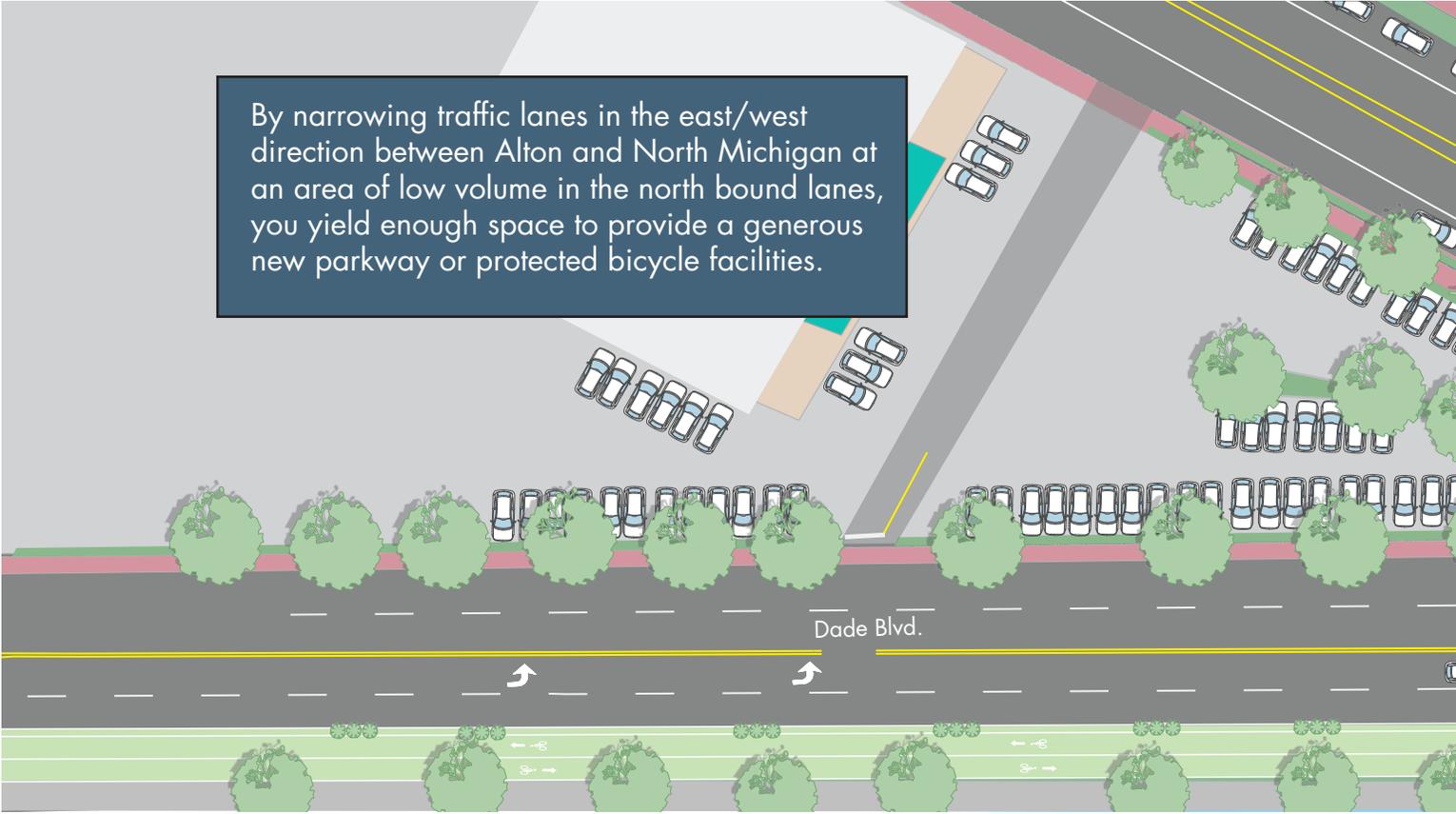
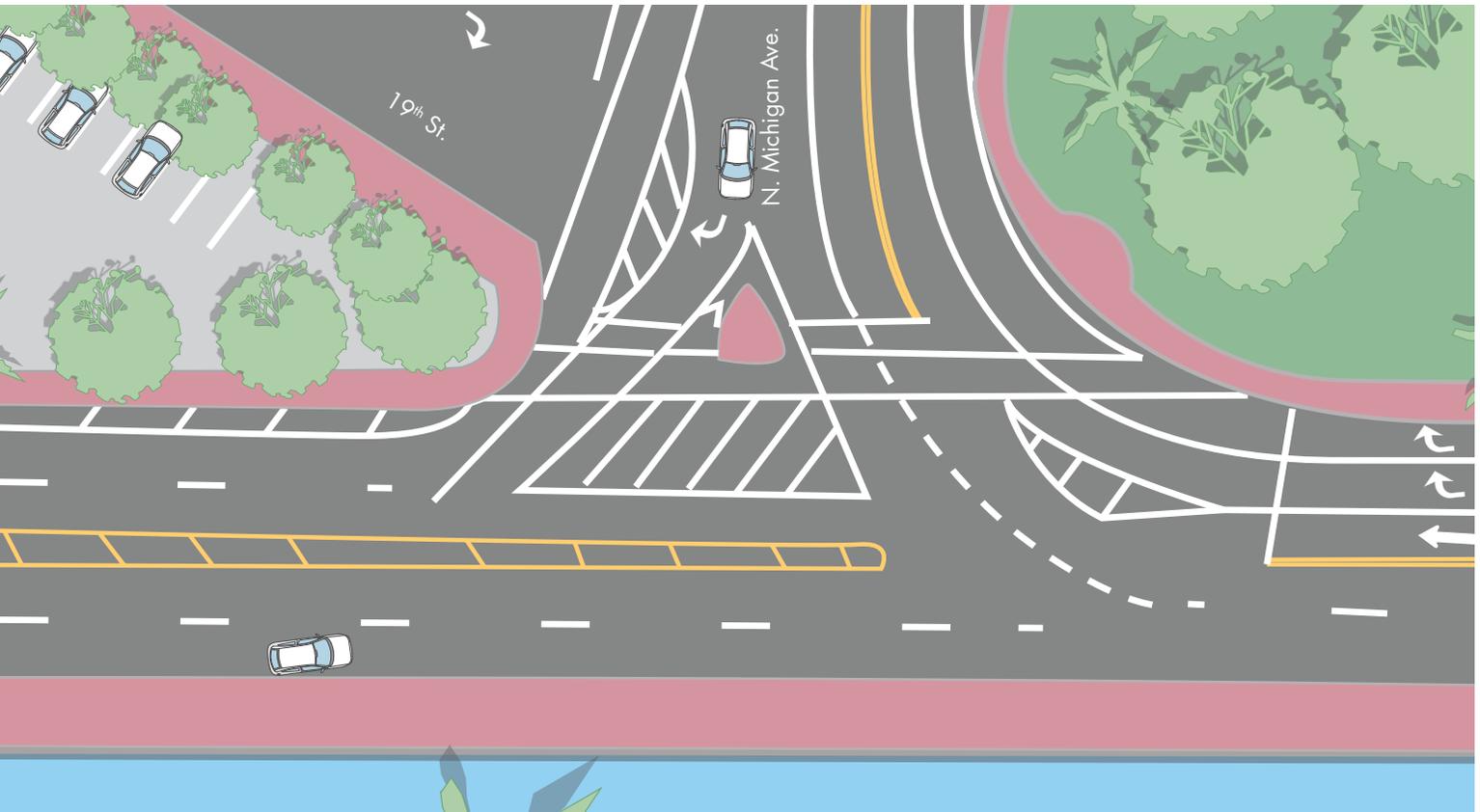


