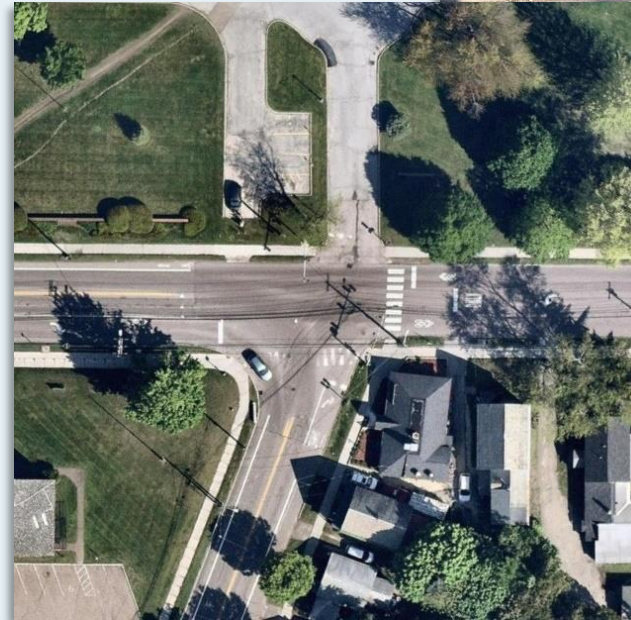


# Colchester Avenue: Bikeways, Parking, and Intersection Safety Study

## Alternatives Presentation

January 11, 2021



# Agenda



(Re)Introductions



Review Updated Purpose and Needs



Brief Project Refresher



Review and Discuss Corridor  
and Intersection Concepts

Conceptual Plans  
Cross Sections  
Evaluations



Discussion & Feedback



Next Steps

# (Re)Introductions

## Project Team

- **CCRPC** | Jason Charest & Marshall Distel
- **City of Burlington** | Nicole Losch & Elizabeth Ross
- **Third Sector Associates** | Diane Meyerhoff
- **VHB** | Jenn Conley, Drew Gingras, & Karen Sentoff

## Advisory Committee

- **City of Burlington** | Will Clavelle
- **UVM Medical Center** | Ashley Bond
- **UVM** | Jim Barr
- **Green Mountain Transit** | Chris Damiani
- **Burlington Walk Bike Council** | Jason Stuffle
- **VTrans** | Mario Dupigny-Giroux, PE
- **NPA Representative** | David Cawley
- **City Council** | Jack Hanson

# Project Purpose

The purpose of the **Colchester Avenue: Bikeways, Parking, & Intersection Safety Study** is to **identify and prioritize improvements** that align with the City's vision for sustainable transportation infrastructure and enable a continuous, connected, and livable multimodal transportation corridor. Specifically, the study will evaluate improvements:

- along Colchester Avenue in its entirety which will **enhance mobility and safety** and include solutions for parking demand of businesses, employers, and residents;
- at the intersection of Colchester Avenue and East Avenue which will **improve safety** for all modes of transportation.





# Project Needs

- **Improve Intersection Safety**
- **Improve Corridor Safety**
- **Enhance Mobility for Bicyclists**
- **Solutions for Parking Demand of Local Businesses, Employers, and Residents**



\* Shoutout to DMV: New permit system works much better!

Very difficult LT for cyclists into UWM Rd

Very difficult and without comments, working fantastic!

Connect: East Ave has been shifted to a residential Ave. is nice... interesting... More comments about these, probably sports

Concern for Residents: Unsafe for residents cars don't anticipate when, hard to access when in residential. Residents are for cut! But no when!

Don't Drive Here and a whole lot of typical info of an intersection? To see how to behave

Don't Drive Here: East Ave and Princeton need to be thought together because a buffer in grade here

UW traffic moves better with the policy on the north side removal

East of East Ave becomes a race track and is very unsafe for cyclists

Signal layout is bad for WB Calaveras into East Ave

Signal time and don't open a very long time. RT too blocks the outside from cars driving right on at East Ave

Parking is important and at Campus Kitchen with recent changes!

Random parking spot after East Ave where Latham Park cars leave

This park is nice but could be much nicer, more seating points, a sign right!

Difficult to see park if you're turning left onto East Ave from Calaveras Ave

University Rd at East Ave is a terrible road. Bldg is cut to avoid by UWM and, walking to all, parking is a shared and shared

East Ave south of the intersection is a busy - speeding cars, SO on E Ave is an issue, no SO on west side

Would like to see a traffic study along East Ave



- 

## Corridor Concepts & Intersection Alternatives

# Project Refresher | Concepts Considered

## ■ Improving User Safety

- Separating modes
- Defining user spaces

## ■ Enhancing Bike Mobility

- Maintain existing curb-to-curb
- Shared use paths on both sides
- Two-way cycle tracks
- On-street separated bike lanes
- Raised, separated bike lanes
- Shared use paths and separated bike lanes

## ■ Intersection Safety

- Equipment Upgrades
- Geometry Improvements and Realignment
- Roundabout

## ■ Solutions for Parking

- Discuss parking needs with businesses
- Identify solutions off corridor
- Identify concept enhancements for parking on corridor

# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
<b>Concept 2 (West)</b> Raised, Separated Bike Lanes	<b>Concept 2 (East)</b> Raised, Separated Bike Lanes	<b>Alternative 2</b> Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal
	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout



# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 2</b> <b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
	<b>Concept 4</b> <b>Concept 2 (East)</b> Raised, Separated Bike Lanes	<b>Alternative 2</b> Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal
<b>Concept 2 (West)</b> Raised, Separated Bike Lanes	<b>Concept 4A</b> <b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements <b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 6</b> <b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout
		<b>Alternative 2A</b> <b>Alternative 3</b>





# Alternatives Presentation

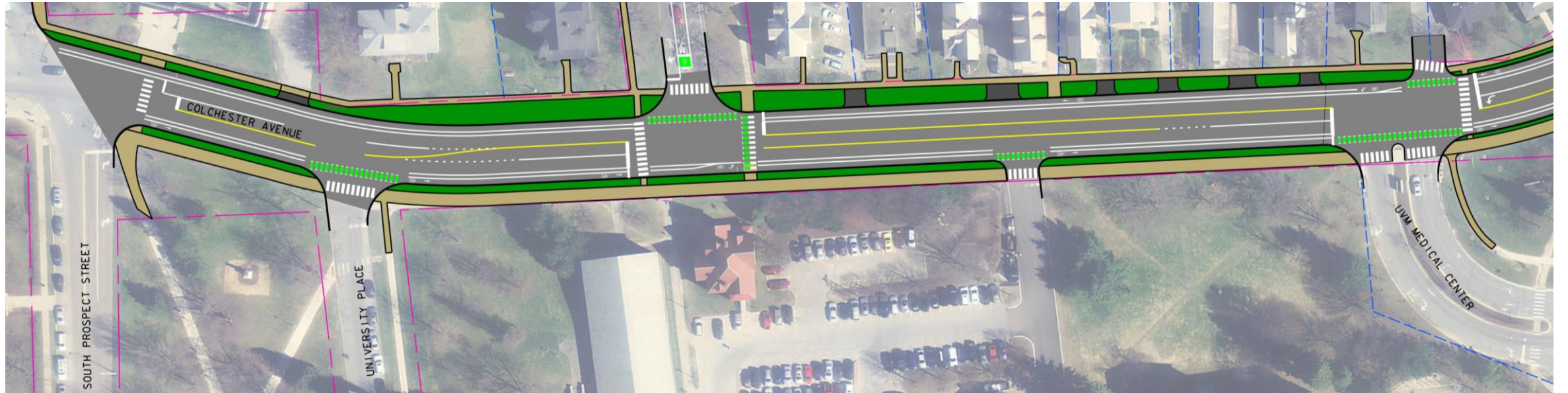
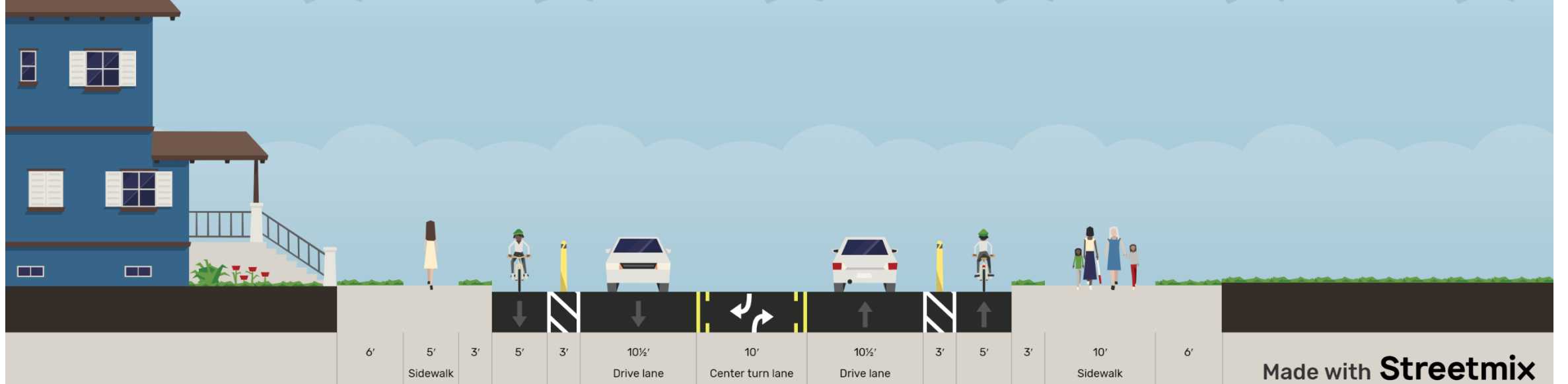
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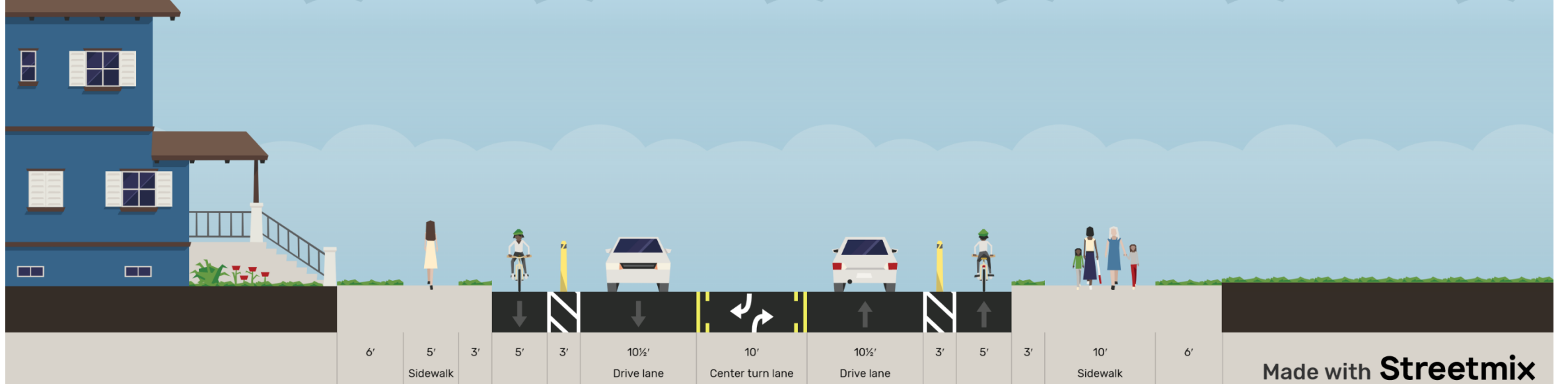
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## Concept 1 (West) | On-Street Separated Bike Lanes





