





Calhoun Expressway

8.0 CALHOUN EXPRESSWAY

8.1 INTRODUCTION

The Calhoun Expressway, an elevated expressway built in 1976, was intended to connect Interstates I-20 to I-520 through Downtown Augusta (refer to Figure 8.1a). The planned expressway was never fully realized and instead is elevated only from Metcalf Road to 12th Street, essentially the entire length of Harrisburg. The Expressway's alignment through Harrisburg is the result of opposition from an earlier plan that proposed the Expressway run through the Augusta National Golf Club, a faster route connecting the interstates. However, public opposition of an expressway through the golf course led to the alternative plan that created what exists today. The Calhoun Expressway connects to Washington Street, a five lane commercial corridor, on the west side of Harrisburg; it continues southeast and then turns to avoid Augusta National, bridges over Rae's Creek and extends over the Harrisburg community. The Expressway ramps down to grade at 12th Street and connects to Greene Street, a four lane divided roadway with a planted median and parallel parking. This resulting Expressway does not connect interstates as planned and instead has become a highway that goes from nowhere to nowhere. The Expressway does provide the benefit of a fly over allowing easy bypass of the railroad tracks. However, the negative impacts on Harrisburg are immense. The Expressway cuts the neighborhood in half, providing only four underpasses to connect the north and south ends of the community (historically nine existed). The Calhoun Expressway additionally destroys adjacent real estate values with its unattractive design and identity as a barrier within the community.





Figure 8.1a: Calhoun Expressway Location Map



Figure 8.1b: Calhoun Expressway Shown in Orange Over 1954 Sanborn Map

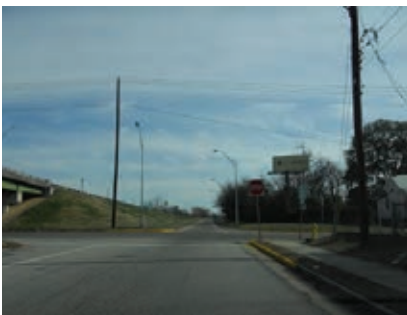
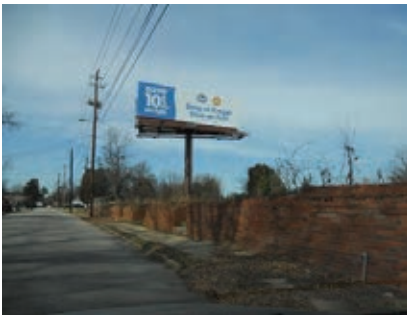


Figure 8.1c: Calhoun Expressway Current Condition Images

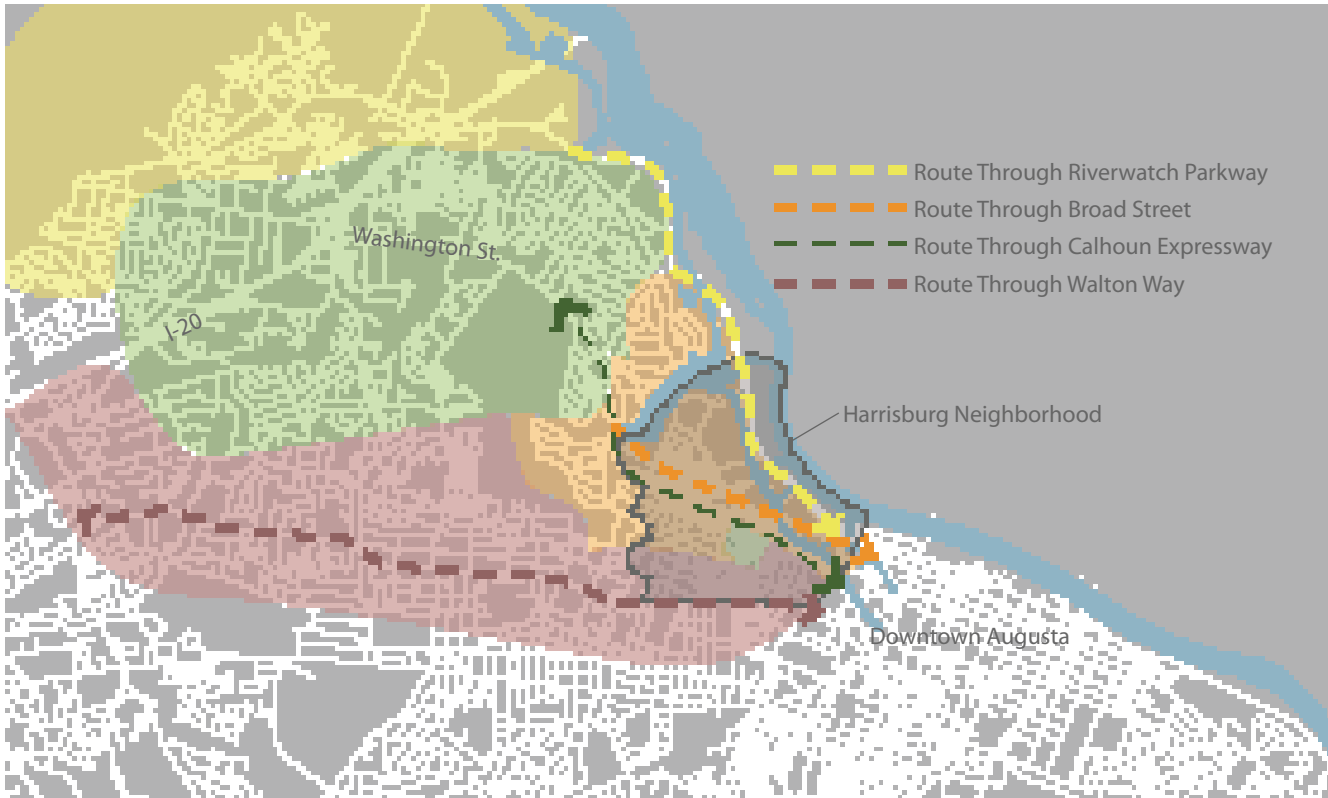


Figure 8.1d: Traffic Flow to Downtown Augusta

8.1.1 EXISTING CONDITIONS AND ISSUES

The Expressway sits below grade after it crosses over Rae's Creek to Metcalf Street. It is above grade from Metcalf Street until it returns to grade at 12th Street in Downtown Augusta. When it was constructed, it erased entire blocks from Harrisburg (188 individual land parcels) and completely destroyed the historic Rollersville neighborhood (refer to Figure 8.1b). It ultimately split Harrisburg in half, separating a large part of the Harrisburg community from the Augusta Canal, the King and Sibley Mills, Lake Olmstead Park, the BMX park, the GreenJackets Stadium, and other recreational amenities located north of the Calhoun Expressway.

EXISTING SITE PHOTOS

Existing site photos illustrate the condition of the Expressway as it is today. The images in Figure 8.1c show how intrusive the Expressway is in different parts of the

neighborhood and at different grade changes. It does not matter if the Expressway is above or below grade, it remains a nuisance and obstruction to the community. Where it is at grade, it is separated from the neighborhood by a chain link fence, which collects trash and presents an ever-present safety hazard. Where it is above grade, it becomes a concrete and/or grass wall obstructing views and passage. Where it is below grade it is an uncrossable canyon.

TRAFFIC STUDIES

Several previous studies have recommended removing the Calhoun Expressway entirely or replacing it with a boulevard. Although additional traffic studies are needed to consider various alternatives, preliminary traffic studies - including traffic flow (where the traffic originates), average daily traffic and existing transit opportunities - suggest that redesigning the Expressway is feasible.

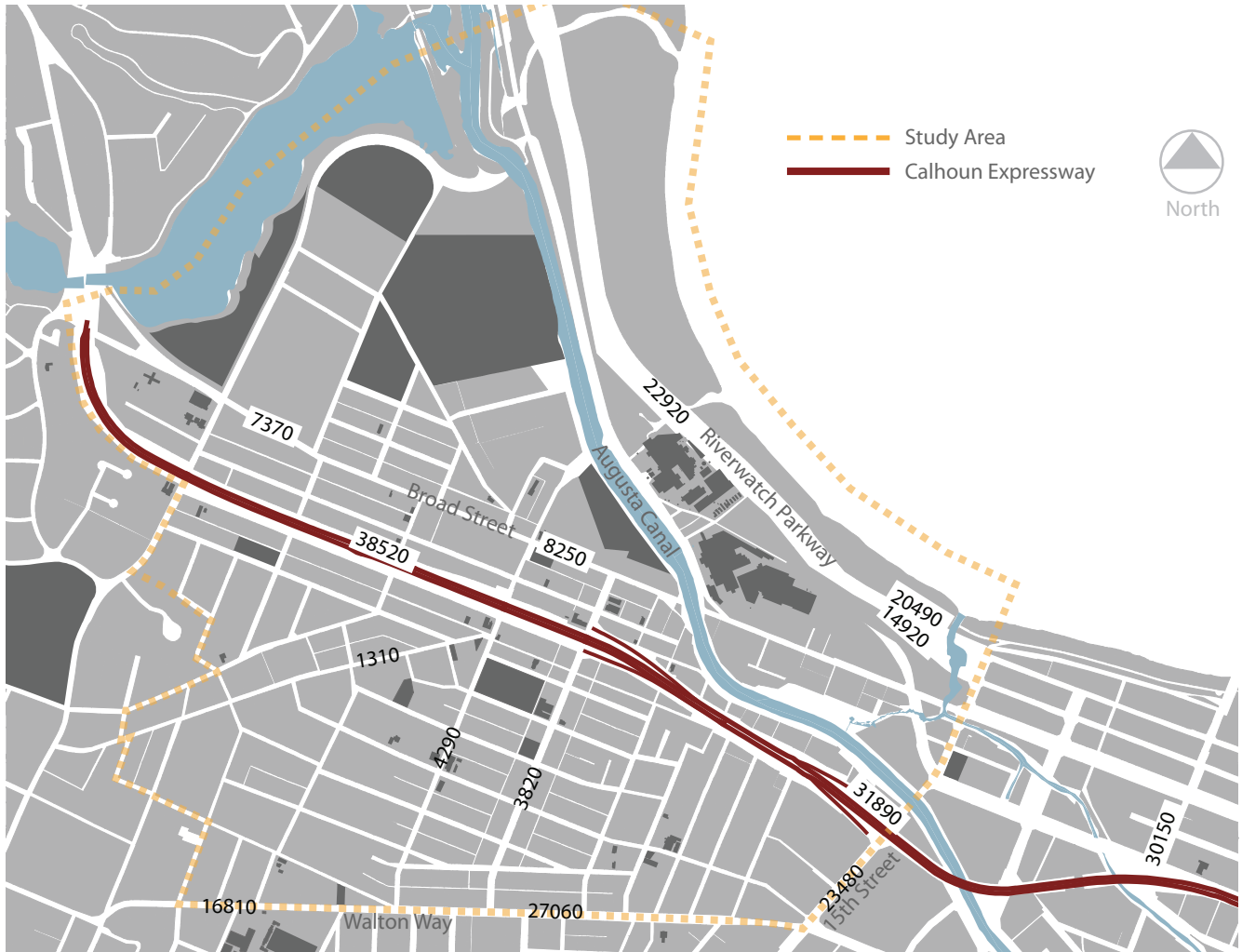


Figure 8.1e: Traffic Counts In Average Daily Trips

TRAFFIC FLOW

The Calhoun Expressway can absorb as many as 2,000 passenger cars per hour per lane. The total travel time on the Calhoun Expressway is 5 minutes or less. This travel time estimate does not account for traffic stopping or slowing while cars enter or exit the Expressway. Most of the traffic arrives from the northwest and travels along the Expressway to Downtown Augusta with exits at Eve/Crawford, 15th Street and ending at Green Street. The traffic flow for the major routes into downtown - Riverwatch Parkway, Broad Street, Calhoun Expressway, and Walton Way - are shown with the origin of traffic traveling to Downtown Augusta in Figure 8.1d.

