



To: Urban Design Committee
From: Planning and Preservation Division
Date: September 6, 2018
RE: **Final review of a pedestrian bridge encroachment for VCU Health System Adult Outpatient Facility, 1001 E. Leigh Street; UDC 2018-35**

I. APPLICANT

Brenton Barefoot, JLL representing VCU Health System (VCU HS)

II. LOCATION

The public right-of-way over N. 11th Street

Property Owner:

City of Richmond right-of-way (ROW)

III. PURPOSE

The application is for the final review of a pedestrian bridge encroachment

IV. SUMMARY & RECOMMENDATION

While the Guidelines are not supportive of pedestrian bridges, they do contain design criteria for when a pedestrian bridge is proposed: that a bridge should span no more than the width of the right-of-way, be level, and be made of transparent and non-reflective glass. The proposed design meets the criteria. Furthermore, the bridge will provide a safe and secure passage for patients and sensitive materials in between buildings. Although it appears the bridge will connect into the parking garage, the connection ties directly into the Ambulatory Outpatient Facility, ensuring a climate controlled environment for those that traverse the pedestrian bridge.

Therefore, it is Staff's position that the Urban Design Committee recommend that the Director of Public Works grant approval of the encroachment request.

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V. FINDINGS OF FACT

a. Site Description and Surrounding Context

The subject ROW spans the width of N. 11th Street between E. Clay and E. Leigh Streets. It is located within an area zoned B-4, Central Business District. The proposed pedestrian bridge will connect the third floor of the newly constructed garage to the existing building. N. 11th Street is a one-way, four-lane road that consists of two lanes of thru-traffic flanked by a parking lane on either side. The posted speed limit is 25 MPH.

b. Scope of Review

The City owns the ROW, but VCU HS will perform all of the work and will be responsible for all of the maintenance, which puts the improvements in the category of encroachments. The UDC has reviewed a number of streetscape

encroachments for similar projects, such as Dominion Workplace Tower I and the neighboring Gateway Plaza building, in the last few years.

The encroachment process is administered through the Department of Public Works, which has requested that the Urban Design Committee (UDC) provide design advice on certain types of encroachments. The UDC does not have the authority to approve encroachments, but rather provides advice to the Department of Public Works.

c. UDC Review History

Throughout the history of reviewing pedestrian bridges, it has always been remarked that the UDC Guidelines do not support these structures, however exceptions have been made:

In 2016, the UDC reviewed a pedestrian bridge encroachment associated with the Dominion Workplace Tower I. Staff recommended approval as they found the proposal to comply with the treatment suggested of such a structure with the additional benefit of offering additional, open-air crossing space at the rooftop garden level. (UDC 2016-36)

In 2009, the UDC reviewed a pedestrian bridge encroachment associated with 1202 E. Marshall Street, what is now the James W. and Frances G. McGlothlin Medical Education Center, designed by Pei Cobb Freed & Partners. Staff recommended approval as they found the proposal would allow for the removal of three (3) existing pedestrian bridges that did not comply with the treatments suggested by the Guidelines. (UDC 2009-23)

In 2005, the UDC reviewed a pedestrian bridge encroachment associated with the 500 and 600 block of E. Jackson Street. The Richmond Downtown Plan, approved by City Council in November of 2004 was referenced as stating “pedestrian bridges should not be allowed.” The Plan noted that pedestrian bridges inhibit street level activity and can potentially block Downtown vistas. It further placed specific emphasis on “street level activity and the pedestrian environment” in the Biotech Park. The recommendation of conceptual approval by the UDC noted that Jackson Street is not an important Downtown vista. (UDC 2005-24)

d. Project Description

The new 600,000 SF VCU Health Ambulatory Outpatient Facility (AOF) project includes a new 17-story high rise ambulatory (outpatient) tower to include cancer treatment, facilities, clinics, and required support space. The project also includes a new, connected 9-tier open parking garage. Fronting Leigh Street and strategically situated between N. 10th and N. 11th streets. A necessary part to facilitate the ease of access, flow, staging, and high volume of daily visits is the proposed elevated pedestrian walkway that will span N. 11th Street.

