



DOWNTOWN CORRIDOR CONCEPTUAL MASTER PLAN

City of Clemson, South Carolina

Final Presentation | February 15, 2018



TODAY'S AGENDA

- Project Vision + Goals
- Study Area + Existing Conditions
- Project Development
- Master Plan Recommendations
- Next Steps



PROJECT VISION AND GOALS

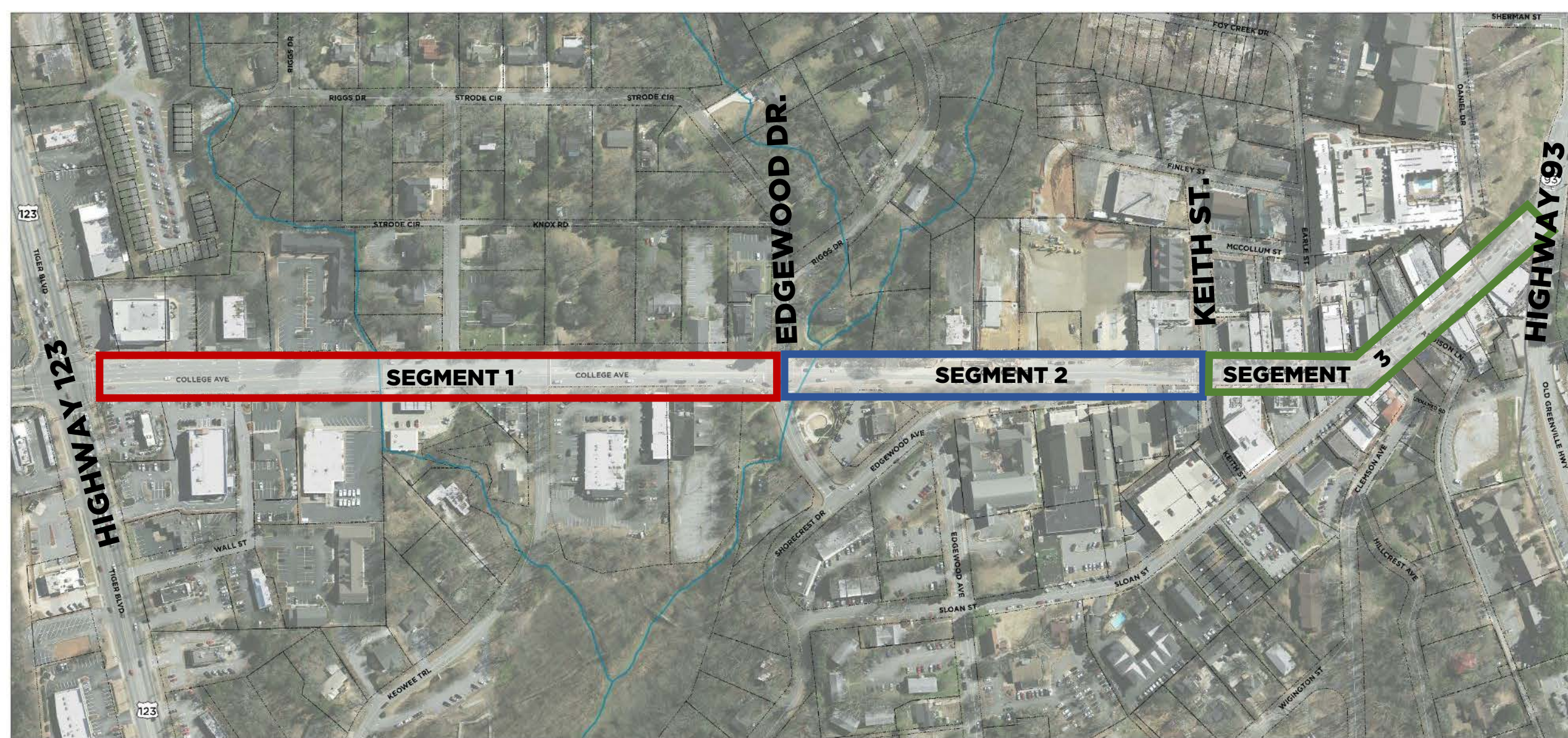
PROJECT VISION + GOALS

- ADA Accessibility
- Bicycle and Moped Parking
- Manage Traffic Volumes and Speeds
- Deter Cut Through Traffic
- Multi-Modal Connectivity to Clemson University
- Wider Sidewalks
- Make Downtown Core Pedestrian/Bicycle Friendly
- Improved Relationships Between Buildings and Street
- Development of a Realistic, Buildable Plan



STUDY AREA





- SEGMENT 1:** Highway 123 to Edgewood Drive
- SEGMENT 2:** Edgewood Drive to Keith Street
- SEGMENT 3:** Keith Street to Highway 93 (Bowman Field)



TOTAL ON STREET PARKING SPACES: 81

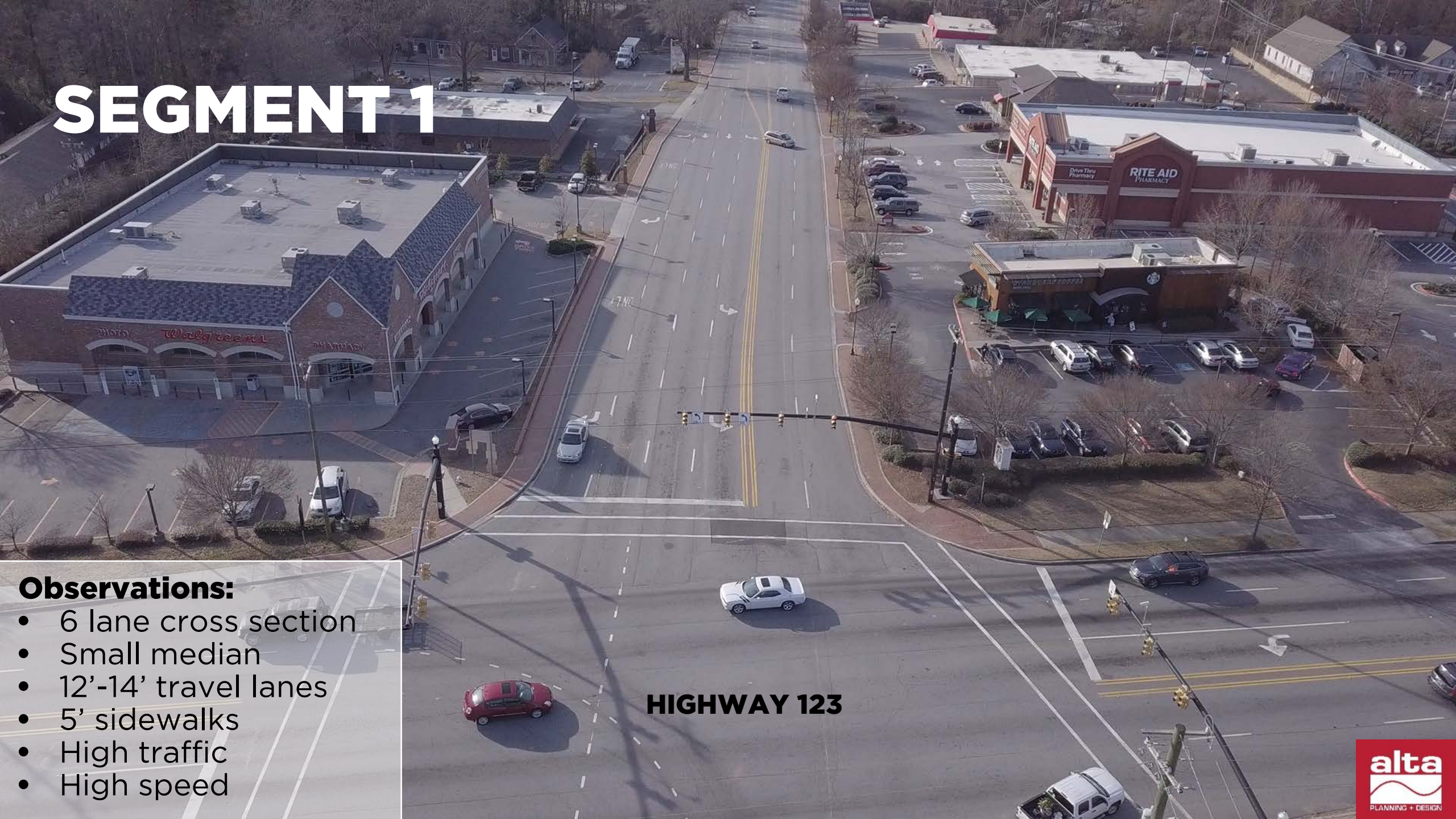


EXISTING CONDITIONS



SEGMENT 1: Highway 123 to Edgewood Drive

SEGMENT 1



HIGHWAY 123

Observations:

- 6 lane cross section
- Small median
- 12'-14' travel lanes
- 5' sidewalks
- High traffic
- High speed

SEGMENT 1

Observations:

- 4 lane cross section
- Center turn lane
- 12-14' travel lanes
- 5-10' sidewalks
- High traffic
- Medium speed
- Dangerous Crossings

WALL STREET

SEGMENT 1

STRODE CIRCLE

EDGEWOOD DRIVE

Observations:

- 4 lane cross section
- Parallel parking
- 12-14' travel lanes
- 5' sidewalks
- Medium traffic
- Medium speed
- Lots of curb cuts