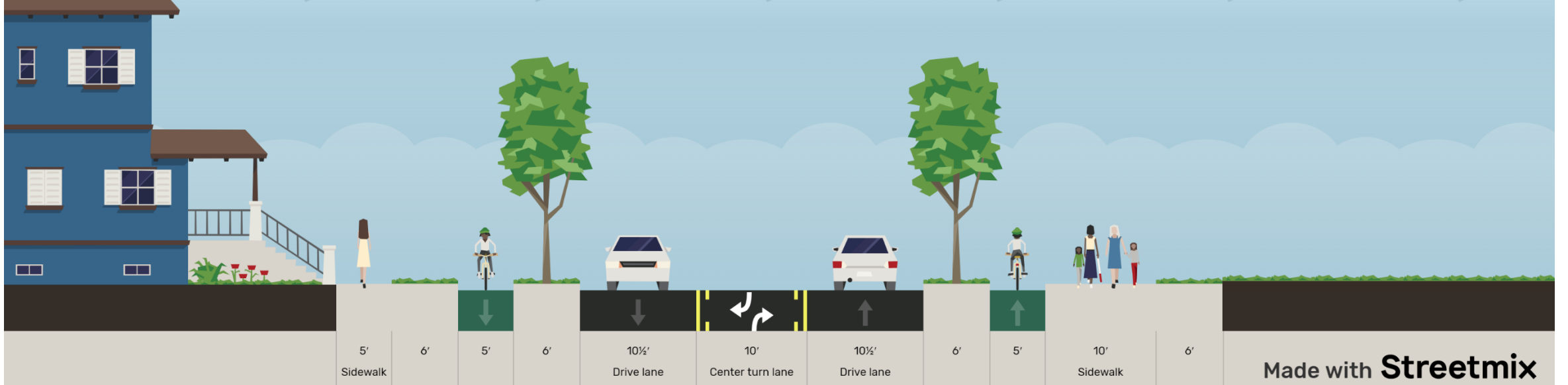
## Concept 1 (West) | On-Street Separated Bike Lanes

# Alternatives Presentation

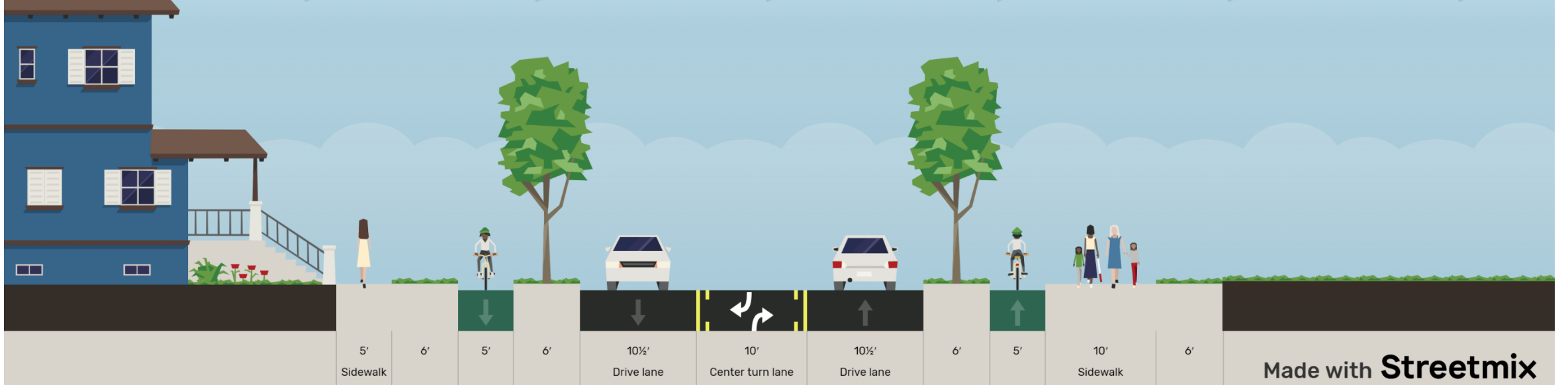
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	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout







Concept 2 (West) | Raised, Separated Bike Lanes



Concept 2 (West) | Raised, Separated Bike Lanes

Evaluation Matrix West		Colchester Avenue Corridor West	
		Concept 1 (West) On-Street Separated Bike Lanes	Concept 2 (West) Raised and Separated Bike Lanes
Costs			
Safety			
Impacts			
Community Character			

Evaluation Matrix West		Colchester Avenue Corridor West	
		Concept 1 (West) On-Street Separated Bike Lanes	Concept 2 (West) Raised and Separated Bike Lanes
Costs	Total Cost	\$	\$
Safety			
Impacts			
Community Character			



Evaluation Matrix West		Colchester Avenue Corridor West	
		Concept 1 (West) On-Street Separated Bike Lanes	Concept 2 (West) Raised and Separated Bike Lanes
Costs			
Safety	Bicycle Safety	Improved Cyclists in separated facility	Improved Cyclists in separated facility
	Pedestrian Safety	Improved Pedestrians in separated facility on south side	Improved Pedestrians in separated facility on south side
	Vehicle Safety	Slightly Improved Reduce conflicts with cyclists by defining and separating spaces	Slightly Improved Reduce conflicts with cyclists by defining and separating spaces
Impacts			
Community Character			



Evaluation Matrix West		Colchester Avenue Corridor West	
		Concept 1 (West) On-Street Separated Bike Lanes	Concept 2 (West) Raised and Separated Bike Lanes
Costs			
Safety			
Impacts	Utility Impacts	Major Impacts	Major Impacts
	ROW Impacts	No Impacts	No Impacts
	Constructability	Major Effort	Major Effort
	Parking	No Change	No Change
	Trees	Moderate Impacts to Existing; Some Tree Belt Opportunity	Moderate Impacts to Existing; Some Tree Belt Opportunity
	Historic	No Impacts	No Impacts
	Archaeological	No Impacts	No Impacts
Community Character			

Evaluation Matrix West		Colchester Avenue Corridor West	
		Concept 1 (West) On-Street Separated Bike Lanes	Concept 2 (West) Raised and Separated Bike Lanes
Costs			
Safety			
Impacts			
Community Character	Aesthetics	No Change	Improved
	Satisfies Purpose & Need	Yes	Yes

