



Complete Streets Technical Assistance Program

Cranbury Bicycle Network Plan

July 2020



North Jersey Transportation Planning Authority

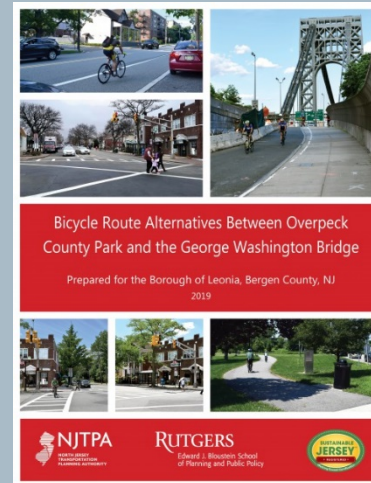
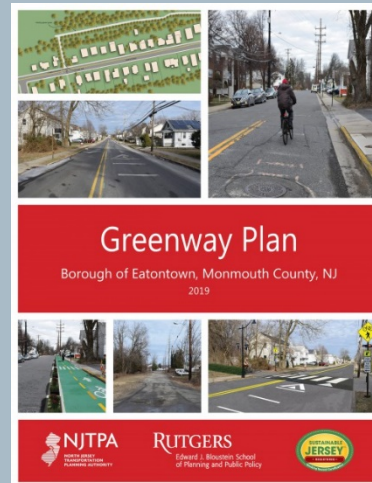
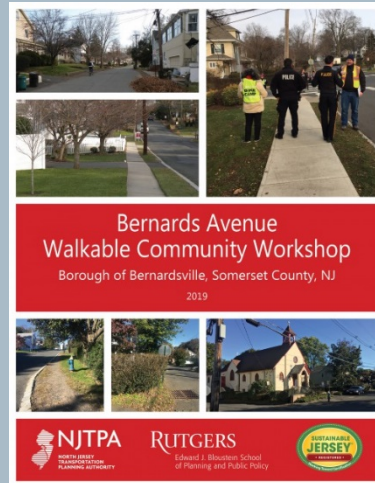
Agenda

- Background
- Introductions
- Complete Streets Overview
- Bicycle Network Plan Overview
- Draft Proposal Review
- Questions and Next Steps



Background

- NJTPA Complete Streets Technical Assistance Program
- 9 communities in 2019
- 8 communities in 2020



Introductions

- How long have you lived in Cranbury?
- How often do you bike around town?
- What barriers to bicycling do you encounter?





Complete Streets Overview

What is a Complete Street?

Complete streets are for everyone!

- Pedestrians
- Bicyclists
- Motorists
- Freight
- Public Transit Users



A Complete Street...

- Offers many travel choices
- Connects to a wider network
- Is fully accessible to all
- Varies according to context
- Improves safety for all



Benefits of Implementation

- Promote healthy lifestyles
- Provides important connections
- Create more livable communities
- Reduces traffic congestion
- Reduce reliance on fuel
- Makes fiscal sense



Building a Place You Want

- Design affects what we do and how we do it
(and how happy we are doing it)
- Build for cars...
.....you get cars
- Build for people...
.....you get people



Building a Place You Want

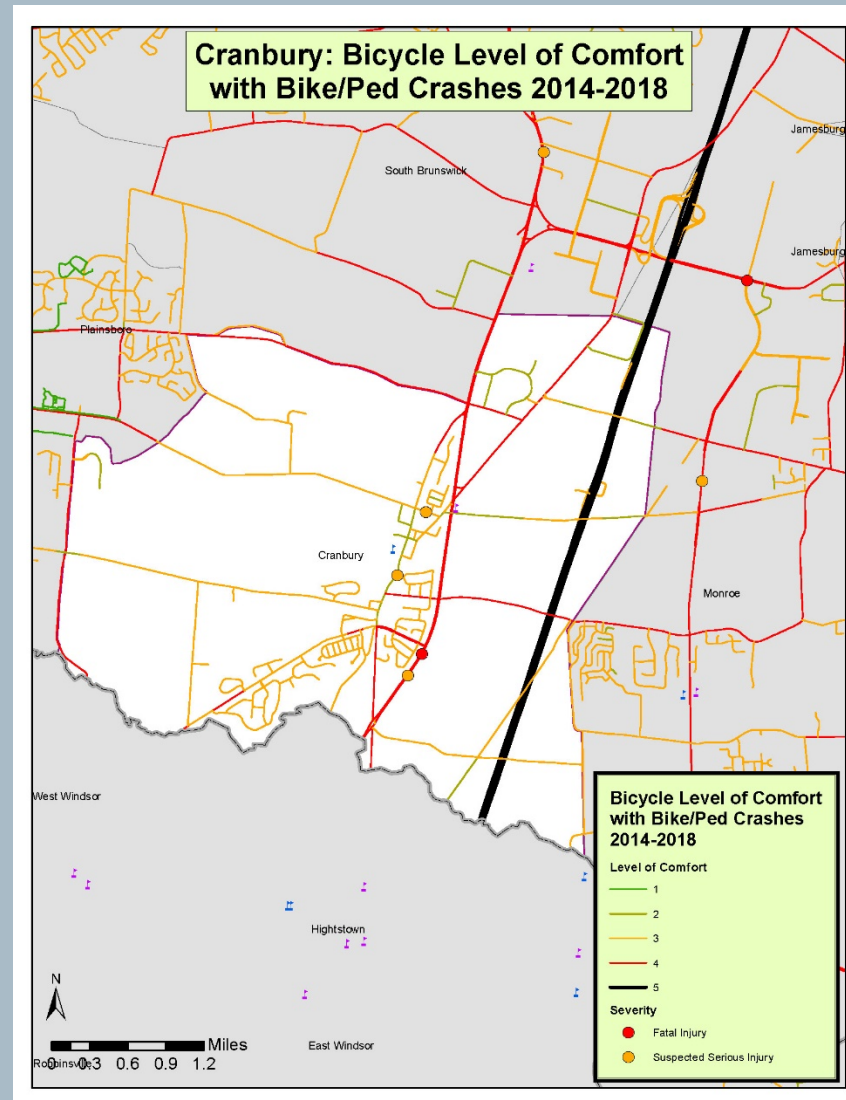
- Would you bicycle with your kids here?
- What about here?
- Design matters!



Who bicycles?

- 1% of population is **strong and fearless**. Will ride anywhere, regardless of conditions.
- 5% - 10% are **enthused and confident**. Fairly comfortable on most roads, but prefers multi-use pathways and low traffic streets.
- 60% are **interested but concerned**. Most comfortable on multi-use pathways and quiet streets away from cars. Can become enthused and confident with improved facilities, encouragement, education, and experience.
- Approximately 30% are **not interested** in cycling regardless of the infrastructure.

What is a Bicycle Network Plan?



What is a Bicycle Network Plan?

- Bicycle network plans enables all those who want to bicycle to do so safely.
 - Especially the “interested but concerned”
- Provides connections between neighborhoods and destinations such as:
 - Work, school, transit, shops, recreation, health care, services

Trip distance in miles		
Mileage	Percent	Cumulative Percent
1 mile or less	28	28
1.1 - 2 miles	13	40
2.1 - 3 miles	9	50
3.1 - 4 miles	6	56
4.1 - 5 miles	7	63
>5 miles	37	100

Components of a Bicycle Network Plan

- Shows what kind of facilities work best for each individual road segment
 - Taking into account: road width, speed limit, parking uses, and unique circumstances
- A good bicycle network is...

Convenient

Comfortable

Continuous

Intuitive

Connected

Safe

Complete

Visible



For ALL ages and abilities



Bicycle Infrastructure Fundamentals

Bicycles

Design for bicycle should focus on:

1. Reducing conflict



2. Visibility



3. Right-of-way



Shared-Lane Markings (Sharrows)



Super Sharrow

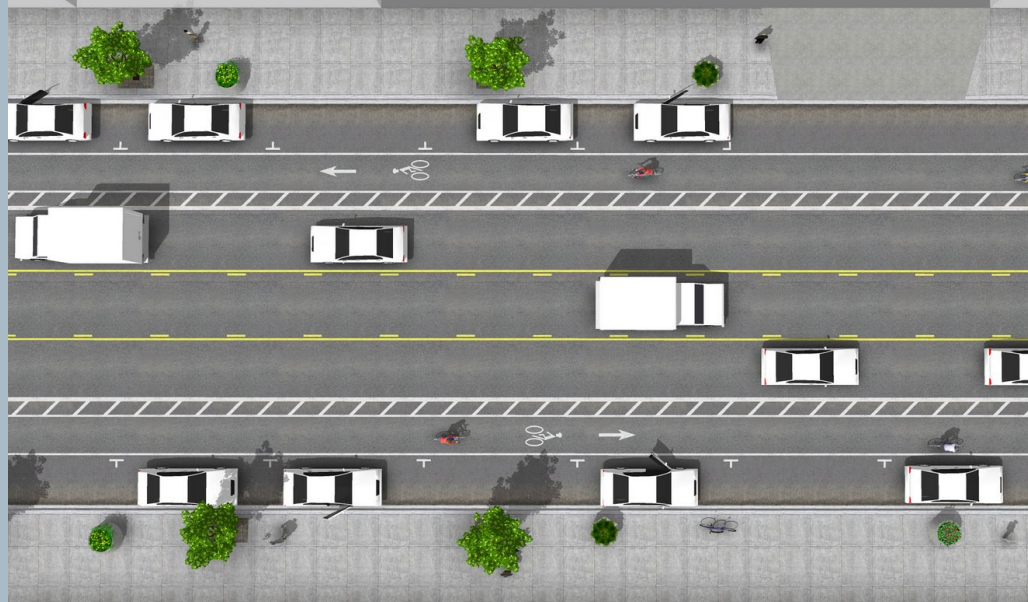


Bicycle Boulevard

- For quiet residential streets
- Combined with traffic calming



Bicycle Lane



- 4-foot minimum by curb
- 5-foot standard
- 6-foot preferred

- 7-foot for contra-flow
- Buffer, even better!

Protected Bicycle Lane

- 5 feet bike lane + 3 feet buffer minimum
- Not optimal if there are many driveways or close intersections
- Need to think about loading areas, bus stops, and turning vehicles



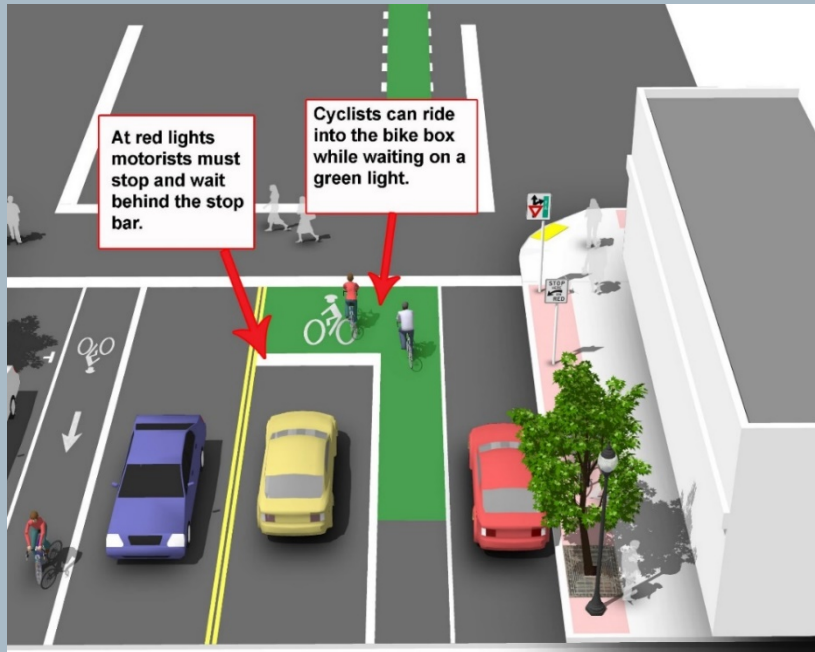
Bicycle Path

- Two-way
- Minimum 8-feet, preferred 10-feet, best 12-feet+
- Best with minimal intersections and driveways



Other Bicycle Infrastructure

- Bicycle box at intersections
- Bike signal
- Bike parking



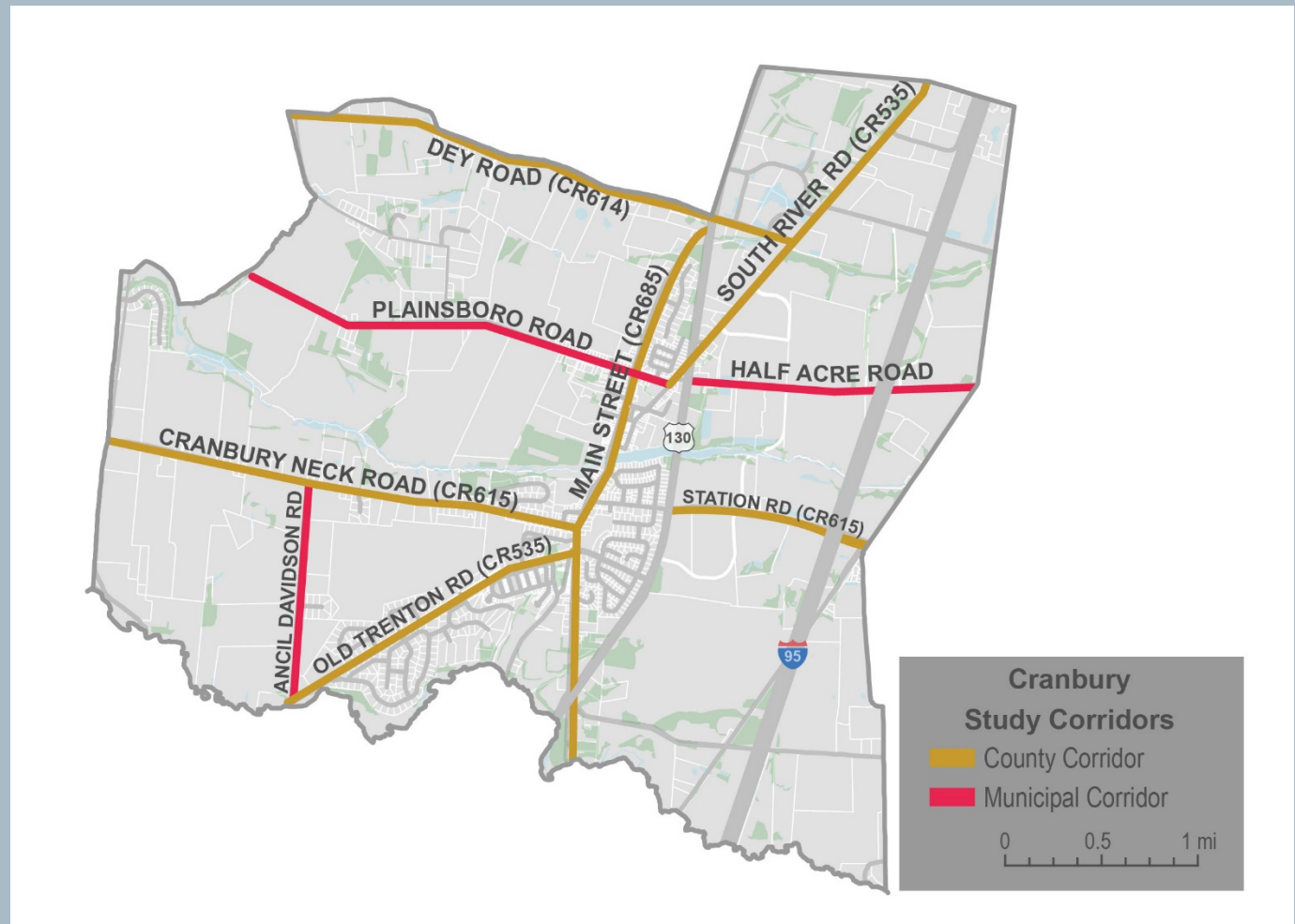


Cranbury Draft Concepts



Study Area

- Ancil Davidson Road
- Cranbury Neck Road (CR615)
- Dey Road (CR614)
- Half Acre Road
- Main Street (CR685)
- Old Trenton Road (CR535)
- Plainsboro Road
- South River Road (CR535)
- Station Road (CR615)



Ancil Davidson Road

- Connects Cranbury Neck Road and Old Trenton Road
- Access to farms and nursery

Speed Limit	50mph	High
Daily Vehicles	2,900	Low
Width	24 feet	Narrow
Land Use	Farm and Open Space	
Owner	Cranbury	



Ancil Davidson Road

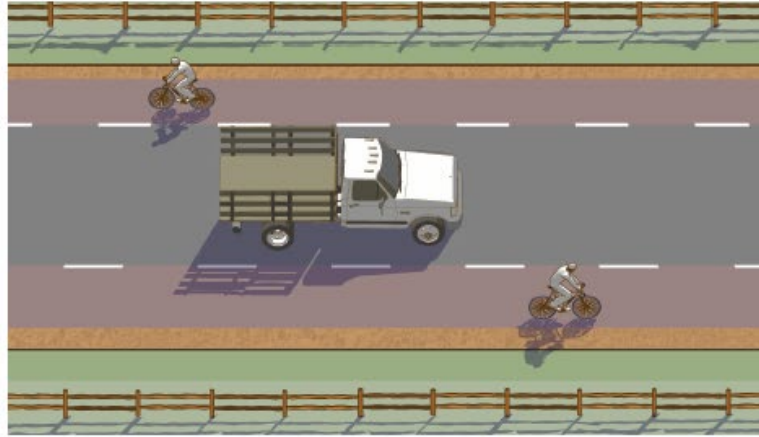
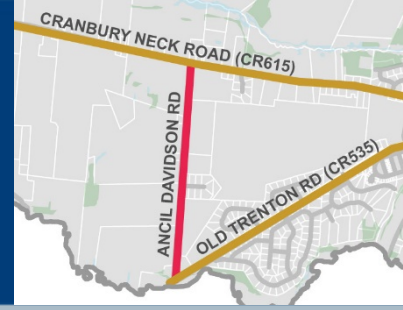


Figure 2-10. Motorists travel in the center two-way travel lane. When passing a bicyclist, no lane change is necessary.

