

SHOCKOE VALLEY STREETS IMPROVEMENTS

Steering Committee Update

Date: February 2021

Introduction

Since we last met on May 3, 2019, the design of the Shockoe Valley Streets Improvements project has continued to progress. This has culminated with the 60% plans being submitted in August of 2020.

Due to the nature of COVID and wanting to limit gatherings, we created this memorandum to provide and update to the Steering Committee on the status of the project, as well as the expectations for the project moving forward.

Project Status

Construction Documents

Following the 30% submission, RK&K's team received comments from the City and other review agencies regarding the proposed design. Taking this feedback, the project team has continued to develop the plans and documents accordingly and advanced the design for the 60% submission to the City and VDOT. This submission was made in August of 2020, and the team has since received feedback and comments on the 60% documents from the City. This feedback has started to be incorporated into the design, and a few changes to the documents have transpired. This document includes updates that were determined post 60% submission.

Project Meetings

The following meetings have taken place since we last met:

- 5/3/2019 – Steering Committee
- 5/9/2019 – Public Information Meeting
- 6/6/2019 – Urban Design Committee (Conceptual)
- 6/17/2019 – Planning Commission (Conceptual)
- 7/17/2019 – Shockoe Alliance Community Meeting
- 9/9/2020 – Update to City staff
- 10/14/2020 – Technical Committee/60% Comment Review
- 1/5/2021 – CAO Presentation
- 1/2021 – Steering Committee Update Memo

- Coordination with VDOT for Smart Scale Scoping
 - 5/28/2019
 - 10/4/2019
 - 4/2/2020



Cultural Resources

A Phase I cultural resource survey of the project area was completed by Dovetail Cultural Resource Group (Dovetail) in 2018. Following this survey, the Department of Historical Resources (DHR) recommended that additional archival research and further archaeological testing be required. This additional research was completed in May of 2020 and the field work in July 2020. In October 2020, a report of the findings was produced by Dovetail and submitted to DHR for approval. As part of this report Dovetail recommends the following:

- Not impact the potential archaeological deposits beyond the current cut and fill plans
- Further studies for all sites potentially eligible for the National Register of Historic Places (NRHP) listing under Criteria D, and additional research to determine potential eligibility under Criteria A-C
- Deep testing is not recommended as part of any further archaeological work on this project

The following is a map showing the proposed testing locations. The blue dots represent a location where a feature, such as a building foundation or artifact, has been found. Disturbances without finding a tangible artifact are denoted by orange dots, and the yellow dots are locations where nothing of historical importance was found during field work.



Figure 1: Archaeology Work

Further steps are currently underway to determine the best way to complete the recommended further archaeology studies. Additional information will be provided in the future.