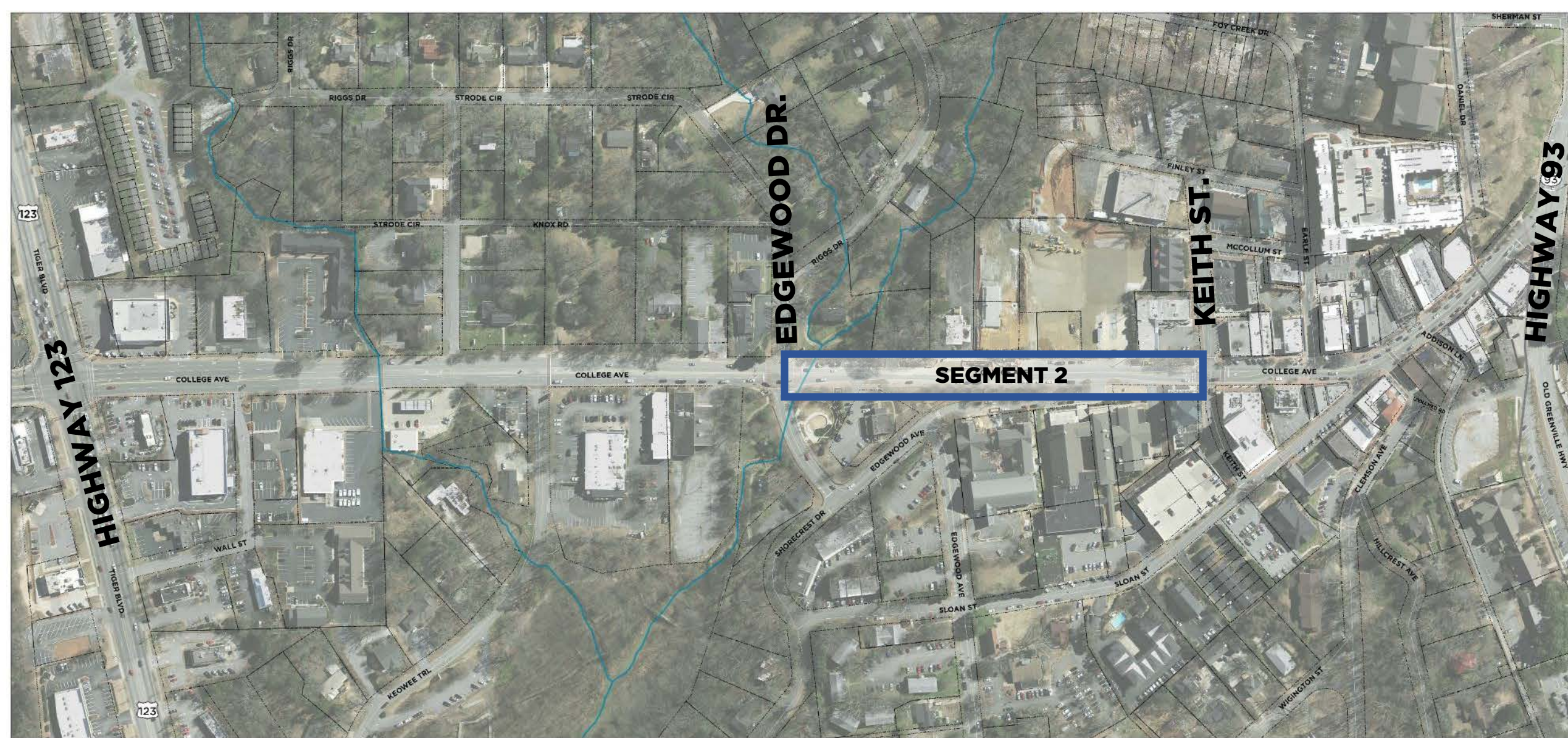
SEGMENT 1

STRODE CIRCLE

EDGEWOOD DRIVE

Observations:

- 4 lane cross section
- Lane drop at Edgewood
- 12-14' travel lanes
- Good ped x-ing
- Medium traffic
- Medium speed



SEGMENT 2: Edgewood Drive to Keith Street

SEGMENT 2

Observations:

- 3 lane cross section
- 12-14' travel lanes
- 5'-10' sidewalks
- Medium traffic
- Medium-Low speed

STRODE CIRCLE

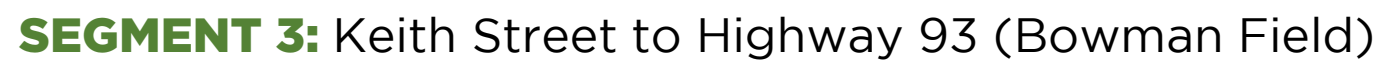
EDGEWOOD DRIVE

SEGMENT 2

KEITH STREET

Observations:

- 2 lane cross section
- Parallel parking
- 18' travel lanes
- 5'-10' sidewalks
- Medium traffic
- Low speed



SEGMENT 3

EARLE STREET

KEITH STREET

Observations:

- Long Crossing Distance
- 3 lane cross section
- 12-14' travel lanes
- 5' sidewalks
- High traffic
- Low speed

SEGMENT 3

ADDISON LANE

N CLEMSON AVE

SLOAN STREET

Observations:

- 2-3 lane cross section
- Parallel + angled parking
- 12-14' travel lanes
- Sidewalks vary
- High traffic
- Low speed



BOWMAN FIELD

SEGMENT 3

HIGHWAY 93

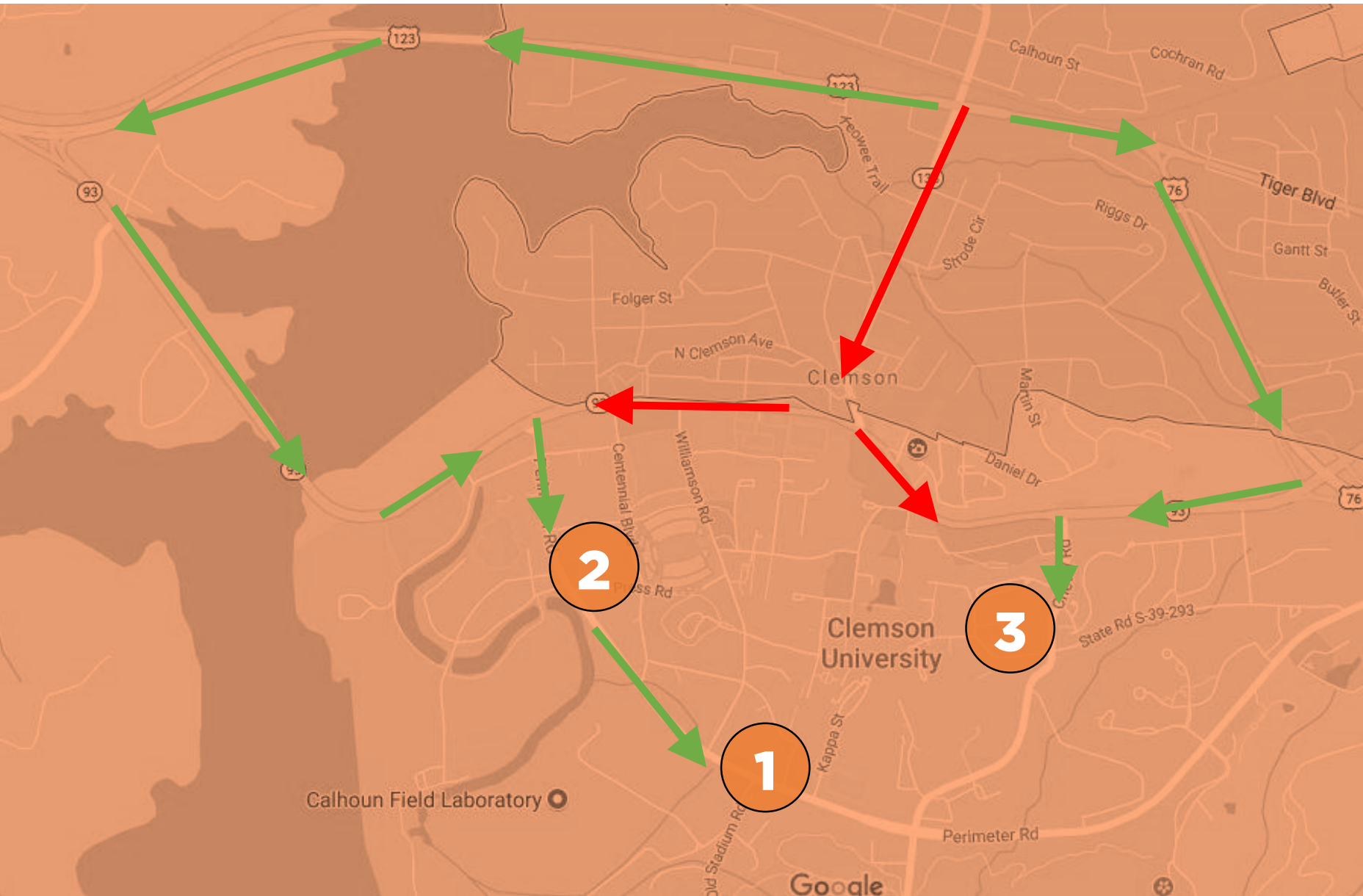
Observations:

- 2-3 lane cross section
- Parallel parking
- 12-14' travel lanes
- Sidewalks Vary
- High traffic
- Low speed
- Heavy Congestion