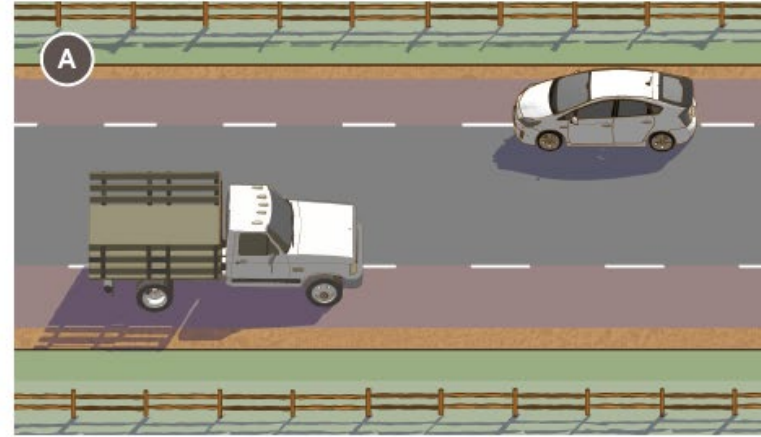
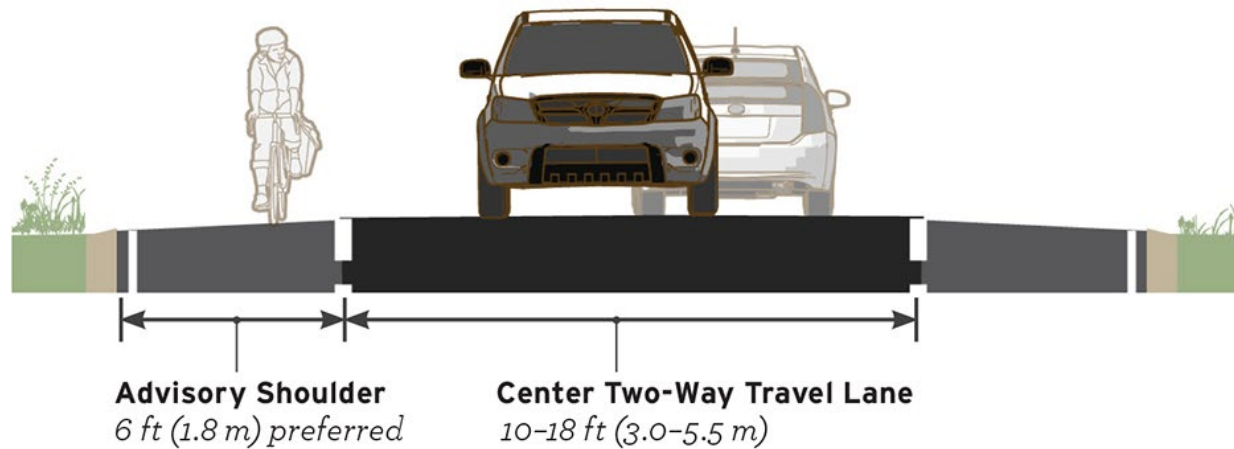
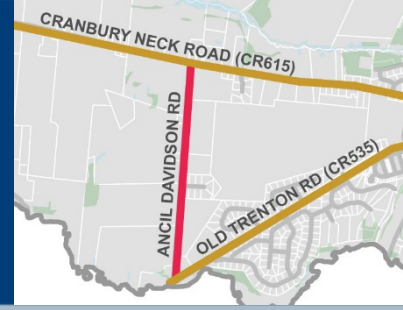


Figure 2-11. When two motor vehicles meet, motorists may need to encroach into the advisory shoulder space.



Ancil Davidson Road



Existing Design



Proposed Design

Ancil Davidson Road



DIMENSIONS
Length: 1600 ft

SPEED AND VOLUME
Speed: 15/25 MPH
Motor Vehicle Volume: 5,000 ADT

MARKINGS

SIGNS

Custom Sign

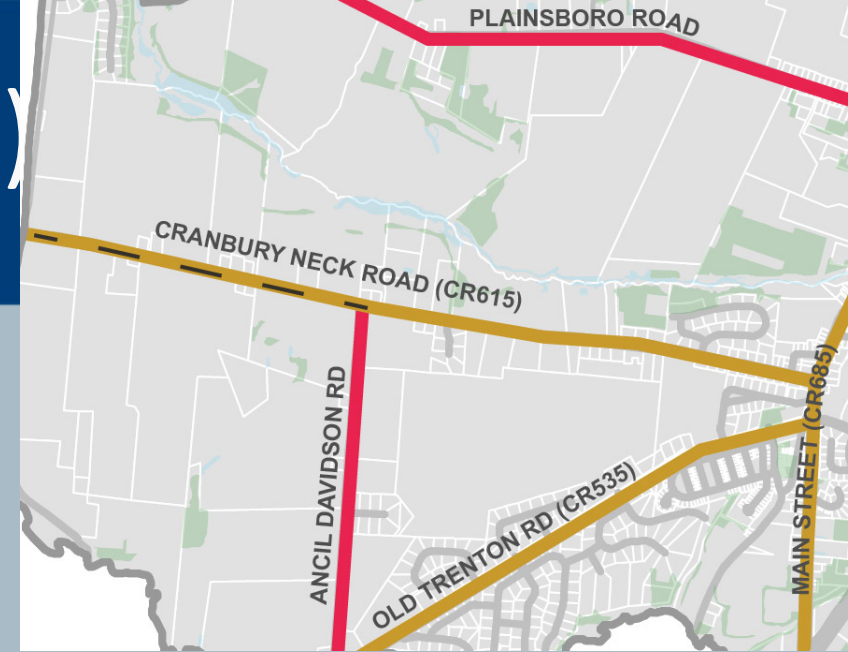
R7-13

* 10-feet in some portions



Cranbury Neck Road (CR 615)

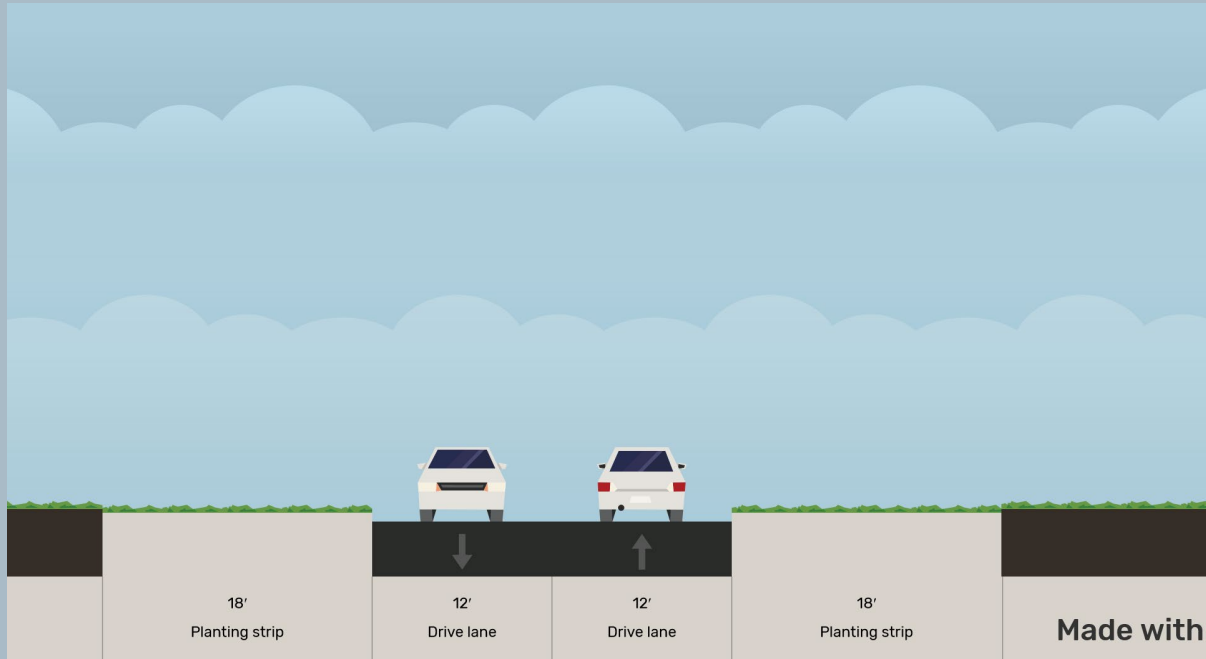
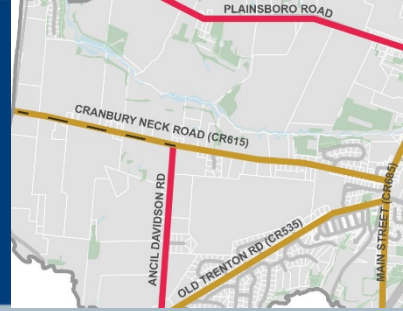
- Connects Main Street and downtown Cranbury to West Windsor
- Starts rural
- Ends residential



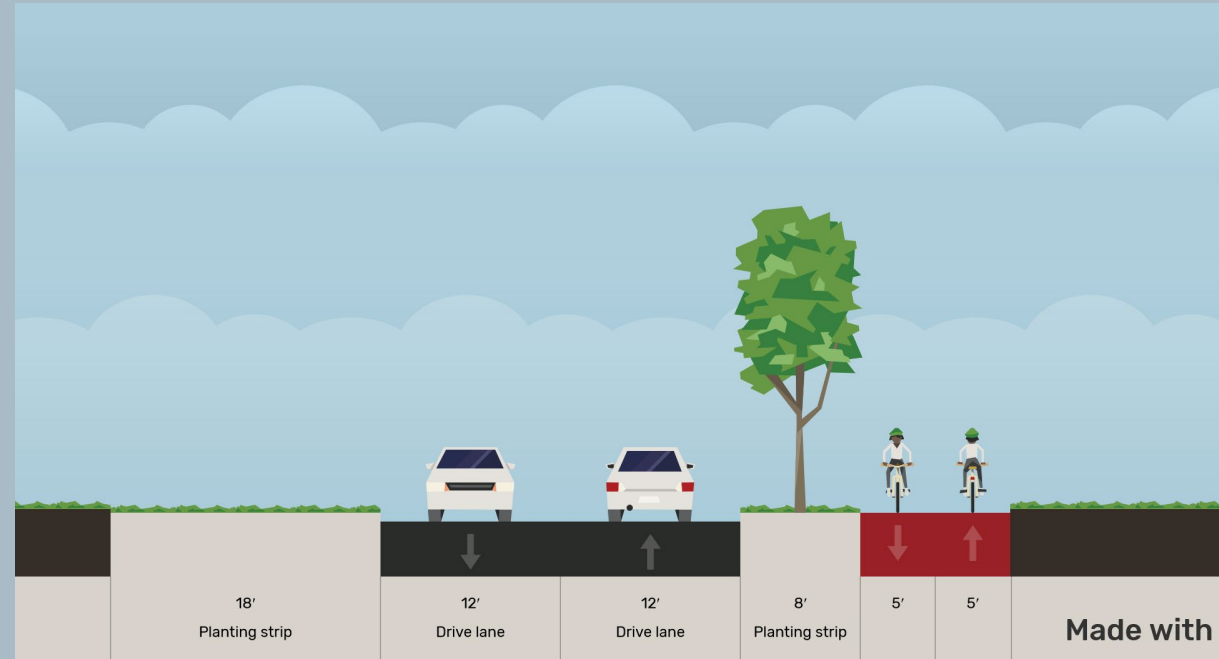
From John White Rd. to Ancil Davidson Rd.		
Speed Limit	50mph	High
Daily Vehicles	3,195	Low
Width	24 feet	Narrow
Land Use	Farm and Open Space	
Owner	County	



Cranbury Neck Road (CR 615)

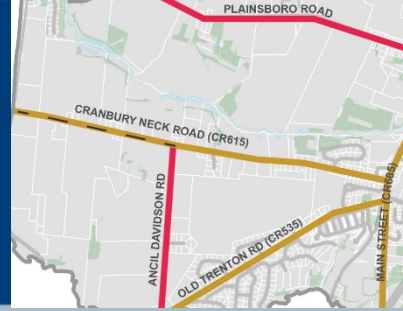


Existing Design



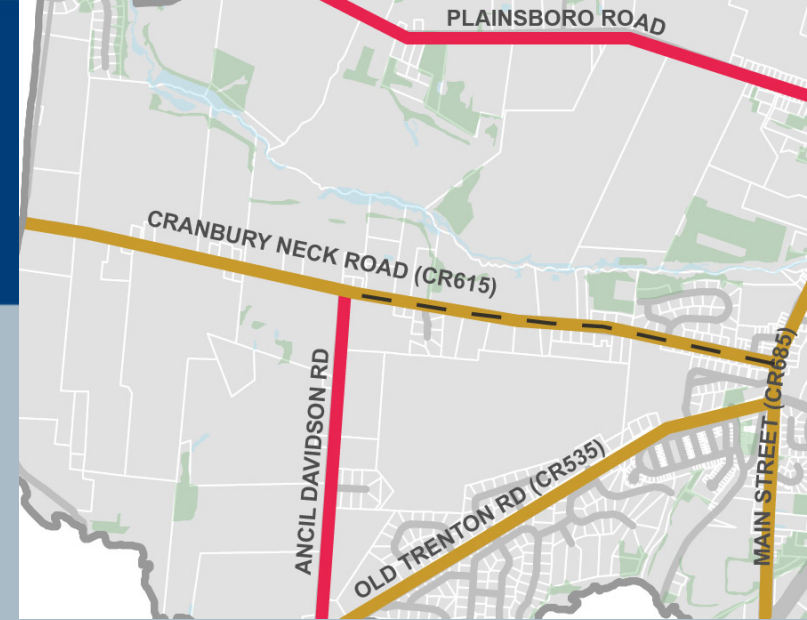
Proposed Design

Cranbury Neck Road (CR 615)



Cranbury Neck Road (CR 615)