Project Overview and Updates

Project Goals

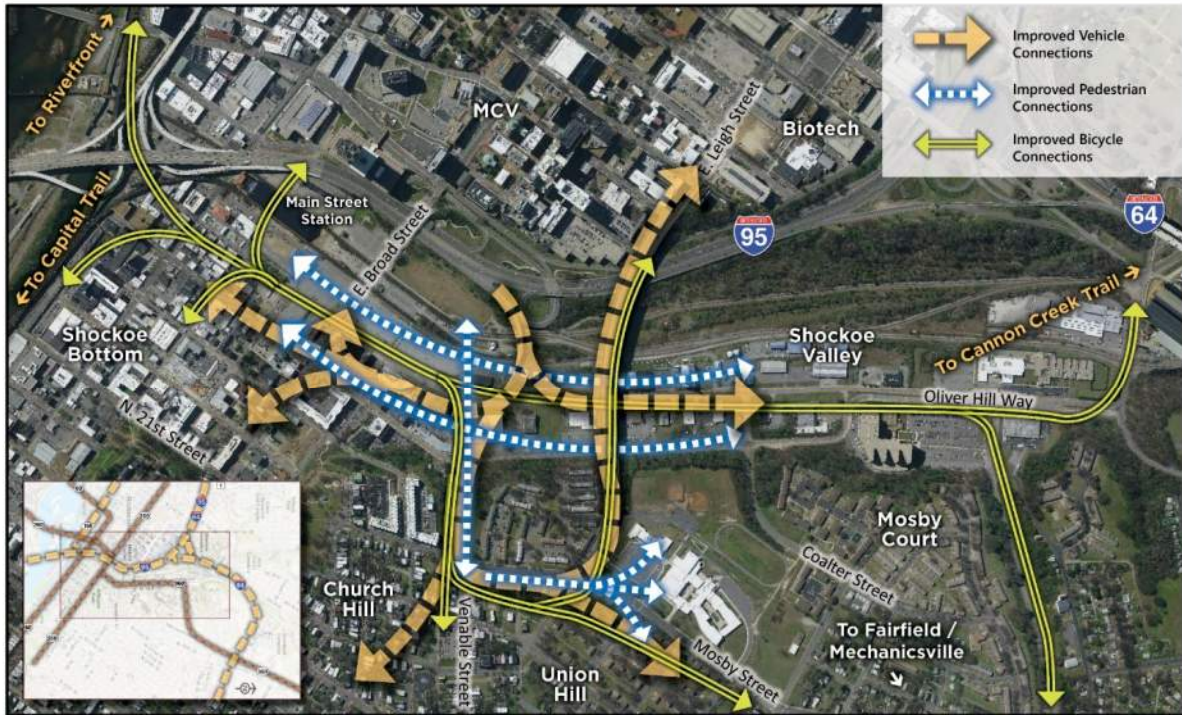
The following goals have been identified for the project, as previously shown:

- Improve Multi-Modal Safety, Mobility and Circulation
 - Prioritize Bicycle and Pedestrian Routes and Connectivity
 - Improve Safety Through Traffic Calming and Speed Reduction
 - Reduce Conflict Points for Vehicles, Bicycles, and Pedestrians
 - Improve Efficiency for all modes of Transportation
- Improve Multi-Modal Accessibility and Connectivity
 - Complete Streets Serving All Users – Develop a “Sense of Place”
 - Improve Access and Connectivity to Union Hill, Church Hill Neighborhoods & VCU/North of Broad Development
 - Two-Way Traffic on Oliver Hill Way and 18th Street
 - Ensure Access to Transit for All Users
- Environmental Sustainability
 - Preserve Cultural Resources – Historical and Archaeological
 - Minimize Impacts
 - Innovative, Healthful, Clean Solutions
- Economic Development
 - Increase Investment in Neighborhood Due to Improved Access
 - Two-Way Traffic on Oliver Hill Way and 18th Street
 - Encourage Mixed Use Development
 - Enhance Street Aesthetics
 - Lighting
 - Walkability
 - Bicycle Facilities
- Land Use
 - Provide Open Spaces
 - Improve Connectivity to All Modes of Travel

Project Connectivity

In conjunction with the project goals in the section above, and the SmartScale application, the Shockoe Streets project seeks to enhance connectivity throughout the region. This includes the Church Hill and Union Hill regions, Shockoe Bottom, and the Capital and Cannon Creek trails. The following map demonstrates the areas that are anticipated to become more accessible through the implementation of the project:





Improved Connections



Figure 2: Project Connectivity

Within the project limits, there has been a focus on providing enhanced pedestrian and bicycle facilities. These facilities were mainly kept the same from the 30% plans to the 60% plans, except for the cycle track on Oliver Hill Way north of the proposed roundabouts. This cycle track was shifted from the eastern side of the roadway to the western side in order to connect to a future cycle track, by others, for an ultimate connection to the Cannon Creek Trail.