AVERAGE DAILY TRAFFIC

The Average Daily Traffic diagram, Figure 8.1e, shows the daily traffic volume for the major roads into downtown according to Georgia Department of Transportation. This provides an idea of the amount of traffic that would have to be accommodated if the Expressway were to be altered. The additional load could be handled by distributing traffic to Riverwatch Parkway, Walton Way and/or Broad Street.

The Calhoun Expressway is not at vehicular capacity and, therefore, could easily service the same amount of traffic with a fewer number of lanes. By decreasing the number of

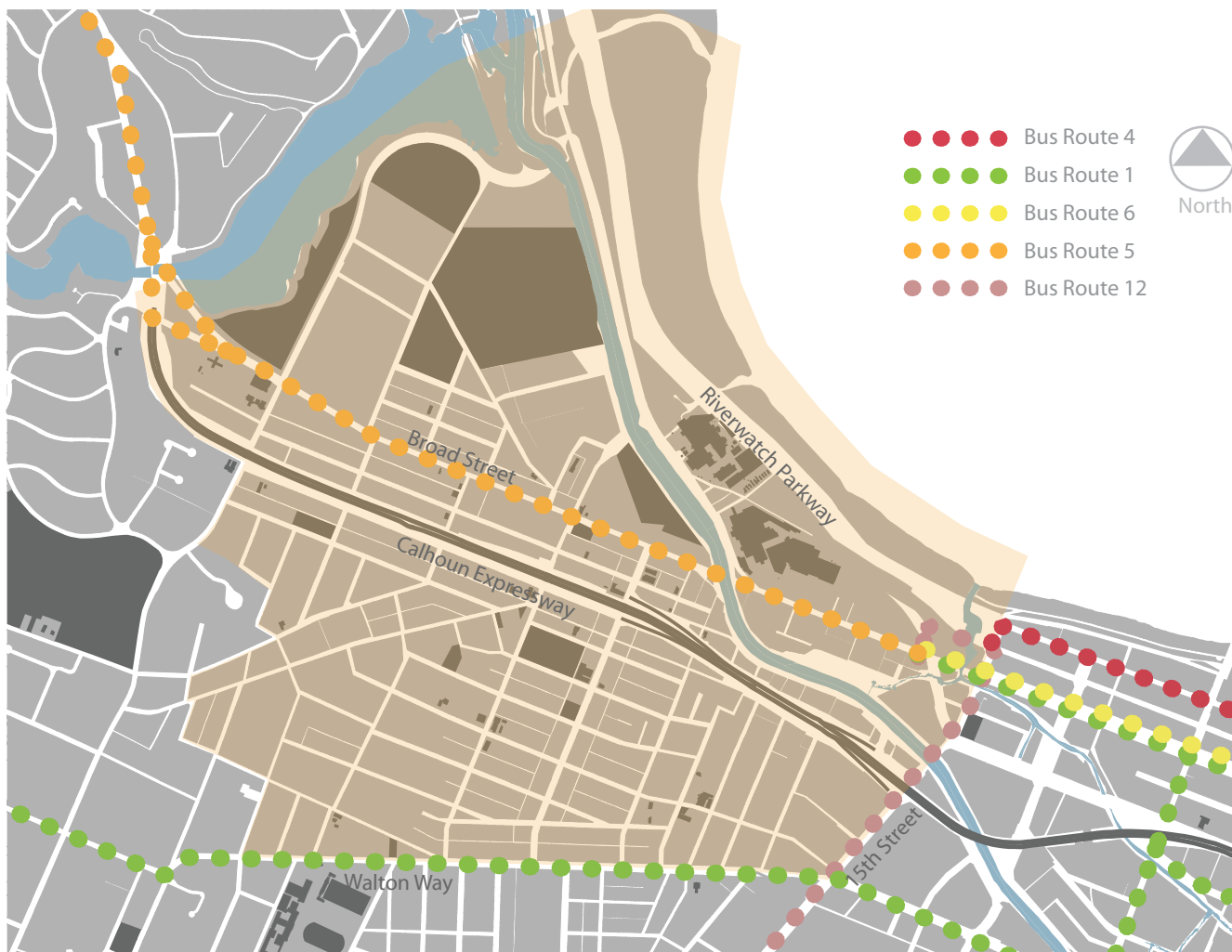


Figure 8.1f: Bus Routes Through Project Area

lanes and distributing the residual traffic to other routes, the Calhoun Expressway could be altered to become an at grade neighborhood street that connects the surrounding neighborhoods to downtown, the Kroc Center, the Canal, Olmstead Park the GreenJackets ballpark and other amenities located north of the Expressway.

TRANSIT

The dotted lines in Figure 8.1f denote the current bus routes near and within the Harrisburg neighborhood. These routes could be used to alleviate some of the traffic demand and serve the community, connecting Downtown Augusta, the Georgia Health Sciences University, and other

area businesses. Strategically increasing the frequency of buses at key times during the day would help to make the buses a more viable alternative.

ISSUES

It is clear that the Calhoun Expressway does not serve regional transportation service, as it was originally intended to. Especially from the perspective of Harrisburg, the Calhoun Expressway should be altered to serve as part of the neighborhood street framework, connecting people and amenities, instead of serving as the barrier that it has become.