TRAFFIC FLOW + ADJACENT PLANS

TRAFFIC FLOW



	College Avenue (Red)	Alternate Route (Green)
Lee Hall <div>1</div>	9 Min 2.9 Mi	6 Min 2.9 Mi (via 123+76)
West End <div>2</div>	8 Min 1.7 Mi	6 Min 3.5 Mi (via 123+93)
Student Center <div>3</div>	9 Min 1.5 Mi	6 Min 2.3 Mi (via 123/76/ Perimeter, McMillan)

ADJACENT PLANS



- Construction Summer '18
- 10' Shared-Use Path
- Raised Intersection
- Pedestrian Scramble Phase Signalization
- Right Turn Lane onto College Removed

ADJACENT PLANS

Parking deck placement TBD

Need of 100-200 additional parking spaces downtown

Opportunity to integrate mixed use and green space

College Ave recommendations are dependent on new deck

Still in planning phase with LS3P

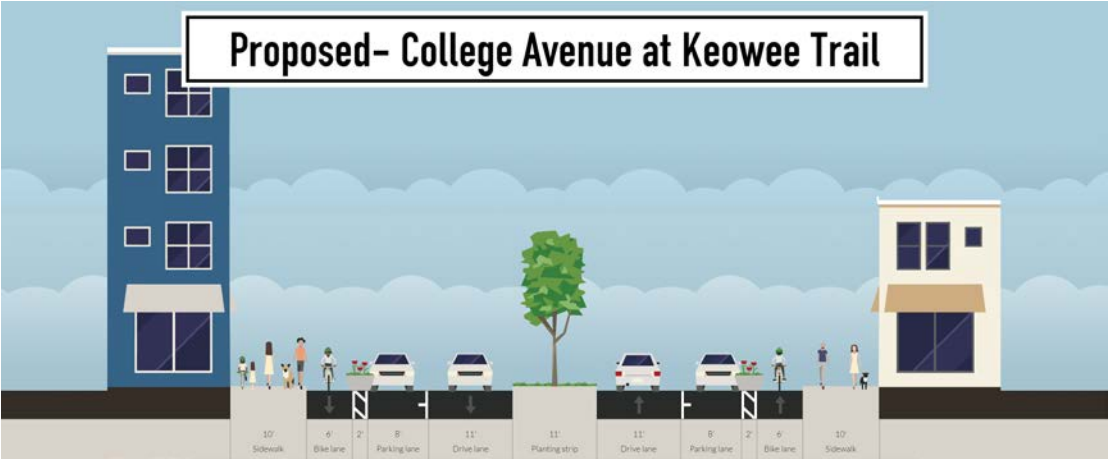
Recommended access to/from Highway 93



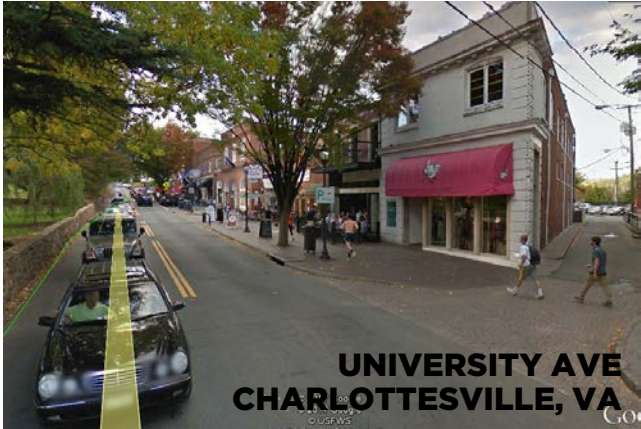
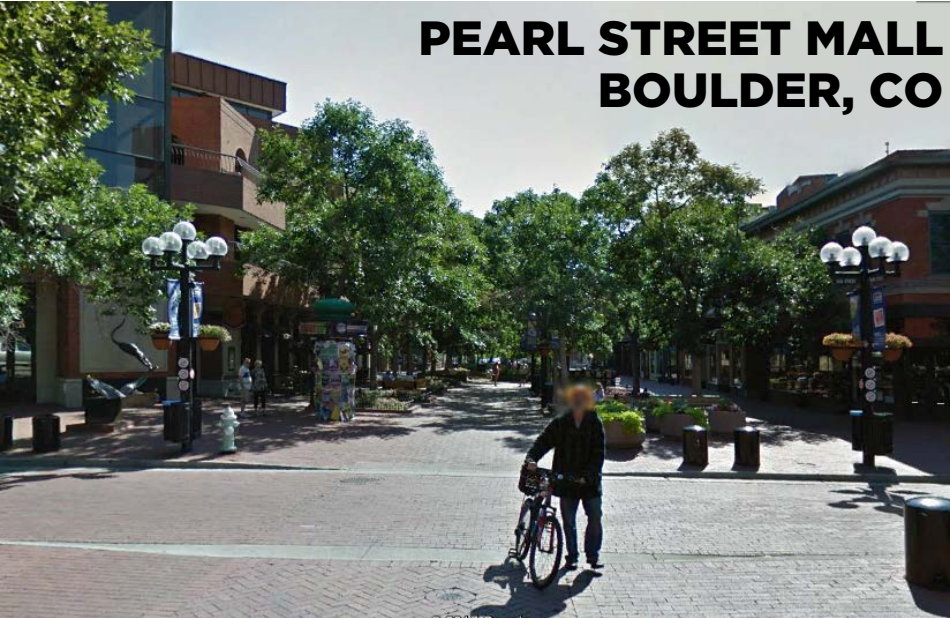


CHARRETTE

SEPTEMBER 28, 2017



CASE STUDIES





PLAN DEVELOPMENT

OVERALL PLAN



OPTION 1



1. All parking remains
2. Angled Spaces converted to back in
3. Sidewalks remain existing width
4. Shared lanes from Keith to 93 via sharrows
5. Crosswalk improvements

OPTION 2



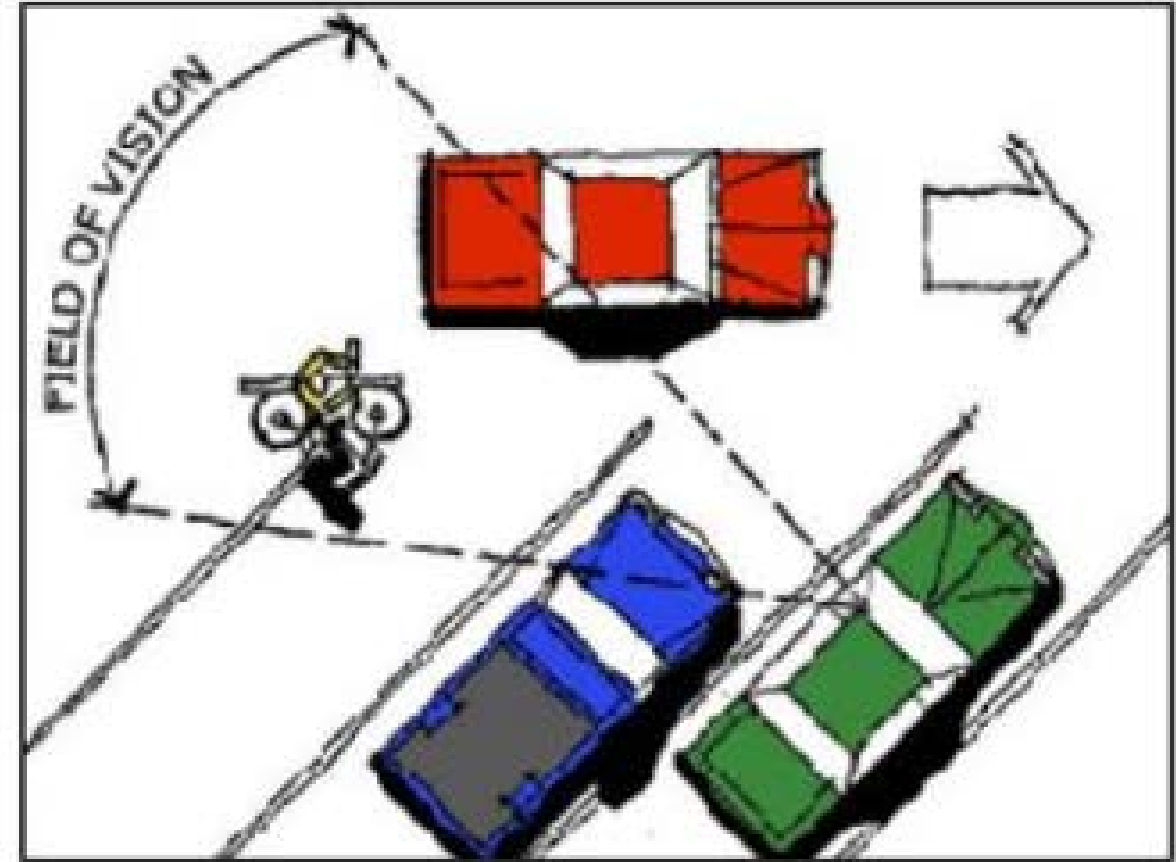
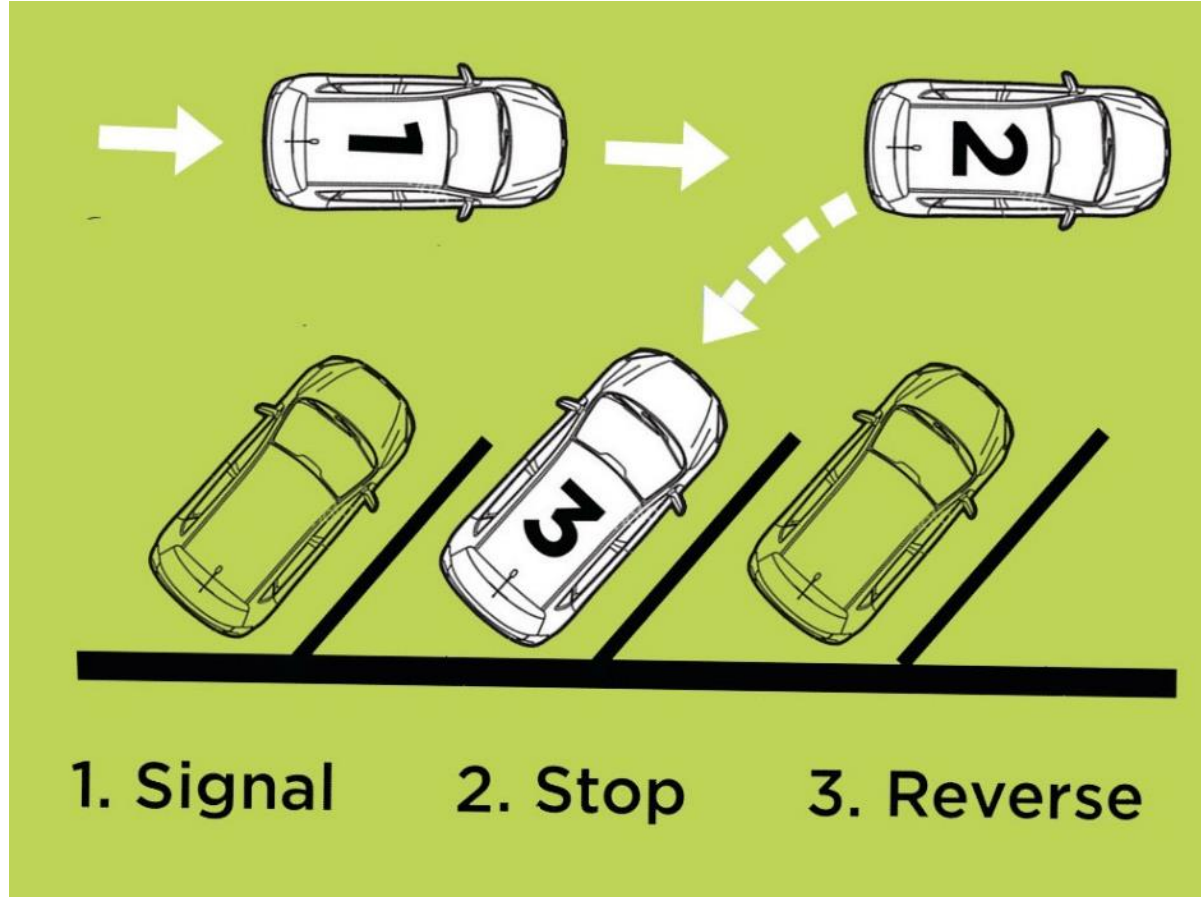
1. Some parking remains
2. Angled Spaces converted to back in
3. Sidewalks widen at areas that parking is removed
4. Shared lanes from Keith to 93 via sharrows
5. Crosswalk improvements
6. Street trees replaced