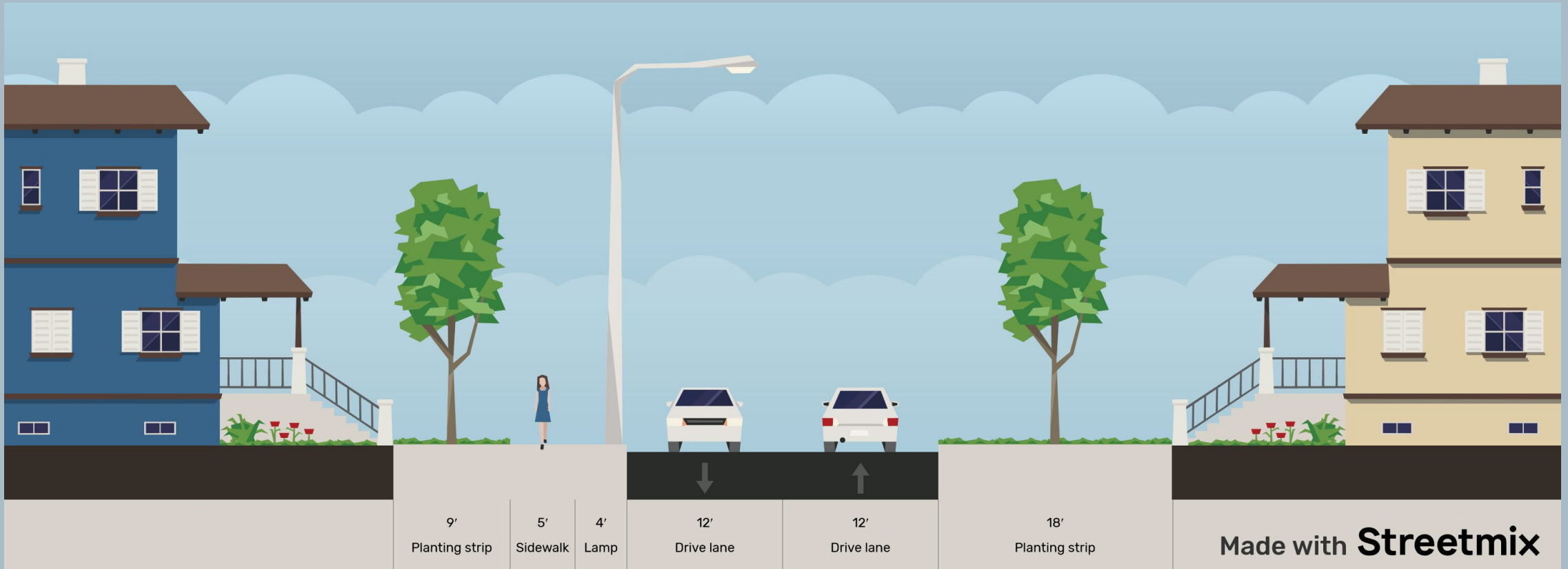
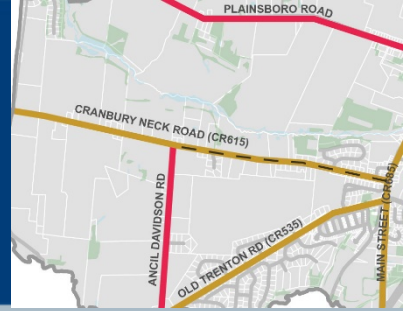
- Character of the road changes to residential



From Ancil Davidson Road to Main Street		
Speed Limit	25-35mph	Low
Daily Vehicles	3,195	Low
Width	24 feet	Narrow
Land Use	Residential	
Owner	County	

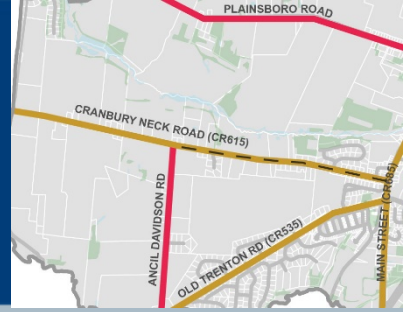


Cranbury Neck Road (CR 615)



Existing Design

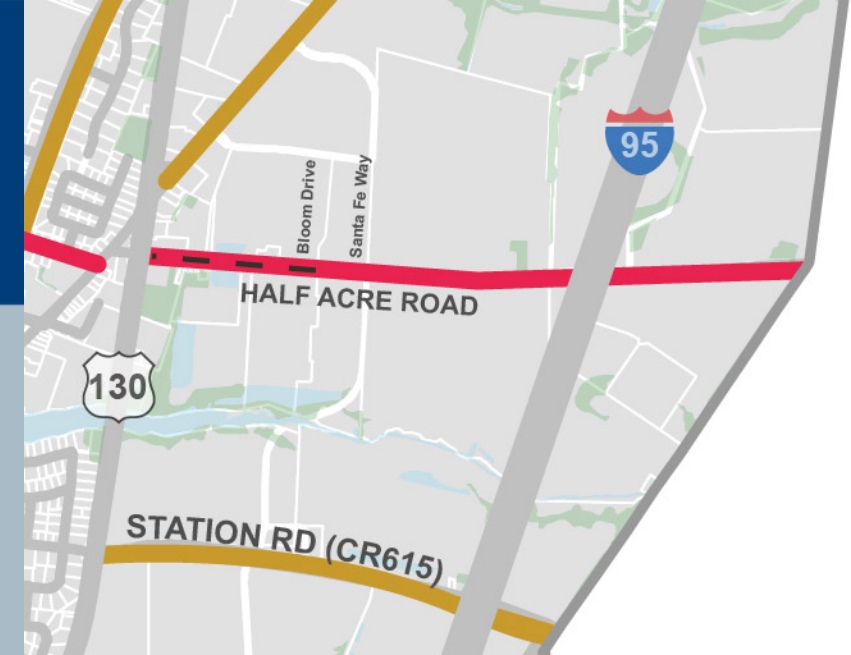
Cranbury Neck Road (CR 615)



Proposed Design

Half Acre Road

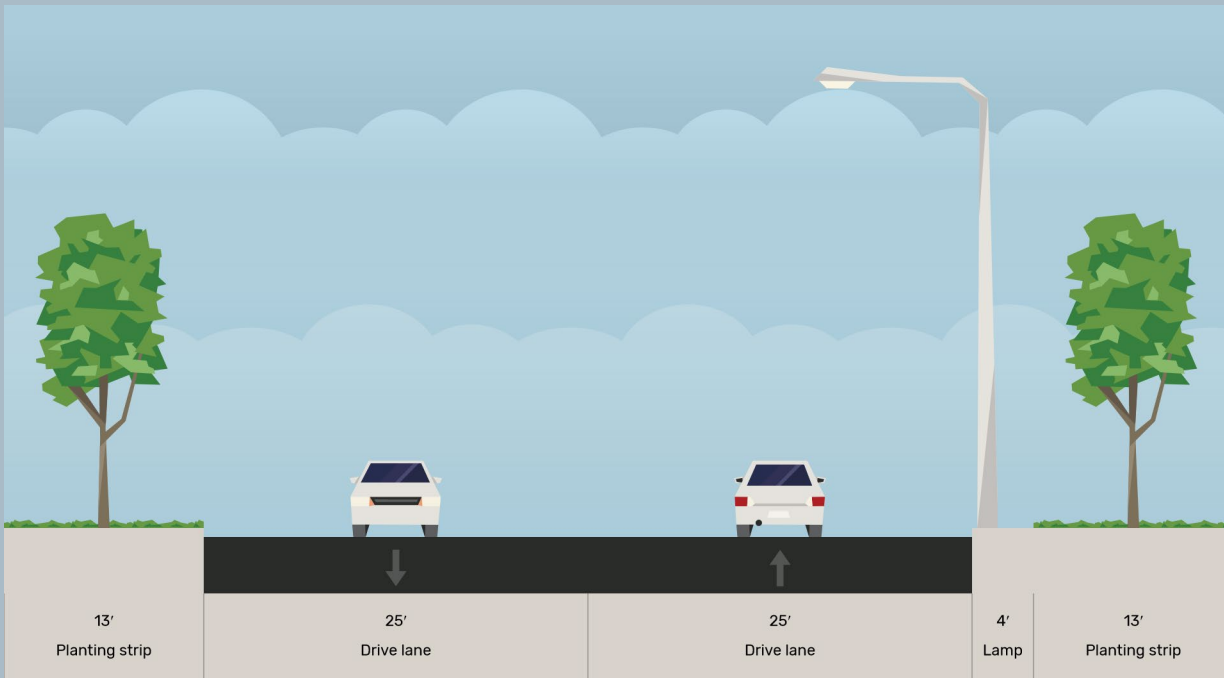
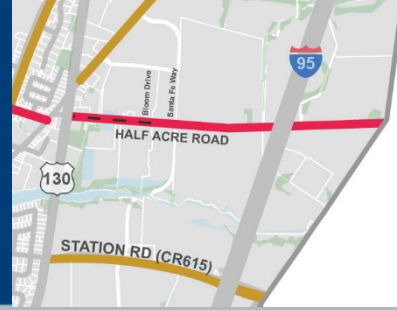
- Key access to major distribution centers from Route 130
- Lane configuration changes frequently



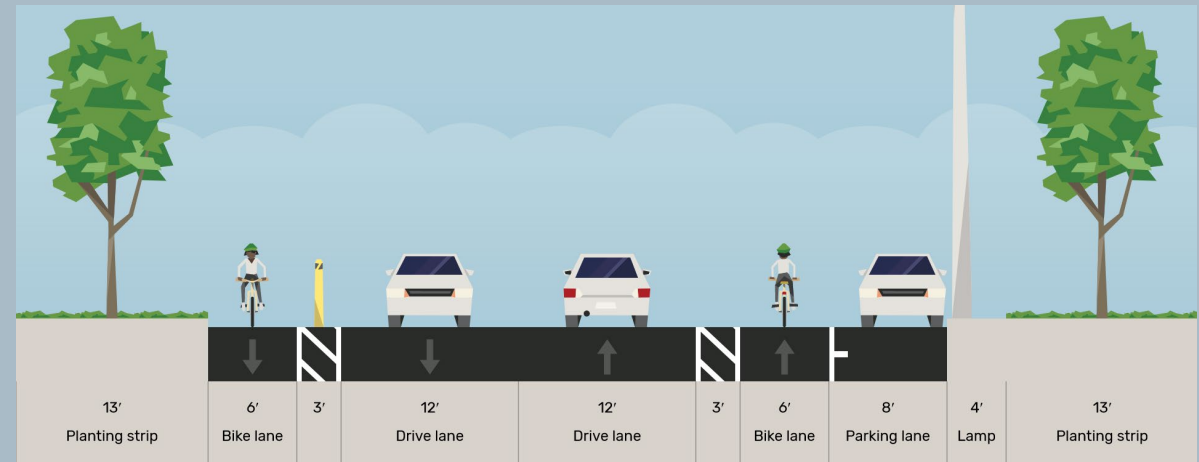
Between Route 130 and Bloom Drive		
Speed Limit	Not Posted	???
Daily Vehicles	8,028	Medium
Width	50 feet	Wide
Land Use	Industrial	
Owner	Cranbury	



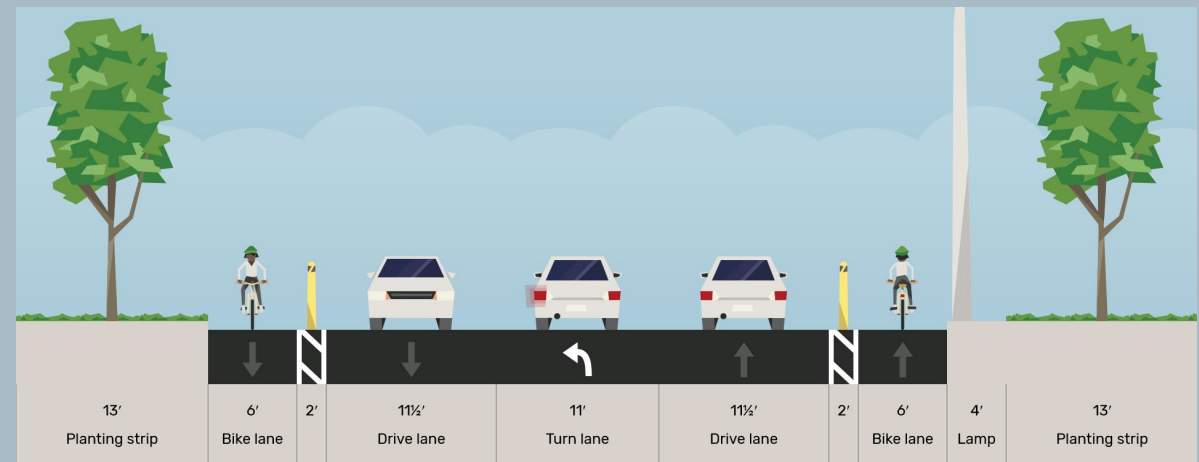
Half Acre Road



Existing Design

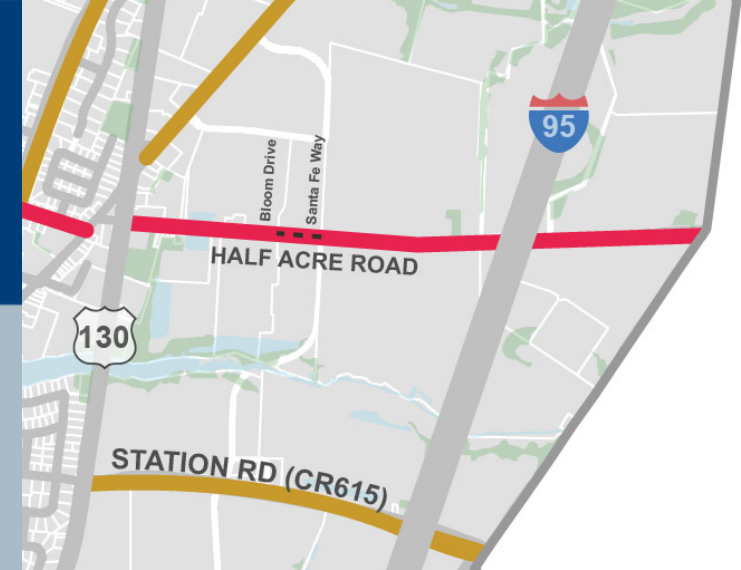


Proposed Design



Proposed Design at Intersection

Half Acre Road

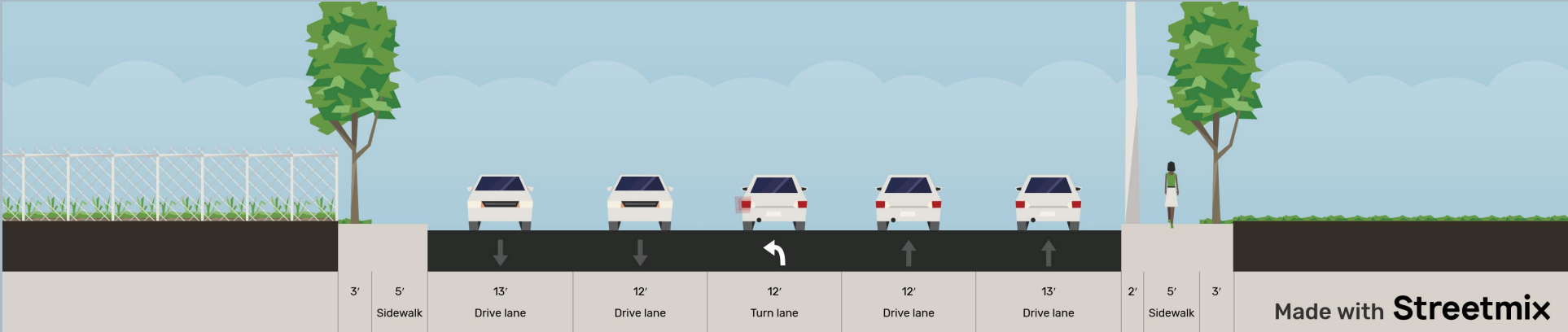
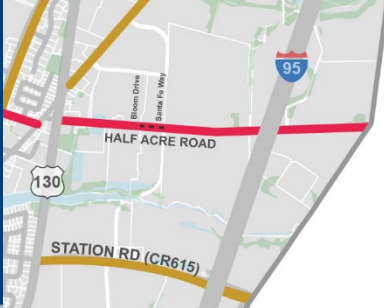