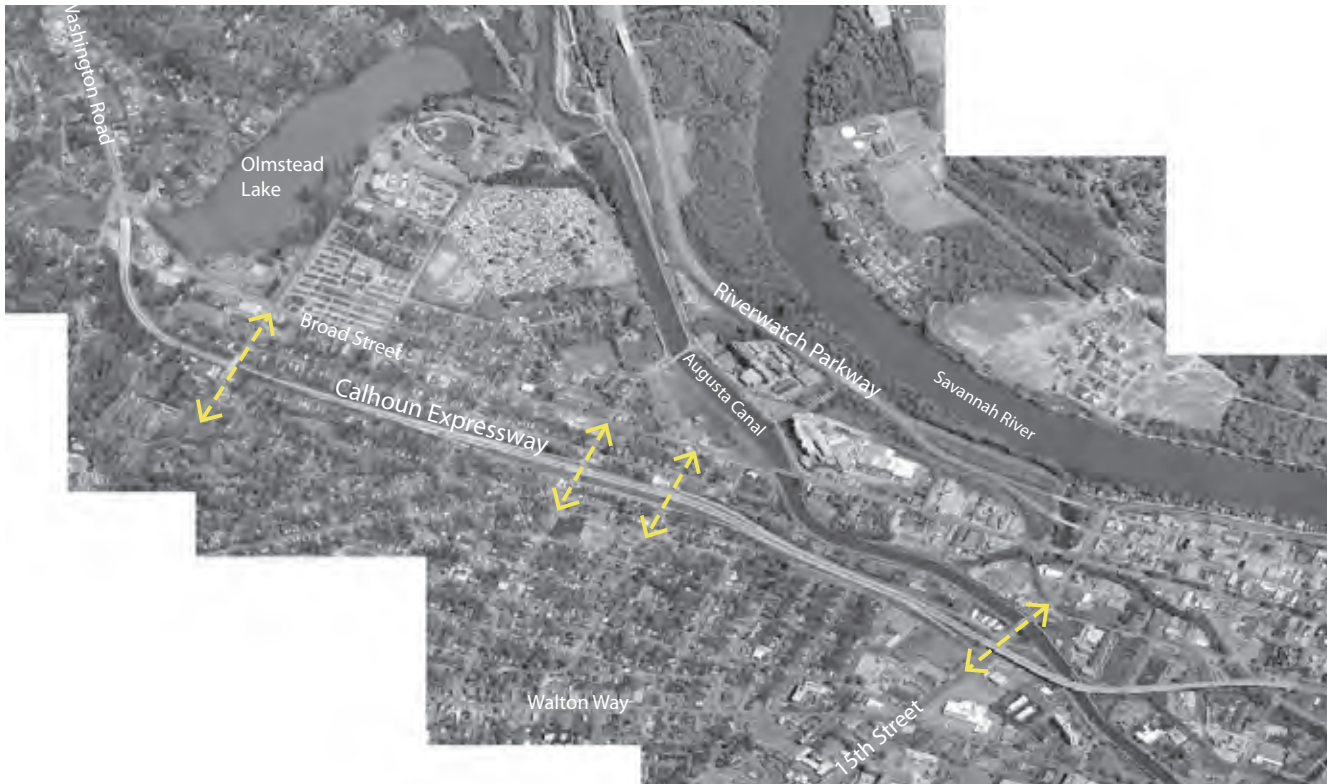


Figure 8.2a: Existing Connections Across Calhoun Expressway



Figure 8.2b: Proposed Additional Connections Across Calhoun Expressway

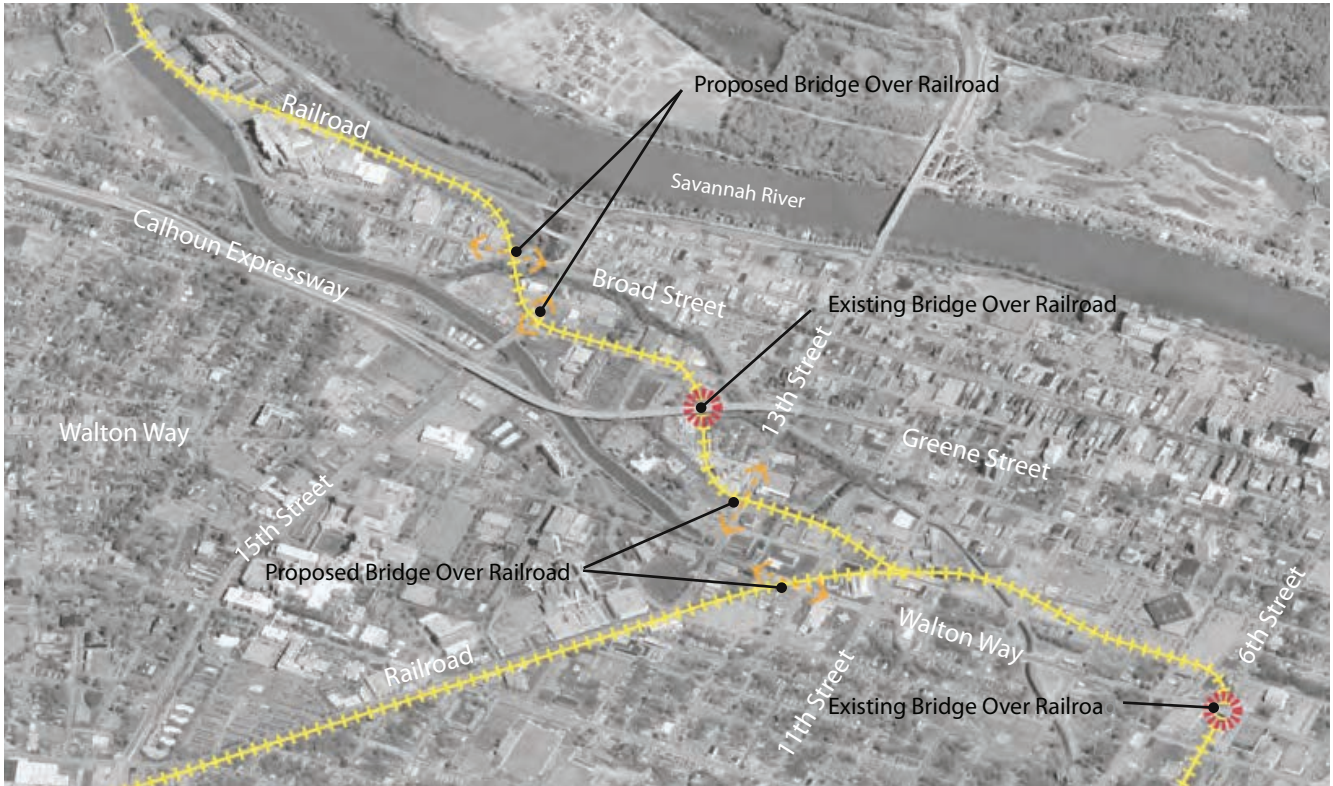


Figure 8.2c: Potential New Connections Across Railroad Tracks

8.2 STRATEGIES

CONNECTIONS ACROSS THE EXPRESSWAY

The Calhoun Expressway separates the north half of the Harrisburg neighborhood, with its many amenities, from the majority of residences located to the south of the Expressway. Currently, there are four connections, shown in yellow on Figure 8.2a. If the Expressway is removed or redesigned, five additional crossings could be realized, shown in orange on Figure 8.2b. Re-establishing these connections is important to creating better access to major assets in the area. New connections will increase the value of the homes to the south of the Expressway because of their increased connectivity to the amenities to the north of the expressway as well as increasing the value of properties facing the expressway itself.

ELEVATED ACCESS FOR THE RAILROAD AND CANAL

One of the benefits of the elevated expressway is to

provide unimpeded access across the canal and the railroad - especially important for use by emergency vehicles. However, maintaining access over the canal is not dependant on the Calhoun Expressway since another connection exists across Butt Memorial Bridge on 15th Street. There is no other viable route, however, over the railroad at this time. The red circles, in Figure 8.2c, show the existing bridges over the railroad and the orange arrows show different possible locations for a bridge over the railroad if the current fly over is removed. These alternatives could be viable options for future planning in the area, although further study is needed.

FOUR OPTIONS

Four options for the removal of the Calhoun Expressway are presented in the next sections along with the travel time and flow capacity of each. Existing travel time along Calhoun Expressway is estimated at 5 minutes. Existing Traffic Flow at LOS D is 38,000 Average Daily Traffic.^{8.1}

8.2.1 OPTION 1: MULTI-USE TRAIL

Option 1 is the only option that envisions the Calhoun Expressway infrastructure remaining in its current state (refer to Figures 8.2d, 8.2e, and 8.2f). While it does allow pedestrians and bicyclists to utilize the infrastructure, it still stands as a barrier dividing the community in half. This option could work as an intermediate step until funding can be secured to bring the Expressway to grade and Options 2, 3, or 4 implemented.

- Calhoun Expressway structure remains, but the four travel lanes are reduced to two travel lanes.
- Adds additional multi-use trail space for pedestrians
- Reduces road capacity
- Neighborhood is still split

Traffic Volume at LOS D: 10,000 ADT

Minutes to Travel Distance (4 min)

+ 30 Seconds Per Light (0 min)

+ Change in Level of Service (1 min)

Travel Time:	5 minutes
Additional Lots Created:	0 lots
Total Acreage Returned to Tax Digest:	0 acres
Relative Cost:	Low



Scale 1" = 50'

Figure 8.2d: Option 1 Plan Detail



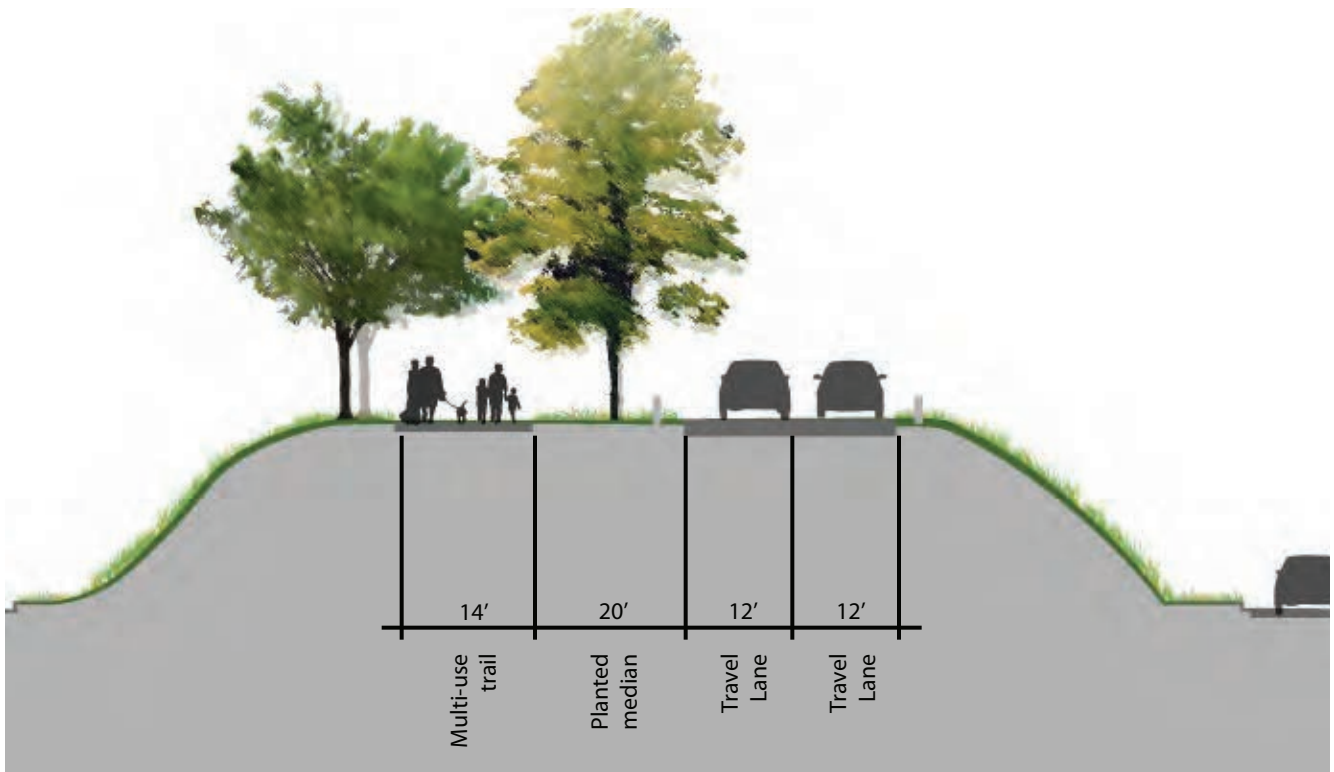


Figure 8.2e: Option 1 Street Section

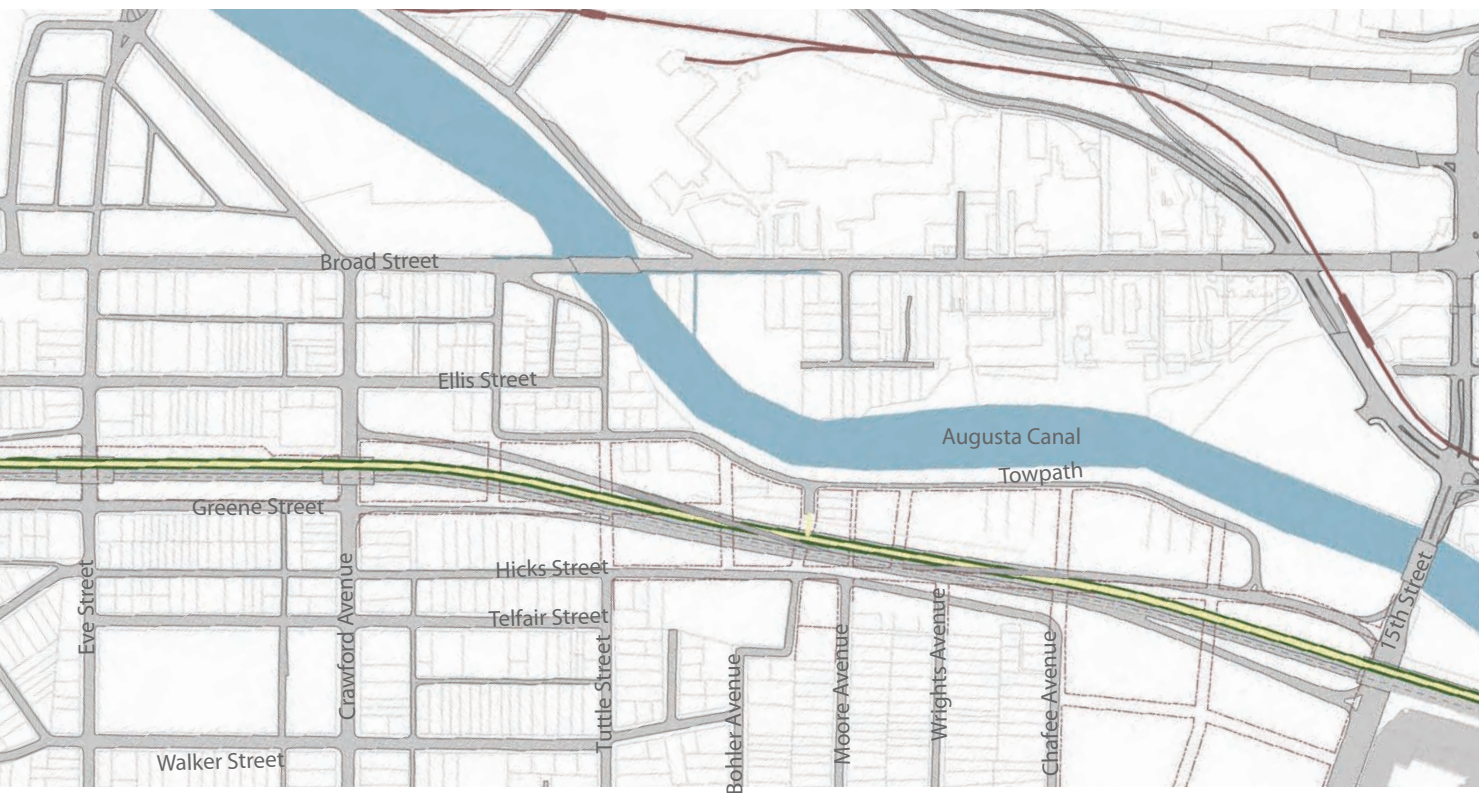


Figure 8.2f: Option 1 Proposed Layout

8.2.2 OPTION 2: LOCAL ROADS

Option 2 brings the Calhoun Expressway to grade and converts it into a local road (refer to Figures 8.2g, 8.2h, and 8.2j).