OPTION 3



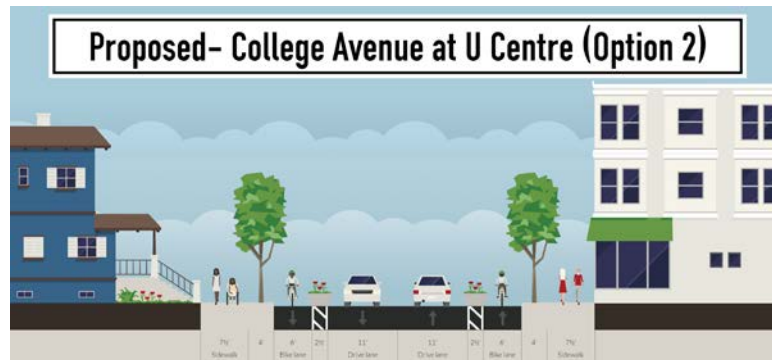
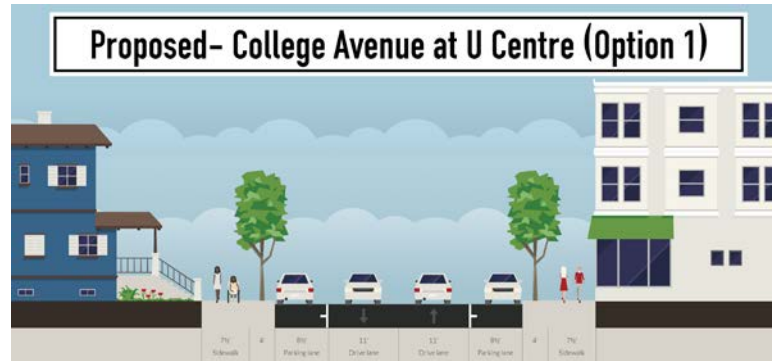
1. All parking removed
2. Sidewalks widen down entire corridor
3. Shared lanes from Keith to 93 via sharrows
4. Crosswalk improvements
5. Turning lane at 93 removed
6. Street trees replaced

BACK IN PARKING



MEETINGS

- September 19th, 2017
 - Public Input Session #1
- September 28th, 2017
 - Charrette
- October 23th, 2017
 - Public Input Session #2
- December 6th, 2017
 - Public Input Session #3
- February 15th, 2018
 - Public Input Session #4





FINAL RECOMMENDATIONS

OVERALL PLAN



TOTAL ON STREET PARKING SPACES: 53
(total loss of 28 spaces)

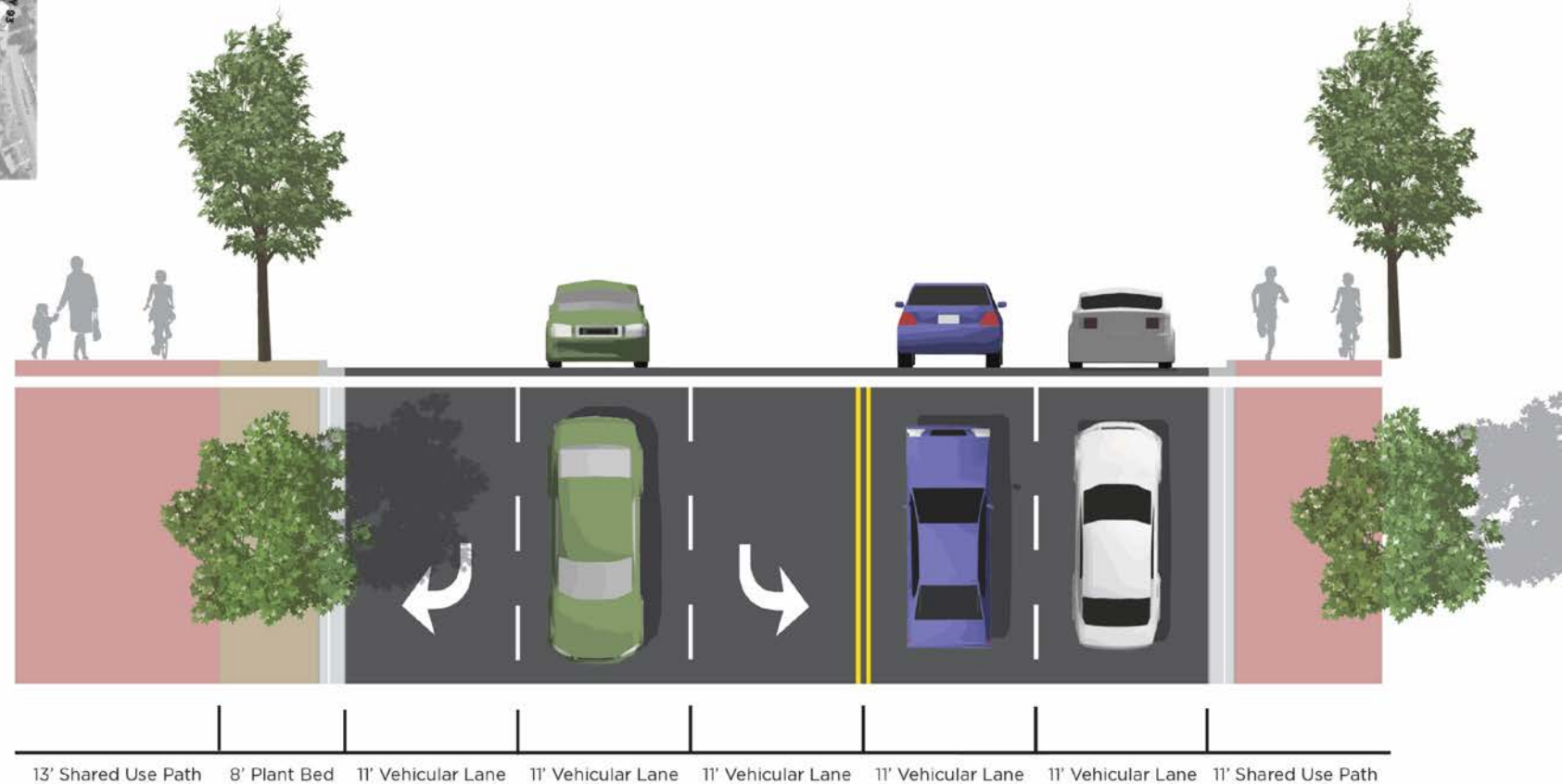
WHERE'S THE PARKING?

