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To: Planning Commission  
From: Urban Design Committee  
Date: January 19, 2016  
RE: **Conceptual Location, Character and Extent Review of the Kanawha Plaza Transportation and Pedestrian Access Study**

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**I. APPLICANT**

Mr. Mark Olinger, Department of Planning and Development Review

**II. LOCATION**

701 E. Canal Street and adjacent rights-of-way

**Property Owner:**

City of Richmond

**III. PURPOSE**

The application is for conceptual Location, Character and Extent Review of the Kanawha Plaza Transportation and Pedestrian Access Study.

**IV. SUMMARY & RECOMMENDATION**

This project proposes modifications to the existing roadway in the vicinity of Kanawha Plaza to improve pedestrian access and came about in response to concerns raised during the Kanawha Plaza renovation review process. The proposed modifications are the result of a study that analyzed current transportation operations and safety conditions along S. 7<sup>th</sup>, S. 8<sup>th</sup>, S. 9<sup>th</sup>, E. Byrd and E. Canal Streets. The goal of the study was to develop concepts that would improve pedestrian access while maintaining adequate traffic operations during peak periods, including the potential to reduce crossing distance through the reduction in travel lanes, opportunities to eliminate channelized right turn lanes, reducing curb radii in key locations and shortening crosswalks with bump outs and pedestrian refuge areas. The most impactful proposal is to reduce a number of vehicular travel lanes in the study area.

The Urban Design Committee finds that the proposed modifications will have a positive impact on accessibility to the park, and are consistent with recommendations made during the Kanawha Plaza renovation review process that were deemed outside of the scope of improvements. Information presented in the proposed plans indicate that level of service for pedestrians and bicycles will improve at seven of the intersection points and remain the same at the eighth, and these improvements for pedestrians and bicyclists result in only one reduction in vehicular level of service at the PM peak at N. 7<sup>th</sup> and E. Canal Streets. The Committee finds the proposal to be consistent with the recommendations of the Downtown Master Plan, the Bicycle Master Plan, the Strategic Multimodal Transportation Plan and the Urban Design Guidelines. Therefore, the Urban Design Committee recommends that the Planning Commission grant conceptual approval with the following conditions:

- That the final plans include a landscape plan and schedule indicating plant species, quantity, location and size at the time of installation.

- That every pedestrian crossing in the study area contains ladder-style crosswalks and a pedestrian countdown signal, the latter with an accessible pedestrian signal (audio component) if an orientation mobility specialist deems it to be necessary.
- That the applicant considers the presentation given by Ms. Emily Thomason considering better bicycle access throughout the project area.
- That the applicant consider elimination or reconfiguration of the channelized turn lanes at the intersections of S. 9<sup>th</sup> and E. Byrd Streets and S. 7<sup>th</sup> and E. Canal Streets.
- That the applicant considers plantings in the median of S. 9<sup>th</sup> Street between E. Byrd and E. Canal Streets.
- That the applicant includes a schedule for streetscape furnishings in the project area.
- That the applicant considers a better visual link between the Federal Reserve Bank and Kanawha Plaza.

**Staff Contact:**

Jeff Eastman, (804) 646-6348

**V. FINDINGS OF FACT**

**a. Site Description and Surrounding Context**

Kanawha Plaza is an urban park encompassing 2.8 acres on two city blocks, partially located over top of the Downtown Expressway (Interstate 195). Kanawha Plaza is located in the B-4 (Central Business) zoning district and is isolated by roadways: S. 9<sup>th</sup> Street to the east carries 10 lanes of two-direction traffic, connecting to the Manchester Bridge; E. Canal Street to the north carries five lanes of two-direction traffic to the east of S. 8<sup>th</sup> Street (a recent configuration due to the construction of the Gateway Plaza building and the closing of a portion of S. 8<sup>th</sup> Street) and four lanes of one-way westbound traffic to the west of S. 8<sup>th</sup> Street; S. 7<sup>th</sup> Street to the west carries four lanes of one-way northbound traffic, and E. Byrd Street to the south carries four lanes of one-way eastbound traffic. The posted speed limit on each of these streets is 25mph, and there is no on-street parking along of the street frontages of the park.

The former RMA parking deck and plaza (now owned by the City) and the WilliamsMullen law firm headquarters building are located to the east of Kanawha Plaza, the Federal Reserve Bank is located to the south, the Downtown Expressway emerges to the west, and on the north are the Dominion office tower and the under-construction Gateway Plaza, which will be home to the McGuireWoods law firm among other tenants.

**b. Scope of Review**

The improvements associated with this project are subject to location, character, and extent review as a “narrowing of streets” in accordance with Section 17.07 of the Richmond City Charter.