- Eliminates most through traffic, reduces travel lanes from four to two lanes, and adds on-street parking.
- Slows traffic through neighborhood with multiple intersections.
- Restores original city master street plan.
- Greatly increases commute time.

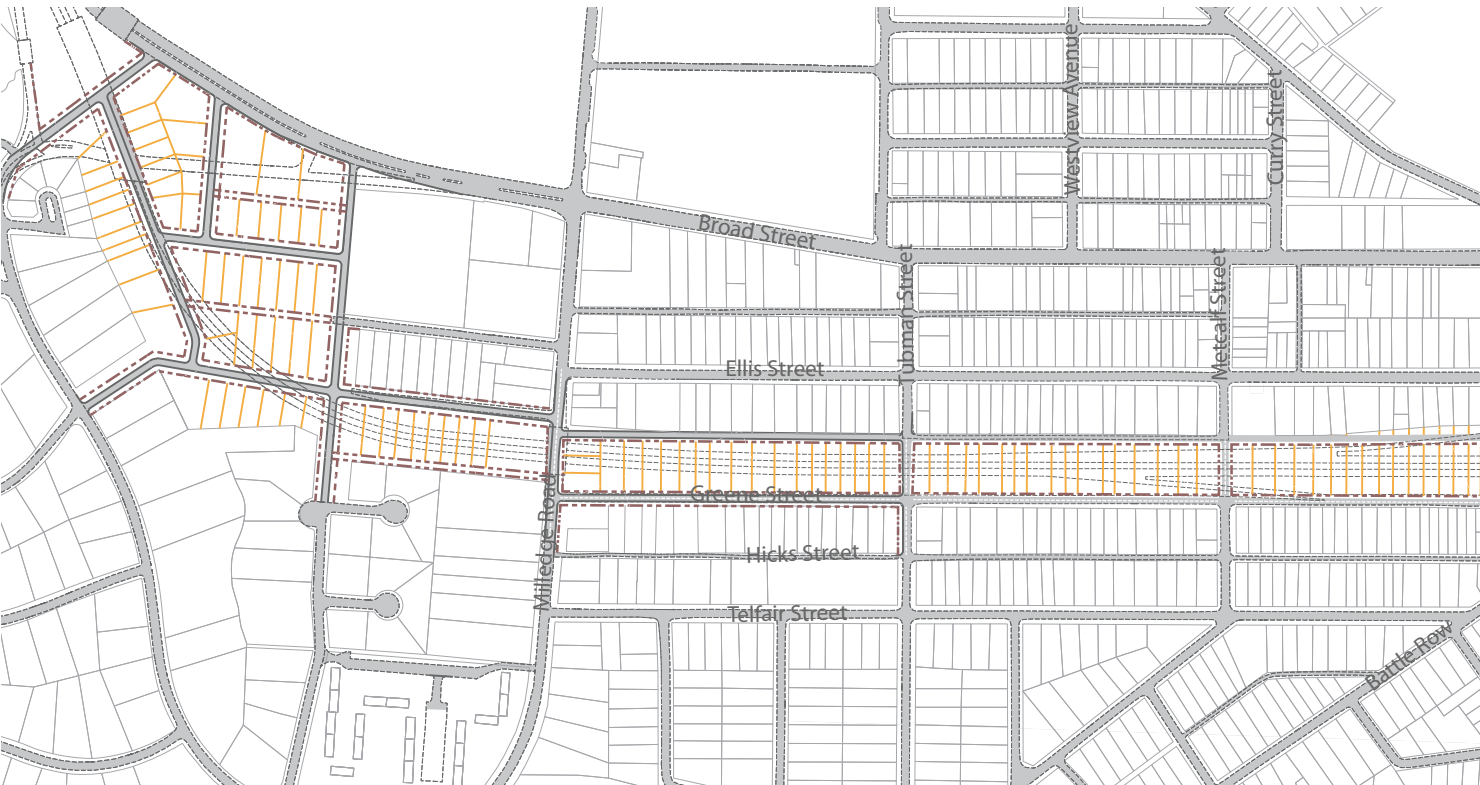
Traffic Volume at LOS D: 6,000 ADT
Minutes to Travel Distance (6 min)
+ 10 Seconds Per Stop Sign (2 min)
+ Change in Level of Service (4 min)