- 40 spaces Keith to 93
- + 12 spaces 123 to Keith

SEGMENT 1: Highway 123 - Edgewood



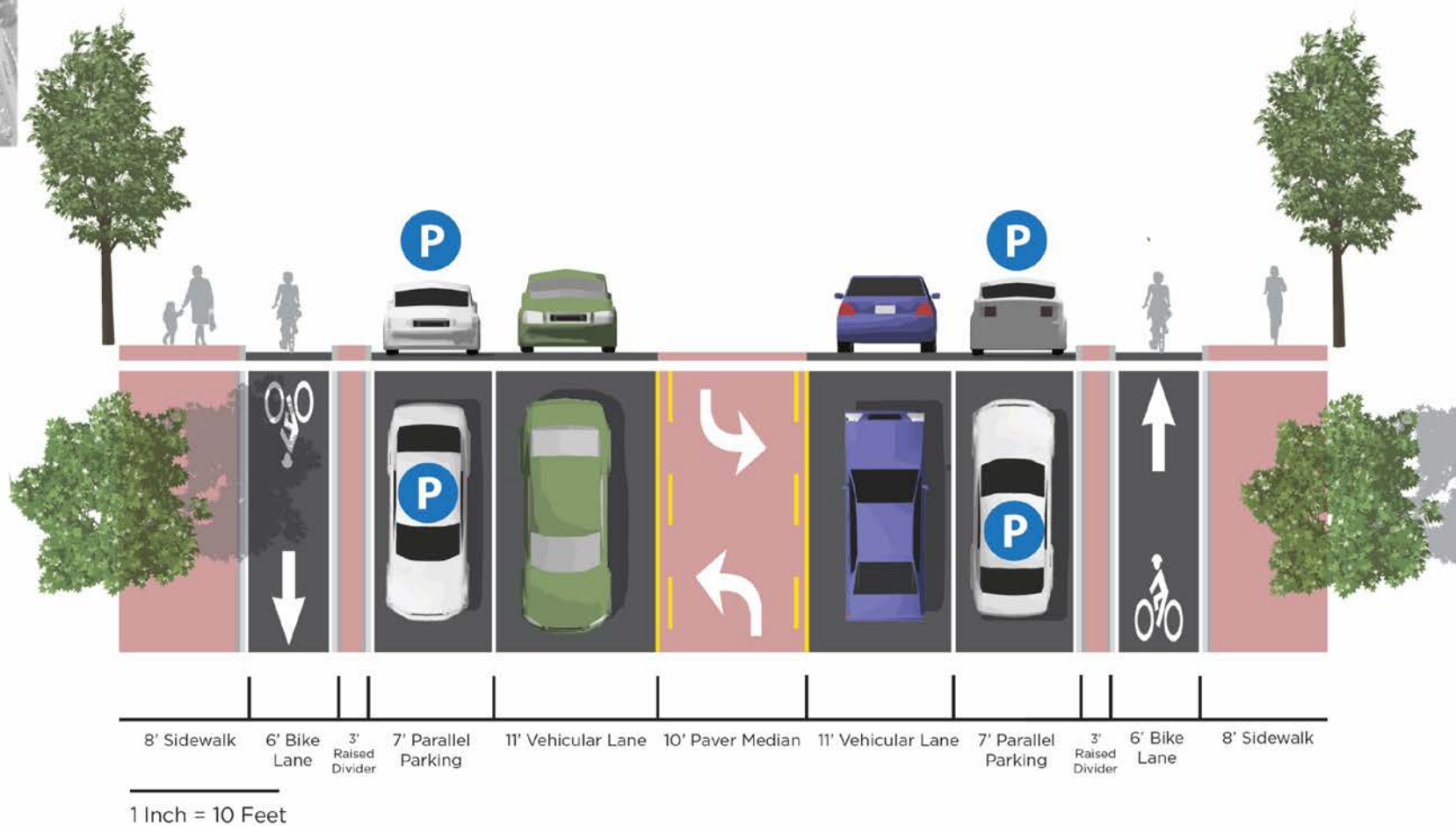
SEGMENT 1: Highway 123 - Edgewood



1 Inch = 10 Feet

SECTION 1

SEGMENT 1: Highway 123 - Edgewood



SECTION 2

BUFFER GUIDANCE

Hardscape



Planters



Planted



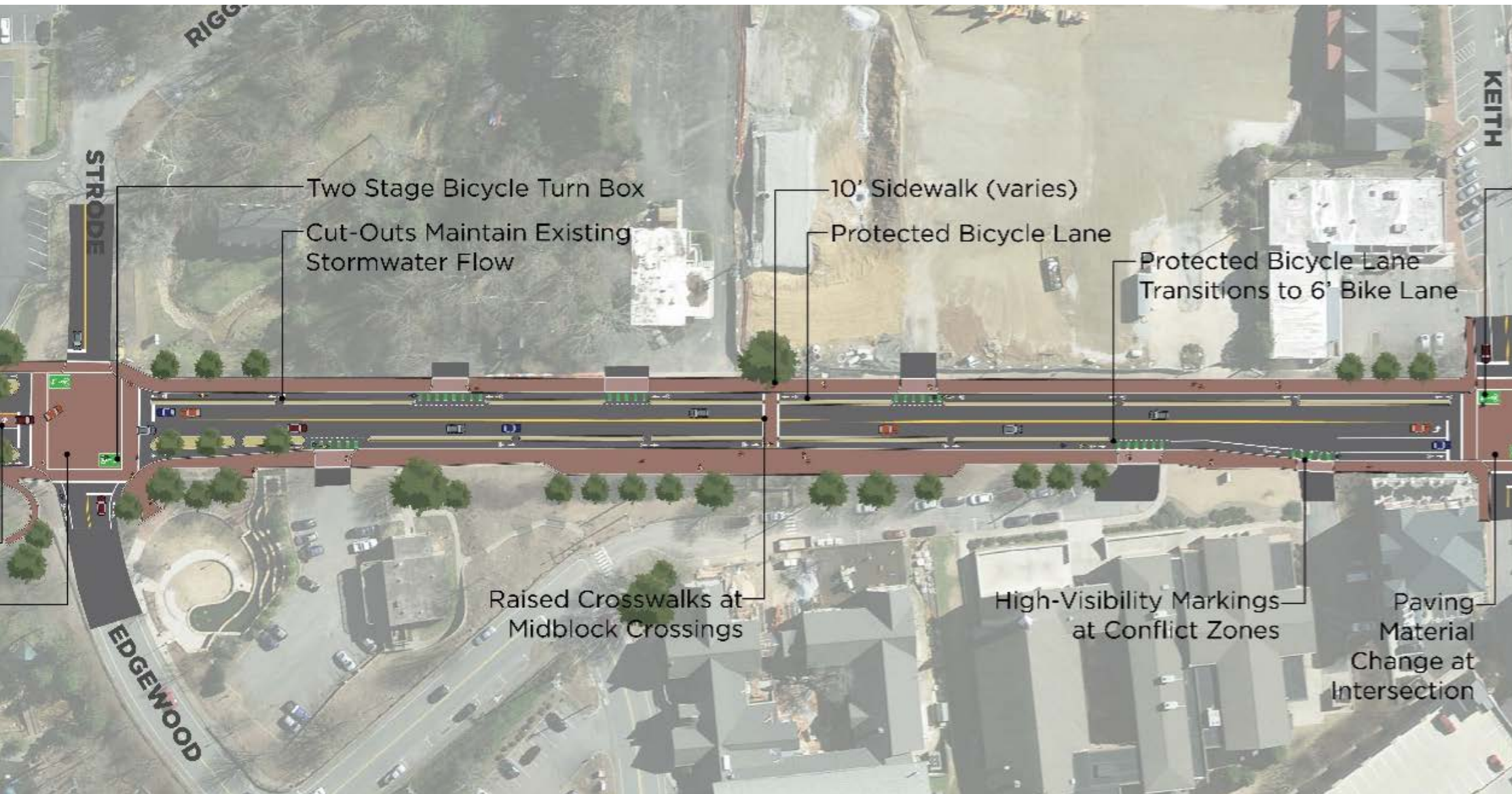
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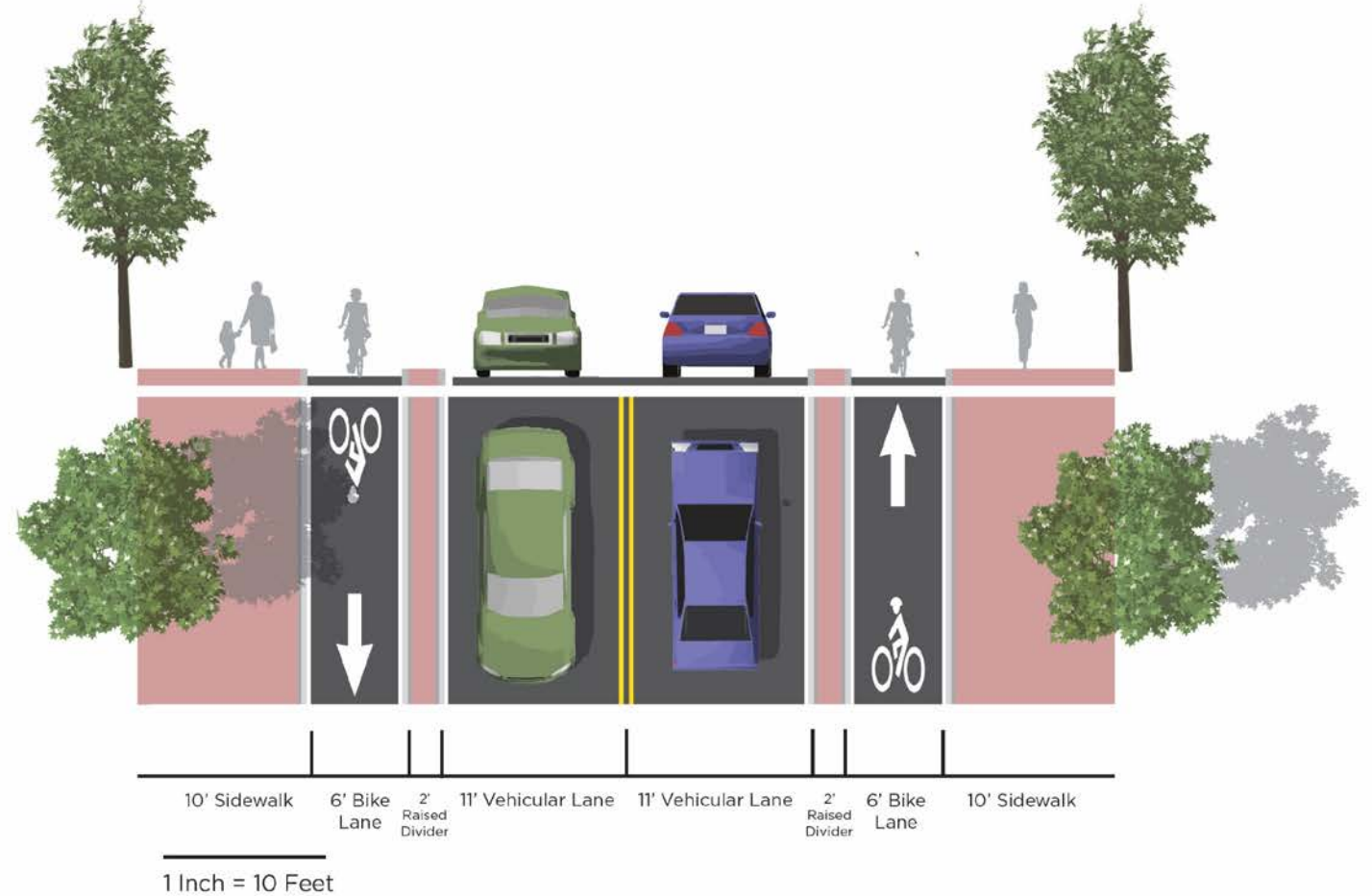
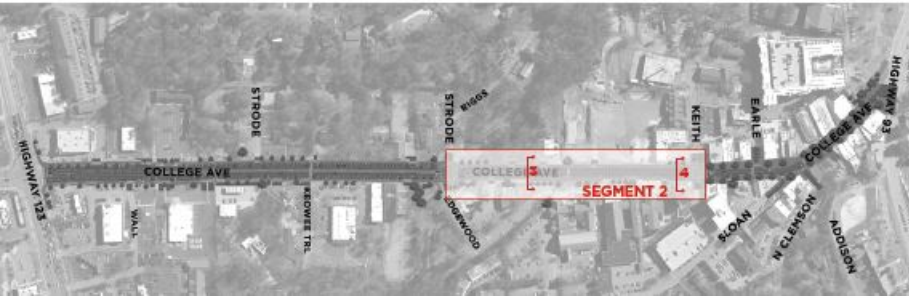
SEGMENT 1: Highway 123 - Edgewood