- Half Ace Road widens to 4 lanes between Bloom Drive and Santa Fe Way

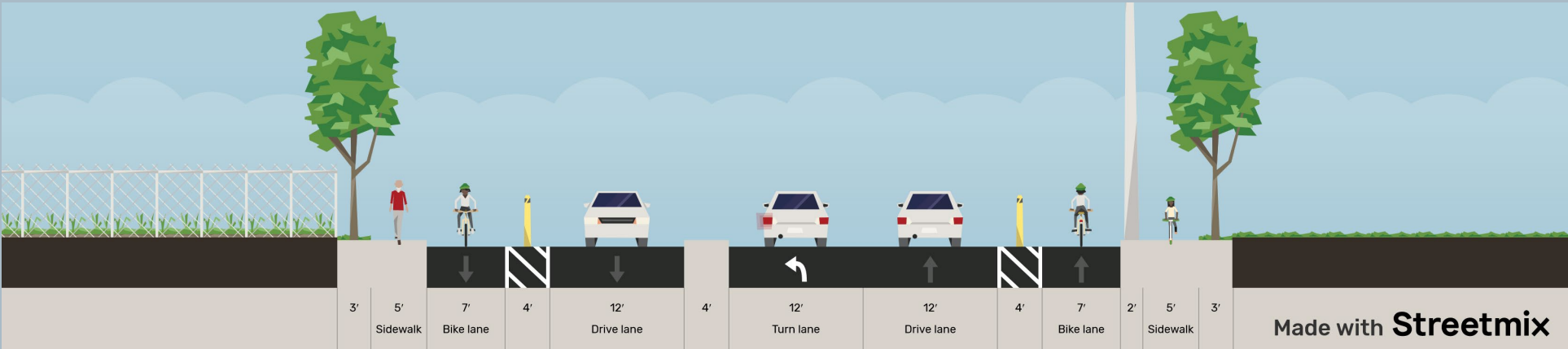
Between Bloom Dr and Santa Fe Way		
Speed Limit	Not Posted	???
Daily Vehicles	8,028	Medium
Width	62 feet	Very Wide
Land Use	Industrial	
Owner	Cranbury	



Half Acre Road



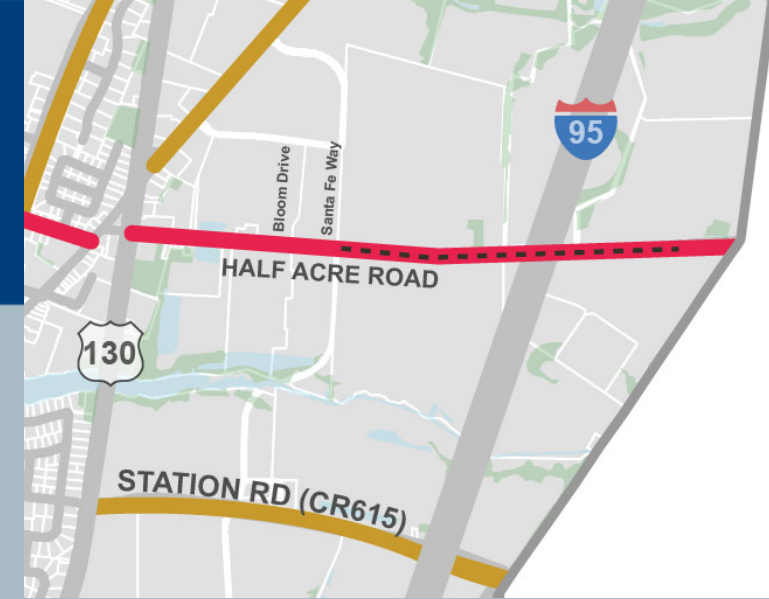
Existing Design



Proposed Design

Half Acre Road

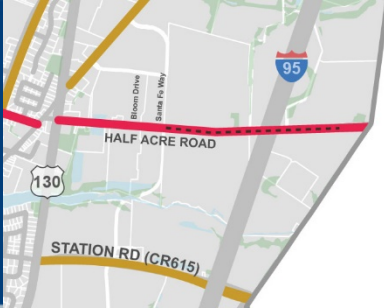
- Bridge over New Jersey Turnpike is constraint point
- Half Ace Road narrows then widens



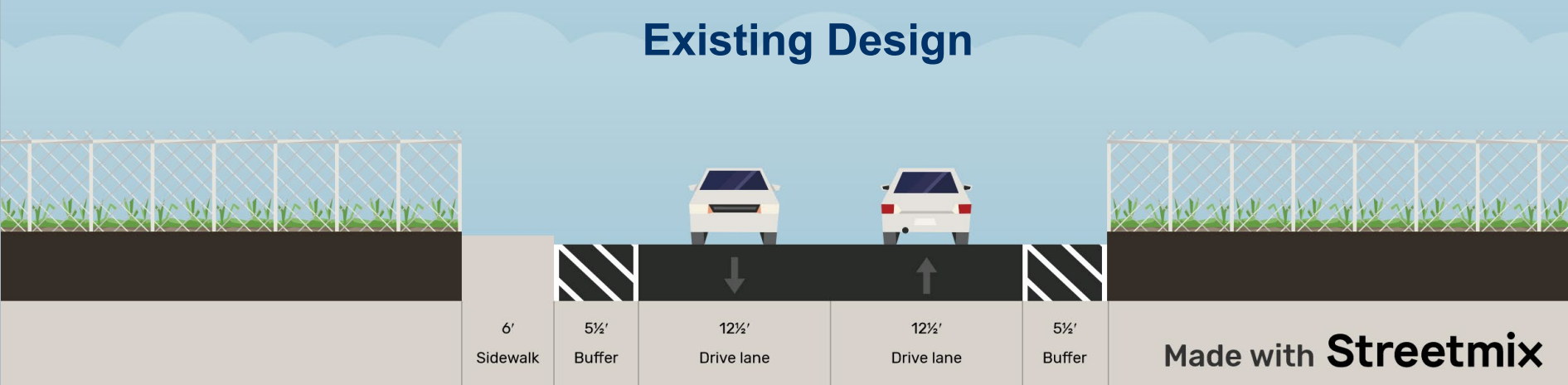
Between Santa Fe Way and NJ Turnpike		
Speed Limit	Not Posted	???
Daily Vehicles	8,028	Medium
Width	36 feet	Average
Land Use	Industrial	
Owner	Turnpike Authority	



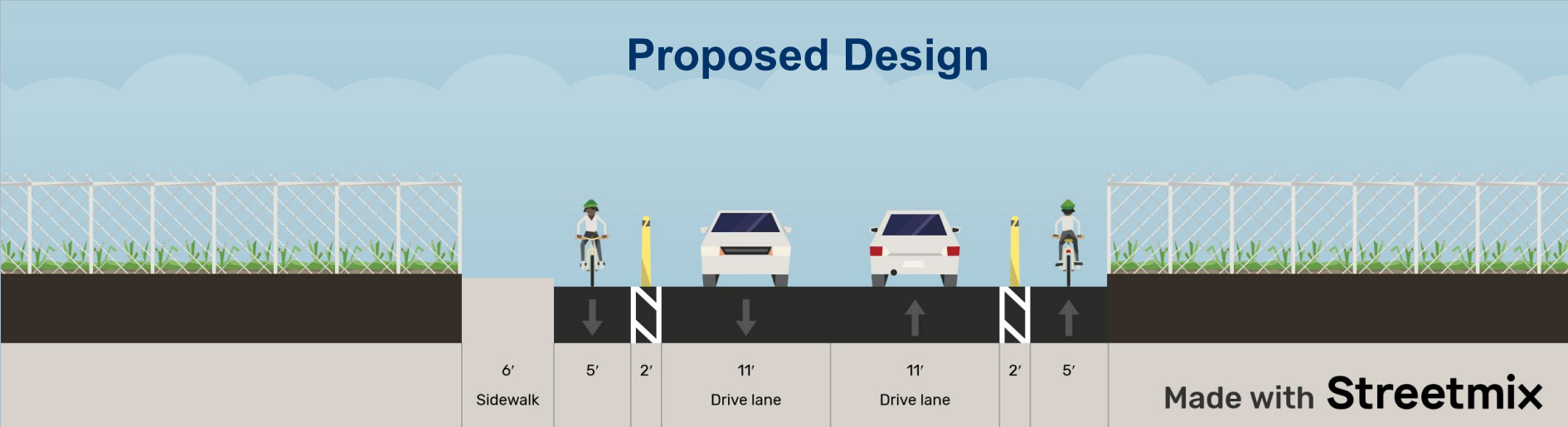
Half Acre Road



Existing Design

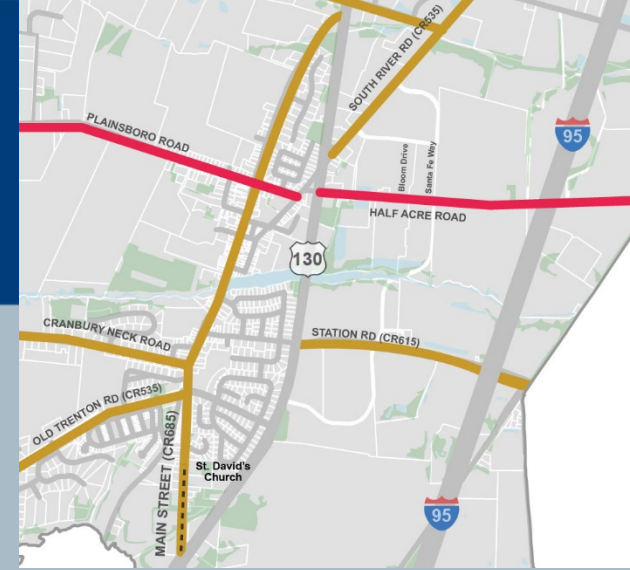


Proposed Design



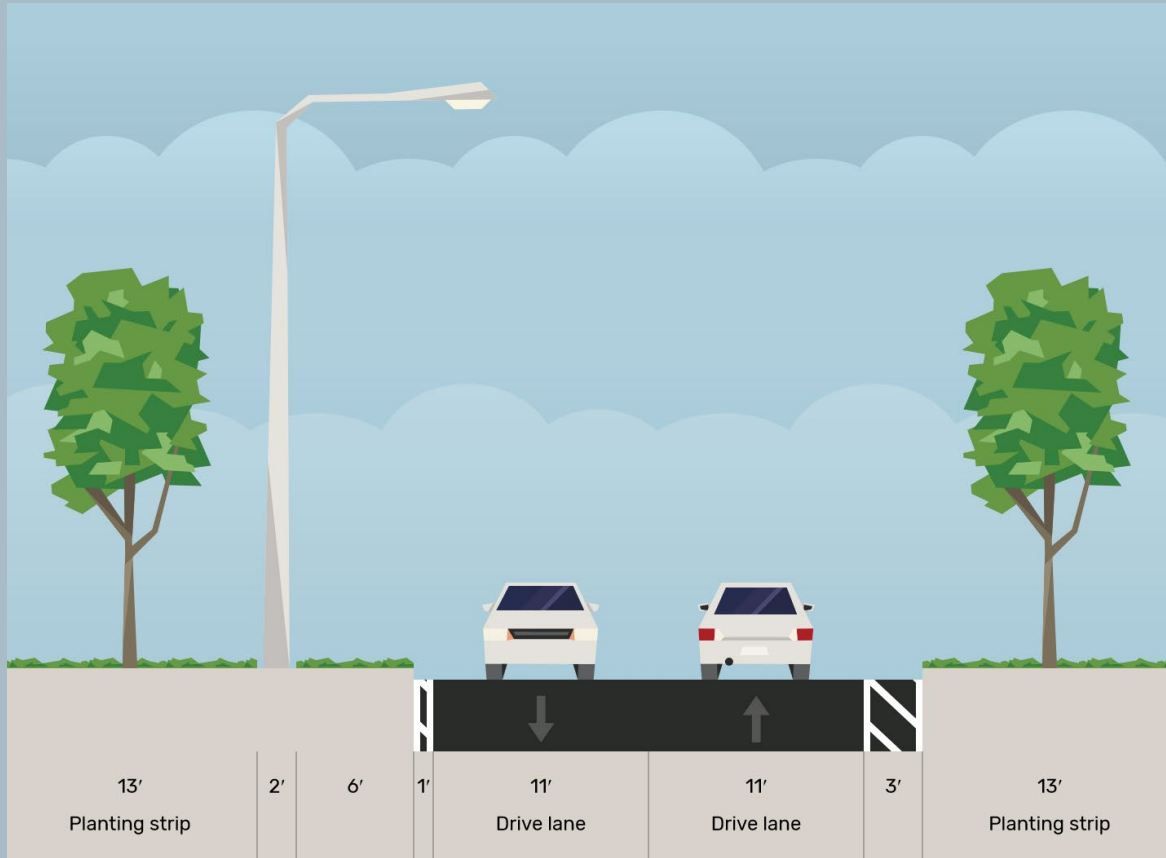
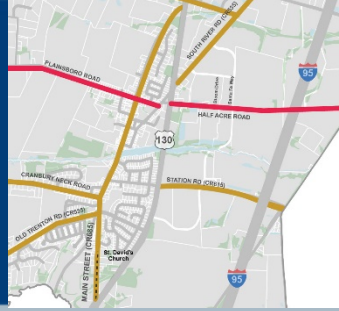
Main Street

- Heart of Cranbury
- Connects into Route 130 at both ends

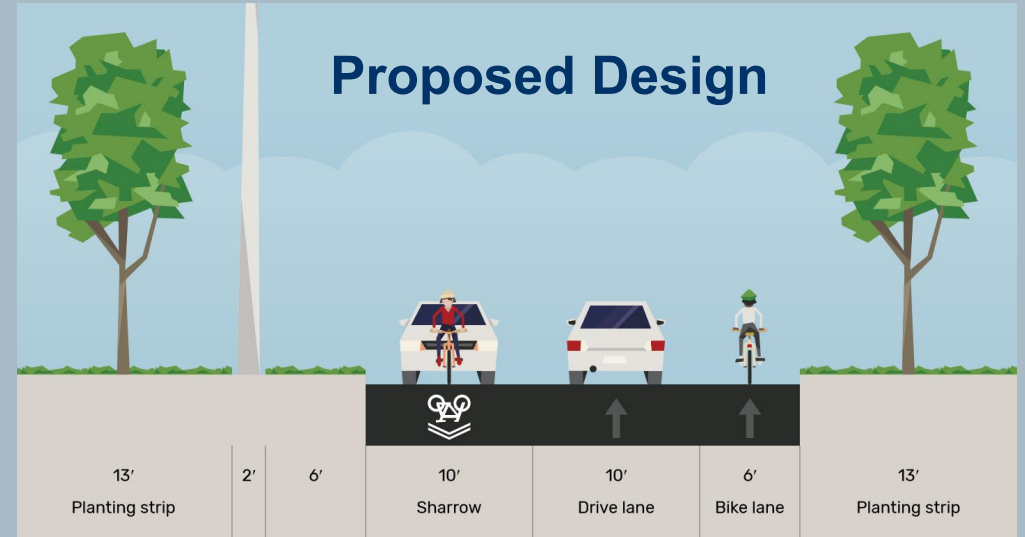


From Route 130 to St David's Church		
Speed Limit	40mph	High
Daily Vehicles	2,611	Low
Width	26 feet	Narrow
Land Use	Farm and Residential	
Owner	County Route 685	