Travel Time: 12 minutes
Additional Lots Created: 240 lots

Total Acreage Returned to Tax Digest: 61.7 acres
Relative Cost: Medium



Figure 8.2g: Option 2 Plan Detail



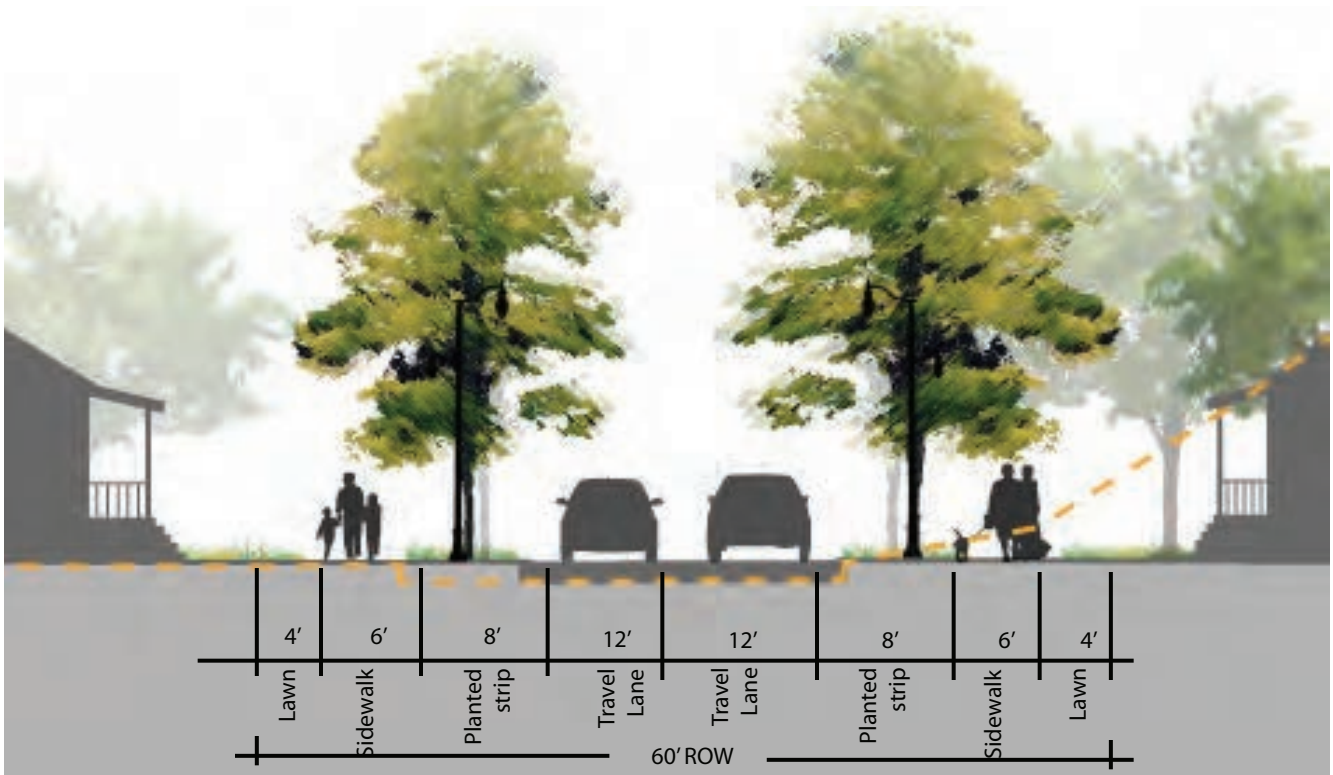


Figure 8.2h: Option 2 Street Section

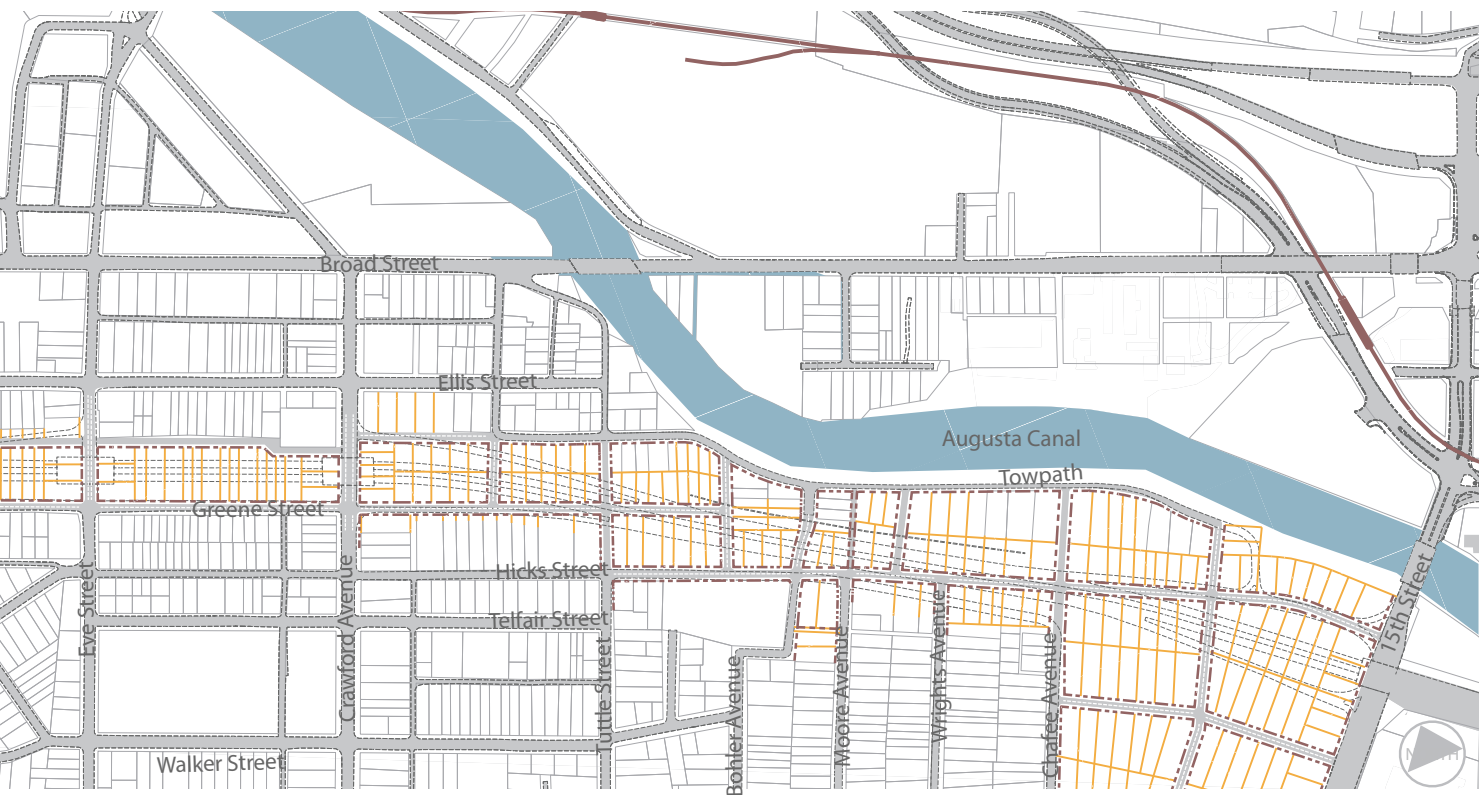


Figure 8.2j: Option 2 Proposed Layout

8.2.3 OPTION 3: THREE LANES

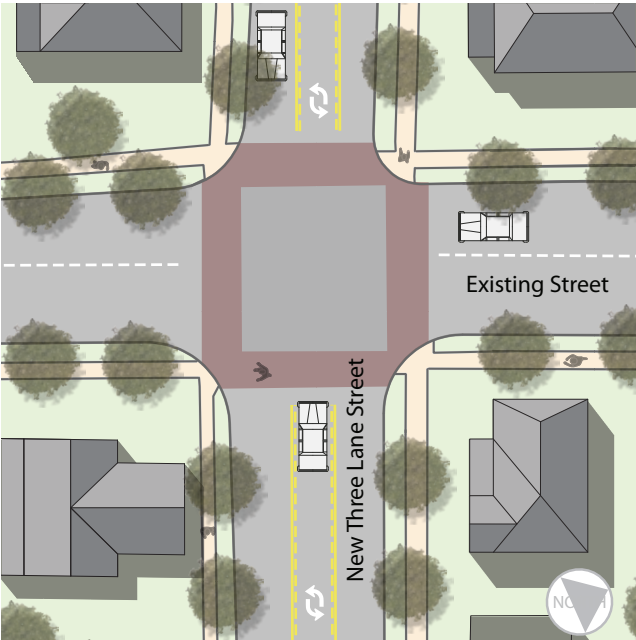
Option 3 brings the Calhoun Expressway to grade and converts it into a three lane street (refer to Figures 8.2k, 8.2m, and 8.2n).

- Allows for turns into drives without impeding the flow of traffic.
- Provides similar capacity as current system.
- Does not add any greenspace along the corridor.
- Additional turns may slow traffic.
- Increases commute time.

Traffic Volume at LOS D: 20,000 ADT
Minutes to Travel Distance (4 min)
+ 30 Seconds Per Light (4 min)
+ Change in Level of Service (2 min)

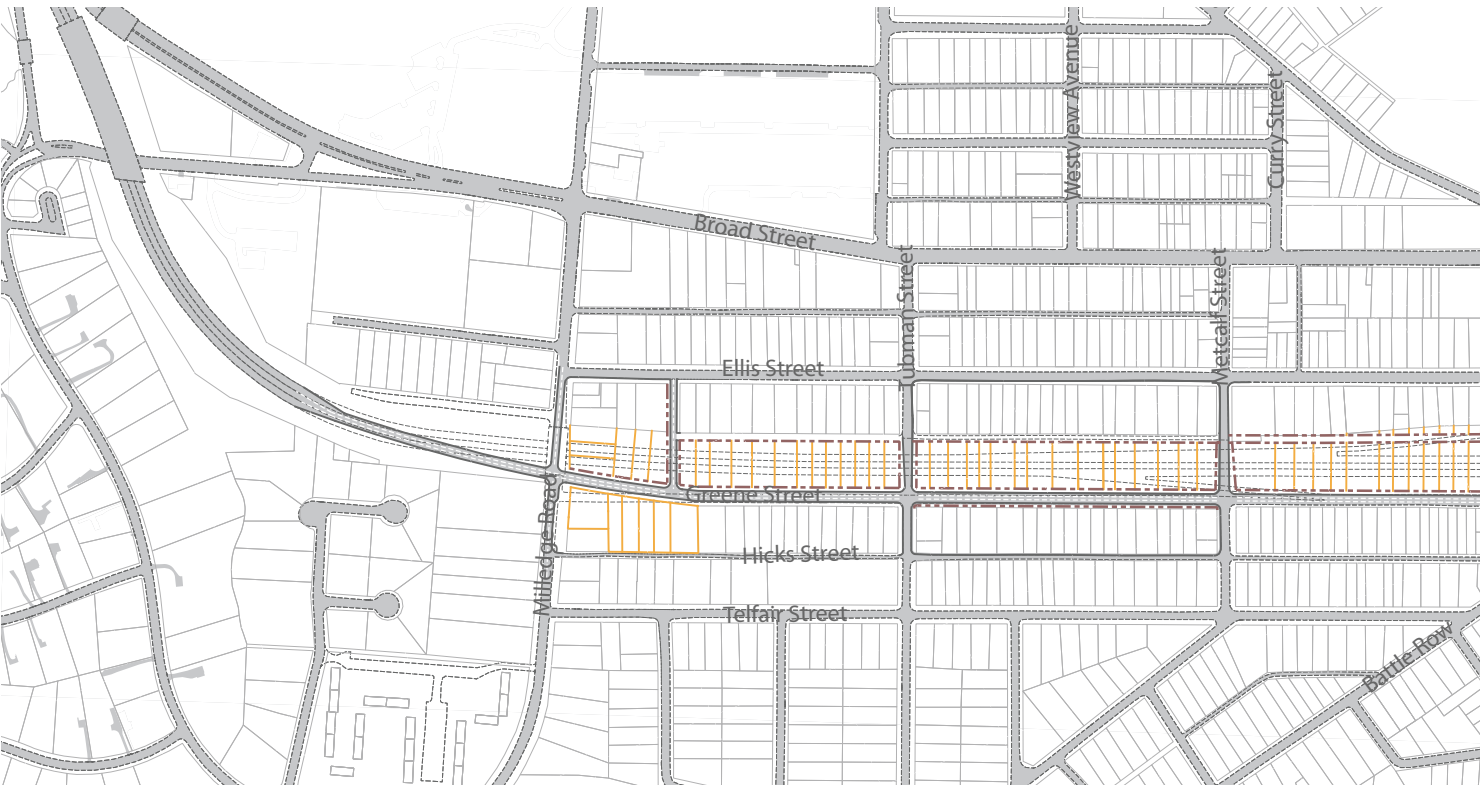
Travel Time: 10 minutes
Additional Lots Created: 160 lots

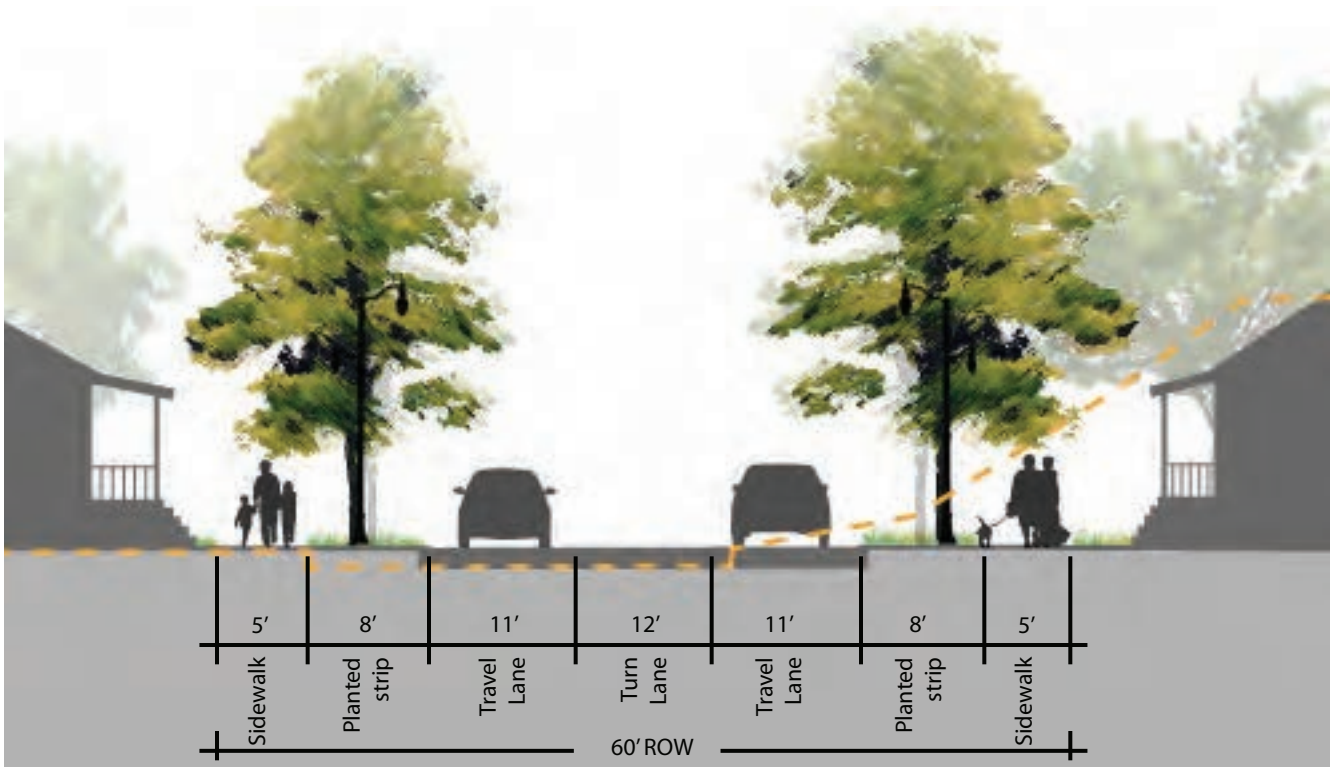
Total Acreage Returned to Tax Digest: 38.0 acres
Relative Cost: Medium