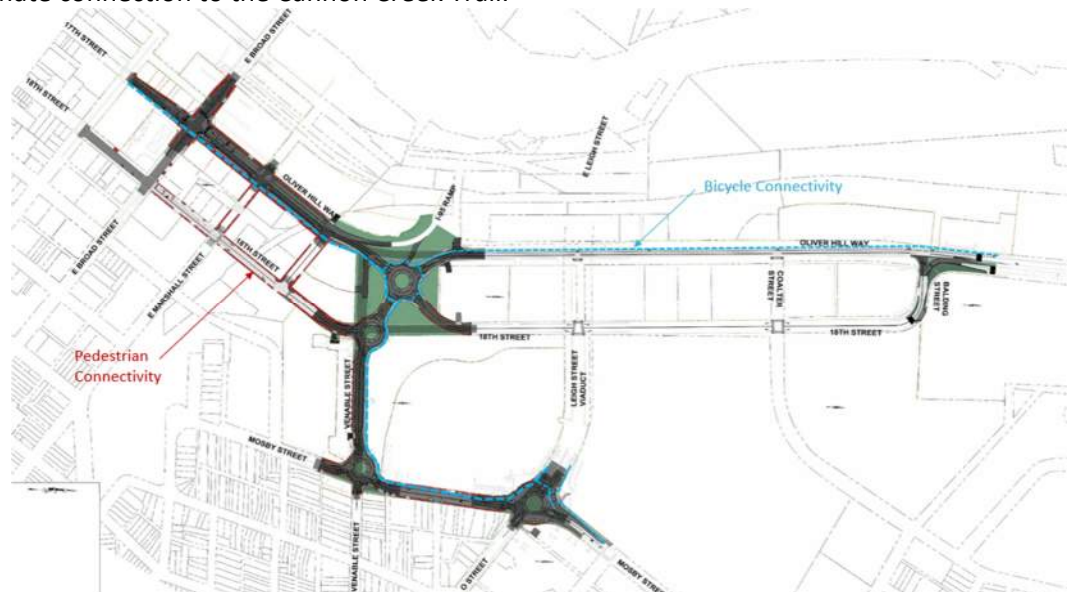


Figure 3: Pedestrian and Bicycle Connectivity



E. Broad Street / N. 17th Street / Oliver Hill Way

As shown in the initial design concept, in conjunction with the SmartScale (HB2) application, the intersection at E. Broad Street/N. 17th Street/Oliver Hill Way was a roundabout concept, as shown below:



Figure 4: Original Broad Street Roundabout Concept

As seen in the 30% plans, this concept was converted to a conventional intersection to show a smaller footprint and alleviate traffic impacts to I-95. After various meetings with VDOT, it was determined that it would be acceptable to use a conventional intersection instead of a roundabout in this area without risking loss of funding. The following figure shows the intersection from the 60% design with an overlay of the limits from the roundabout for comparison.



Figure 5: 60% Broad Street Intersection Concept with Roundabout Area Overlay

The 60% revisions to this concept included the creation of a protected intersection to maximize safe passage for pedestrians and bicyclists. This concept features additional islands and separation between pedestrians and bicyclists and vehicular traffic.

