target to achieve USGBC - LEED 'Silver' level certification. Some of the sustainable design features includes; high-performance building envelope, triple-pane insulated exterior window and door systems, energy efficient HVAC system, LED light fixtures, building system control systems, low VOC materials, light colored roof membrane, and among many other sustainable design strategies that will provide a highly sustainable and healthy environment for the staff and visitors.

LANDSCAPING

Low maintenance is intended for the project with native plantings to minimize maintenance requirements. Lawn areas to be mown and maintained according to City of Richmond standard practices. Non-fruiting shrubs and trees to be pruned for structural and clearance reasons only. Planting bed areas to be top dressed annually with double shredded hardwood mulch. Site furnishings and paving to be inspected and repaired or replaced as needed. Existing fencing (if to remain) is to be inspected and repaired or replaced as needed.