SEGMENT 2: Edgewood – Keith

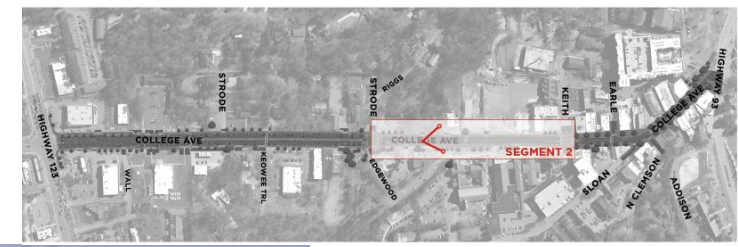


SEGMENT 2: Edgewood – Keith

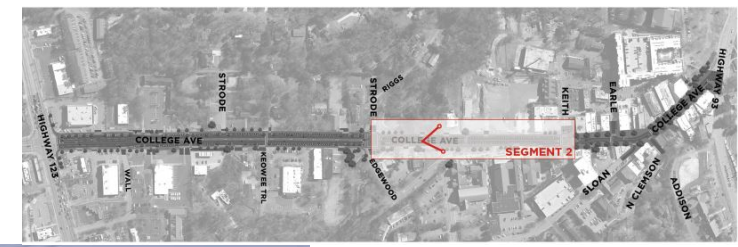


SECTION 3

SEGMENT 2: Edgewood – Keith



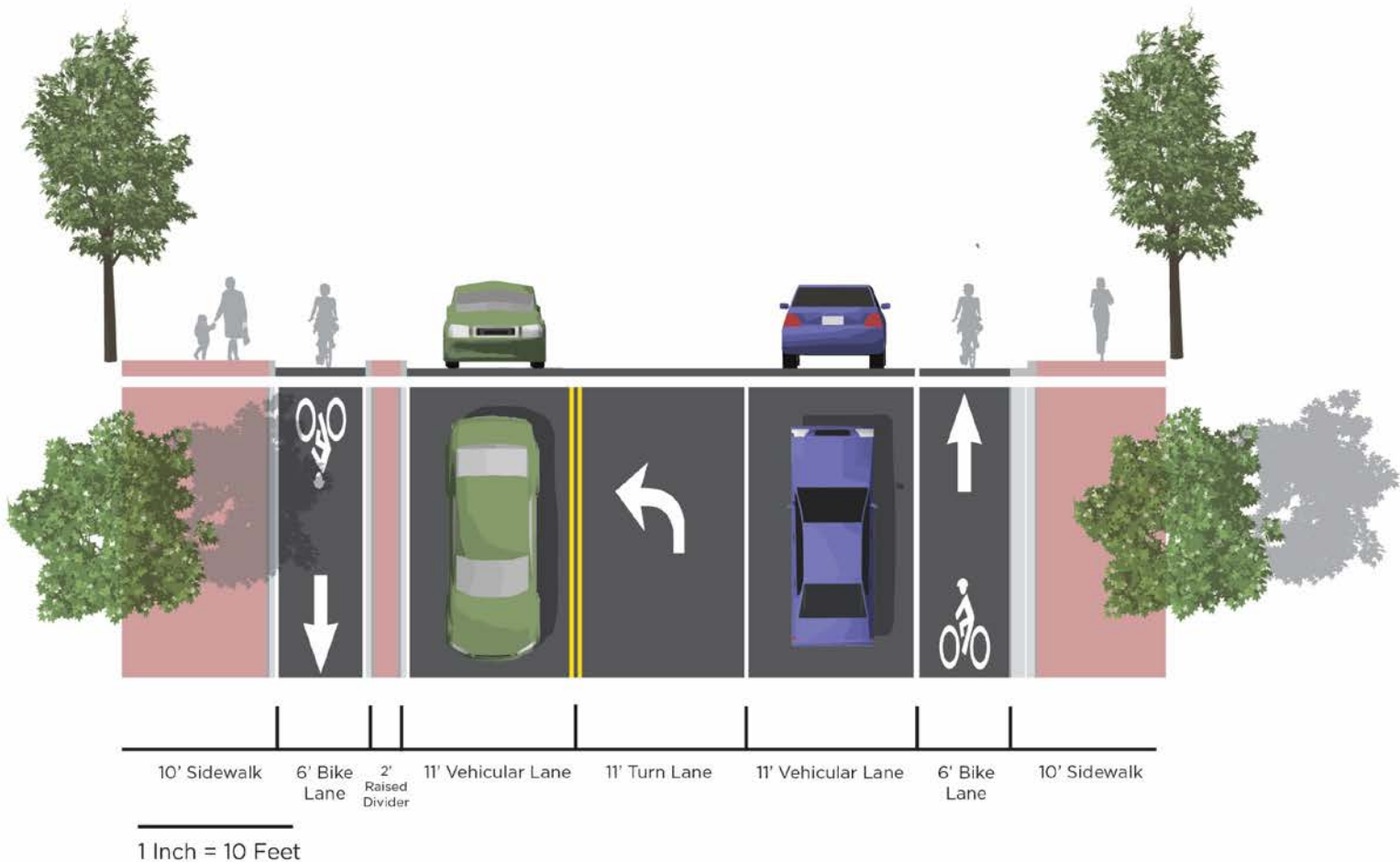
SEGMENT 2: Edgewood – Keith



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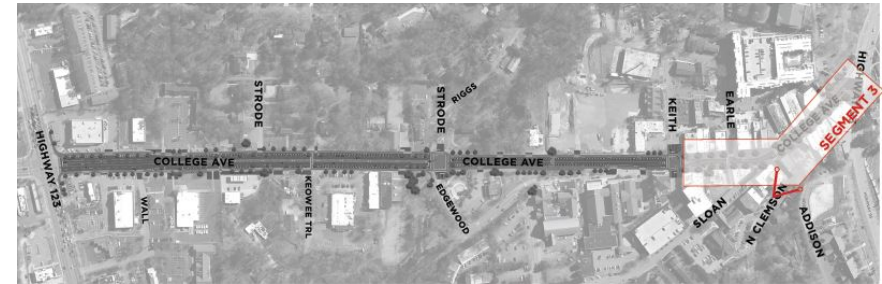