The pedestrian bridge will connect the dental buildings (Wood/Lyons/Baxter-Perkinson) through the garage and into the new AOF. The new AOF Building is planned to contain two levels of clinic space for the VCU School of Dentistry at roughly 100,000 SF total.

The pedestrian bridge associated with the AOF is the first piece of the larger VCU Health System master plan which will include a pedestrian bridge for the New Inpatient Hospitals located between E. Clay and E. Leigh and N. 12th and N.13th Streets. This will connect the AOF with the School of Dentistry, the New Inpatient Hospital and the other VCUHS buildings. It will allow patients to be safely and conveniently transferred between different areas of the hospital without being exposed to the elements or having to be put into an ambulance. The AOF contains radiation oncology, medical infusion and other clinics/services that provide care for some of the health systems most vulnerable patients and the ability to transfer those patients in and out of the AOF without putting the patient a risk is of utmost concern to the health system.

Installing a tunnel to connect these buildings is not feasible due to the utilities that are currently in place, the cost to relocate those services, and the disruption to the health systems ability to provide services.

Additionally, it is believed there will be substantial foot traffic by the School's students and faculty between the AOF and the existing buildings. A large volume of pedestrians crossing N. 11th Street during peak hours may pose both a safety risk, as well as potential to hinder vehicular traffic flows. For the purposes of safety for the pedestrians, as well as protecting students/faculty and their supplies from the elements, an elevated pedestrian walkway connecting the buildings is proposed.

Option A. Parallel Truss

The proposed Pedestrian Connector will be a steel framed structure consisting of parallel truss elements. The trusses will be constructed of steel HSS vertical and diagonal members that are fully welded to avoid visible gusset plates at panel points. Steel wide flange beams will span perpendicularly between trusses to support the floor and roof of the bridge. The walking surface at the floor will consist of a concrete slab on composite metal deck while the roof of the bridge will be metal deck. The bridge will be supported on the southwest end (at the Adult Outpatient Facility Grid H) from the concrete spandrel beam and from a new concrete column across 11th Street at the exterior of the Woods Building. The bridge will be structurally separated from the existing Woods Building by cantilevering from this new column and expansion joints will be provided at the interface between the bridge and the existing building.

Option B. Vierendeel Truss

As an alternate to the Parallel Truss option, the proposed Pedestrian Connector will be a steel framed structure consisting of parallel vierendeel truss elements. The chord and web members will be W14 shapes, and in lieu of diagonals the web and chord members will be moment connected. Steel wide flange beams will span perpendicularly between trusses to support the floor and roof of the bridge. The walking surface at the floor will consist of a concrete slab on composite metal deck while the roof of the bridge will be metal deck. In-plane diagonal steel bracing will be used at the roof and potentially at the floor for lateral stiffness. The bridge will be supported on the west end (at the Adult Outpatient Facility Grid H) from the concrete spandrel beam and from a new concrete column across 11th Street at the exterior of the Woods Building. The bridge will be structurally separated from the existing Woods Building by cantilevering from this new

column and expansion joints will be provided at the interface between the bridge and the existing building.

e. Master Plan

The subject property is located in the City Center Focus Area, as defined by the 2008 Downtown Master Plan, and is placed in the Urban Core character area. The Plan contains very specific language about integrating the VCU HS Campus into Downtown's urban fabric. The plan further states "Streetscape programs should continue to better connect the campus. New and existing parking garages should be lined with habitable space." (p.4.22).

f. Urban Design Guidelines

The Urban Design Guidelines do "not support the use of pedestrian bridges. If they are used, the bridge should span no more than the width of the right-of-way. Pedestrian bridges should be level, with little to no incline. The materials used for the construction of pedestrian bridges should not be opaque or made of reflective material, so as to minimize the obstruction across the public right of-way." (p. 28).

VI. ATTACHMENTS

- a. Vicinity Map**
- b. Application**
- c. Plans**