



**Staff Report**  
**City of Richmond, Virginia**  
Urban Design Committee



UDC 2022-06	Conceptual Review	Meeting Date: 5/5/2022
<b>Applicant/Petitioner</b>	Thomas Westbrook, City of Richmond Department of Public Works	
<b>Project Description</b>	Conceptual 17.05 review of the replacement of a bridge on E. Broad Street.	
<b>Project Location</b>		
<b>Address: 1554 E. Broad Street</b>		
<b>Property Owner: City of Richmond</b>		
<p>City of Richmond department of Public Works is proposing to replace and existing bridge on E. Broad Street due to structural deficiencies.</p> <p>The scope of work is “bridge only” as there will be no increase to roadway capacity.</p>		
<b>Staff Recommendation</b>	Approval, with Conditions	
<b>Staff Contact</b>	Alex Dandridge, <a href="mailto:alex.dandridge@richmondgov.com">alex.dandridge@richmondgov.com</a> , (804) 646-6569	
<b>Previous Reviews</b>	None	
<b>Staff Recommendations</b>	<p>Staff recommends that:</p> <ul style="list-style-type: none"> <li>- Existing granite curbing and cobblestone underneath of the bridge be retained and protected during construction.</li> <li>- Applicant coordinate final design of the bridge with the Department of Environmental Quality to analyses the project’s impact on the existing floodplain and floodway.</li> <li>- Any Existing historic resources be protected during construction, including existing masonry abutting the existing wingwalls on the southern side of the bridge.</li> <li>- Lighting be provided within the pedestrian culvert. Additional details to be submitted to UDC with final review package.</li> </ul>	

### Findings of Fact

<b>Site Description</b>	The bridge is located within the City of Richmond limits on Broad Street over abandoned CSXT Right-of-Way, approximately 1,000 feet west of the intersection of Broad Street and 18th Street. The bridge is adjacent to the Lumpkin’s Slave Jail and Richmond African Burial
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	Ground. The project location map is provided in Attachment 1 of this report. The proposed tunnel will be constructed in the same location as the existing bridge.
Scope of Review	The proposed bridge replacement is subject to design review under Section 17.05 of the Richmond City Charter as a “public structure”.
Project Description	<p>The purpose for this project is to replace the existing structurally deficient bridge carrying Broad Street over CSXT Right-of-Way with a new structure to eliminate a structurally deficient bridge from the City’s inventory.</p> <p>The existing bridge and approach roadway consists of a four-lane facility located in an urban area. The roadway is classified as a Primary Arterial with a posted speed limit of 25 mph. The existing 34-foot, single span structure was constructed in 1909 and consists of a concrete encased multisteel beam superstructure set on reinforced concrete substructure with slight skew. The framing system consists of 53 steel I-beams (16” deep) spaced at approximately 2’-0” on center. The bridge carries four travel lanes of Broad Street. The travel width of the existing bridge is approximately 42’-0” measured face-to-face of curb with an out-to-out width of approximately 66’-0”. The land in the immediate vicinity of the project is generally urban with some historical areas nearby.</p> <p>Below the bridge, there is a proposed 20 foot wide culvert which will be used for pedestrian access below the bridge. The preliminary structural plans have terminal walls that are perpendicular to the culvert. These walls afford the opportunity for signage, artwork, or information regarding the surrounding area.</p>

#### Urban Design Guidelines and Master Plan

	Text	Staff Analysis
Richmond 300 Master Plan	<p><b>Objective 4.1.e</b>  <i>e. Encourage development that respects and preserves the natural features of the site through sensitive site design, avoids substantial changes to the topography, and minimizes property damage and environmental degradation resulting from disturbance of natural systems.</i></p> <p><b>Goal 9: Streets, Bridges &amp; Connections</b>  <i>Building and improving Richmond’s street network and bridges is critical to connect our neighborhoods to one another and provide multiple routes for pedestrians, cyclists, and transit moving around the city. (pg. 122)</i></p> <p><b>Objective 9.2: Improve and Create Bridges</b>  <i>a. Develop and implement a plan to rehabilitate and repair city bridges so that less than 10% of bridges are rated as structurally deficient and all bridges have been substantially renovated and maintained.</i></p>	<p>This proposal helps meet the Goal 9 outlined in the Richmond 300 Master Plan by replacing an existing structurally deficient bridge that has been rated “poor” by VDOT.</p> <p>Staff notes that the proposed bridge and culvert are located within a 100-year Floodplain and Floodway. In order to minimize any future environmental degradation as a result of this project, <u>staff recommends that the applicant coordinate the final design of the bridge with the Department of Environmental Quality to analyses the project’s impact on the existing floodplain and floodway.</u></p>
Urban Design Guidelines		
Environment, Public Parks, Design	<i>Certain design considerations should be addressed in any project, regardless of the type of park. Historic elements</i>	There are several historical elements on site that should be preserved as part of this reconstruction project. These items include:

<b>Considerations,</b> <b>pg. 9</b>	<p><i>should be surveyed and preservation should be considered for both facilities and landscapes. Impacts to the natural landscape should be assessed and should generally be minimized when constructing man-made elements.</i></p> <p><i>Lighting and landscaping should allow for surveillance and policing activities, but should be designed primarily to accommodate the intended use of the park.</i></p>	<p>(i) any existing granite curbing and cobblestone below the bridge, (ii) the existing masonry abutments flanking either side of the wing walls on the south side of the tunnel, and (iii) the larger pieces of masonry located in the fill on the north side of the bridge. <u>Staff recommends that these elements retained and protected during construction.</u></p>
<b>Transportation,</b> <b>Provision of New</b> <b>Sidewalk, pg. 4</b>	<p><i>Existing granite curbing and stormwater inlets should be retained. Any new granite curbing should match existing curbs.</i></p>	<p><u>Staff recommends that any existing cobblestone and granite curbing below the bridge be retained and protected during construction.</u></p> <p>Staff also notes that there are existing brick-paved sidewalks with granite curbs on the bridge. The plans provided with this application note that these features will be reconstructed as part of this project.</p>
<b>Community</b> <b>Character,</b> <b>Illumination, pg.</b> <b>22</b>	<p><i>Consistent levels of illumination should be maintained in public areas. Safe and comfortable circulation depends more on the consistency of illumination than on the level or brightness of the lighting. All light sources should be shielded to reduce glare, spill light, and wasted light.</i></p>	<p>Staff notes that the preliminary structures report submitted with the application recommends the inclusion of pedestrian lighting within the resulting culvert. However, no information on any proposed lighting has been provided with this application. <u>Staff recommends that lighting be installed within the culver and that additional details be provided to UDC for review.</u></p>