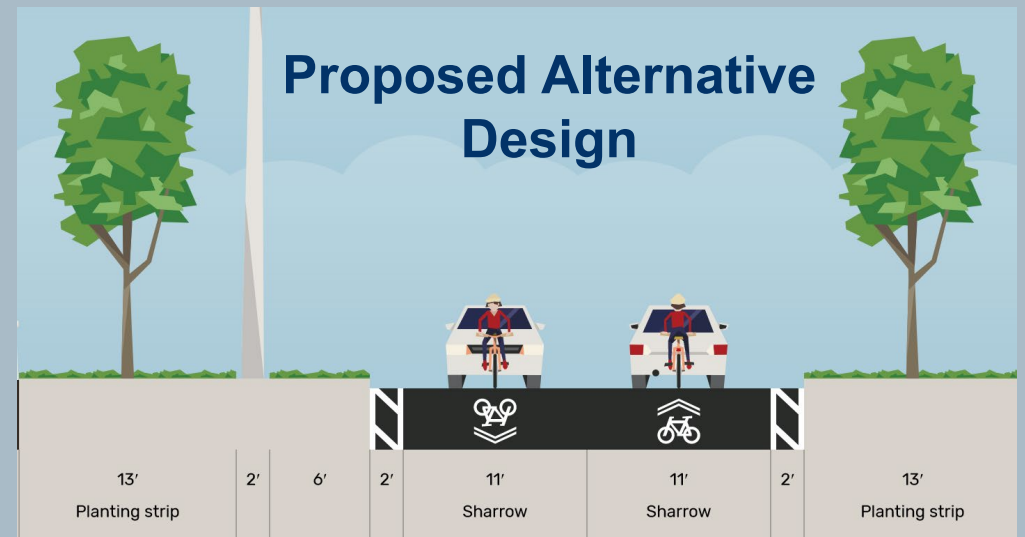
Main Street



Existing Design



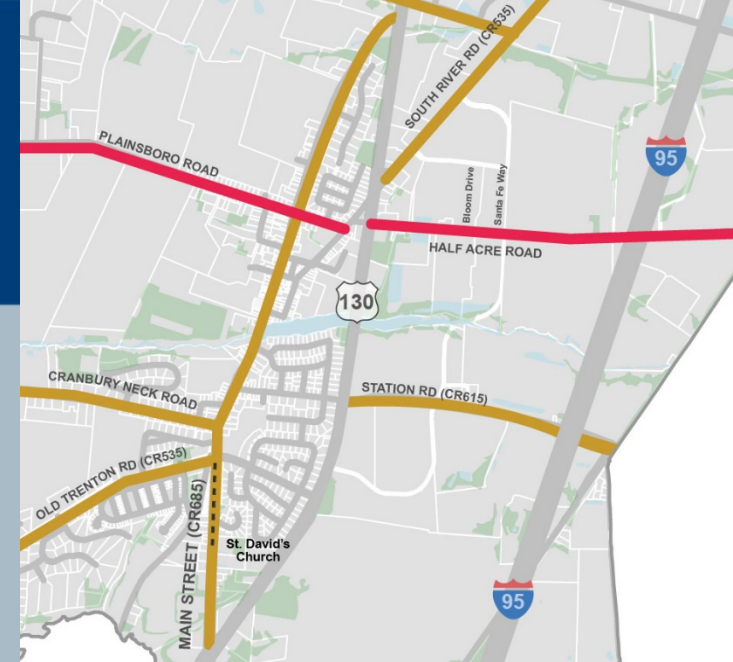
Proposed Design



Proposed Alternative Design

Main Street

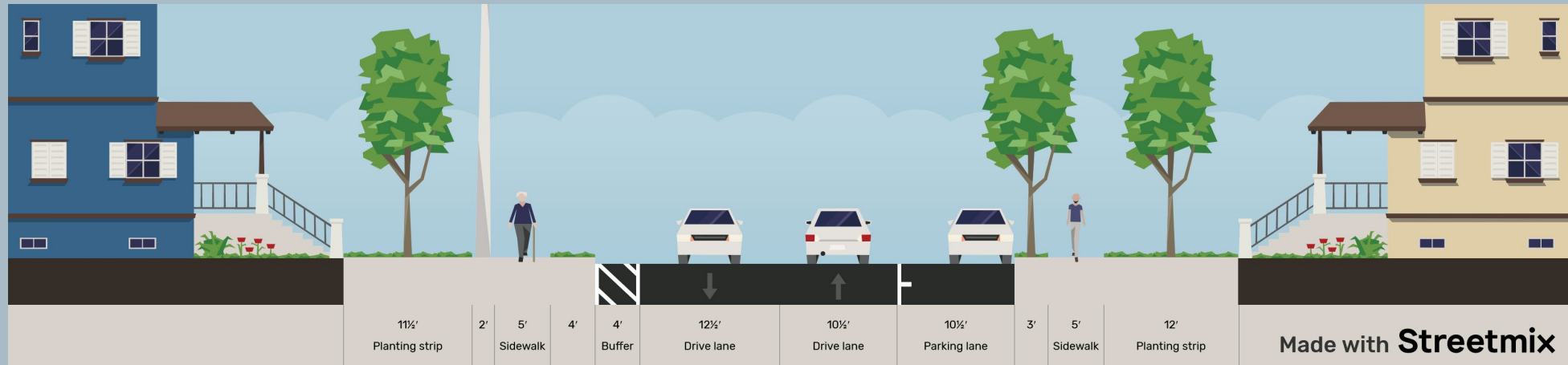
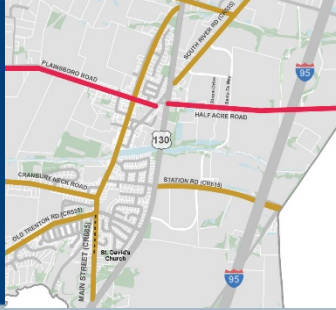
- Road widens to allow parking
- New residential development



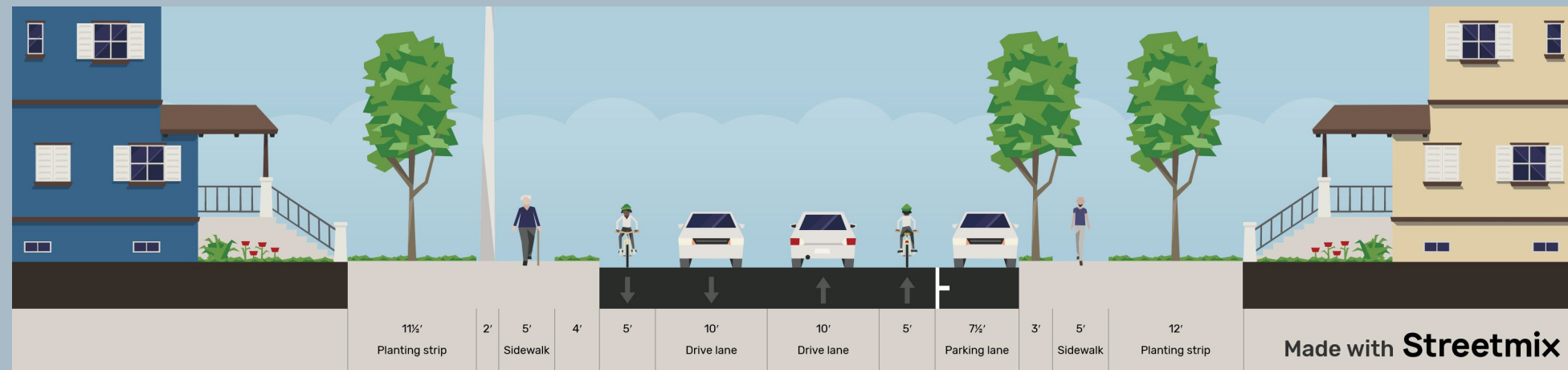
From St. David's Church to Old Trenton Road		
Speed Limit	40mph	High
Daily Vehicles	2,611	Low
Width	38 feet	Narrow
Land Use	Residential	
Owner	County Route 685	



Main Street



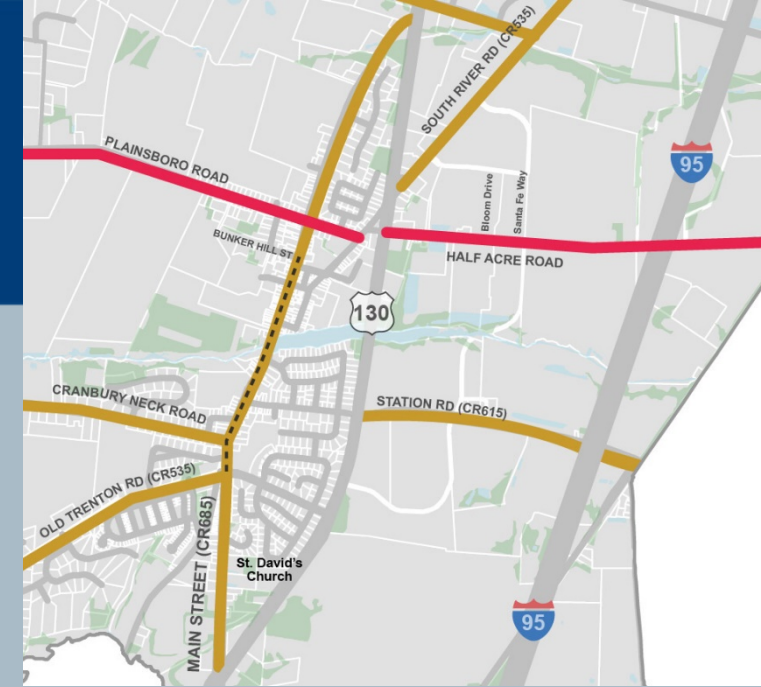
Existing Design



Proposed Design

Main Street

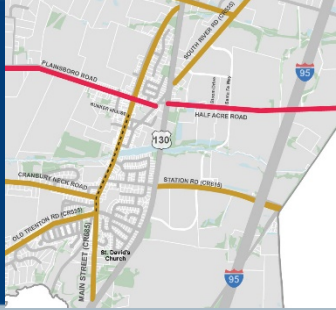
- Downtown area
- Commercial and civic services



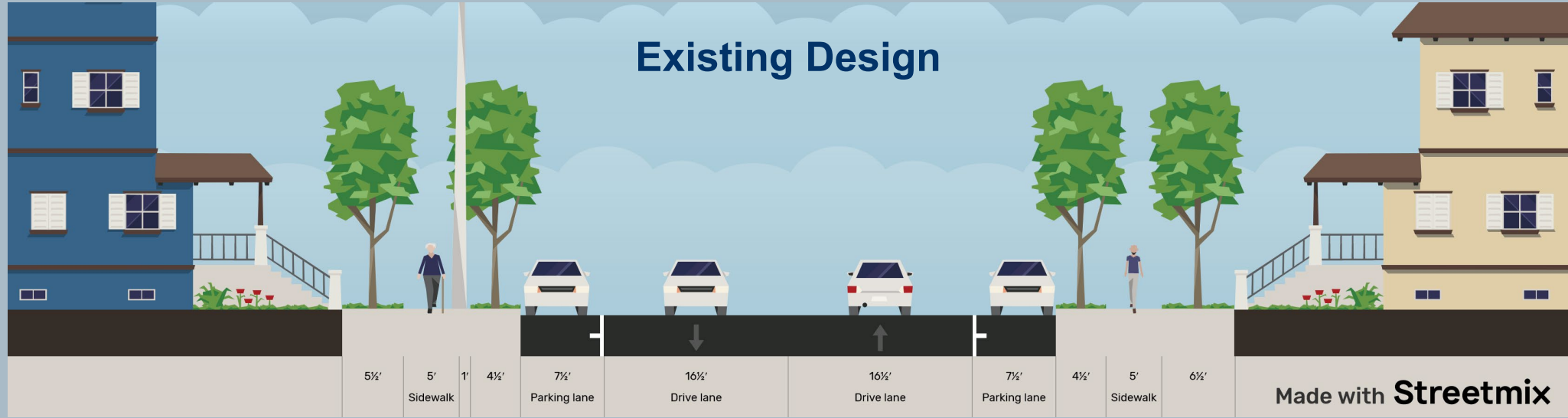
From Old Trenton Road to Bunker Hill Street		
Speed Limit	25mph	Low
Daily Vehicles	-	
Width	48 feet	Wide
Land Use	Commercial	
Owner	County Route 685	



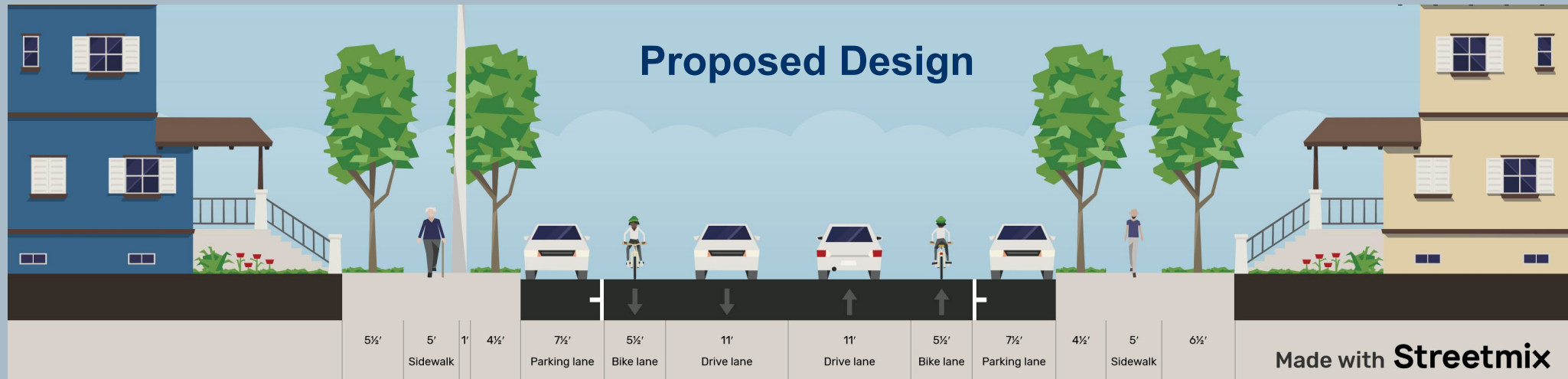
Main Street



Existing Design



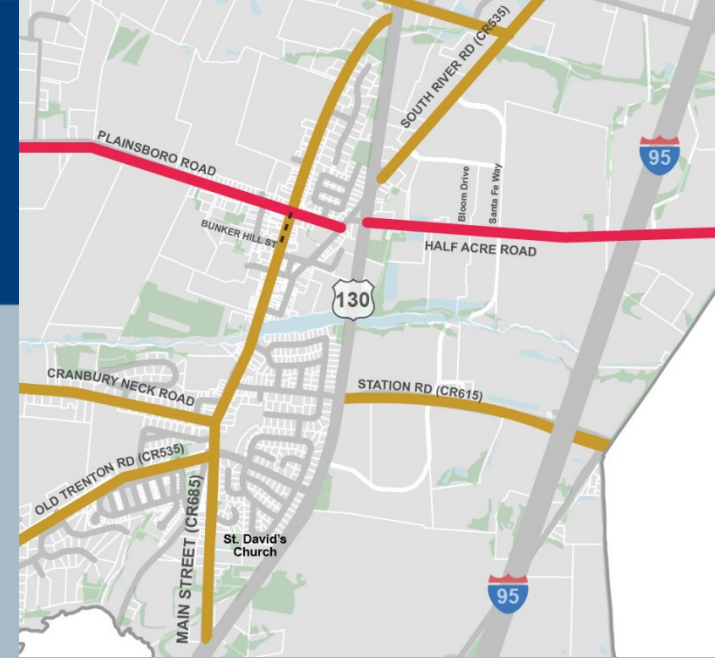
Proposed Design



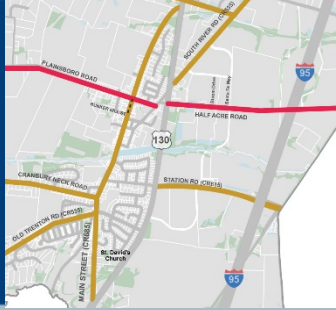
Main Street

- Back to residential

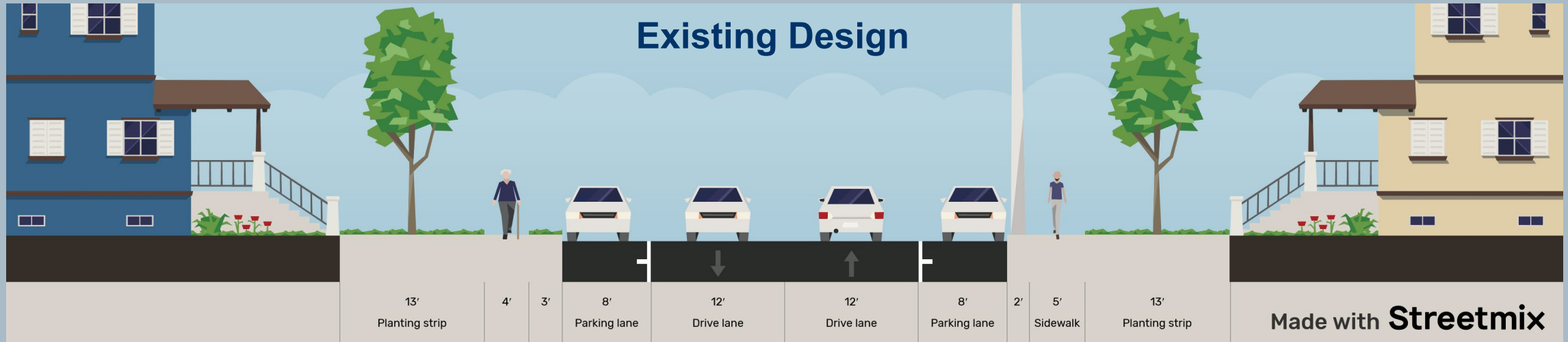
From Bunker Hill Street to Plainsboro Road		
Speed Limit	25mph	Low
Daily Vehicles	-	
Width	40 feet	Average
Land Use	Residential	
Owner	County Route 685	