Scale 1" = 50'

Figure 8.2k: Option 3 Plan Detail





Existing Section - - - - -

Figure 8.2m: Option 3 Street Section

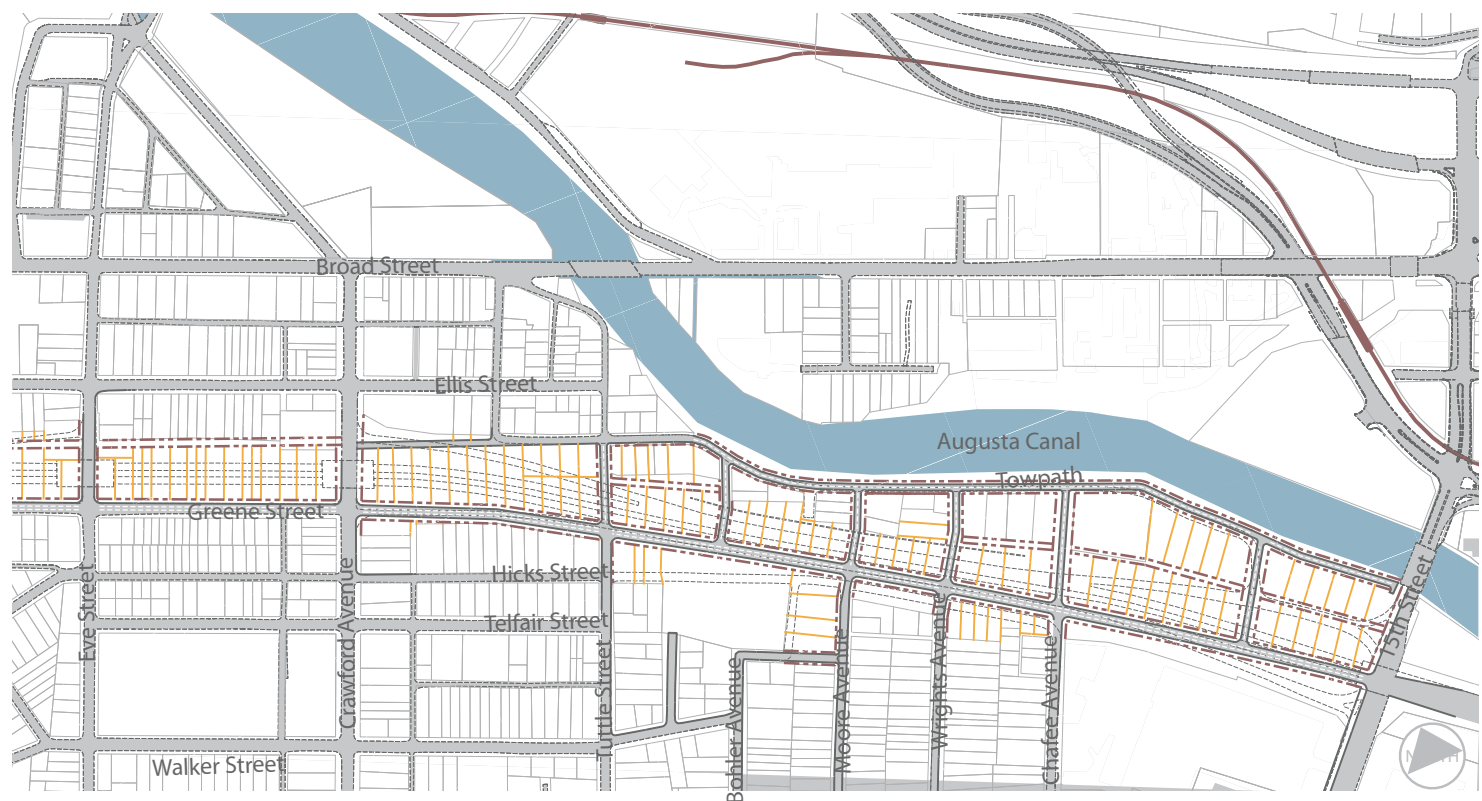


Figure 8.2n: Option 3 Proposed Layout

8.2.4 OPTION 4: PLANTED MEDIAN - RECOMMENDED PLAN

Option 4 brings the Calhoun Expressway to grade and converts it into a two lane boulevard with bicycle lanes. (refer to Figures 8.2p through 8.2w)

- Adds an attractive amenity to the neighborhood including bike lanes and green space.
- Increases safety by only allowing left turns at intersections.
- Encourages driveways to be on alley behind residences to create a more walkable street.
- Increases commute time.

Traffic Volume at LOS D: 16,000 ADT
 Minutes to Travel Distance (5 min)
 + 30 Seconds Per Light (4 min)
 + Change in Level of Service (2 min)

Travel Time: 11 minutes

Additional Lots Created:	205 lots
Total Acreage Returned to Tax Digest:	46.1 acres
Relative Cost:	High



Scale 1" = 50'

Figure 8.2p: Option 4 Plan Detail





Existing Section - - - - -

Figure 8.2q: Option 4 Street Section

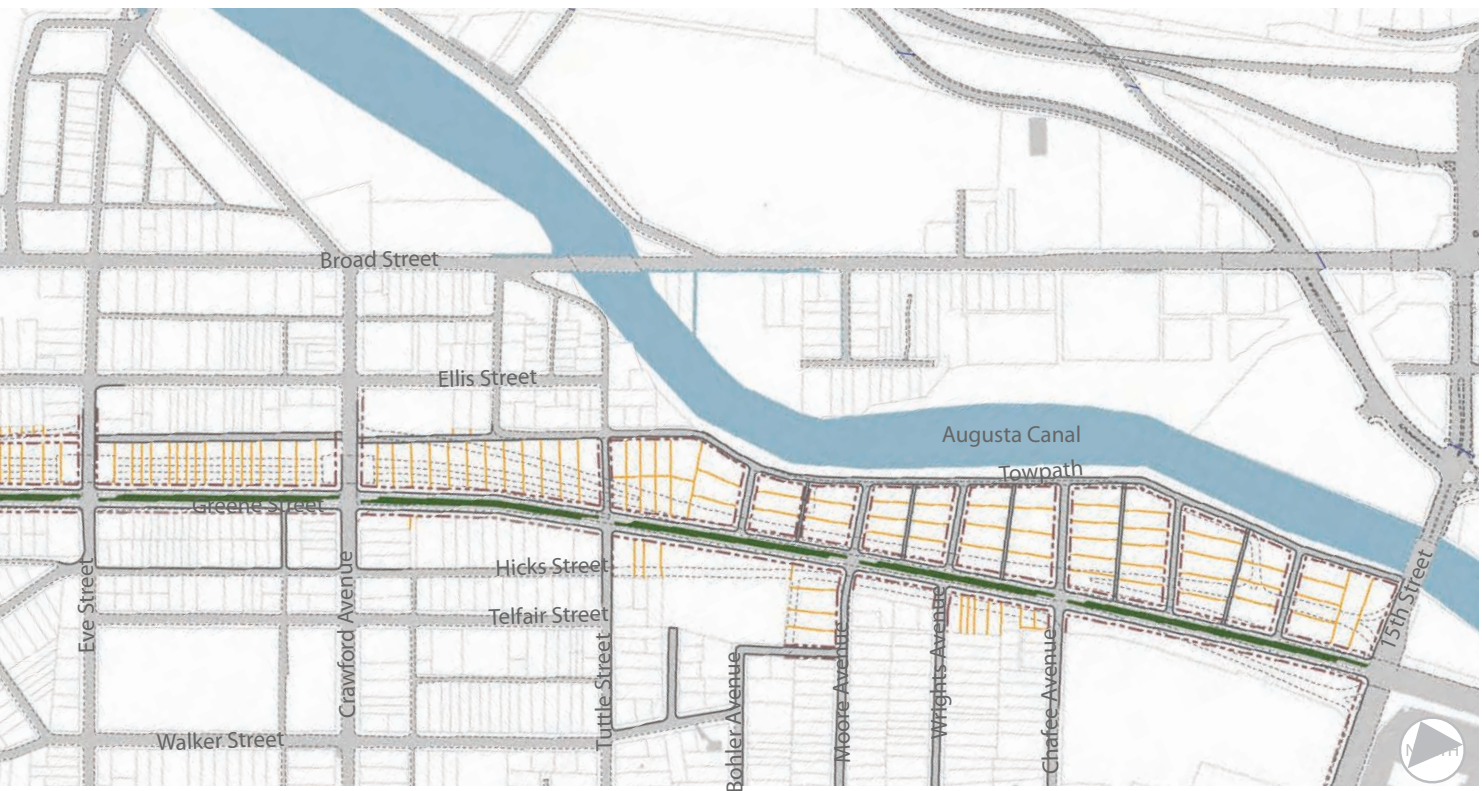


Figure 8.2r: Option 4 Proposed Layout



Existing view looking east along Greene Street



Proposed view looking east along Greene Street with planted median option

Figure 8.2s: Option 4 Before and After on new Greene Street



Figure 8.2t: Option 4 Proposed section with the planted median



Figure 8.2u: Option 4 Proposed plan with the planted median



Existing view looking north along Crawford Avenue



Proposed view with planted median options

Figure 8.2v: Option 4 Before and After at Crawford Avenue and Calhoun Expressway



Existing view of Calhoun Expressway bridge over 15th Street

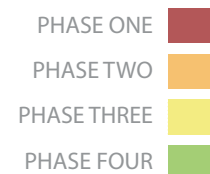


Proposed intersection with planted median option

Figure 8.2w: Option 4 Before and After at Calhoun Expressway and 15th Street



Figure 8.3a: Calhoun Expressway Phasing



8.3 PROJECT IMPLEMENTATION AND PHASING

The re-design of the Expressway will require investment from Augusta-Richmond County and the Georgia Department of Transportation in terms of time and money. To make the process easier to complete, a phasing strategy is recommended. These different phases can help the community of Harrisburg and Augusta-Richmond County to use funds as they become available and begin to improve the connectivity within Harrisburg to the Canal incrementally.

Figure 8.3a is a general phasing diagram to explain how the options may be implemented. Each phase may be completed in several steps as diagrammed on the following pages. Many of these steps can happen together or could be separated further, to make this project easier to implement. The first step in the process would be to have construction documents developed in order to create cost estimates and a more detailed phasing scheme.

8.3.1 PHASE 1

The first phase consists of improving the existing Greene Street between Tubman Street and Crawford Avenue. The



Figure 8.3b: Phase One

improvement of the intersections of Crawford Avenue and Eve Street with Greene Street are also a priority in this phase. This is the first phase because it does not require any change of the Expressway and it is in the area that will have a great impact because of its proximity to the new elementary school and the Kroc Center. Refer to Figure 8.3b.