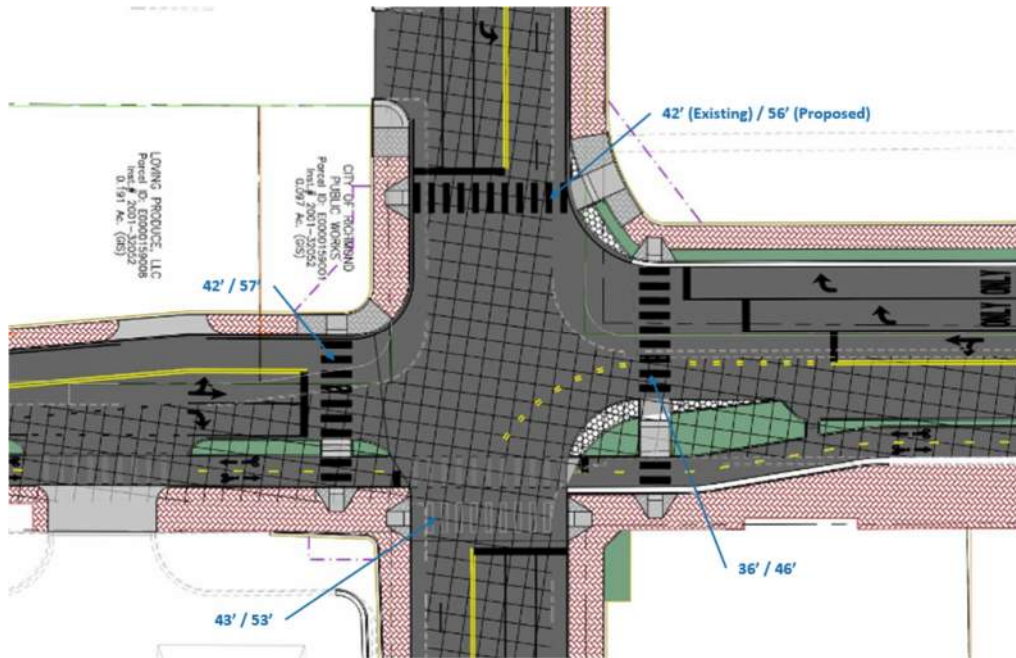


Figure 6: Protected Intersection Concept

Oliver Hill Way

While the Oliver Hill Way design fundamentally stayed the same in terms of layout, there were subtle refinements to the corridor. These refinements included the protected intersection design at Broad Street, Marshall Street, and Clay Street, the extension of a median north of Clay Street to prevent the potential for someone using the ramp from I-95 to stop short and attempt to turn at Clay Street, and enhanced detailing on the street layout. The current concept can be seen in the following figure:

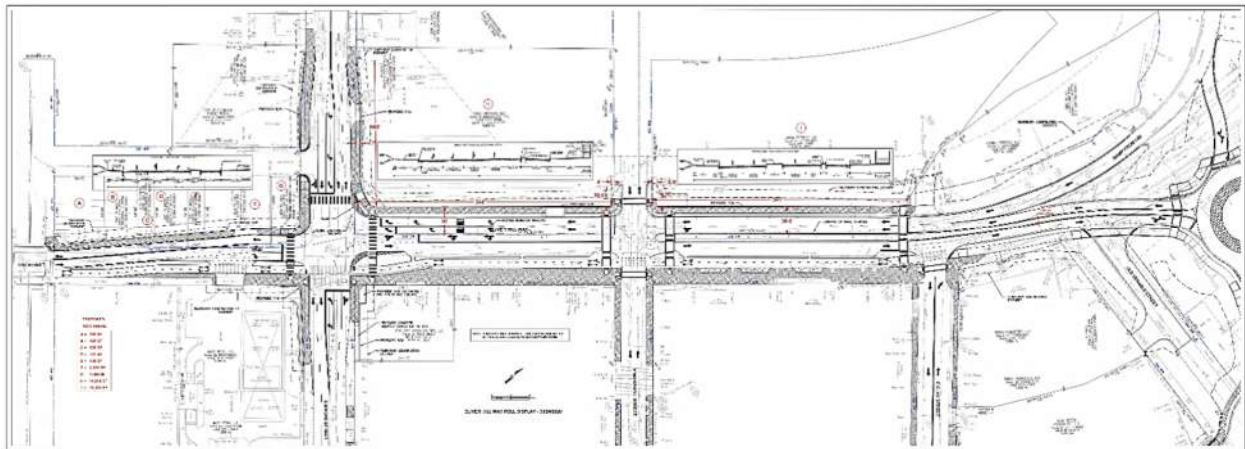


Figure 7: Current Oliver Hill Way Corridor

The two blocks between Broad Street and Clay Street both have an increase in the ratio of non-car space versus space dedicated to cars.

Oliver Hill Way and 18th Street Roundabouts



The roundabouts on Oliver Hill Way and 18th Street only were modified slightly between the 30% and 60% documents. The main edits included refinement of the I-95 off-ramp, enhancements to the sidewalks and shared use paths in the vicinity to accommodate more pedestrians and bicyclists in the waiting areas, and ensuring the layout met required standards for speed and safety vehicle access. The following graphic shows the current layout with proposed landscaping, as well as the footprint of the existing roadways to be removed.