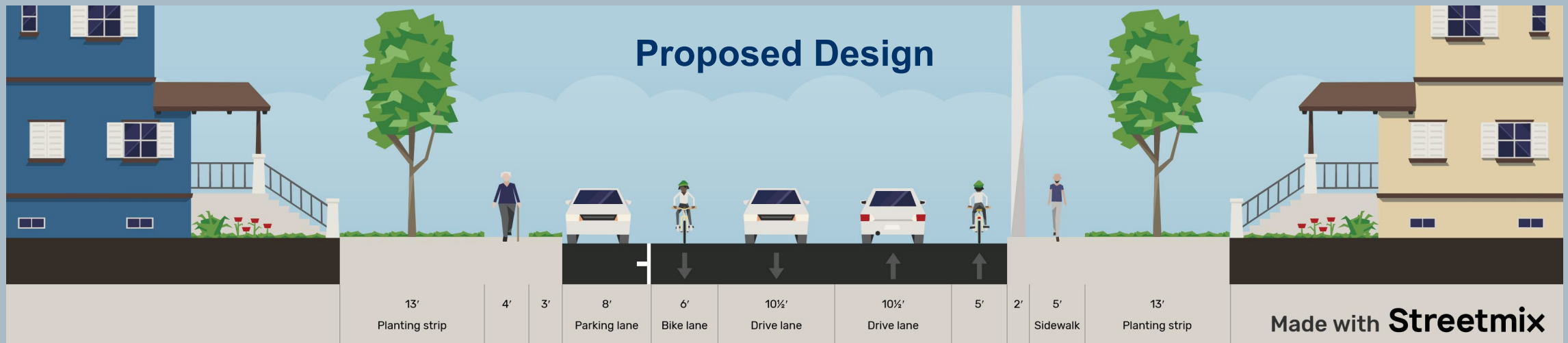
Main Street



Existing Design

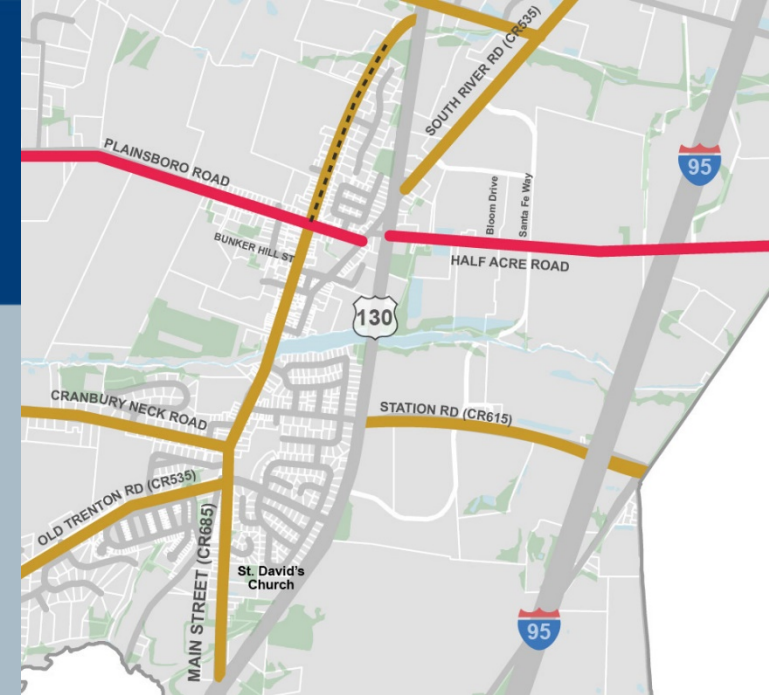


Proposed Design



Main Street

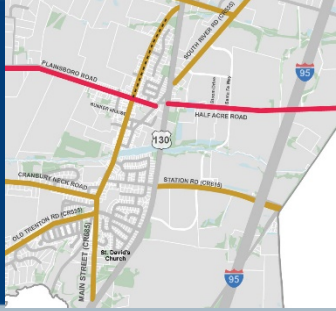
- Exiting town towards Route 130



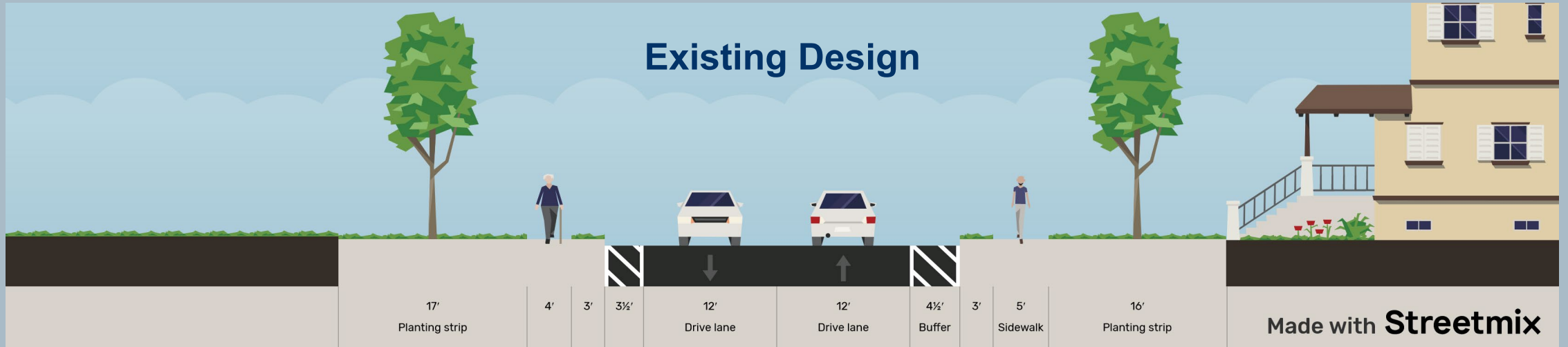
From Plainsboro Road to Route 130		
Speed Limit	25mph – 40mph	Low
Daily Vehicles	-	
Width	28 feet	Average
Land Use	Residential	
Owner	Municipal	



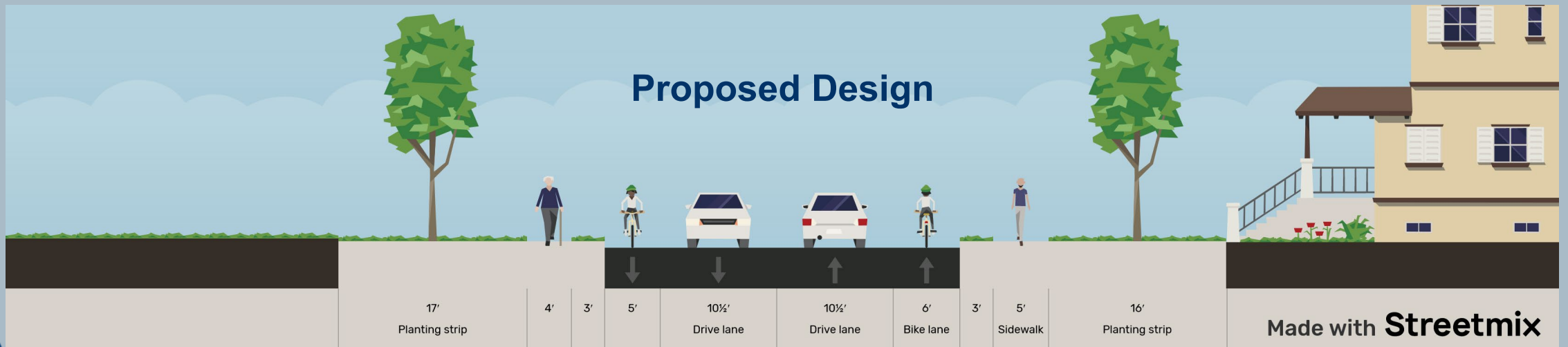
Main Street



Existing Design



Proposed Design



Old Trenton Road

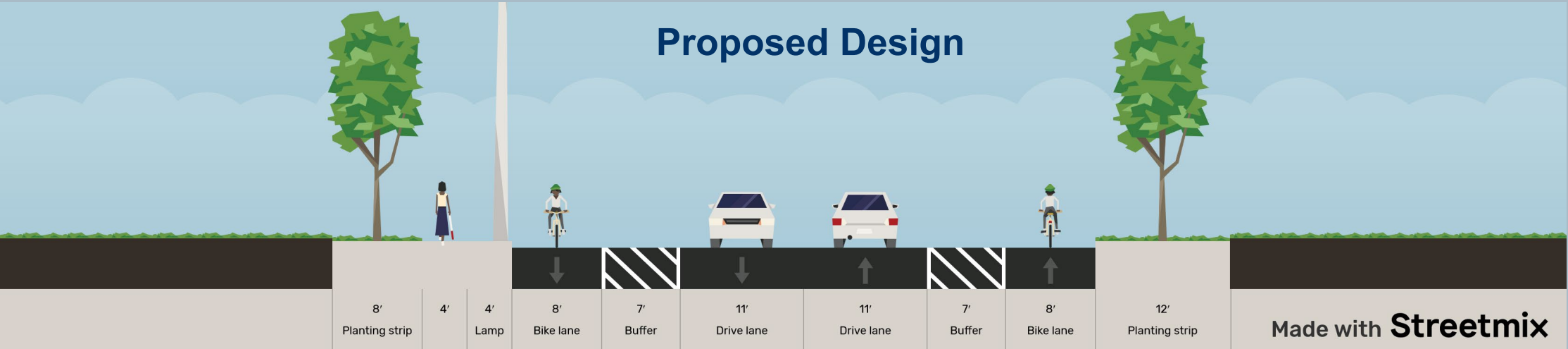
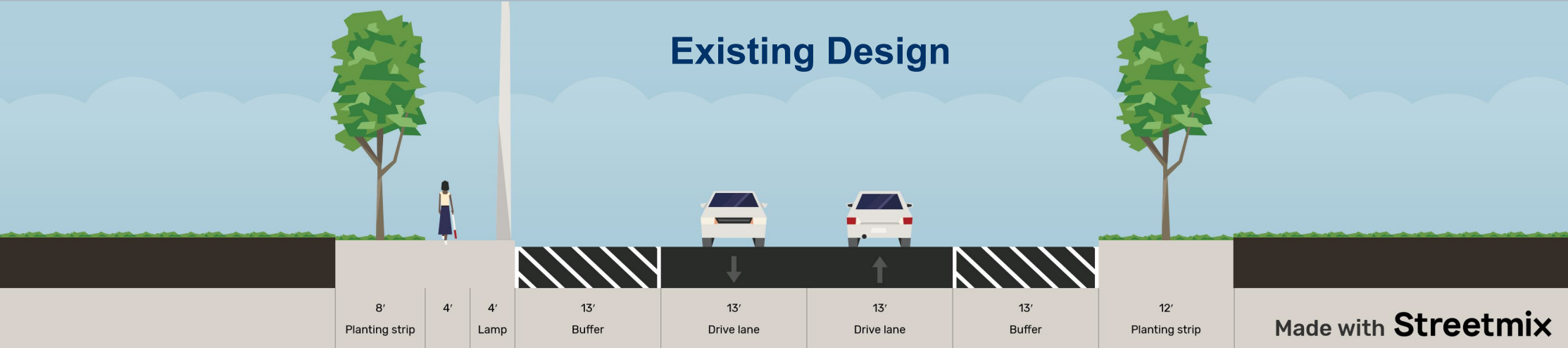
- Runs south through West Windsor into Trenton
- Ends at Route 130



From Ancil Davidson Road to Main Street		
Speed Limit	35mph	Medium
Daily Vehicles	6,859	Medium
Width	54 feet	Average
Land Use	Residential	
Owner	County	

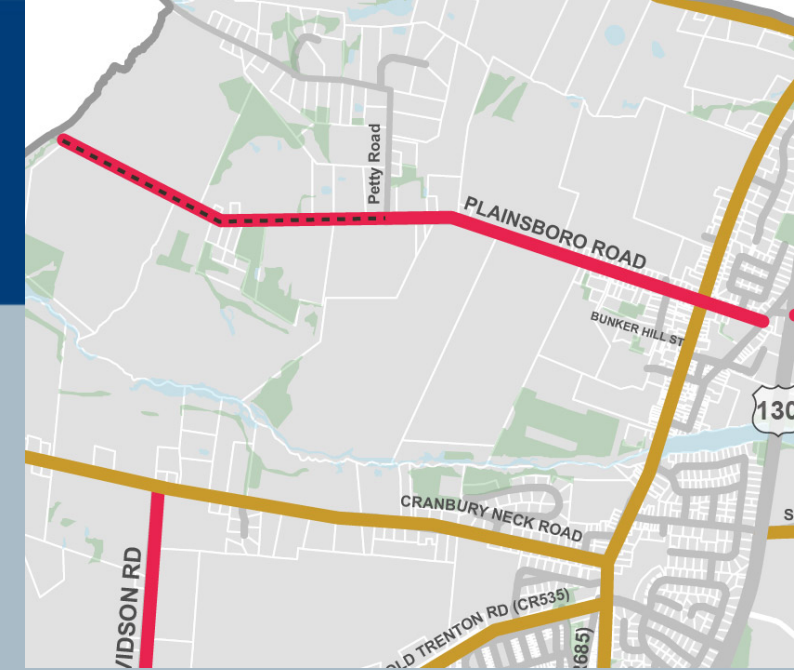


Old Trenton Road



Plainsboro Road

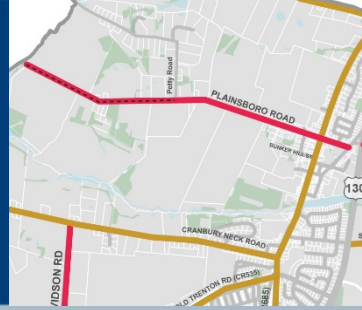
- Connects Cranbury with Plainsboro Township
- Access to Route 1



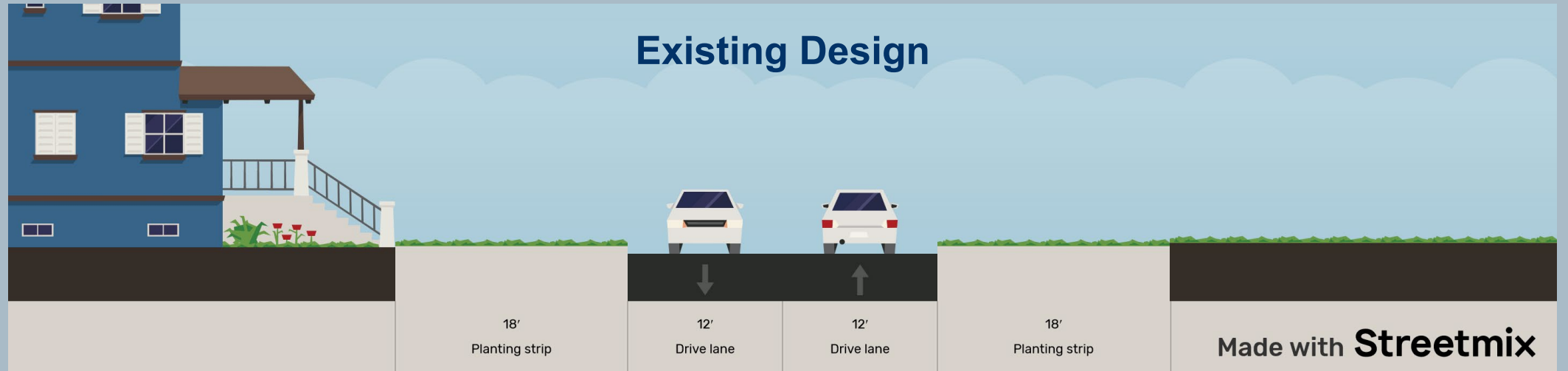
From town line to Petty Road		
Speed Limit	45mph	Low
Daily Vehicles	5,531	Medium
Width	24 feet	Average
Land Use	Open Space	
Owner	Municipal	