SECTION 4

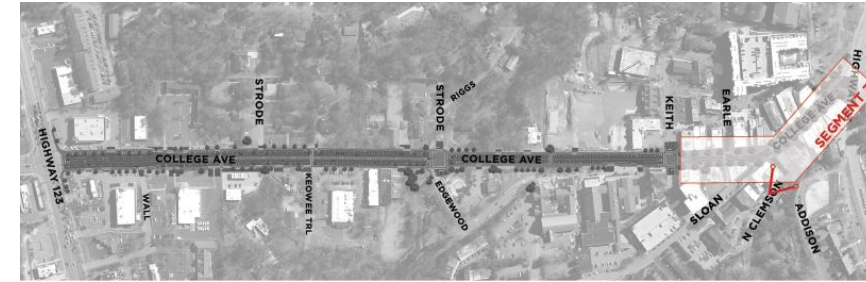
SEGMENT 3: Keith - Highway 93



SEGMENT 3: Keith - Highway 93



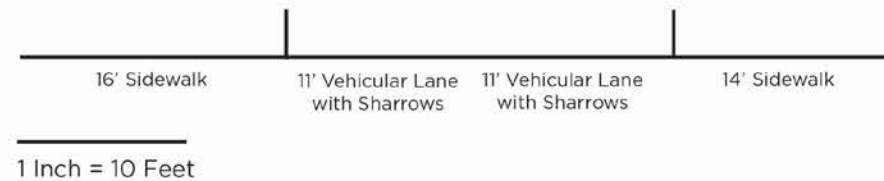
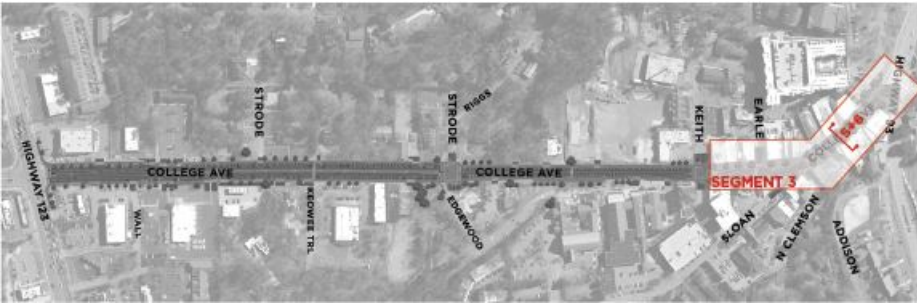
SEGMENT 3: Keith - Highway 93



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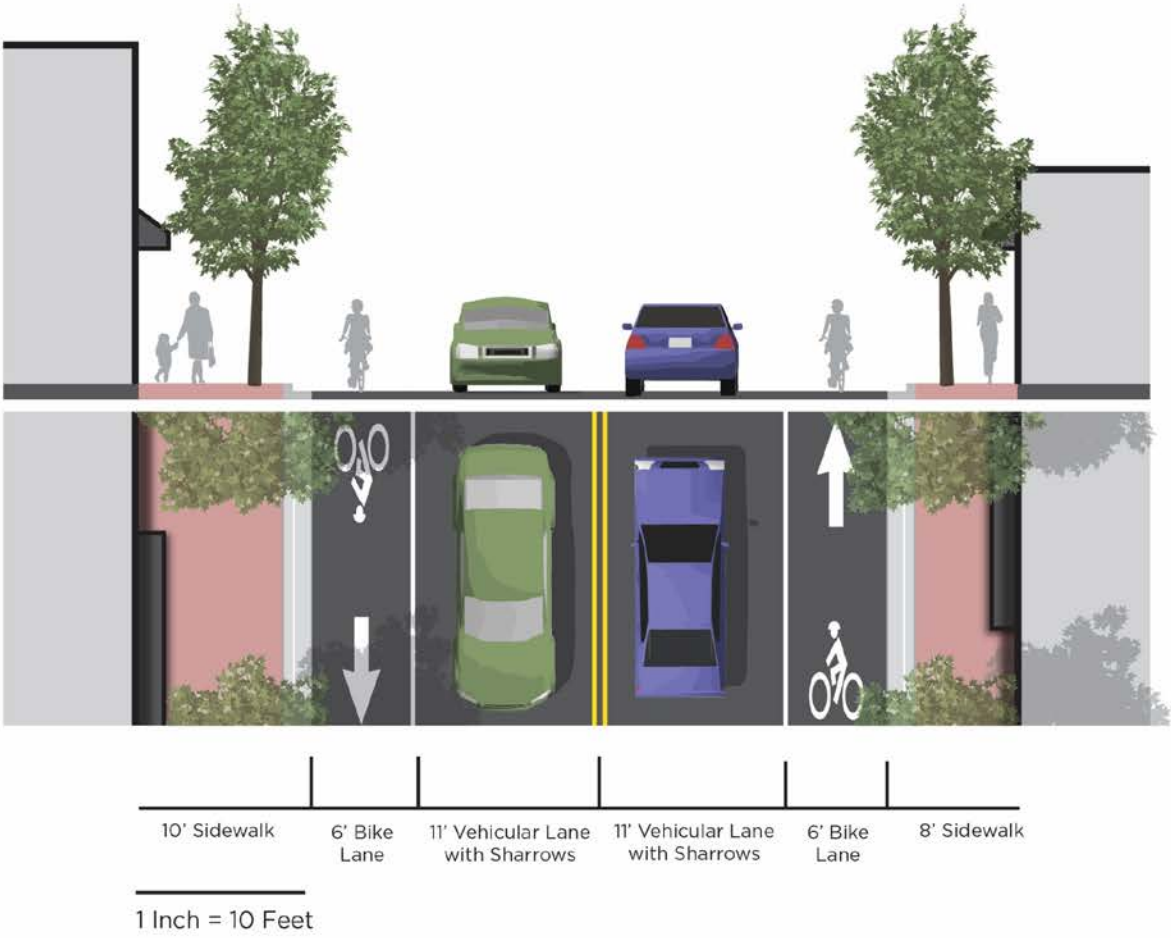
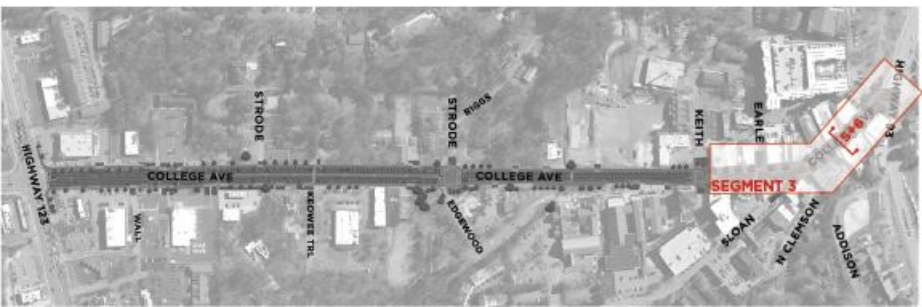


SEGMENT 3: Keith - Highway 93



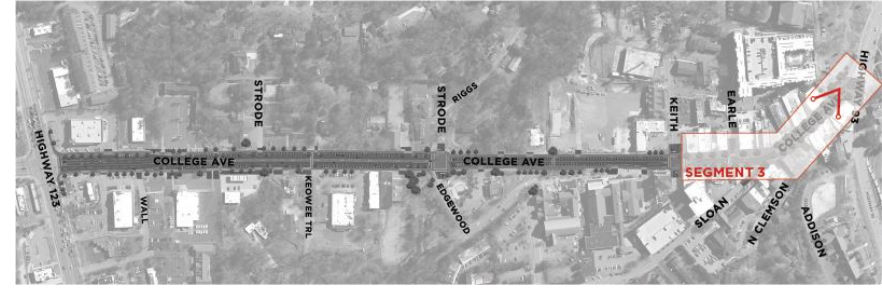
SECTION 5

SEGMENT 3: Keith – Highway 93

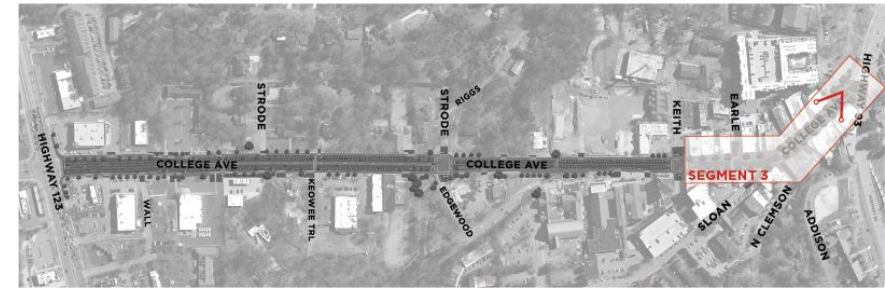


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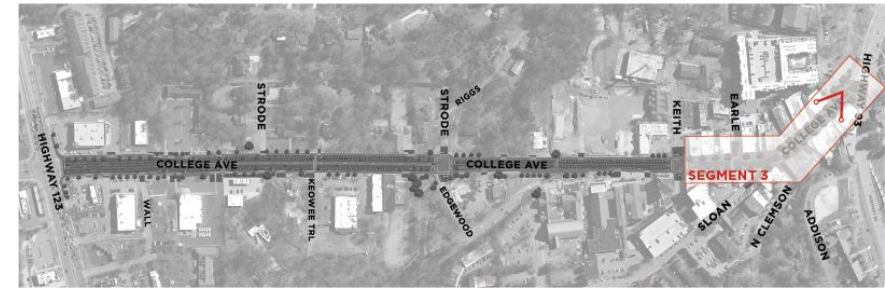
SEGMENT 3: Keith – Highway 93