8.3.2 PHASE 2

The second phase begins with closing a segment of Calhoun Expressway on the south side (refer to Figure 8.3c). The traffic will be rerouted to the north half of the Expressway, with one lane in each direction. This will help

to keep traffic flowing during construction of this phase. The second step will be to construct two segments of the new road at grade: the segment from the bridge at Rae's Creek to Milledge Road and the segment from Milledge Road to Tubman Street (refer to Figure 8.3d). The third step will be to rework the intersection of the new road with Milledge Road to be ready for traffic (refer to Figure 8.3e). The fourth step will be to allow inbound traffic on the new road and continue to have outbound traffic on the expressway until the next phase can be completed (refer to Figure 8.3f).

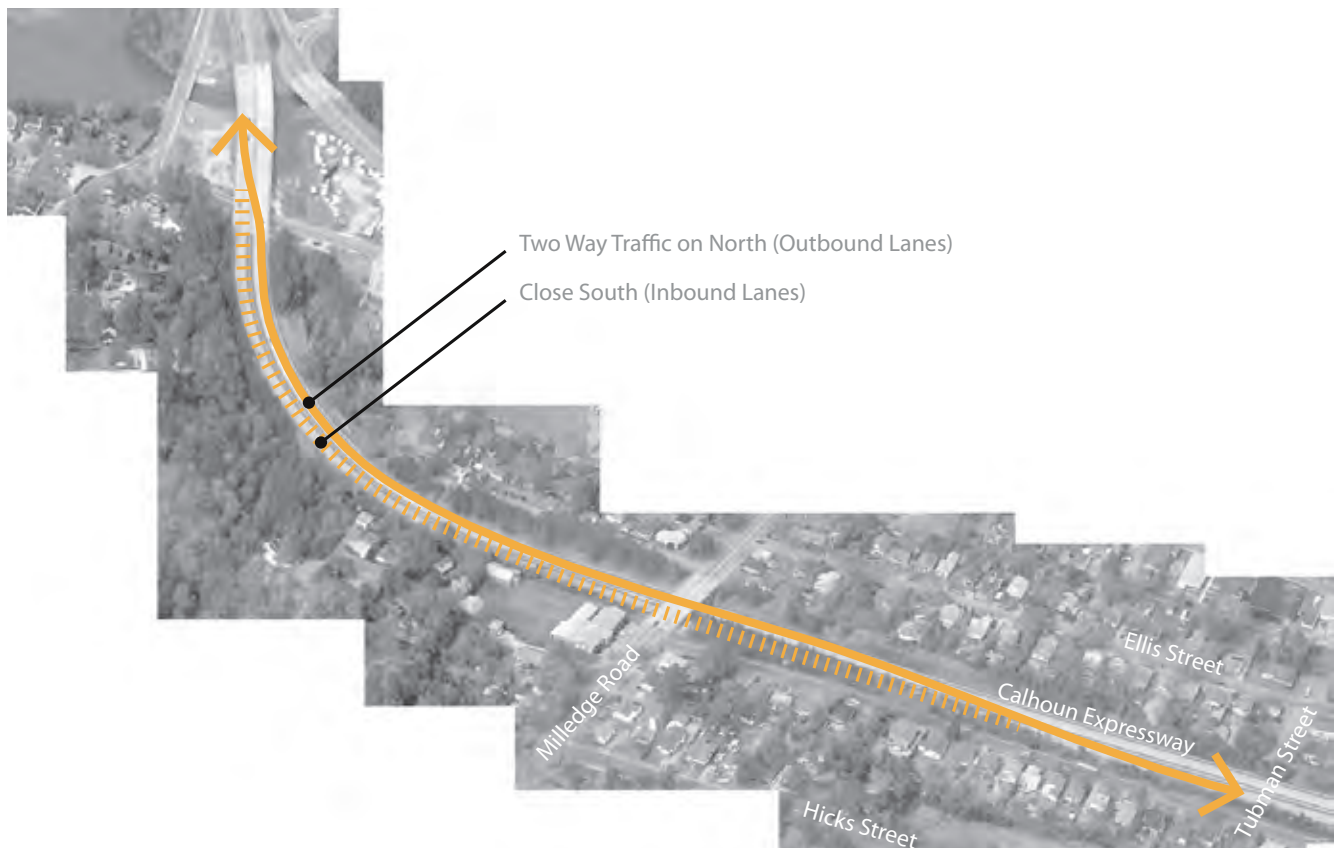


Figure 8.3c: Phase 2 - Step 1

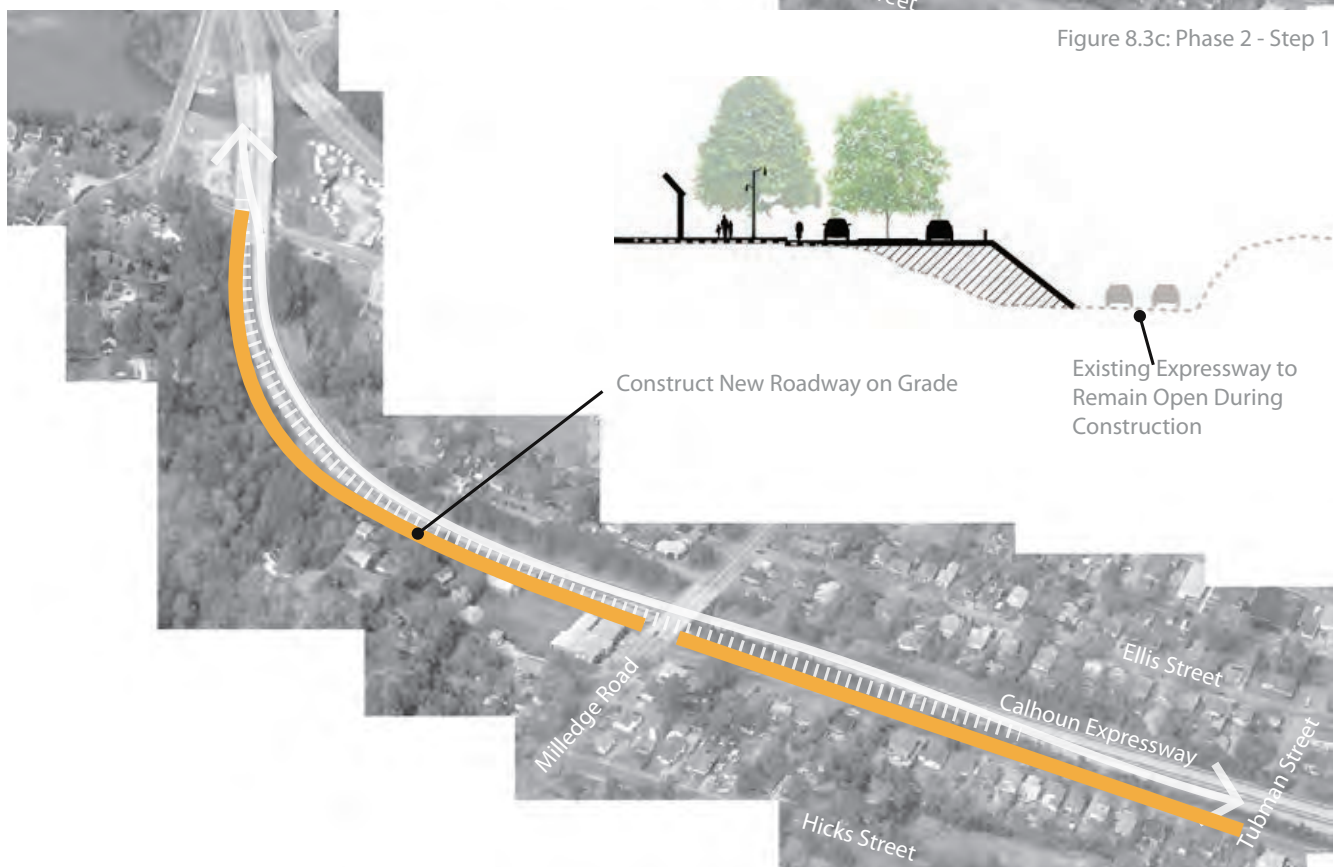


Figure 8.3d: Phase 2 - Step 2

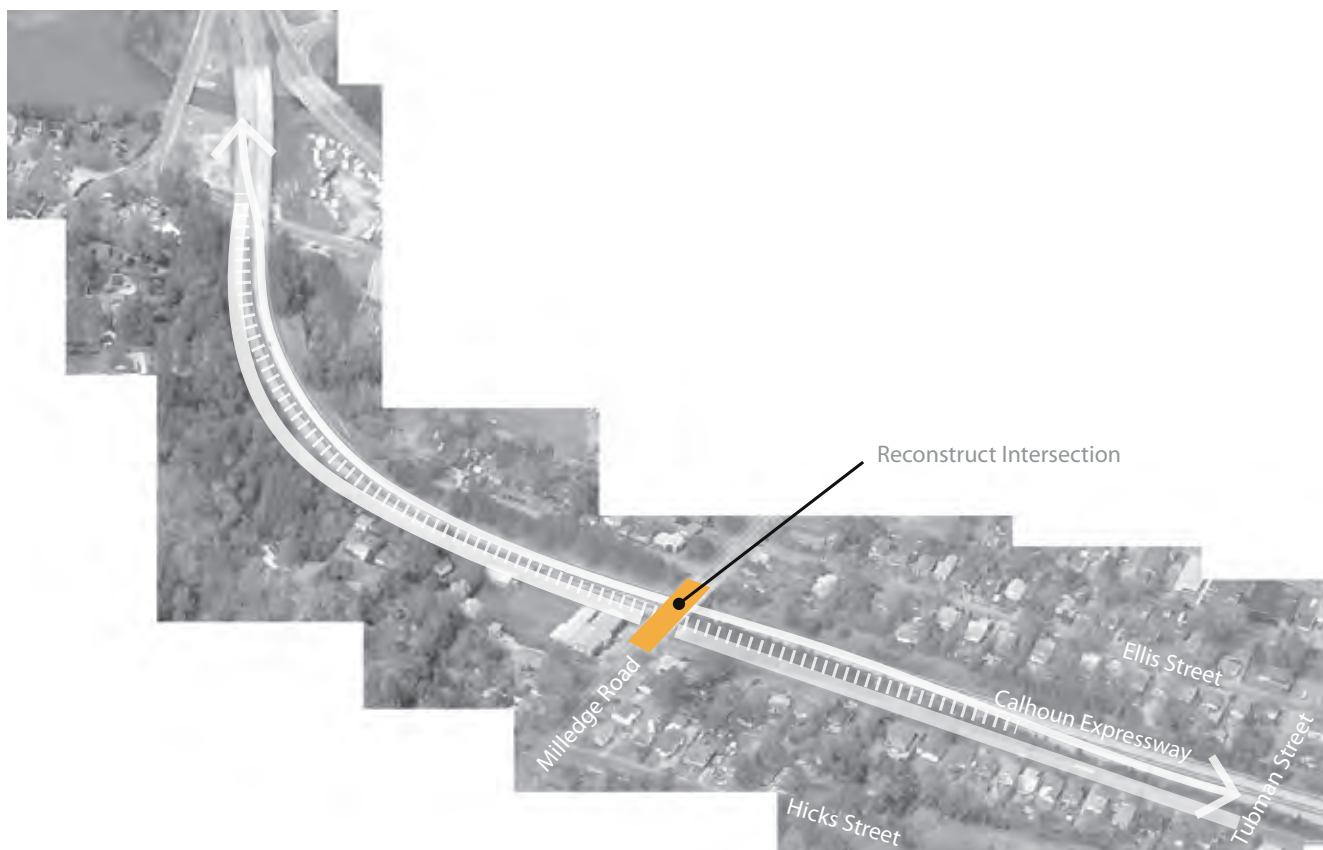


Figure 8.3e: Phase 2 - Step 3

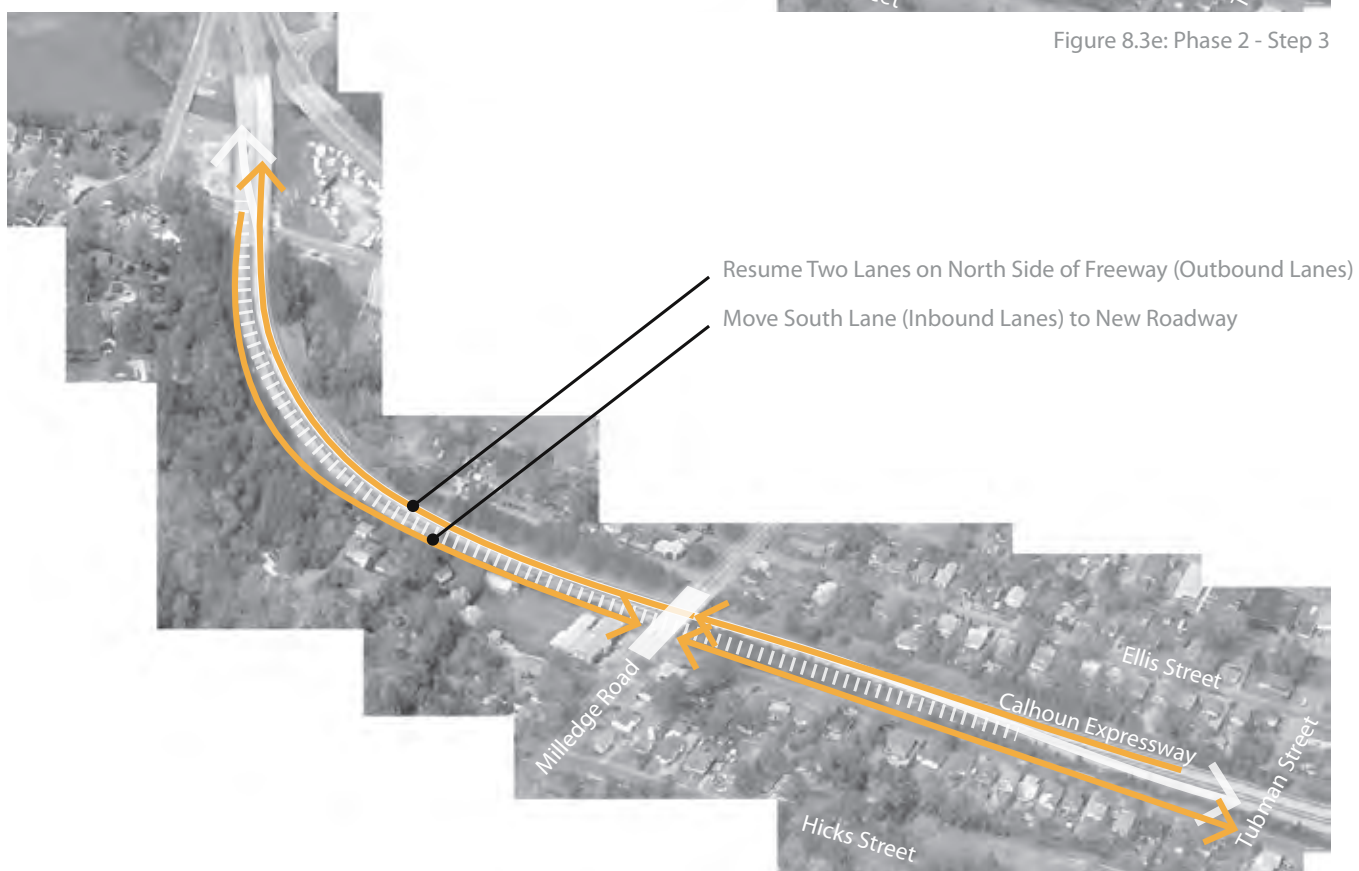


Figure 8.3f: Phase 2 - Step 4



Figure 8.3g: Phase 3 - Step 1

8.3.3 PHASE 3

The third phase begins the removal of a portion of the Calhoun Expressway. The first step in this phase is to connect the west end of the new street (Greene Street) with the remaining lane coming from the bridge over Rae's Creek (refer to Figure 8.3g). This will make it possible to remove and regrade the Calhoun Expressway from the bridge over Rae's Creek to the entrance and exit ramps at Crawford Avenue. This will include filling land to the west of Metcalf Road where the Expressway is currently below the surrounding grade and excavating soil to the east of Metcalf where the Expressway is currently above grade. The regrading efforts will be more cost effective if both the cut and fill are done at the same time since most of the soil needed for the fill can come from the cut. The newly graded land will be the location for new lots

fronting Greene Street.

The second part of the third phase will include the construction of two new streets (refer to Figure 8.3h). This will allow for a greater variety of travel routes into and out of downtown Augusta from the communities to the west of Harrisburg. The new roads will create a new block structure for additional housing, commercial, or retail uses in this area.