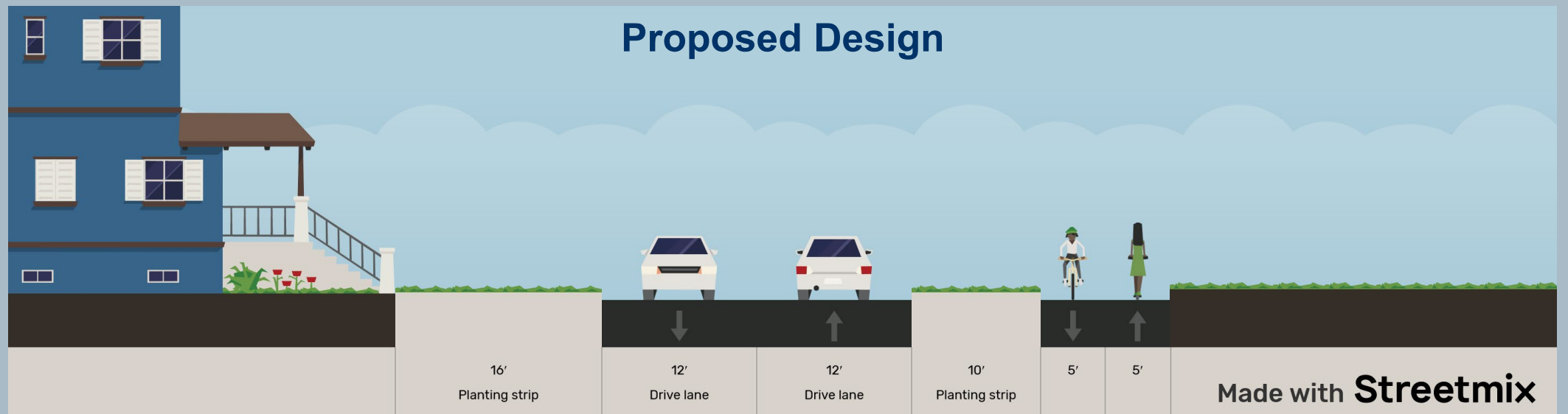
Plainsboro Road



Existing Design

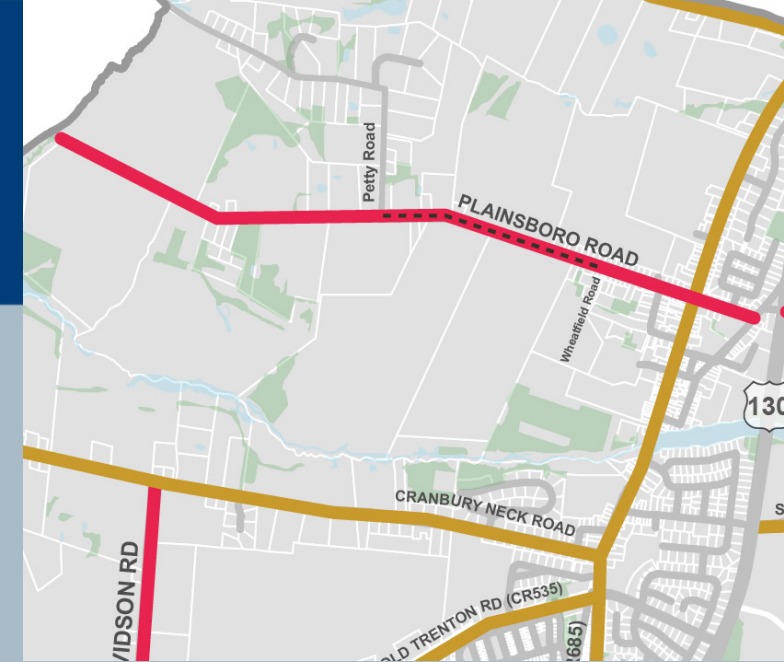


Proposed Design



Plainsboro Road

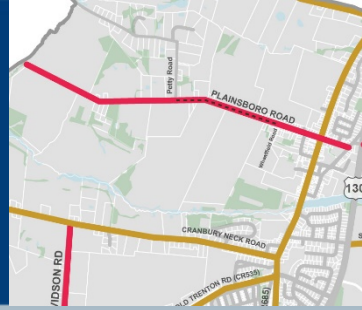
- Speed limit decreases to 40mph



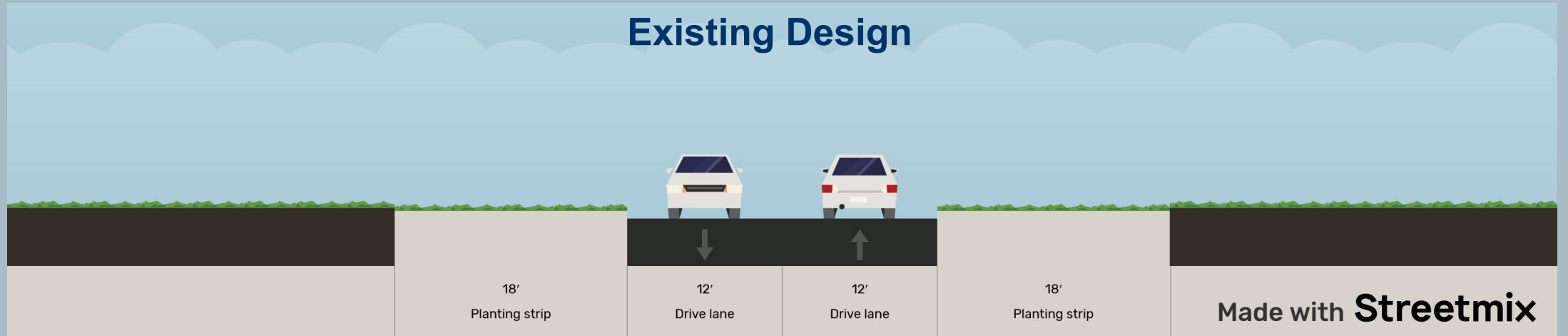
From Petty Road to Wheatfield Road		
Speed Limit	40mph	Low
Daily Vehicles	5,531	Medium
Width	24 feet	Average
Land Use	Open Space	
Owner	Municipal	



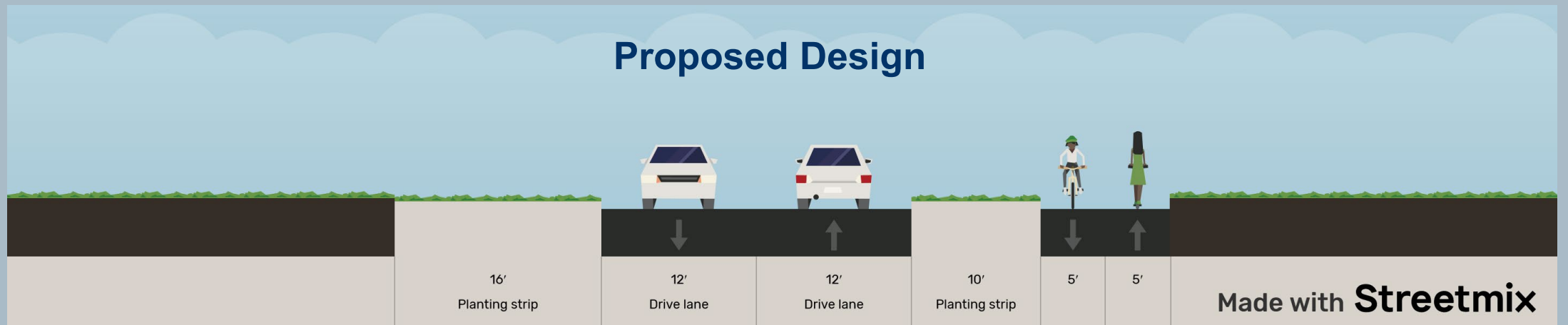
Plainsboro Road



Existing Design



Proposed Design

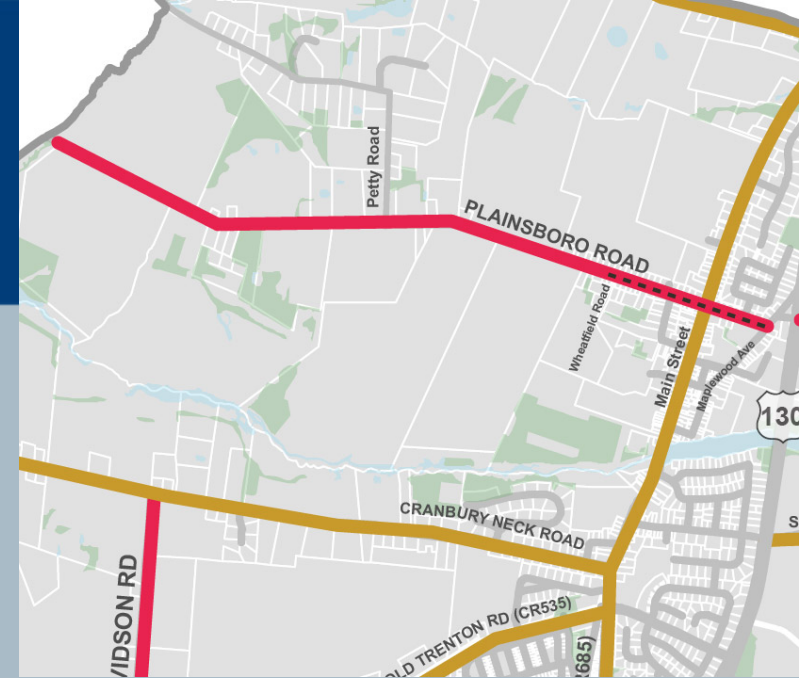


Plainsboro Road

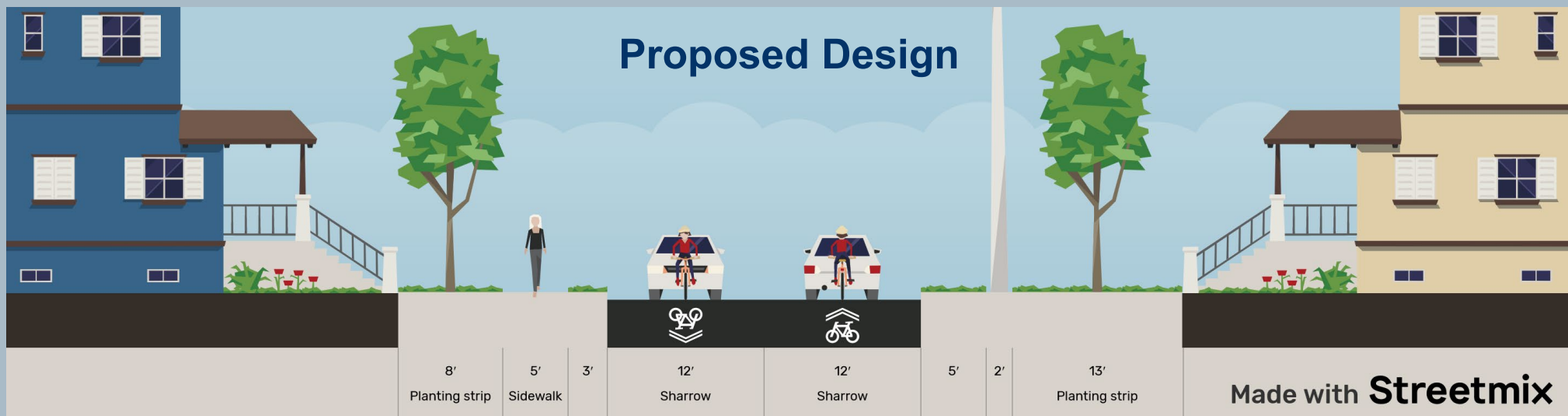
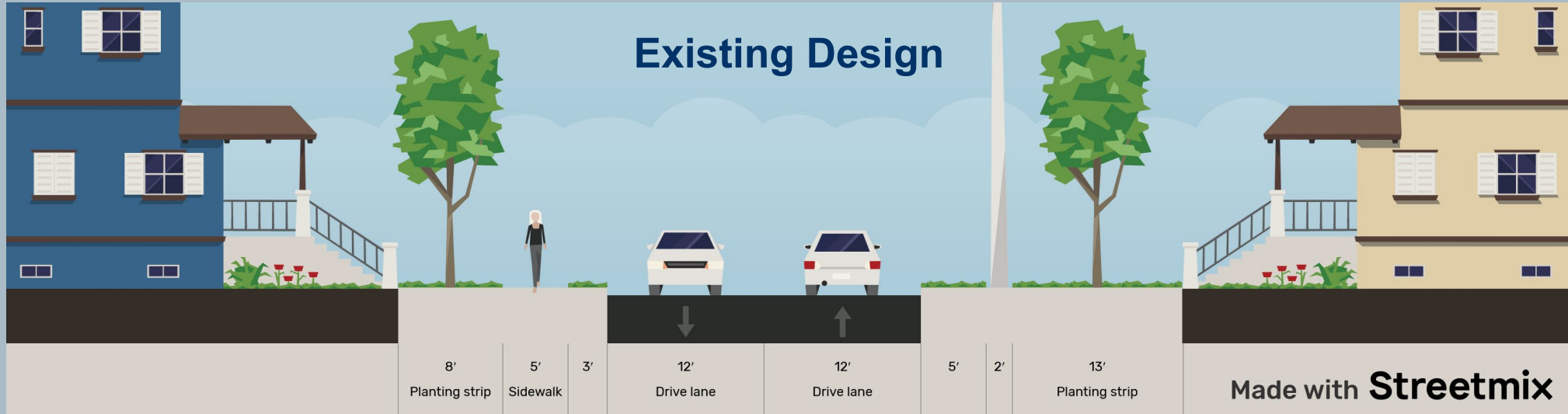
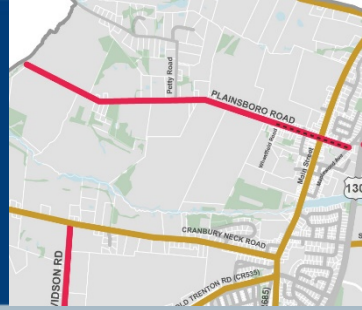
- Entering village center
- Residential character

From Wheatfield Road to Maplewood Avenue

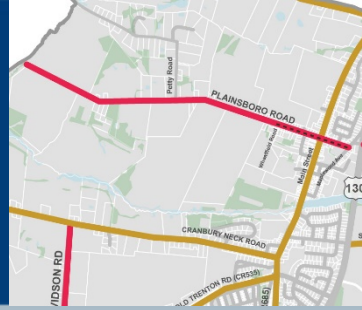
Speed Limit	25mph	Low
Daily Vehicles	5,531	Medium
Width	24 feet	Average
Land Use	Residential	
Owner	Municipal	