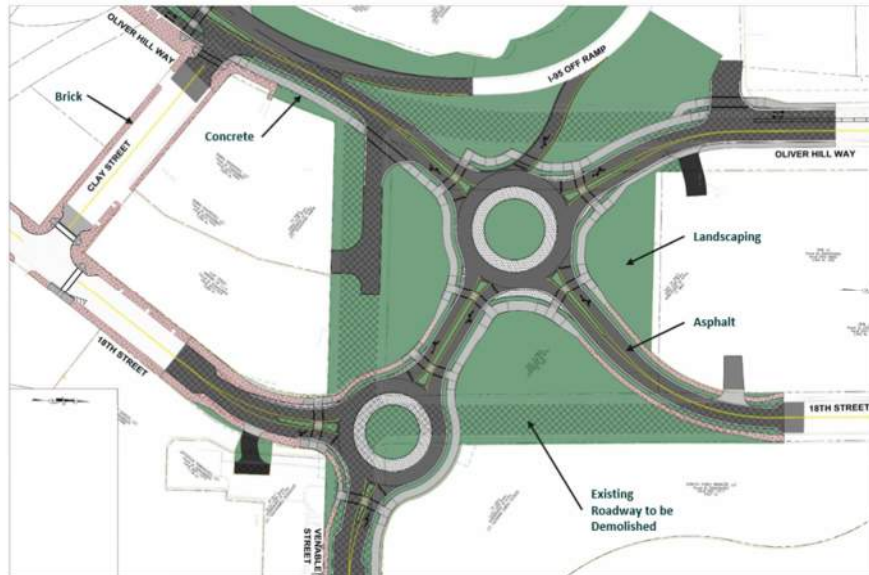


Figure 8: Oliver Hill Way and 18th Street Roundabouts

Mosby Street and Venable Street Roundabout

The roundabout at Mosby Street and Venable Street remained primarily unchanged from design progression. This is largely due to the Union Hill Historical District on the eastern edge, the steep terrain to the leasing office on the southwest corner, and the overall grading required to ensure that the roundabout and Venable Street are all within standard design compliance. The image below shows the current alignment, with a summary of what was updated for the 60% documents.

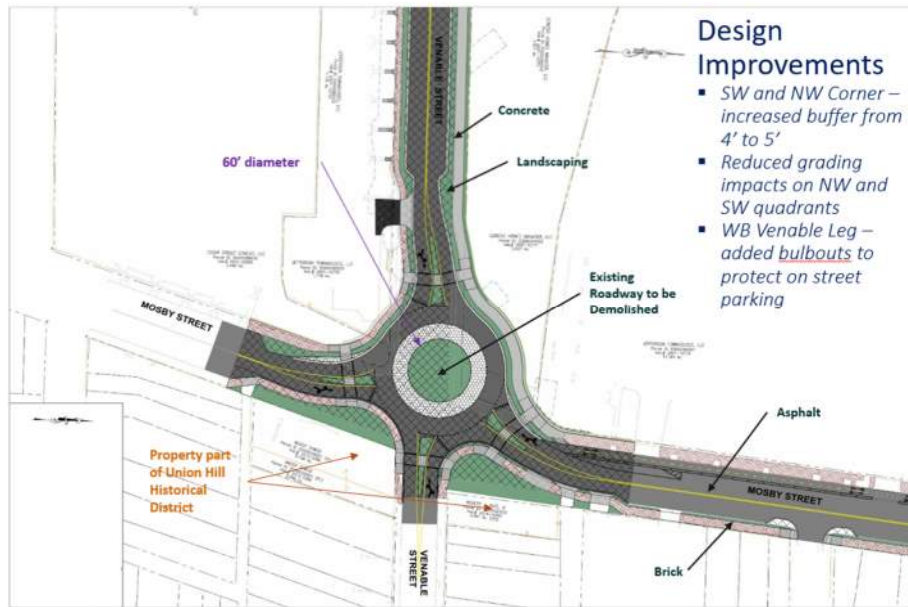


Figure 9: Mosby Street and Venable Street Roundabout

Mosby Street and Leigh Street Roundabout

The final roundabout has been the most heavily changed from 30% to 60% plans. The 30% concept was more oval, as can be seen below:

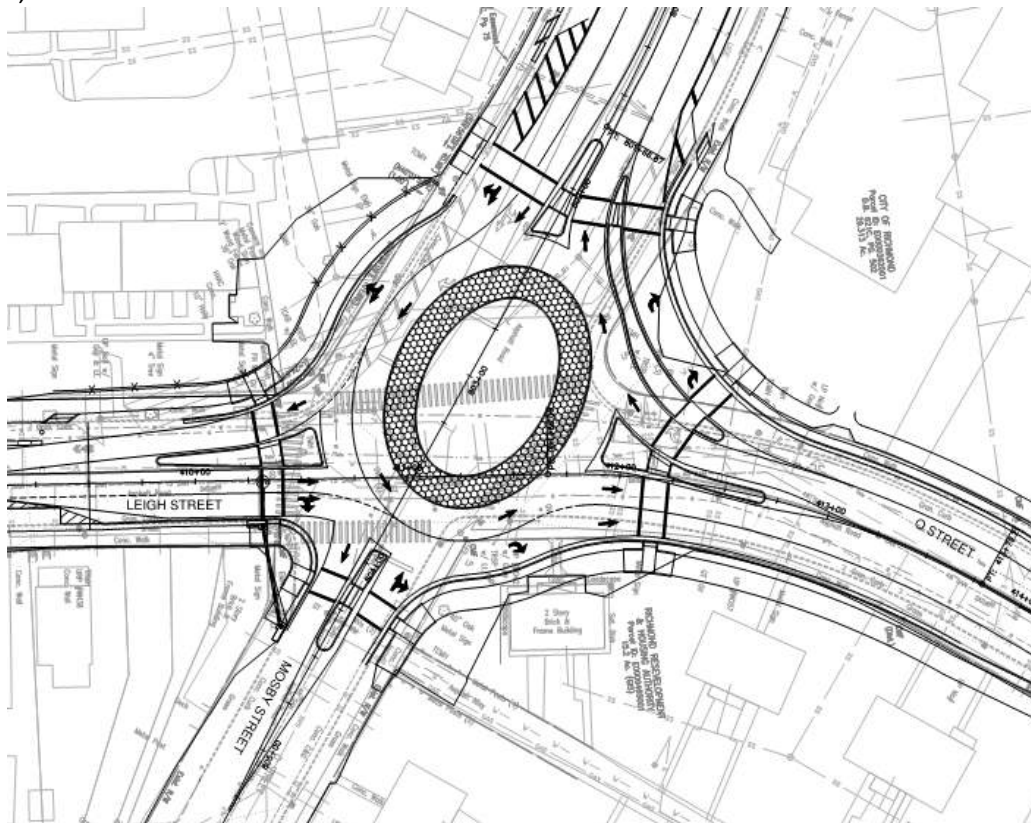


Figure 10: 30% Roundabout at Mosby Street and the Leigh Street Viaduct

The team took the feedback from the 30% plans and worked to find a solution that provided shorter crossing distances for the crosswalks, additional protection in refuge islands, and separating bicyclists from pedestrians where possible. These changes resulted in a circular roundabout with shorter, safer crossings for non-car users. A visual of the proposed roundabout can be found below:

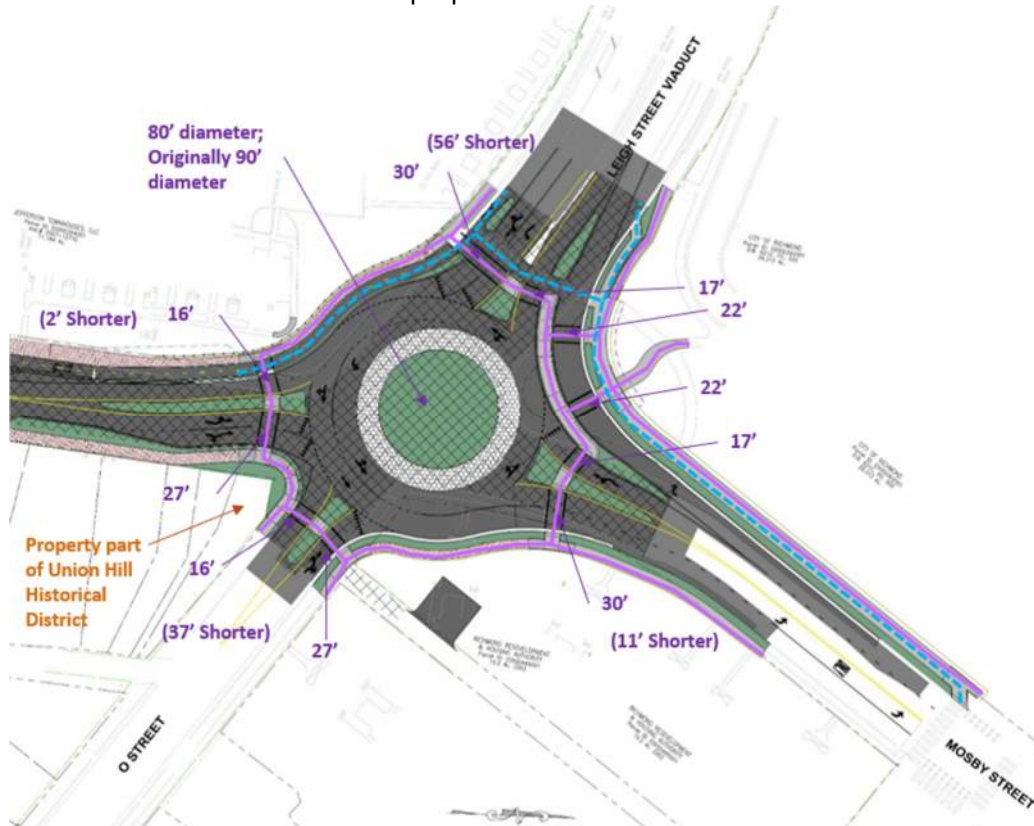


Figure 11: 60% Mosby Street and Leigh Street Viaduct Roundabout

Value Engineering

The current estimate for the Shockoe Streets Improvement Project, at the 60% design stage, is approximately \$38 Million. VDOT is providing approximately \$28 Million through the Smart Scale program and any costs exceeding that amount must be provided by the City. In an attempt to identify areas to reduce cost while still meeting the goals of the project, the design team has been looking into potential cost savings measures including:

- Reducing the limits of full streetscape enhancements, such as, brick sidewalks, ornamental lighting and other streetscape items and focus those elements on the main Oliver Hill Way corridor, as it will be the gateway into Richmond and the neighborhoods from I-95.
- Modifying the drainage system design to reduce the size and number of facilities needed for drainage and stormwater management.
- Refining the limits of utility relocations and reducing utility impacts where possible.

In addition, the Virginia Department of Transportation (VDOT) requires an independent review of a project if the estimated construction cost exceeds \$15 Million. In addition to the potential cost saving measures investigated by the RK&K design team, the City tasked another engineering firm, Whitman, Requardt & Associates, with completing a formal Value Engineering Study. A draft version of this report was presented to the City in December 2020. Four recommendations were made, totaling approximately \$3.7 million, which can be summarized as follows:

Value Engineering Recommendations	Potential Cost Savings
1. <i>Revise the Sequence of Construction & Maintenance of Traffic Plans</i>	\$2,380,193
2. <i>Minimize Full Depth Pavement Reconstruction</i>	\$450,650
3. <i>Minimize and Standardize Retaining Walls</i>	\$567,770
4. <i>Reduce Widths of Lanes, Shared Use Path, and Sidewalk Where Possible</i>	\$266,542
Total Potential Savings:	\$3,665,155

Figure 12: Value Engineering Recommendations from Whitman, Requardt & Associates

Determination of which of these recommendations to accept is currently under review by the City staff.

Next Steps

The team will continue to address 60% comments while completing the additional archaeological investigations required by the Department of Historical Resources (DHR). Once we complete the archaeological work, we will proceed to a Public Hearing, anticipated later this year (2021), followed by an update to the Planning Commission. These dates are pending the completion of the archaeology process and approval by DHR to proceed.

We will continue to engage with the Steering Committee as the project continues. Further updates will be provided following the Phase II archaeology findings, as the team gets into the 90% design phase.