**c. UDC Review History**

The Urban Design Committee and Planning Commission reviewed several different projects pertaining to Kanawha Plaza in 2015. Several of the recommendations made during those reviews, deemed critical to the success of the park but not included in the park renovation submittals, pertain to this proposal:

- That prior to Phase 1B consideration the applicant works with the Department of Public Works and Department of Planning & Development Review to ensure that every pedestrian crossing to the park contains a pedestrian countdown signal, preferably with an audio component, and ladder-style crosswalks.
- That prior to Phase 1B consideration the applicant works with the Department of Public Works and Department of Planning & Development Review to explore the opportunity of creating a curbed pedestrian refuge at S. 7<sup>th</sup> and Canal Streets as has been created at the corner of S. 9<sup>th</sup> and E. Canal Street, and to incorporate such a feature into the overall plans for the site if it is deemed a possibility.
- That prior to Phase 1B consideration the applicant works with the Department of Public Works and Department of Planning & Development Review to explore the opportunity of creating curb extensions at the adjacent street intersections that lead into the park.
- That prior to Phase 1B consideration the applicant works with the Department of Public Works and Department of Planning & Development Review to determine if it is possible to provide on-street parking along S. 7<sup>th</sup> Street.

**d. Project Description**

This project proposes modifications to the existing roadway in the vicinity of Kanawha Plaza to improve pedestrian access and came about in response to concerns raised during the Kanawha Plaza renovation review process. The proposed modifications are the result of a study that analyzed current transportation operations and safety conditions along S. 7<sup>th</sup>, S. 8<sup>th</sup>, S. 9<sup>th</sup>, E. Byrd and E. Canal Streets. The goal of the study was to develop concepts that would improve pedestrian access while maintaining adequate traffic operations during peak periods, including the potential to reduce crossing distance through the reduction in travel lanes, opportunities to eliminate channelized right turn lanes, reducing curb radii in key locations and shortening crosswalks with bump outs and pedestrian refuge areas.

As part of the study, the consulting group VHB and City representatives conducted a roadway safety audit for the five intersections surrounding the plaza. This technique, developed by the Federal Highway Administration, provides a process for looking at all the components of the intersection in developing the concepts for improving safety, including vehicle and pedestrian volumes, physical features, roadway widths and grades. The team observed morning, mid-day and evening peak hours. VHB also hosted a meeting of the major tenants in the area including Dominion Virginia Power and Armada Hoffler who provided insight into their transportation concerns. VHB also worked with City staff to administer a survey that was distributed to major employers and residential buildings in the area, asking questions about barriers to walking in the area. A total of 191 responses were received.

Per the applicant's report, the results of the study, as proposed in the conceptual plans, aims to refocus the area on safe and comfortable pedestrian environment, redistribute excess road capacity to support pedestrian and bicycle environment, and support the redesign of Kanawha Plaza as a central gathering space for the

City. The most impactful proposal is to reduce a number of vehicular travel lanes in the study area:

- Reducing one northbound lane on S. 9<sup>th</sup> Street north of E. Canal Street
- Reducing one westbound lane on E. Canal Street west of S. 9<sup>th</sup> Street
- Reducing one northbound lane on S. 7<sup>th</sup> Street between E. Canal and E. Byrd Streets
- Reducing a storage lane on E. Byrd Street between S. 7<sup>th</sup> and S. 9<sup>th</sup> Streets
- Reducing two northbound and two southbound lanes on S. 9<sup>th</sup> Street south of E. Byrd Street
- Reducing two northbound and one southbound lanes on S. 9<sup>th</sup> Street between E. Byrd and E. Canal Streets

On S. 7<sup>th</sup> Street between E. Canal and E. Byrd Street the space previously occupied by the vehicular travel lane will be dedicated to providing a wider sidewalk. At the intersection of S. 7<sup>th</sup> and E. Canal Streets, the plans call for a wider sidewalk along the north side of E. Canal Street and a curb extension on S. 7<sup>th</sup> Street on the northeastern side of the intersection. Curb extensions would also be provided on E. Canal Street on the northwestern side of the intersection. The island directing traffic onto the Downtown Expressway on-ramp would be enlarged to provide more protection to pedestrians, and the sidewalk will be improved to provide more direct connection to the crosswalks. A raised median with a pedestrian refuge will be created on the eastern side of E. Canal Street. All sides of this intersection will now contain pedestrian crosswalks with ladder-style markings.

At the intersection of S. 7<sup>th</sup> and E. Byrd Streets, the plans call for the elimination of the channelized left-turn lane from E. Byrd Street/the Downtown Expressway off-ramp onto S. 7<sup>th</sup> Street. This will also allow for a wider sidewalk to be provided on the western side of S. 7<sup>th</sup> Street. West of the intersection, street lights will be provided on the north side of E. Byrd Street to match those on the south side. All sides of this intersection will now contain pedestrian crosswalks with ladder-style markings. A wider sidewalk will be provided on E. Byrd Street on the southeastern side of the intersection. While all of these improvements will aid pedestrians, the most significant proposal at this intersection is the provision of a pedestrian activated traffic signal.