The third part of the third phase will involve redirecting the west end of Broad Street to intersect with the new section of Greene Street (refer to Figure 8.3j). A couple of segments of Broad Street will have to be removed in order to connect to Greene Street with an intersection just south of the bridge.



Figure 8.3h: Phase 3 - Step 2

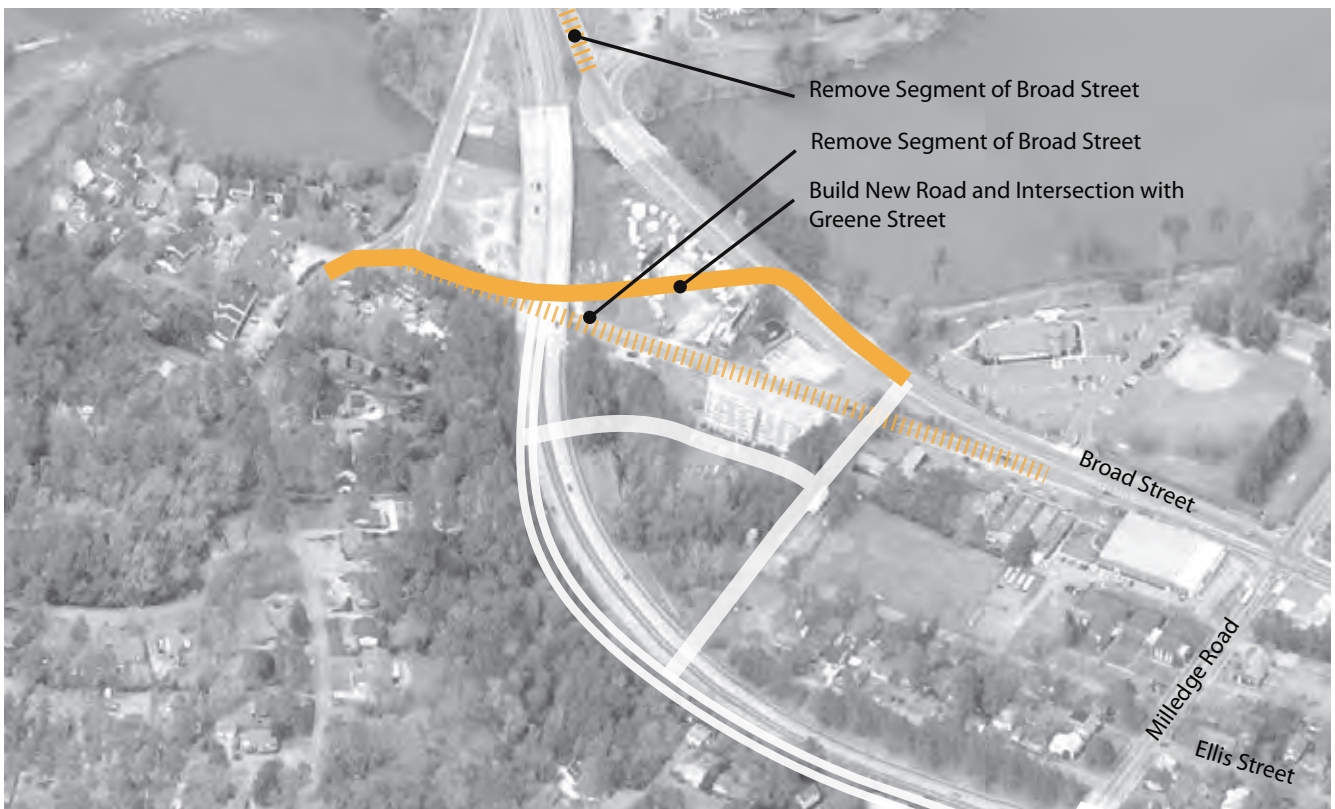


Figure 8.3j: Phase 3 - Step 3



Figure 8.3k: Phase Four - Step One

8.3.4 PHASE 4

The fourth and final phase will complete the removal of the Calhoun Expressway in Harrisburg. The first step of the fourth phase will be tearing down the remaining elevated Expressway from Crawford Avenue to 15th Street (refer to Figure 8.3k). The Expressway to the east of 15th street will have to remain closed during this phase until a new ramp can be built to connect to the elevated portion over the Augusta Canal.

Part two of this final phase will reconnect 15th street at grade with the east side of the former Calhoun Expressway (refer to Figure 8.3m). This move will allow for a greater connection within the community, as four new at grade intersections will be built. Once phase four is complete, the new Greene Street can be completed, reconnecting Augusta with historic Harrisburg.



Figure 8.3m: Phase Four - Step Two

8.4 CONCLUSION

Removing and redesigning the Calhoun Expressway will help future efforts to reclaim Historic Harrisburg. The new connections will help to knit the community together and provide for greater access to all the great assets this neighborhood has to offer. Allowing vehicles to drive through Harrisburg and not over it or around it will enable people to see the assets and opportunities this community has to offer. Although the change may take years to implement, ultimately it will help create a better future for Harrisburg and for Augusta as a whole. Harrisburg has the potential to be a sought after location with its many recreational amenities, its proximity to downtown Augusta and Augusta National, its rich history, and architecturally unique housing stock. The redevelopment of the Expressway is an important part of Harrisburg's transformation.