Plainsboro Road

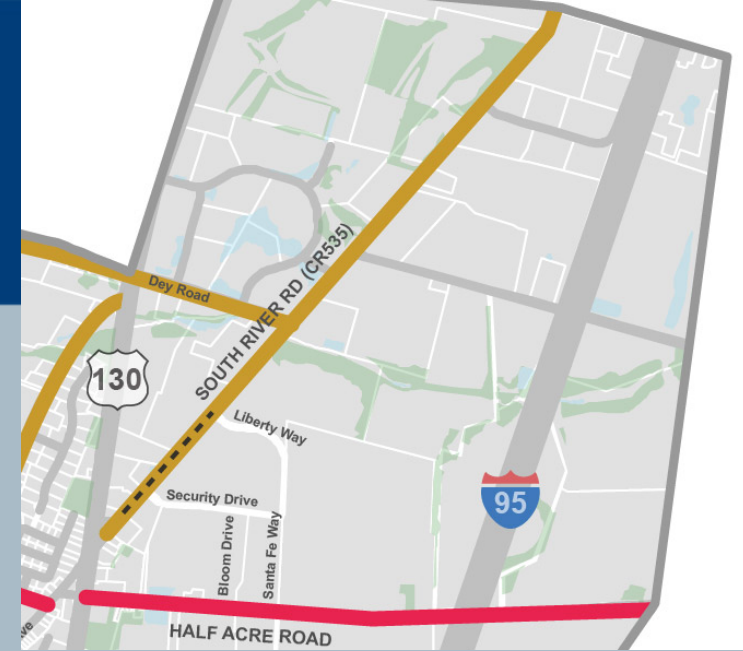


Plainsboro Road



South River Road

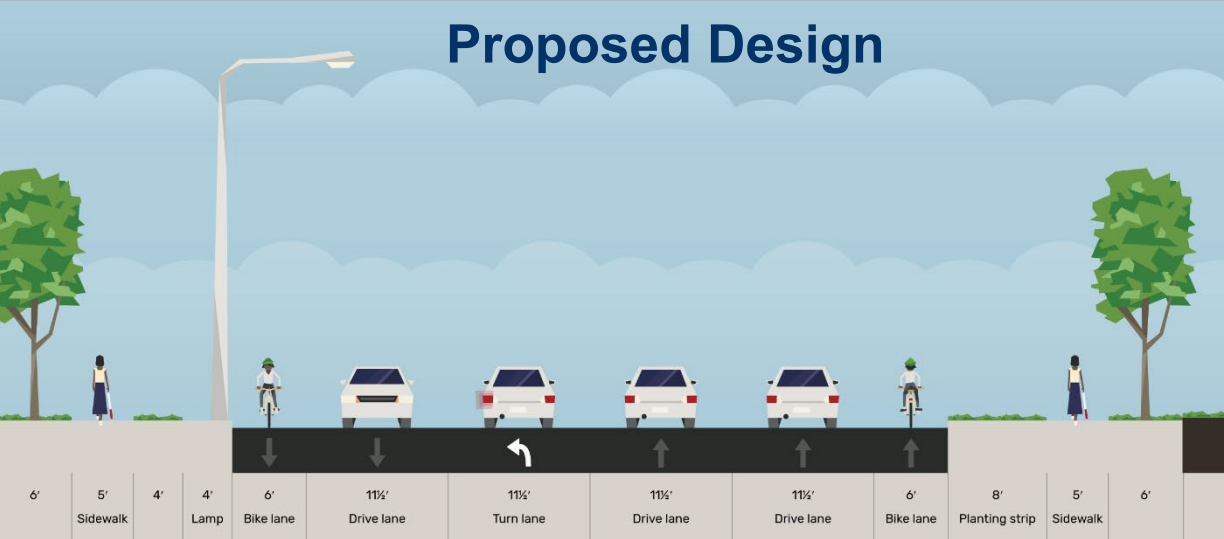
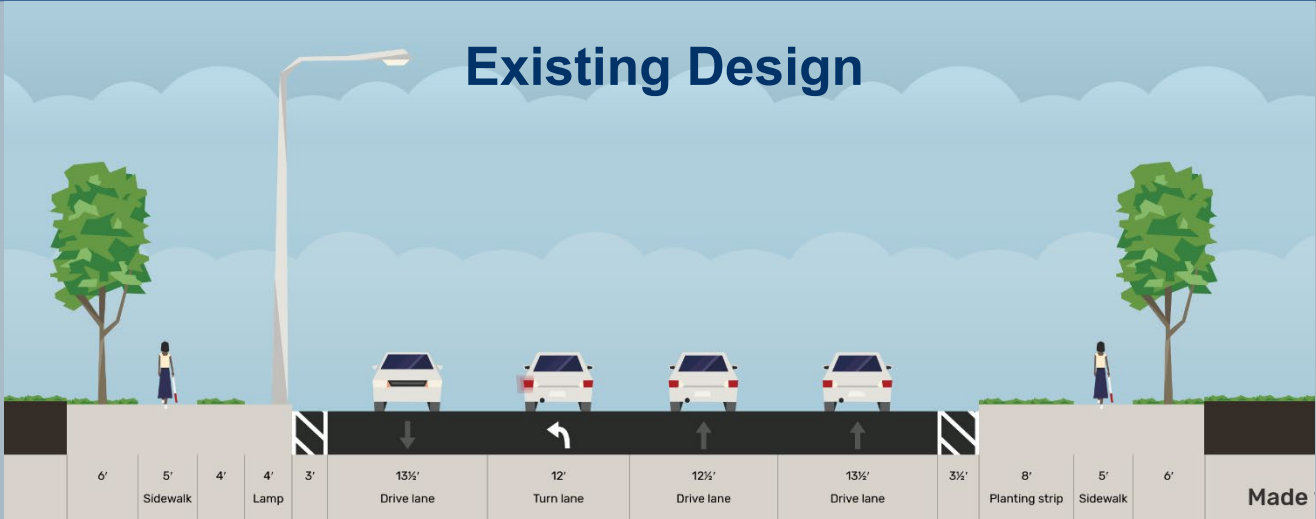
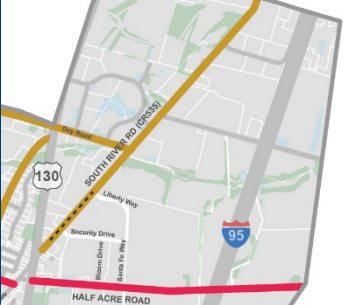
- Connects Route 130 and distribution centers to NJ Turnpike access
- High traffic volumes
- Heavy truck traffic



From Route 130 to Liberty Way		
Speed Limit	50mph	High
Daily Vehicles	22,591	High
Width	60 feet	Wide
Land Use	Industrial	
Owner	County	

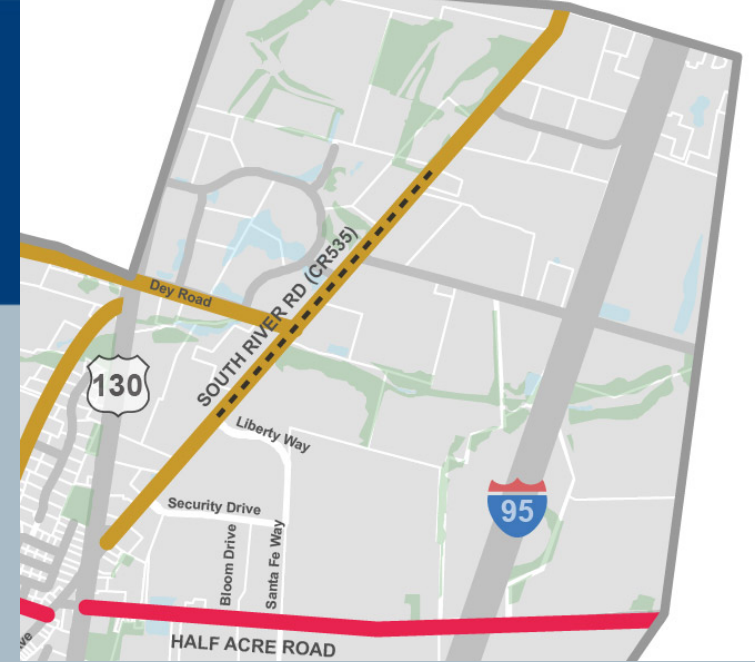


South River Road



South River Road

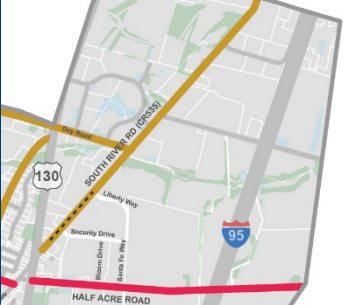
- Widens to 4 lanes and center turn lane



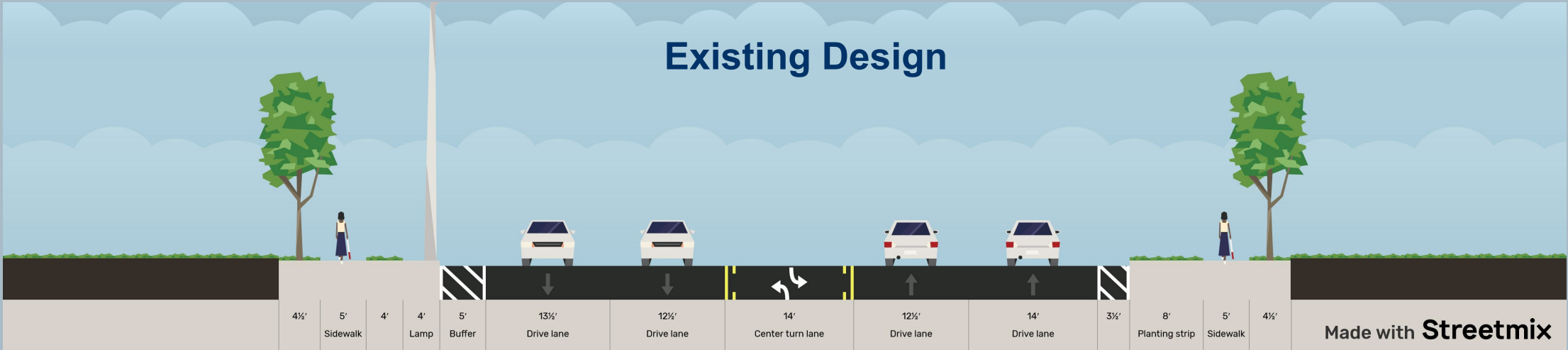
From Liberty Way to 1246 South River Road		
Speed Limit	50mph	High
Daily Vehicles	22,591	High
Width	75 feet	Very Wide
Land Use	Industrial	
Owner	County	



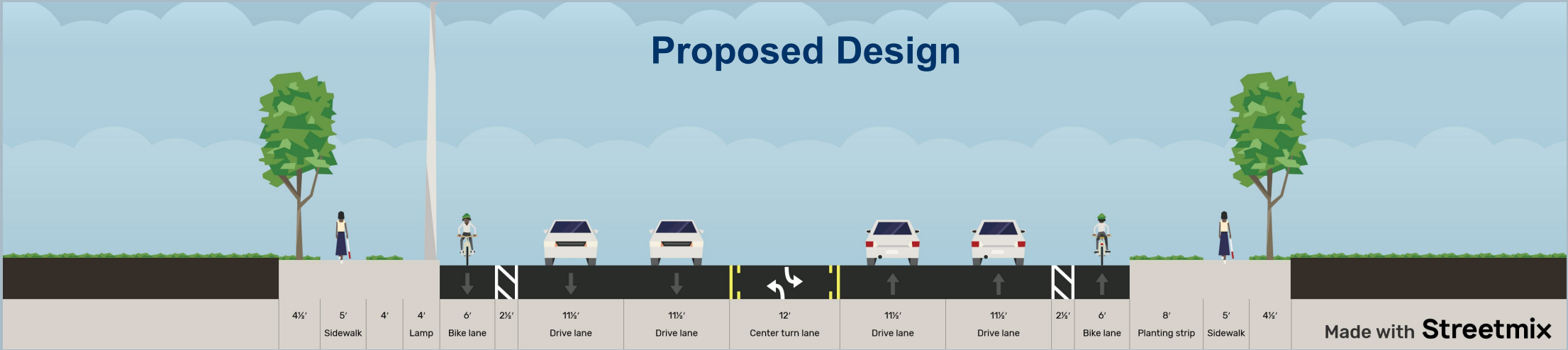
South River Road



Existing Design



Proposed Design

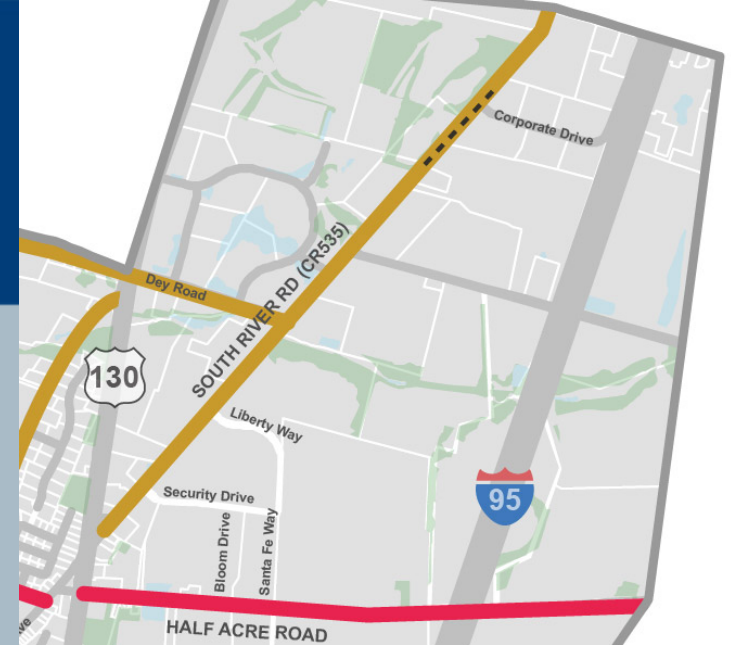


South River Road

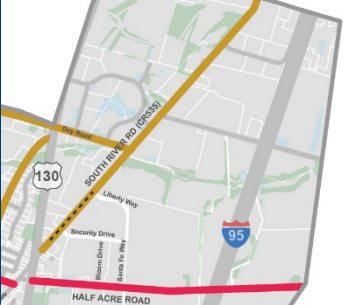
- Roadway starts to narrow again

From 1246 South River Road to Corporate Dr.

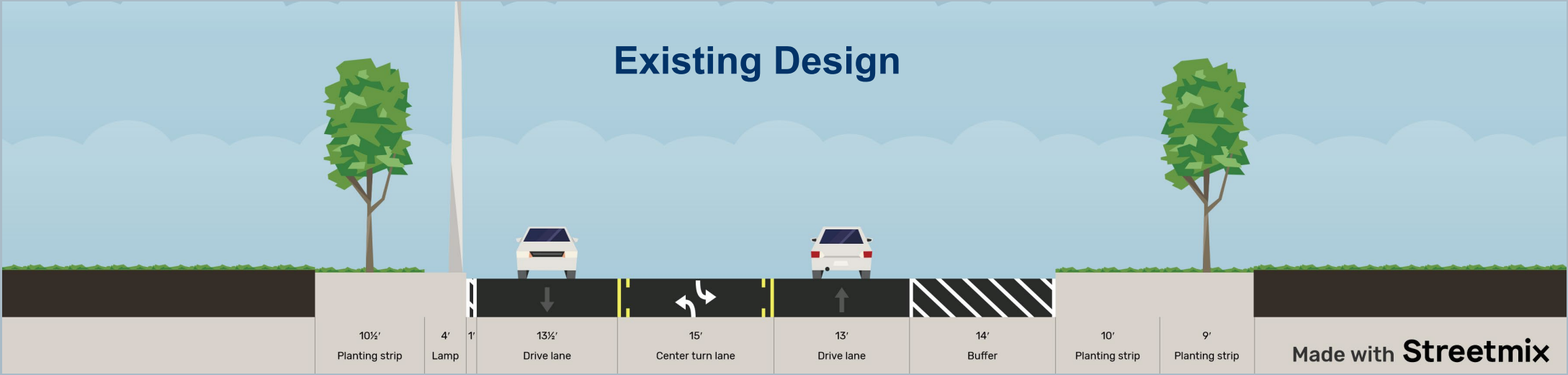
Speed Limit	50mph	High
Daily Vehicles	22,591	High
Width	56 feet	Very Wide
Land Use	Industrial	
Owner	County	



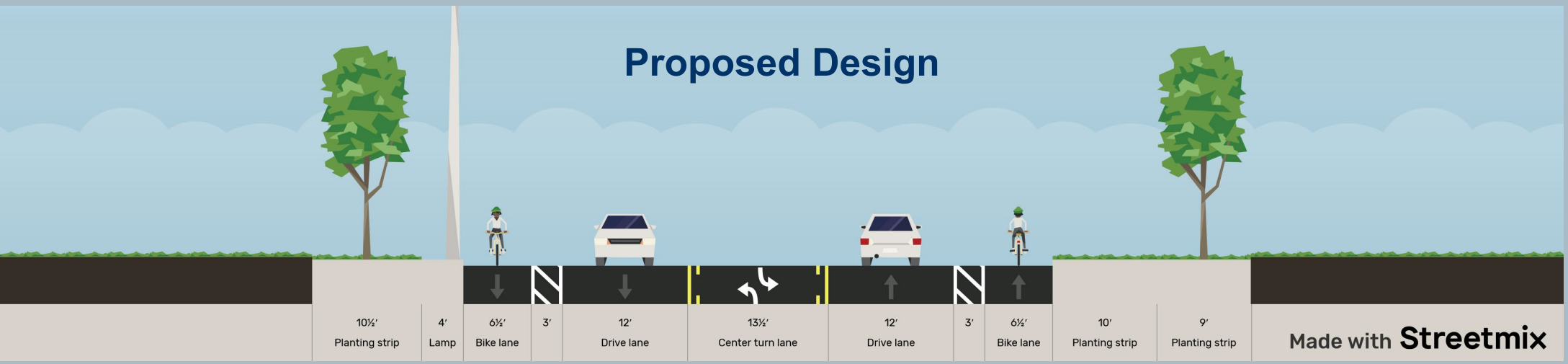
South River Road



Existing Design



Proposed Design





Complete Streets Technical Assistance Program

Cranbury Bicycle Network Plan

July 2020

Send additional comments and suggestions to:

heaslya@tcnj.edu

Comments due by July 13, 2020



North Jersey Transportation Planning Authority