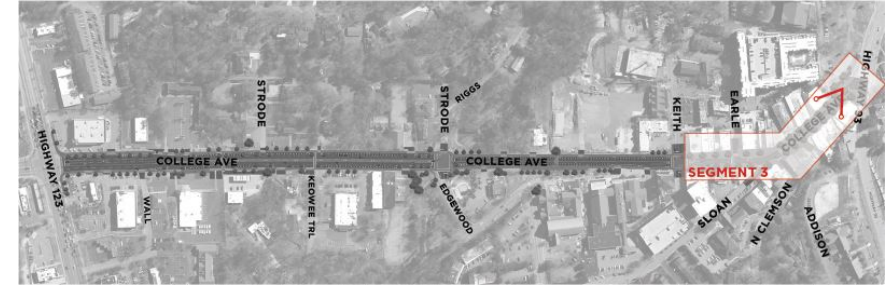
SEGMENT 3: Keith - Highway 93



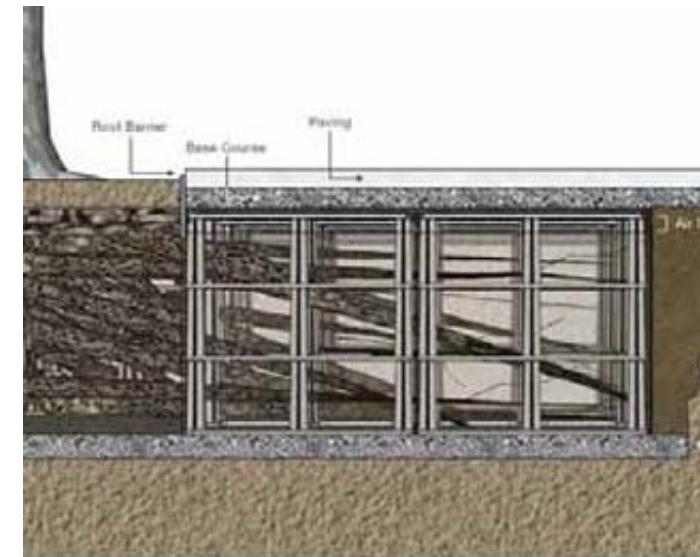
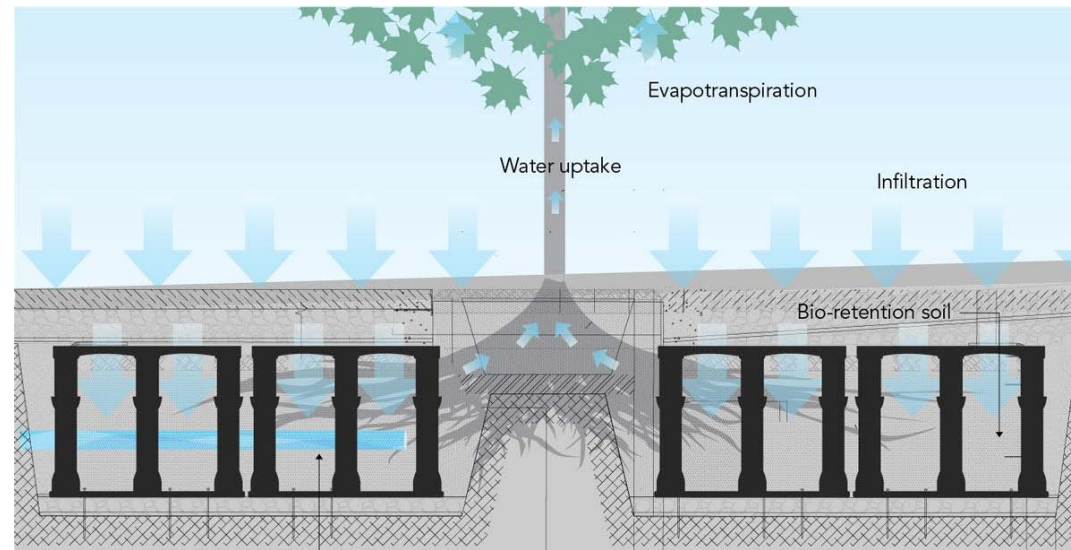
SEGMENT 3: Keith - Highway 93



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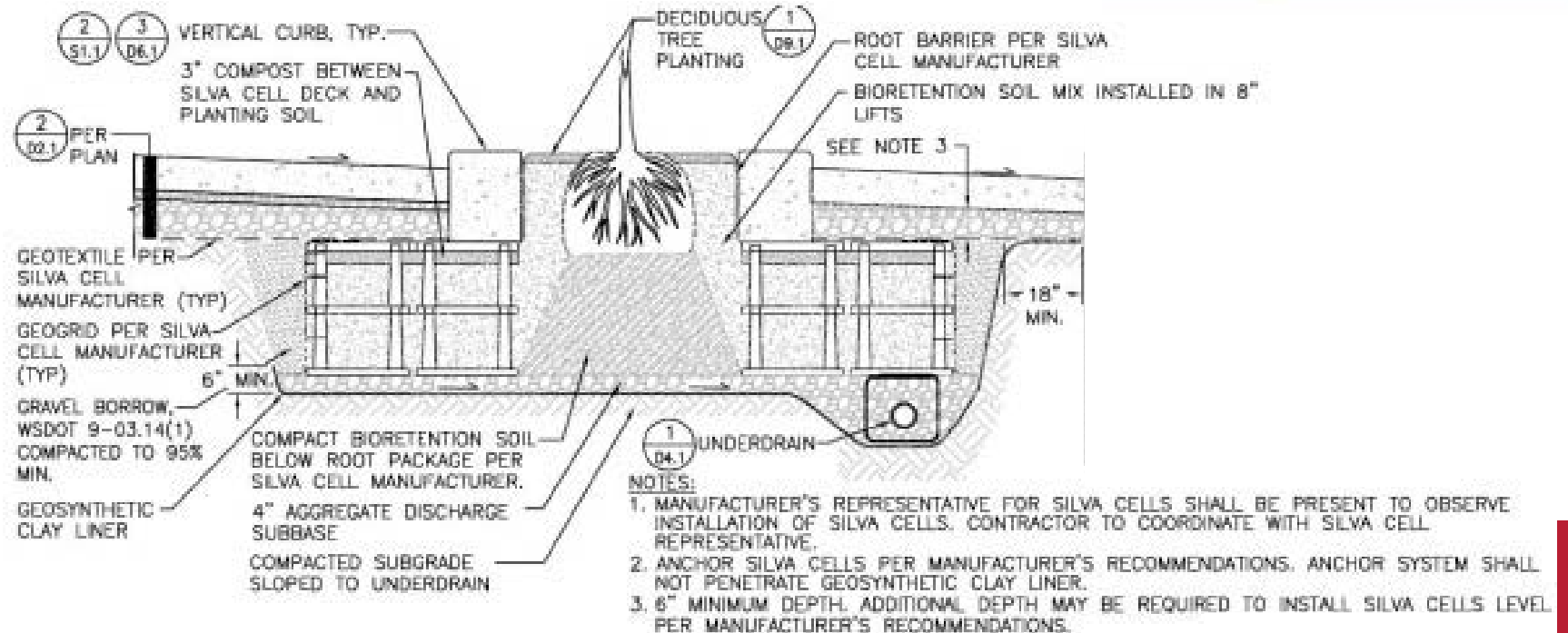


TREE INSTALLATION: Silva Cells



MAIN BENEFITS:

- Stormwater Retention
- Reduced Runoff
- Stabilized Soils
- Root Control



PLAN VISION REVIEW

- **ADA Accessibility**
 - Centralized ADA Parking
- **Bicycle and Moped Parking**
 - Redevelopment Area at College Ave/Addison St
- **Manage Traffic Volumes and Speeds**
 - Reduction of Travel Lanes
 - Wayfinding Signage for Alternate/Faster Routes
- **Deter Cut Through Traffic**
 - Wayfinding Signage for Alternate/Faster Routes
 - Sidewalks on Hillcrest, Oak, and Pine; Traffic Calming on Alternate Routes
- **Multi-Modal Connectivity to Clemson University**
 - Connection to Highway 93 Improvements
- **Make Downtown Core Pedestrian/Bicycle Friendly**
 - Protected Bicycle Lanes on College Avenue
 - 8'-16' Sidewalks Throughout College Avenue
- **Development of a Realistic, Buildable Plan**
 - Engineer Reviewed Cost Estimates

NEXT STEPS

1. Parking Deck Placement and Construction
2. Full Engineering Design of Recommendations
3. Implementation



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**QUESTIONS OR
COMMENTS?**



OPINION OF PROBABLE COSTS

OPINION OF COSTS

SEGMENT 1 – Highway 123 to Edgewood

\$3,152,800

SEGMENT 2 – Edgewood to Keith

\$1,922,400

SEGMENT 3 – Keith to Highway 93

\$2,607,800

TOTAL PROJECT– Highway 123 to Highway 93

\$7,683,000