# Alternatives Presentation

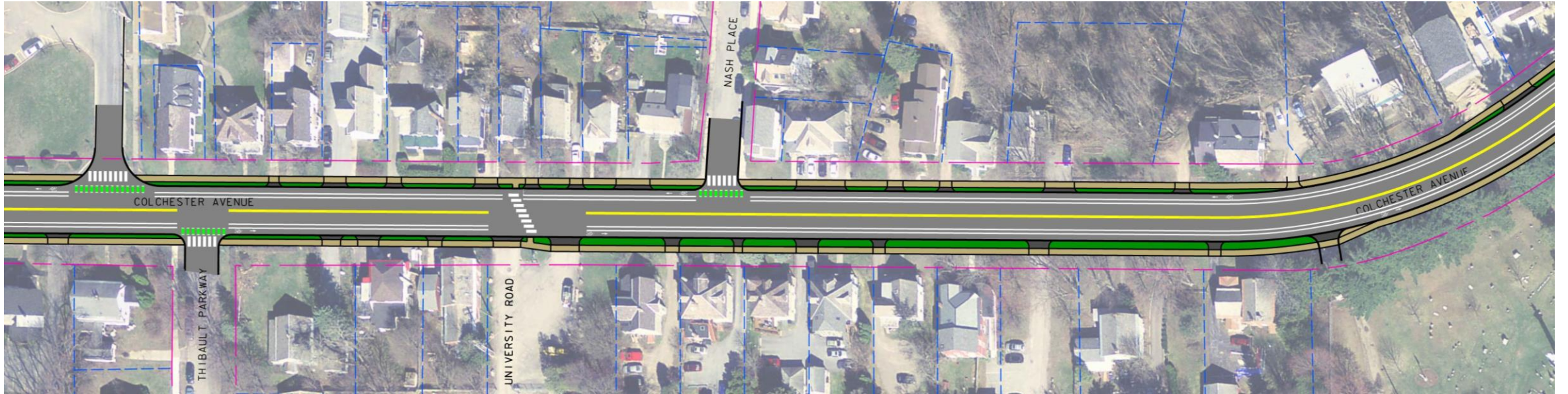
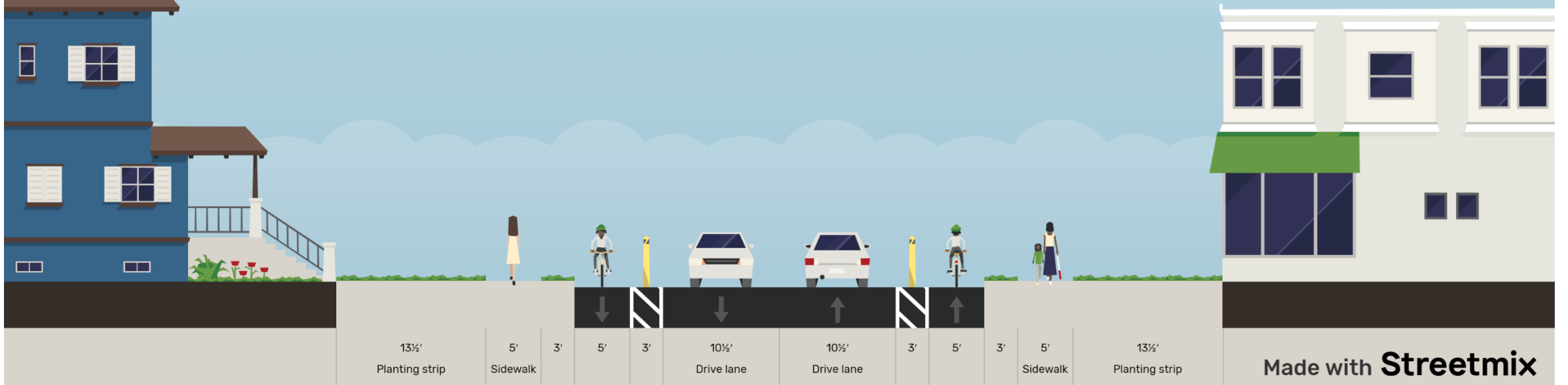
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	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout



# Alternatives Presentation

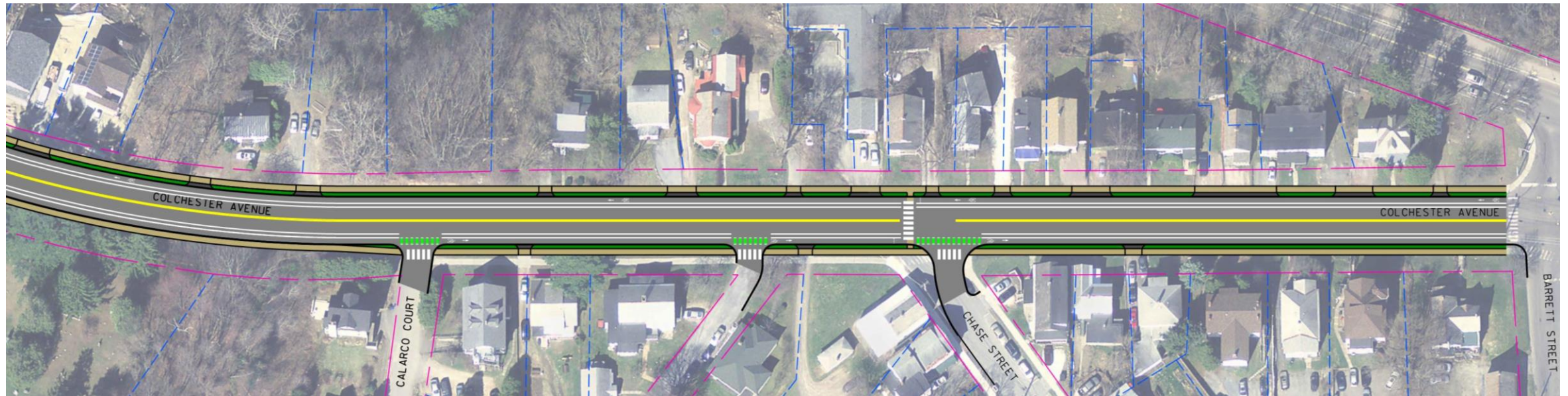
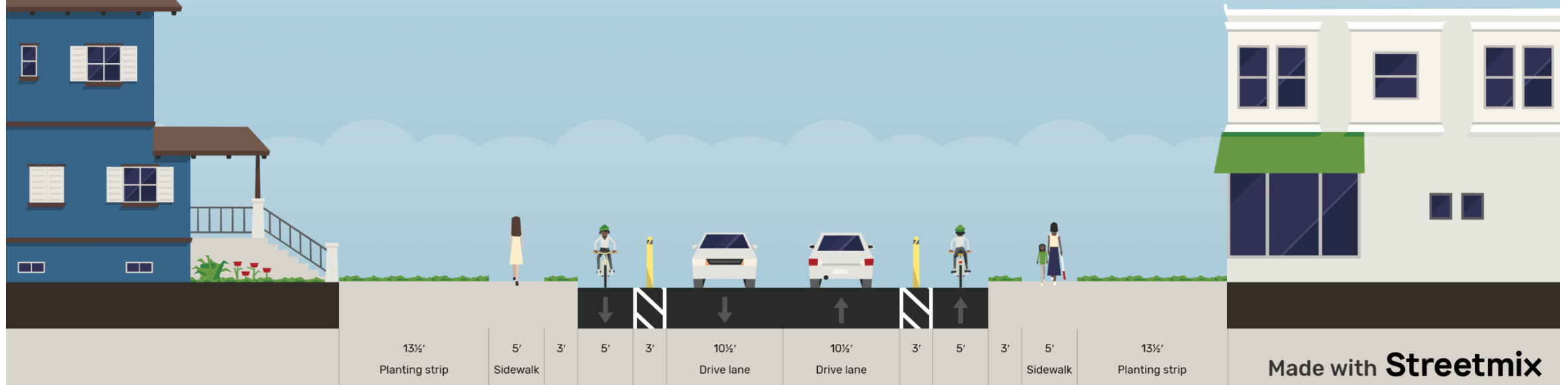
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	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout





## Concept 1 (East) | On-Street Separated Bike Lanes





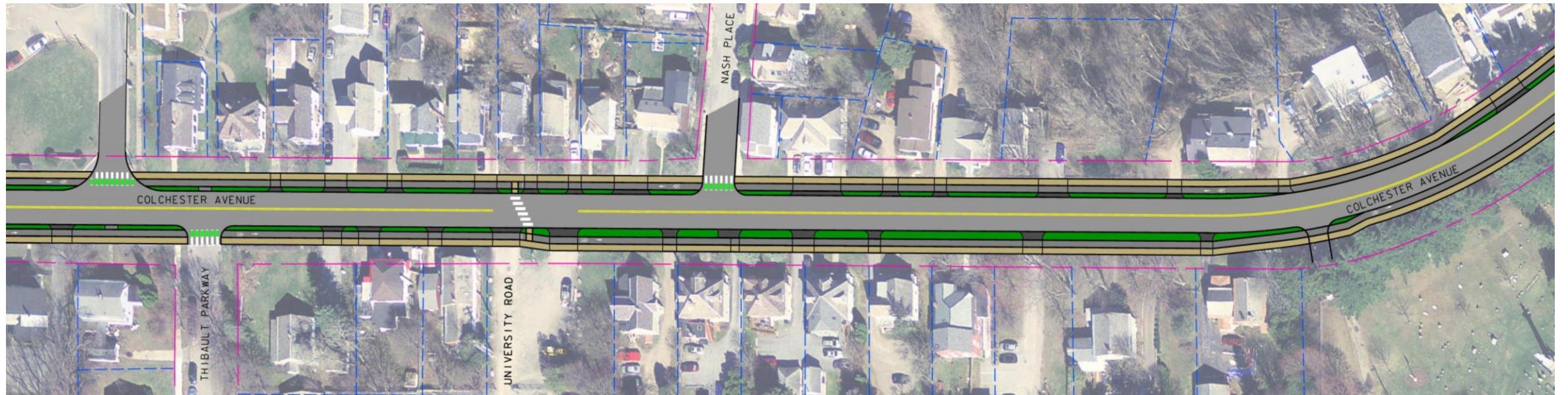
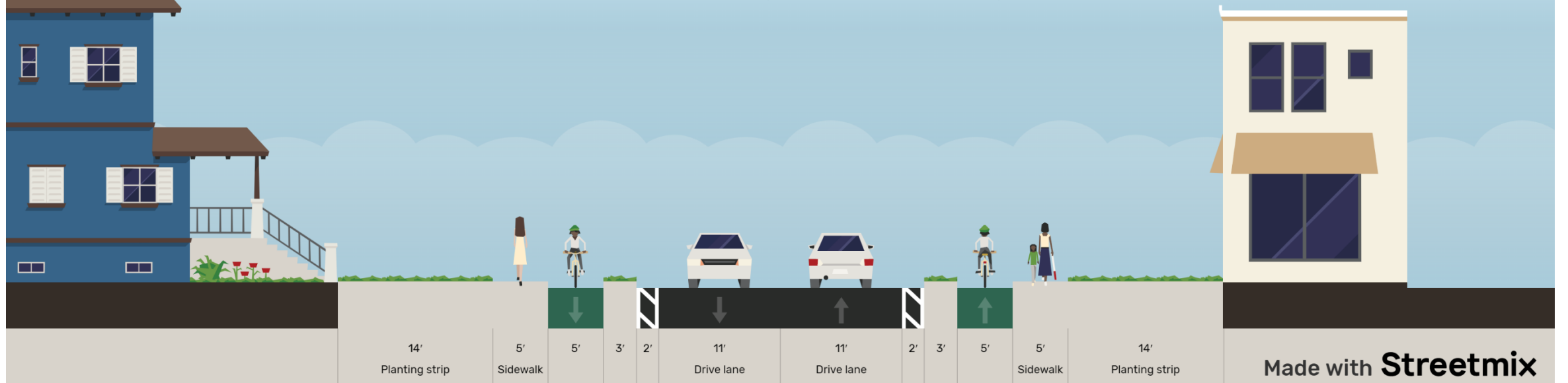
Concept 1 (East) | On-Street Separated Bike Lanes

# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
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	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout

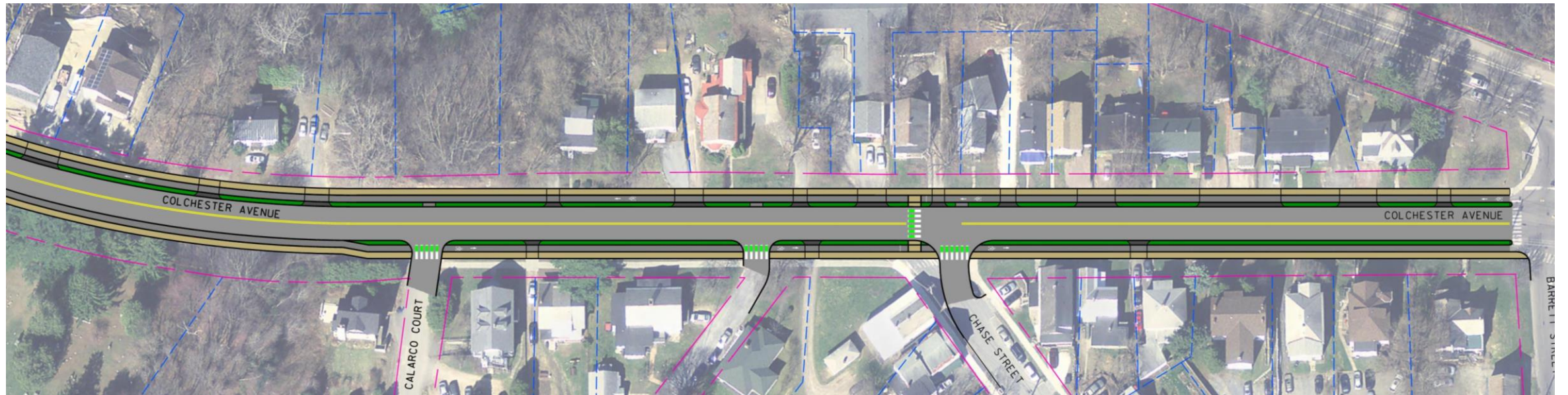
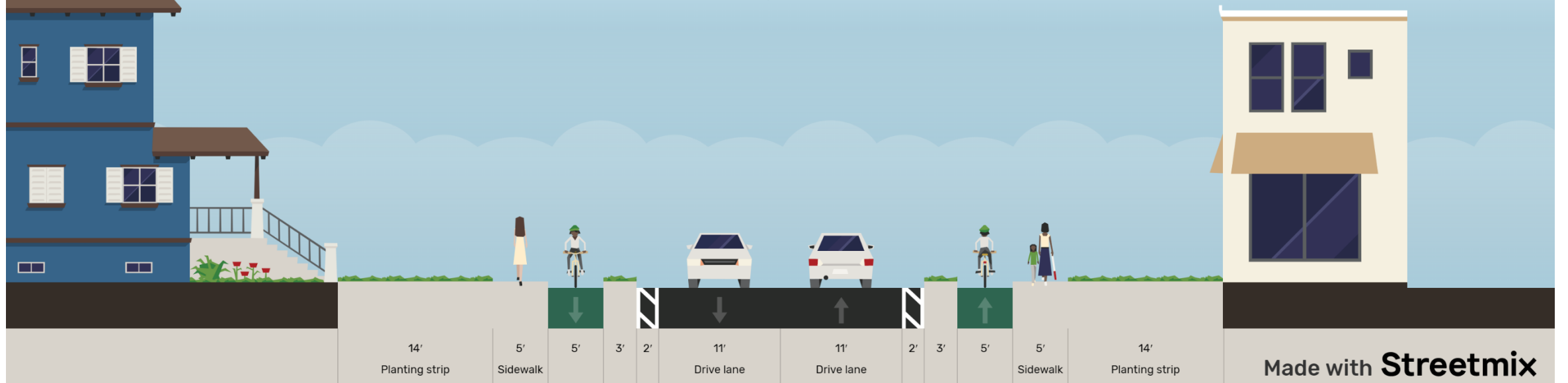






Concept 2 (East) | Raised, Separated Bike Lanes





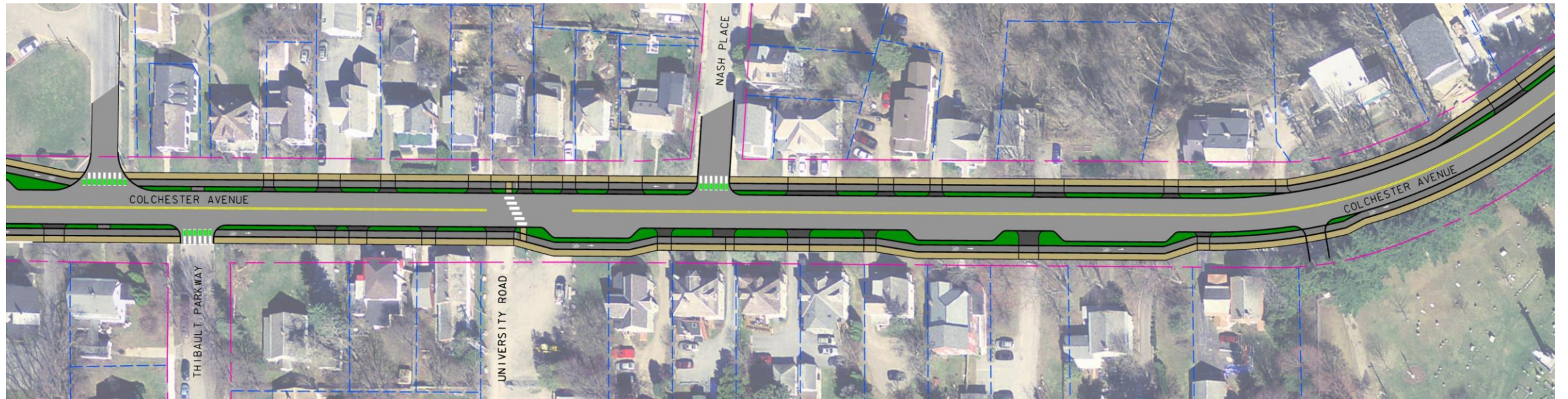
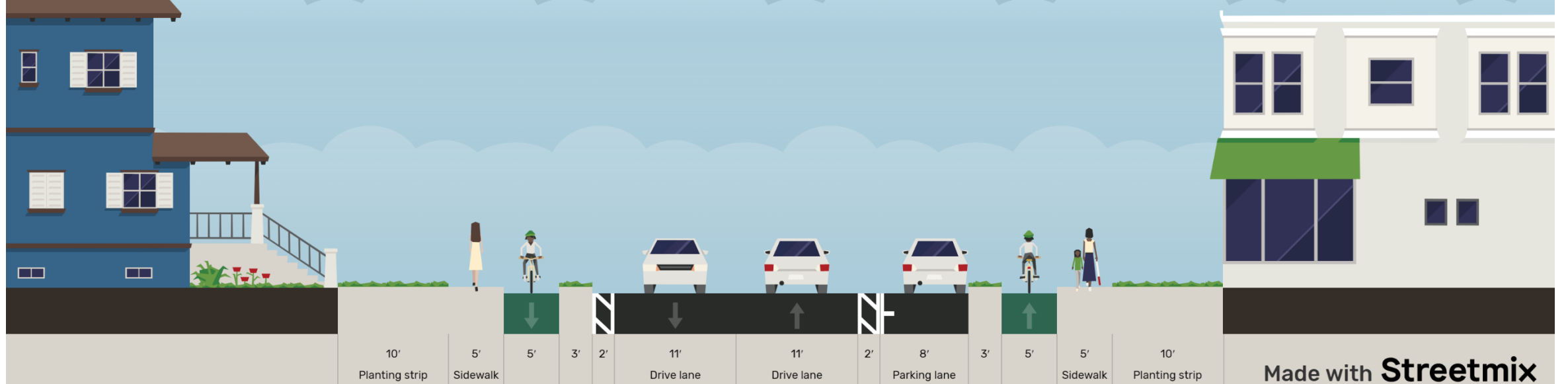
Concept 2 (East) | Raised, Separated Bike Lanes

# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
<b>Concept 2 (West)</b> Raised, Separated Bike Lanes	<b>Concept 2 (East)</b> Raised, Separated Bike Lanes	<b>Alternative 2</b> Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal
	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout







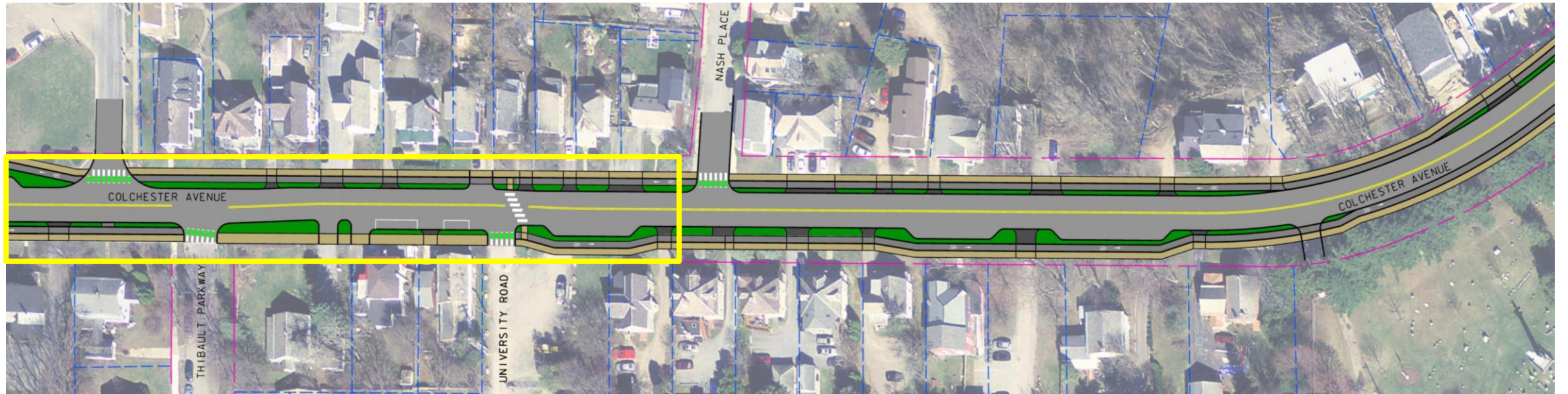
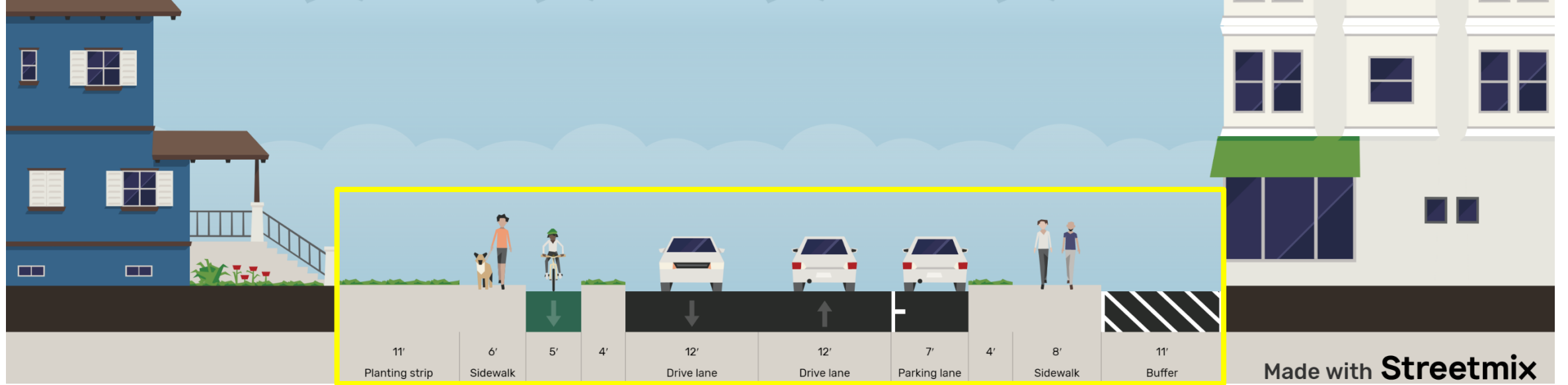
Concept 3 (East) | Raised, Separated Bike Lanes with Enhancements

# Alternatives Presentation

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<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
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	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout







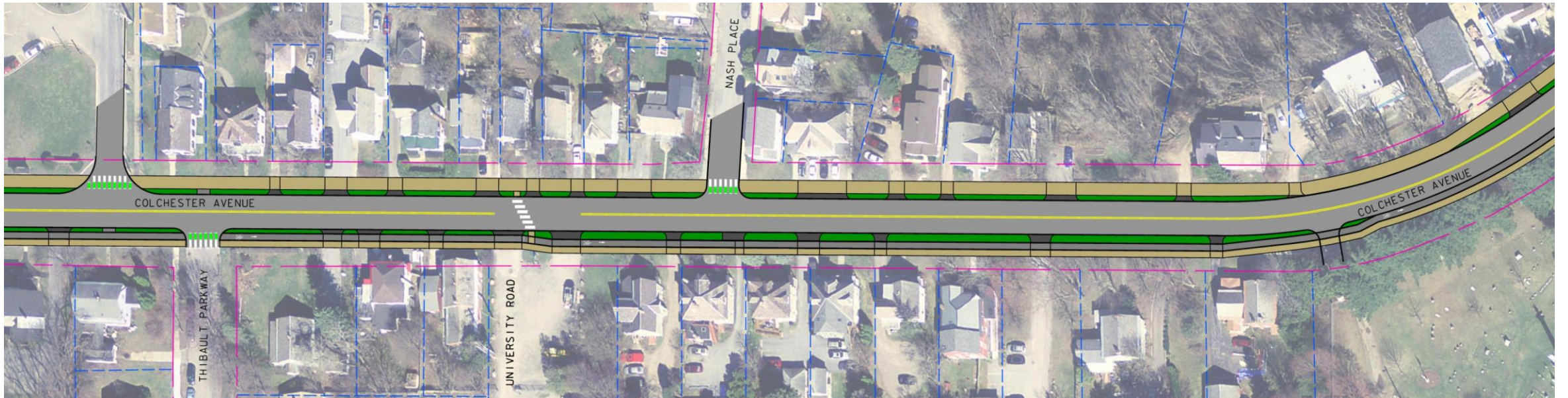
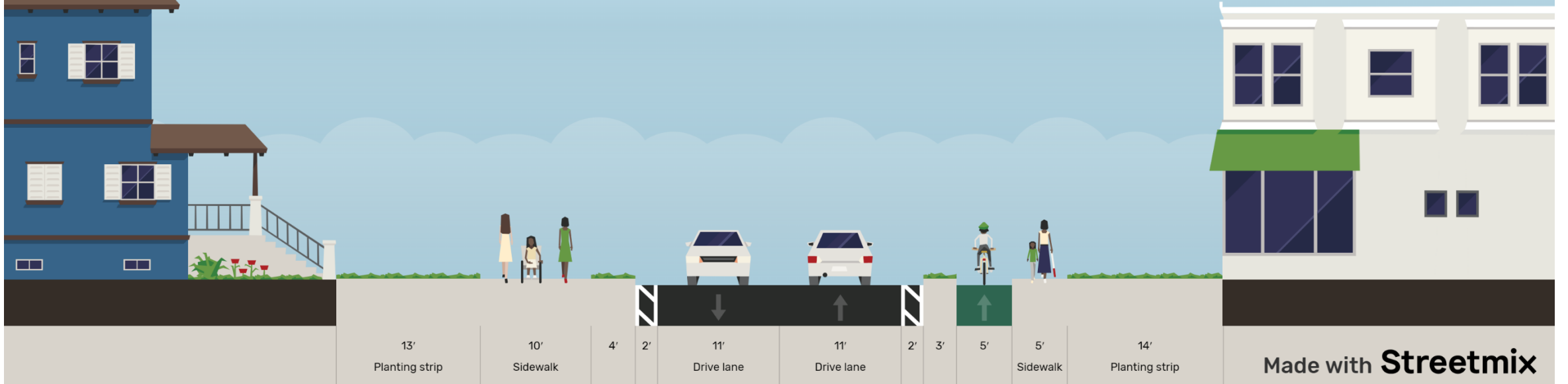
Concept 3A (East) | Raised, Separated Bike Lanes with Enhancements and Mixing Zone

# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
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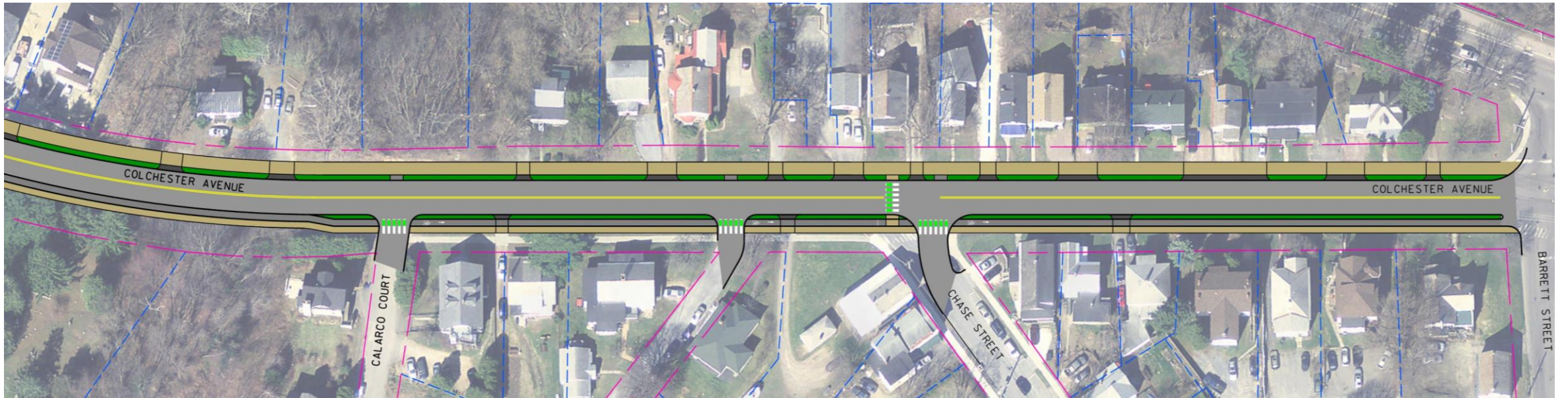
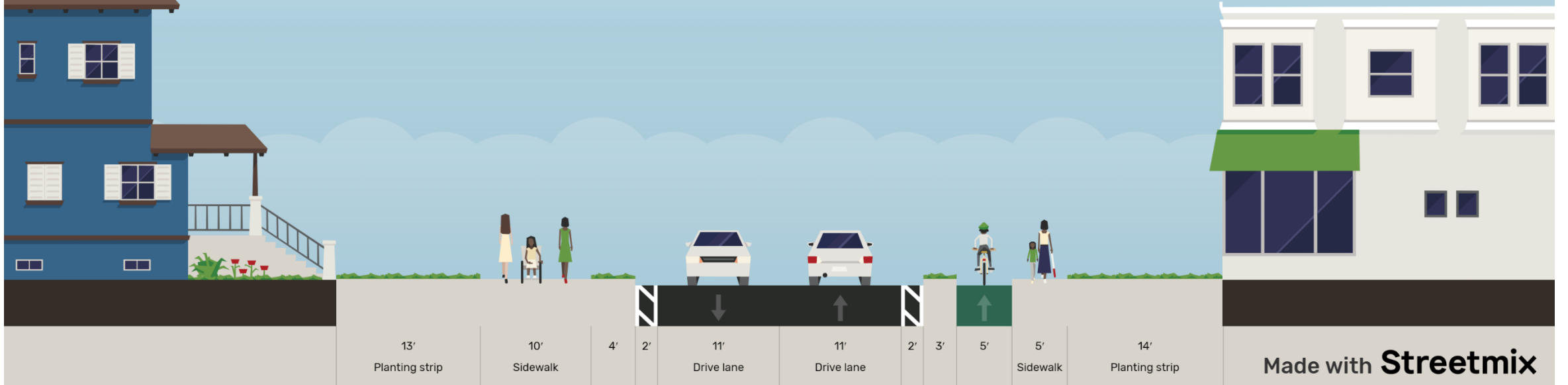






## Concept 4 (East) | Shared Use Path





Concept 4 (East) | Shared Use Path

Evaluation Matrix East		Colchester Avenue Corridor East				
		Concept 1 (East) On-Street Separated Bike Lanes	Concept 2 (East) Raised and Separated Bike Lanes	Concept 3 (East) Raised and Separated Bike Lanes with Enhancements	Concept 3A (East) Raised and Separated Bike Lanes with Enhancements and Mixing Zone	Concept 4 (East) Shared Use Path and Separated Bike Lanes
Costs						
Safety						
Impacts						
Community Character						

Evaluation Matrix East		Colchester Avenue Corridor East				
		Concept 1 (East) On-Street Separated Bike Lanes	Concept 2 (East) Raised and Separated Bike Lanes	Concept 3 (East) Raised and Separated Bike Lanes with Enhancements	Concept 3A (East) Raised and Separated Bike Lanes with Enhancements and Mixing Zone	Concept 4 (East) Shared Use Path and Separated Bike Lanes
Costs	Total Cost	\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$
Safety						
Impacts						
Community Character						

Evaluation Matrix East		Colchester Avenue Corridor East				
		Concept 1 (East) On-Street Separated Bike Lanes	Concept 2 (East) Raised and Separated Bike Lanes	Concept 3 (East) Raised and Separated Bike Lanes with Enhancements	Concept 3A (East) Raised and Separated Bike Lanes with Enhancements and Mixing Zone	Concept 4 (East) Shared Use Path and Separated Bike Lanes
Costs						
Safety	Bicycle Safety	Improved Cyclists in separated facility	Improved Cyclists in separated facility	Improved Cyclists in separated facility	Improved Cyclists in separated facility or shared use path	Improved Cyclists in separated facility or shared use path
	Pedestrian Safety	No Change / Slightly Improved Fewer cyclists using sidewalk	No Change / Slightly Improved Fewer cyclists using sidewalk	No Change / Slightly Improved Fewer cyclists using sidewalk	No Change/Slightly Worse Pedestrians in separated facility except for mixing zone area	No Change/Slightly Worse Cyclists and pedestrians in shared path on north side at east end of project
	Vehicle Safety	Slightly Improved Reduce conflicts with cyclists by defining and separating spaces	Slightly Improved Reduce conflicts with cyclists by defining and separating spaces	Slightly Improved Reduce conflicts with cyclists by defining and separating spaces	Slightly Improved Reduce conflicts with cyclists by defining and separating spaces	Slightly Improved Reduce conflicts with cyclists by defining and separating spaces
Impacts						
Community Character						

Evaluation Matrix East		Colchester Avenue Corridor East				
		Concept 1 (East) On-Street Separated Bike Lanes	Concept 2 (East) Raised and Separated Bike Lanes	Concept 3 (East) Raised and Separated Bike Lanes with Enhancements	Concept 3A (East) Raised and Separated Bike Lanes with Enhancements and Mixing Zone	Concept 4 (East) Shared Use Path and Separated Bike Lanes
Costs						
Safety						
Impacts	Utility Impacts	Major Impacts	Major Impacts	Major Impacts	Major Impacts	Major Impacts
	ROW Impacts	No Impacts	No Impacts	Minor Impacts	Minor Impacts	No Impacts
	Constructability	Major Effort	Major Effort	Major Effort	Major Effort	Major Effort
	Parking	Elimination of On-Street Parking (Colchester Ave)	Elimination of On-Street Parking (Colchester Ave)	Maintains Some On-Street Parking (Colchester Ave)	Maintains Some On-Street Parking (Colchester Ave)	Elimination of On-Street Parking (Colchester Ave)
	Trees	Moderate Impacts to Existing; Some Tree Belt Opportunity	Moderate Impacts to Existing; Some Tree Belt Opportunity	Major Impacts to Existing; Increased Tree Belt Opportunity	Major Impacts to Existing; Increased Tree Belt Opportunity	Moderate Impacts to Existing; Some Tree Belt Opportunity
	Historic	No Impacts	No Impacts	No Impacts	No Impacts	No Impacts
	Archaeological	No Impacts	No Impacts	No Impacts	No Impacts	No Impacts
Community Character						



Evaluation Matrix East		Colchester Avenue Corridor East				
		Concept 1 (East) On-Street Separated Bike Lanes	Concept 2 (East) Raised and Separated Bike Lanes	Concept 3 (East) Raised and Separated Bike Lanes with Enhancements	Concept 3A (East) Raised and Separated Bike Lanes with Enhancements and Mixing Zone	Concept 4 (East) Shared Use Path and Separated Bike Lanes
Costs						
Safety						
Impacts						
Community Character	Aesthetics	No Change	Improved	Improved	Improved	Improved
	Satisfies Purpose & Need	Yes*	Yes*	Yes	Yes	Yes*

## ■ \*Parking Need

- Existing on-street parking on Colchester Ave reduced or removed in all concepts
  - Concepts 3 and 3A are the only concepts that retain some on-street parking on Colchester Ave
- Identified business parking needs based on discussions with business owners
- Identified potential for additional parking opportunities adjacent to the corridor, including:
  - UVM and City pursuit of public parking in Centennial Lot on University Road (10+ spaces)
  - Neighborhood pursuit of residential on-street parking by area instead of by street (Fletcher Place, Latham Court, Thibault Parkway, and Nash Place)
  - Discussions regarding privately owned lots for residential use

# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
<b>Concept 2 (West)</b> Raised, Separated Bike Lanes	<b>Concept 2 (East)</b> Raised, Separated Bike Lanes	<b>Alternative 2</b> Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal
	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout

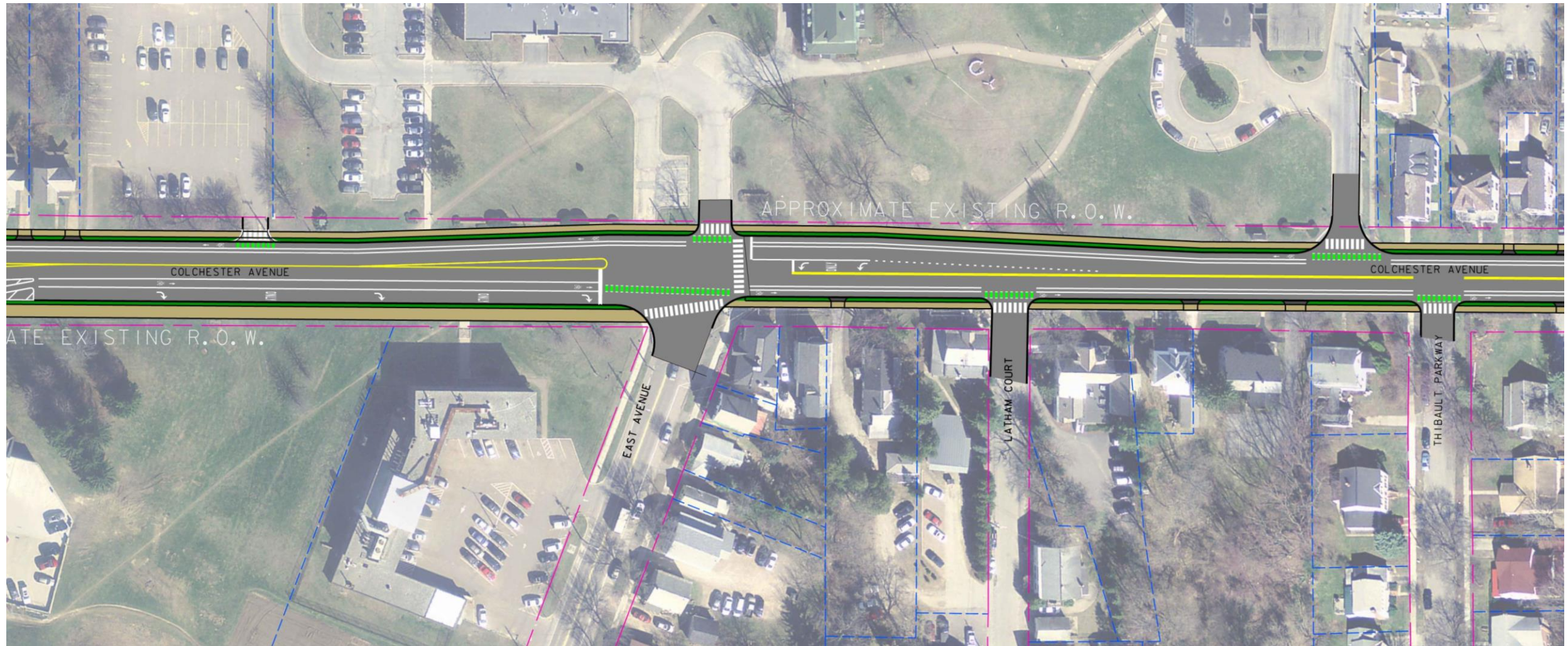


# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
<b>Concept 2 (West)</b> Raised, Separated Bike Lanes	<b>Concept 2 (East)</b> Raised, Separated Bike Lanes	<b>Alternative 2</b> Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal
	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout







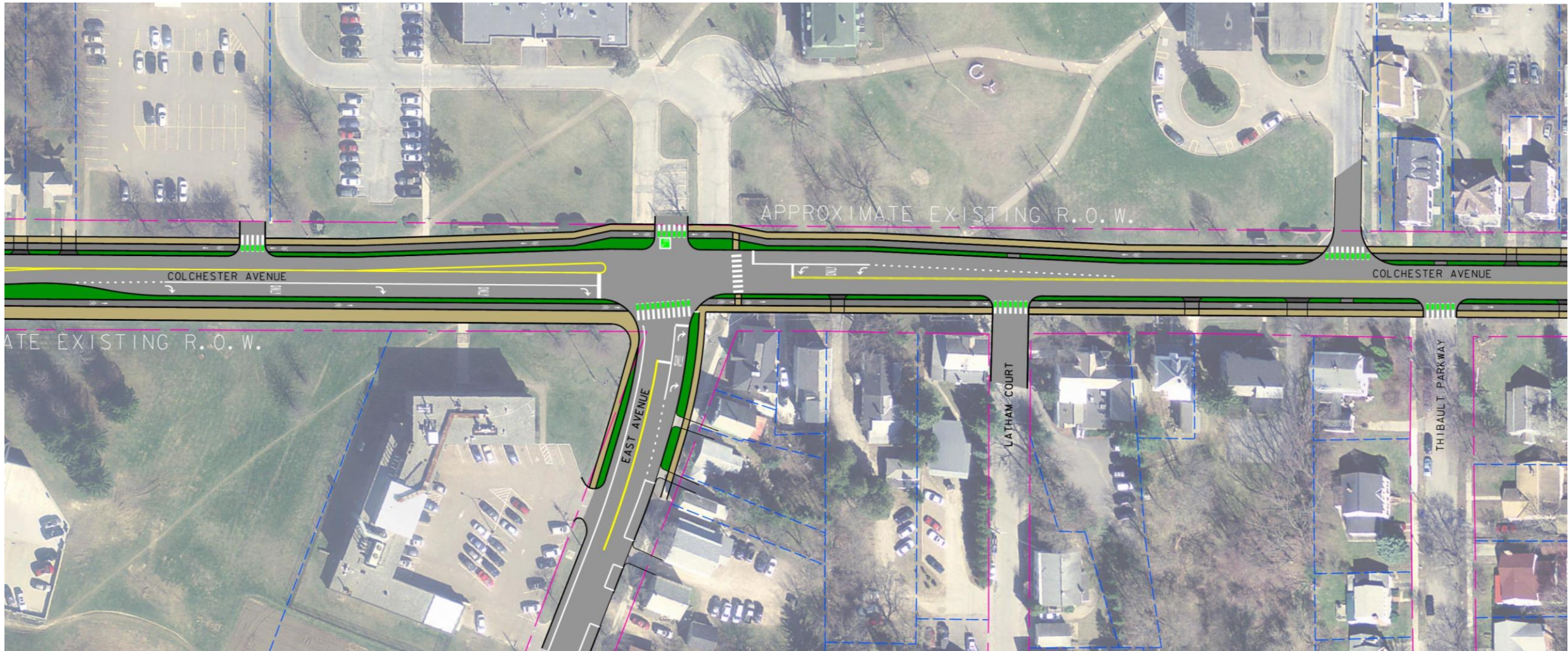
## Alternative 1 | Equipment and Striping

# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
<b>Concept 2 (West)</b> Raised, Separated Bike Lanes	<b>Concept 2 (East)</b> Raised, Separated Bike Lanes	<b>Alternative 2</b> Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal
	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout







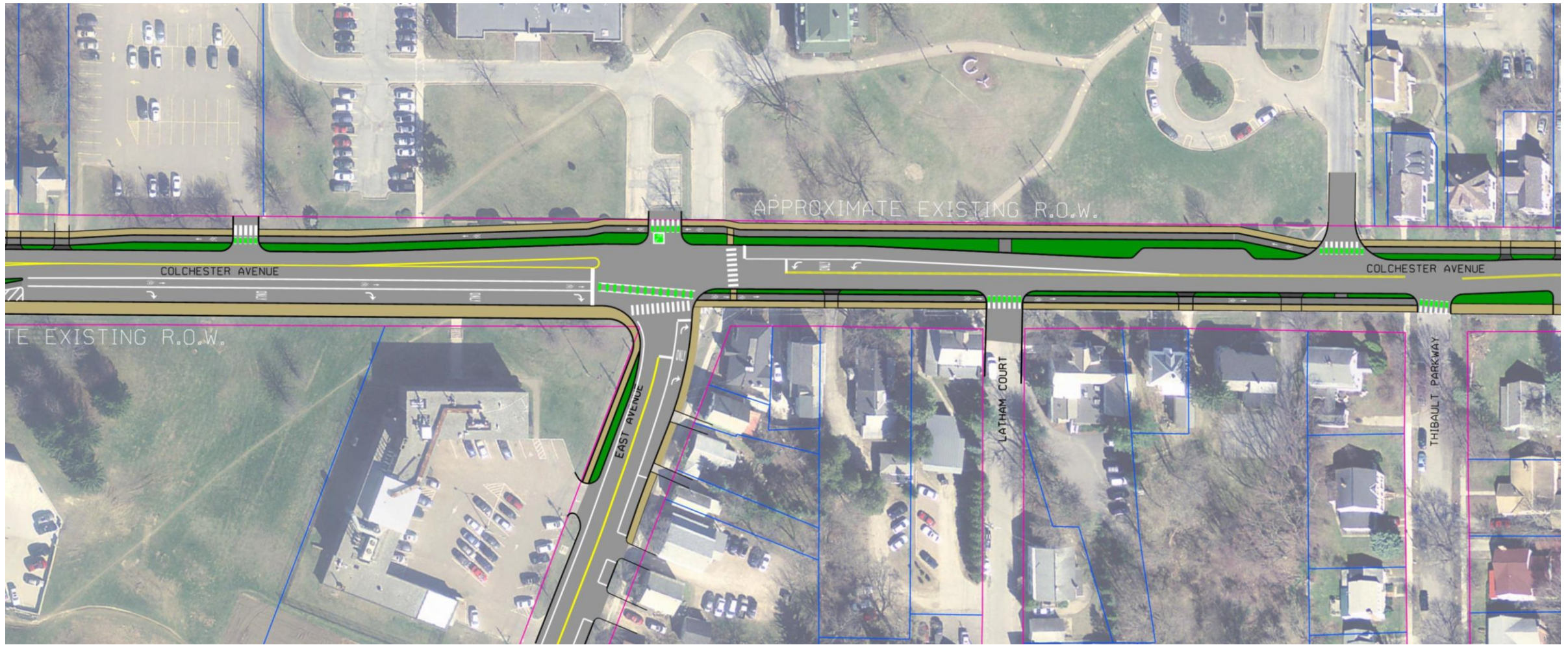
## Alternative 2 | Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal

# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
<b>Concept 2 (West)</b> Raised, Separated Bike Lanes	<b>Concept 2 (East)</b> Raised, Separated Bike Lanes	<b>Alternative 2</b> Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal
	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout







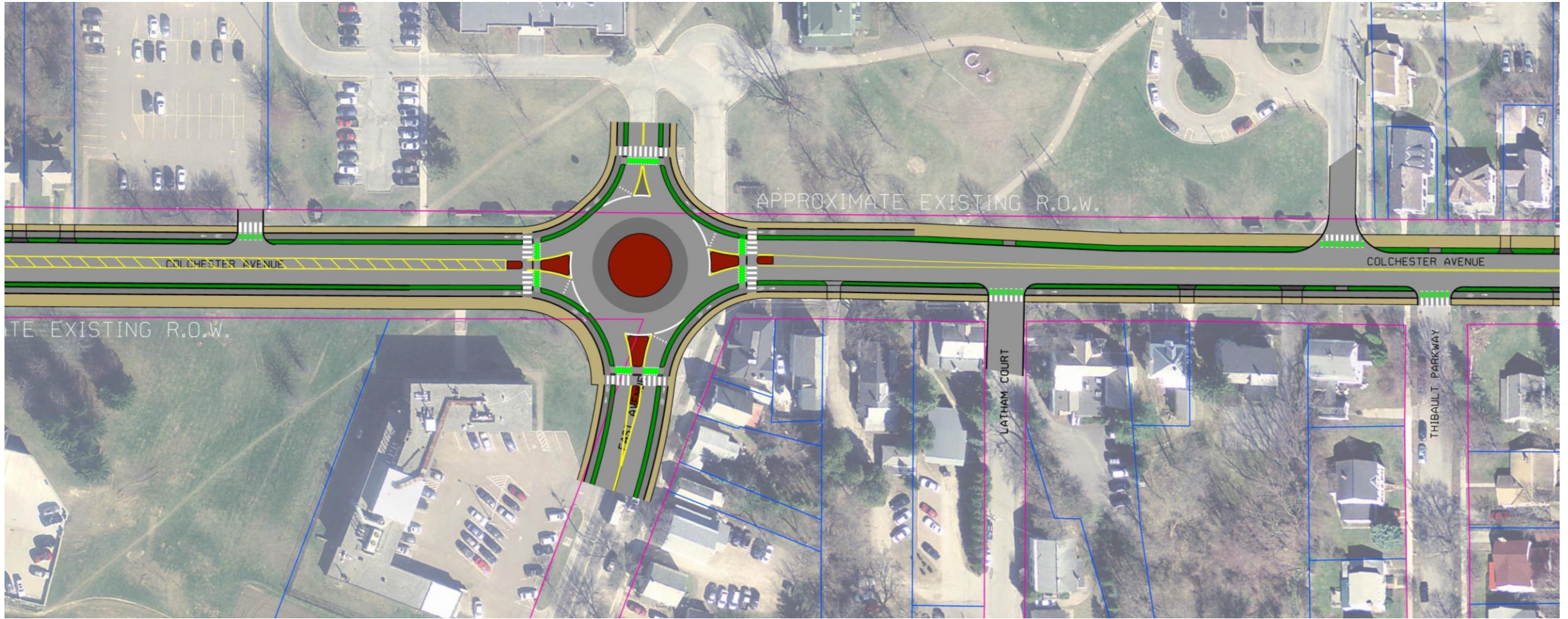
## Alternative 3 | Equipment and Striping Upgrades with Realignment of Intersection

# Alternatives Presentation

Corridor Concepts West of East Avenue	Corridor Concepts East of East Avenue	Intersection Alternatives @ East Avenue
<b>Concept 1 (West)</b> On-Street Separated Bike Lanes	<b>Concept 1 (East)</b> On-Street Separated Bike Lanes	<b>Alternative 1</b> Equipment and Striping Upgrades at Existing Signalized Intersection
<b>Concept 2 (West)</b> Raised, Separated Bike Lanes	<b>Concept 2 (East)</b> Raised, Separated Bike Lanes	<b>Alternative 2</b> Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal
	<b>Concept 3 (East)</b> Raised, Separated Bike Lanes with Enhancements	<b>Alternative 3</b> Equipment and Striping Upgrades with Realignment of Intersection
	<b>Concept 3A (East)</b> Raised, Separated Bike Lanes with Enhancements and Mixing Zone	
	<b>Concept 4 (East)</b> Shared Use Path	<b>Alternative 4</b> Roundabout







## Alternative 4 | Roundabout

Evaluation Matrix Intersection		Colchester Avenue / East Avenue Intersection			
		Alternative 1 Equipment and Striping Upgrade	Alternative 2 Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal	Alternative 3 Equipment and Striping Upgrades with Realignment of Intersection	Alternative 4 Roundabout
Costs					
Safety					
Impacts					
Community Character					

Evaluation Matrix Intersection		Colchester Avenue / East Avenue Intersection			
		Alternative 1 Equipment and Striping Upgrade	Alternative 2 Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal	Alternative 3 Equipment and Striping Upgrades with Realignment of Intersection	Alternative 4 Roundabout
Costs	Total Cost	\$	\$\$\$	\$\$\$	\$\$\$\$
Safety					
Impacts					
Community Character					

Evaluation Matrix Intersection		Colchester Avenue / East Avenue Intersection			
		Alternative 1 Equipment and Striping Upgrade	Alternative 2 Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal	Alternative 3 Equipment and Striping Upgrades with Realignment of Intersection	Alternative 4 Roundabout
Costs					
Safety	Bicycle Safety	<b>Slightly Improved</b> Bike Lanes provided westbound through signal	<b>Improved</b> Bikes provided protected lane and phase - no turn conflicts	<b>Slightly Improved</b> Cyclists have to travel between thru and right turn lanes, but protected	<b>Slightly Improved</b> Bikes only conflict with single movement at time, but not fully protected; fewer conflict points
	Pedestrian Safety	<b>Improved</b> Protected Crossings with less delay with vehicular phasing	<b>Improved</b> Protected Crossings with less delay with vehicular phasing	<b>Improved</b> Protected Crossings with less delay with vehicular phasing	<b>Slightly Improved</b> Allow additional cross locations, but unsignalized; shorter crossings with lower speed vehicles; fewer conflict points
	Vehicle Safety	<b>Slightly Improved</b> by separating users, proper equipment	<b>Improved</b> by fully separating users, proper equipment	<b>Slightly Improved</b> by separating users, proper equipment	<b>Significantly Improved</b> Lower vehicle speeds and fewer conflict points
Impacts					
Community Character					



<div>Evaluation Matrix</div> <div>Intersection</div>		Colchester Avenue / East Avenue Intersection			
		<div>Alternative 1</div> <div>Equipment and Striping Upgrade</div>	<div>Alternative 2</div> <div>Equipment and Striping Upgrades with Realignment of Intersection &amp; New Bike Signal</div>	<div>Alternative 3</div> <div>Equipment and Striping Upgrades with Realignment of Intersection</div>	<div>Alternative 4</div> <div>Roundabout</div>
Costs					
Safety					
Impacts	Utility Impacts	Major Impacts	Major Impacts	Major Impacts	Major Impacts
	ROW Impacts	Minor Impacts	Minor Impacts	Minor Impacts	Minor Impacts
	Constructability	Minor Effort	Major Effort	Major Effort	Major Effort
	Parking	Existing Parking Maintained (East Ave)	Slight Reduction (East Ave)	Slight Reduction (East Ave)	Slight Reduction (East Ave)
	Trees	No Impacts	Minor Impacts To Existing	Minor Impacts to Existing	Minor Impacts to Existing
	Historic	No Impacts	No Impacts	No Impacts	No Impacts
	Archaeological	No Impacts	Additional Review Recommended	Additional Review Recommended	Additional Review Recommended
Community Character					

Evaluation Matrix Intersection		Colchester Avenue / East Avenue Intersection			
		Alternative 1 Equipment and Striping Upgrade	Alternative 2 Equipment and Striping Upgrades with Realignment of Intersection & New Bike Signal	Alternative 3 Equipment and Striping Upgrades with Realignment of Intersection	Alternative 4 Roundabout
Costs					
Safety					
Impacts					
Community Character	Aesthetics	No Change	Improved	No Change	Improved
	Satisfies Purpose & Need	Yes	Yes	Yes	Yes



# Next Steps

- Preferred Alternative Refinement
- Advisory Committee Meeting #3
- Preferred Alternative Recommendation to TEUC and City Council





# Stay Connected with the Colchester Avenue: Bikeways, Parking, and Intersection Safety Study!

Project Website:

<http://bit.ly/colchester-ave>

Contact Info:

Jason Charest, CCRPC  
jcharest@ccrpcvt.org







Questions?  
Comments?





# Supplemental Slides



# Raised, Separated Bike Lane Example