At the intersection of S. 9<sup>th</sup> and E. Byrd Streets, the plans call for the elimination of the channelized right turn from E. Byrd to S. 9<sup>th</sup> Street. South of the intersection, S. 9<sup>th</sup> Street will carry three vehicular lanes and a buffered bike lane in each direction. The channelized right-turn lane from S. 9<sup>th</sup> onto E. Byrd will be extended. New sidewalks will be provided along each side of S. 9<sup>th</sup> Street south of the intersection, and along the eastern side of S. 9<sup>th</sup> Street north of the intersection. All sides, except for the eastern of this intersection will now contain pedestrian crosswalks with ladder-style markings.

The plans call for the segment of S. 9<sup>th</sup> Street between E. Byrd Street and the Manchester Bridge to be transformed into a gateway through the use of plantings. The walkway will be maintained in the center of the bridge but will be enhanced with a median of street trees and trees along the side of the roadway as well.

At the intersection of S. 9<sup>th</sup> and E. Canal Streets, a curb extension would be added at the northeastern corner of the intersection, to mirror the condition in front of Gateway Plaza on the northwestern side of the intersection. The island on the western side of E. Canal Street will be enlarged to provide more protection to pedestrians, and the sidewalk will be improved to provide more direct connection to the crosswalks. All sides of this intersection will now contain pedestrian crosswalks with ladder-style markings.

At the intersection of S. 8<sup>th</sup> and E. Canal Streets, the only alteration is a tightening of the turn radius on the northwestern corner.

The provision of wider sidewalks along many of the streets within the plan area will allow for the planting of street trees. No landscaping plans are included at this time.

The cost estimate to implement these plans is \$1,738,000. A Capital Improvement Program budget request has been submitted but has not yet been evaluated. As a result there is no timetable for construction at this date.

**e. Master Plan**

In general, the Downtown Master Plan advocates for prioritizing pedestrian needs on Downtown Streets, noting that “conventional zoning and engineering standards tend to be focused on maximizing vehicle capacity and speed, rather than the creation of attractive pedestrian environments” (page 5.8). The Plan also advocates for the planting of street trees to create desirable addresses and enhance the pedestrian environment (page 4.21).

Regarding access to Kanawha Plaza, the Downtown Plan notes that pedestrian access to the park can be improved “with the use of clearly defined crosswalks and pedestrian signals on the roads adjacent to the park, and by reducing the speed of traffic on the adjacent roadways” (page 4.29).

Richmond’s Bicycle Master Plan, completed in May 2015, included a bicycle demand analysis that indicated a high demand for bicycling infrastructure on S. 9<sup>th</sup> Street (page 2-12). To meet this demand, the plan recommends the provision of buffered bike lanes on S. 9<sup>th</sup> Street (page 3-9).

Two of the strategies noted in the City’s Strategic Multimodal Transportation Plan, completed in July 2013, are to make street crossings safer for pedestrians and to develop a city-wide bicycling network (page 57). Two high priorities in the subject area are improving pedestrian crossings at the intersections of S. 9<sup>th</sup> with E. Canal and E. Byrd Streets and providing on-street lanes or sharrows on 8<sup>th</sup> and 9<sup>th</sup> Streets (page 62).

**f. Urban Design Guidelines**

The Urban Design Guidelines note that “all transportation projects should have adequate provisions to address the needs of the pedestrian in a safe and efficient manner” and that “street trees and lighting should be used to encourage pedestrian activity”. The Guidelines also say that “striped crosswalks, pedestrian crosswalk signals and other improvements that enhance safety should be installed as a standard amenity at all signalized intersections” (page 5).

The Guidelines are supportive of traffic management techniques that slow traffic (page 7) and that add “an aesthetic contribution to the urban character of the neighborhoods in which they are placed” (page 8). The Guidelines note that “intersections should be designed to serve pedestrians, bicyclists and motorists in a safe manner” (page 7). The Guidelines also state that “pedestrian crossings should be clearly marked and refuge islands should be provided where the crossing distance is 60’ or greater” (page 7).

The Guidelines note that “the use of curb extensions, or bulb-outs, is recommended where appropriate” (page 7). The Guidelines are supportive of on-street parking, noting that it “creates pedestrian activity and provides a buffer between those pedestrians and moving traffic” (page 6). In regards to landscaping, the Guidelines note that “landscaping should provide a sense of scale and seasonal interest” and that “shade trees for pedestrian comfort should be the predominant plant material in an urban setting” (page 10). The Guidelines also note that “existing granite curbing and stormwater inlets should be retained” and that “any new granite curbing should match existing curbs” (page 4).

## **VII. ATTACHMENTS**

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