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To: Planning Commission  
From: Urban Design Committee  
Date: February 21, 2017  
RE: **Final Location, Character and Extent review of the widening of Richmond-Henrico Turnpike between Dove Street and Fourquare Lane; UDC No. 2017-02**

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**I. APPLICANT**

Manouchehr Nosrati, Department of Public Works

**II. LOCATION**

Richmond-Henrico Turnpike between Dove Street and Fourquare Lane

**Property Owners:**

City of Richmond

**III. PURPOSE**

The application is for Final Location, Character and Extent review of the widening of Richmond-Henrico Turnpike between Dove Street and Fourquare Lane.

**IV. SUMMARY & RECOMMENDATION**

The committee moved this item to the regular agenda in order to ask the applicant more detailed questions regarding the full-depth reconstruction and slight widening of Richmond-Henrico Turnpike from Dove Street to Fourquare Lane. The applicant addressed concerns the committee had previously raised during conceptual review regarding certain aspects of the project:

-The proposed retaining wall material will be concrete, VDOT Standard 401.03 depicts potential surface treatment however another choice may be to install a form liner to enhance the aesthetics, this finish will need to be selected by the City; the scope of work for the landscape plan; the guardrail material; and the pedestrian improvement and traffic calming measures.

-In accordance with former City Arborist's request (Mr. Luke McCall), the landscape plans indicate a 1/2 caliper replacement. In other words, proposed trees to be planted will equate to half the lost diameter.

- Guardrail material along Richmond-Henrico Turnpike will be galvanized and similar to the recently installed segment to the north of Fourquare Dr. Please note that weathering steel will not be used due to high maintenance/replacement costs, the product is not approved by VDOT, and it may also compromise safety since it typically weakens as it rusts.

- The pedestrian opening at Fourquare Dr. /Richmond-Henrico Turnpike remains open and accessible and the turning radius from west-bound Dove onto north-bound Richmond-Henrico Turnpike has been tightened to 40'.

A citizen raised concern regarding water runoff and how the applicant plans to ensure it is mitigated to the fullest. The applicant stated they designed the project to ensure there will be no more runoff than currently exists.

The Urban Design Committee has no objection to the proposed roadway modifications, and finds the proposal to be consistent with the recommendations of the Urban Design Guidelines and the recommendations from conceptual review. Therefore, the Urban Design Committee recommends the Planning Commission grant final approval.

**Staff Contact:**

Josh Son, (804) 646-3741

**V. FINDINGS OF FACT**

**a. Site Description and Surrounding Context**

The subject corridor is located along Richmond-Henrico Turnpike between Dove Street and Fourquare Lane and traverses the R-5 (Single-family Residential), R-6 (Single-family Attached Residential) and R-48 (Multi-family Residential) zoning districts. Cannon Creek is located to the west of the corridor, and the former Dove Street Armory is located at the northeast corner of the intersection of Dove Street and Richmond-Henrico Turnpike. At the northern end of the corridor the surrounding area is developed with single-family detached dwellings. The Cannon Creek Greenway, a bicycle/pedestrian trail, runs parallel to Richmond-Henrico Turnpike to the east.

**b. Scope of Review**

The project is subject to location, character, and extent review as a "street widening" under Section 17.07 of the City Charter.

**c. UDC Review History**

The conceptual location, character and extent review of this segment of the Richmond-Henrico Turnpike Roadway Improvement was approved at the 2/4/2016, with conditions of the staff recommendations; that curb radii be reduced at the intersection of Richmond-Henrico Turnpike and Henrico Drive, Fourquare Lane; that there be a preference to the use of corten steel or something more aesthetic for the guardrail being used; that the guidelines should be followed for tree replacement to an inch for inch guideline if possible; that a pedestrian opening be maintained at 8-10' width at the intersection of Richmond Henrico-Turnpike and Fourquare Lane.

The Cannon Creek Greenway, which currently extends adjacent to and along Richmond-Henrico Turnpike from Valley Road to E. Ladies Mile Road, was reviewed by the UDC and approved by the Planning Commission over a series of years and has been constructed in phases from 2012 to 2015.

**d. Project Description**

This project involves the full-depth reconstruction and slight widening of Richmond-Henrico Turnpike from Dove Street to Fourquare Lane, a distance of about ½ mile. The applicant notes that the current roadway construction is substandard, with 1"-2" of asphalt placed over top a thin mixture of gravel and dirt. Due to the poor construction of the road base, the asphalt deteriorates

quickly. Other modifications include road alignment adjustments, installation of guardrail and retaining walls and drainage improvements.

The existing roadway carries one lane of vehicular traffic in each direction, with lane widths varying between 9' and 10.5'. The proposal includes providing consistent 10' travel lanes while shifting the roadway slightly to the east to minimize slope impacts to the ravine area to the west. As a result of the eastward shift of the road, two sections of retaining wall will need to be provided on the eastern side of the road.

The modifications also include the installation of continuous curb and gutter on the eastern edge of the road, with five existing outfalls directing stormwater into the ravine on the western side of the road. The western edge of the road will not have curb and will continue to transition to turf to allow stormwater to sheet flow down into the ravine. The proposed roadway modifications will add slightly to the impervious cover of the project area, from the existing 1.78 acres up to 1.93 acres.

The proposal includes the provision of guardrail on the western edge of the road.

The applicant proposed retaining wall material will be concrete and the attached VDOT Standard 401.03 depicts potential surface treatments. In addition, another choice may be to install a form liner to enhance the aesthetics. This finish will need to be selected by the City.

The applicant is following the former City Arborist's request (Mr. Luke McCall), by indicating a 1/2 caliper replacement. In other words, proposed trees to be planted will equate to half the lost diameter.

The guardrail material along Richmond-Henrico Turnpike will be galvanized and similar to the recently installed segment to the north of Fourquarean Dr. Weathering steel will not be used due to high maintenance/replacement costs, the product is not approved by VDOT, and it may also compromise safety since it typically weakens as it rusts.

The pedestrian opening at Fourquarean Dr /Richmond-Henrico Turnpike will remain open and accessible.

The estimated project cost is \$1,400,000, with funding coming from the City and VDOT revenue sharing. Currently, only \$110,000 of that estimate has been funded through the 2015 CIP budget. No timetable for construction has been established for this project at this time.

**e. Master Plan**

The subject corridor is located within the North Planning District as defined by the citywide Master Plan, which recommends Single Family (Low Density) uses for the adjacent properties to the east and Public & Open Space uses for the adjacent properties to the west, where Cannon Creek is located. The Plan also contains writing specific to the greenway, noting that "additional parks and open space should be provided", which includes lands adjacent to the Richmond-Henrico Turnpike between E. Brookland Park Boulevard and Dove Street" (page 261).

**f. Urban Design Guidelines**

The Transportation section of the Urban Design Guidelines note that “where feasible, all new roadway segments should be constructed to include bikeways” (page 5). Similarly, the Guidelines note that “all transportation projects should have adequate provisions to address the needs of the pedestrian in a safe and efficient manner”.

In a section on Street Design, the Guidelines state that “the width of a street should respond to the volume of traffic it carries. Lane widths on local and collector streets should be between 9 and 10 feet” (page 6). In regards to landscaping/street trees, the guidelines offer that “plant materials should be adaptable to existing soils, climatic and lighting conditions, and be disease resistant. Native plant species are encouraged, but not required” (page 10).

**VII. ATTACHMENTS**

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