Existing Conditions, Dade Boulevard between Alton Road and North Michigan



Proposed Condition

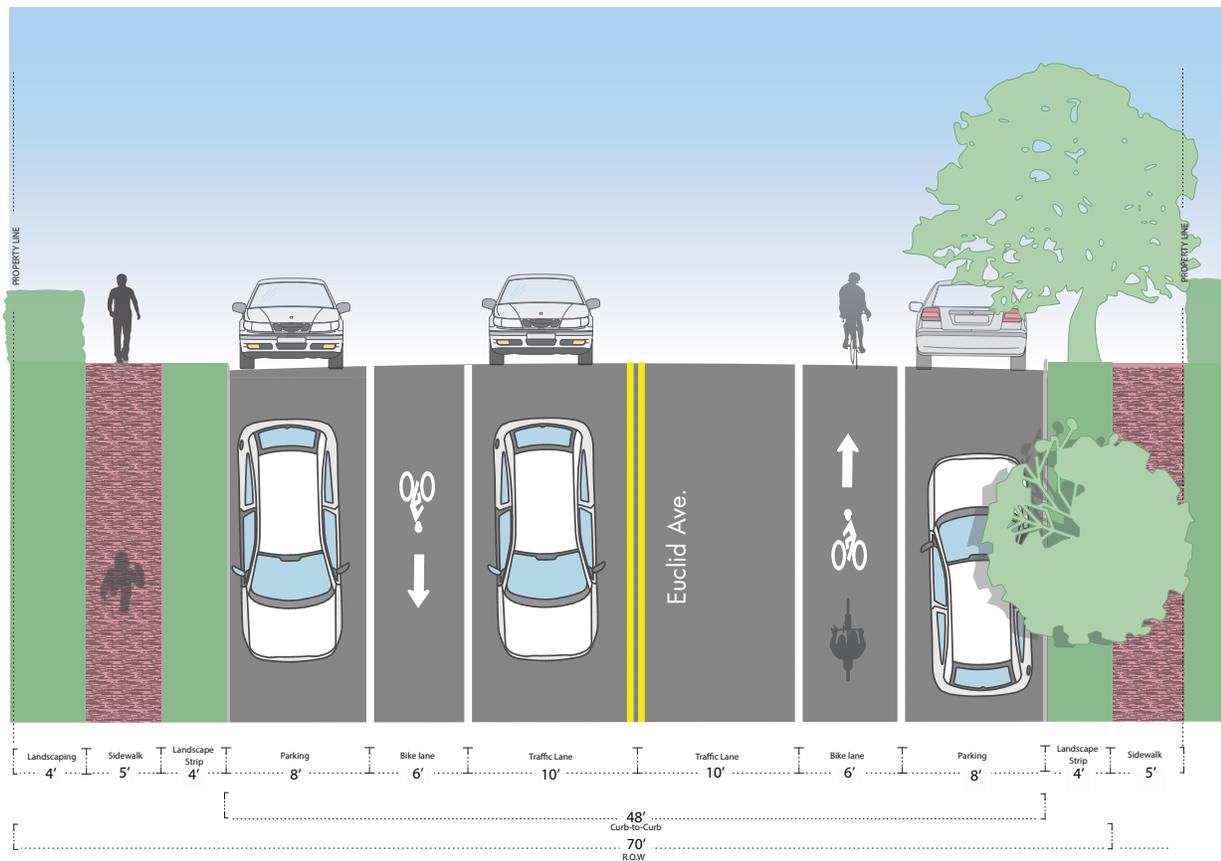
DADE BOULEVARD BETWEEN ALTON AND NORTH MICHIGAN



EUCLID AVENUE

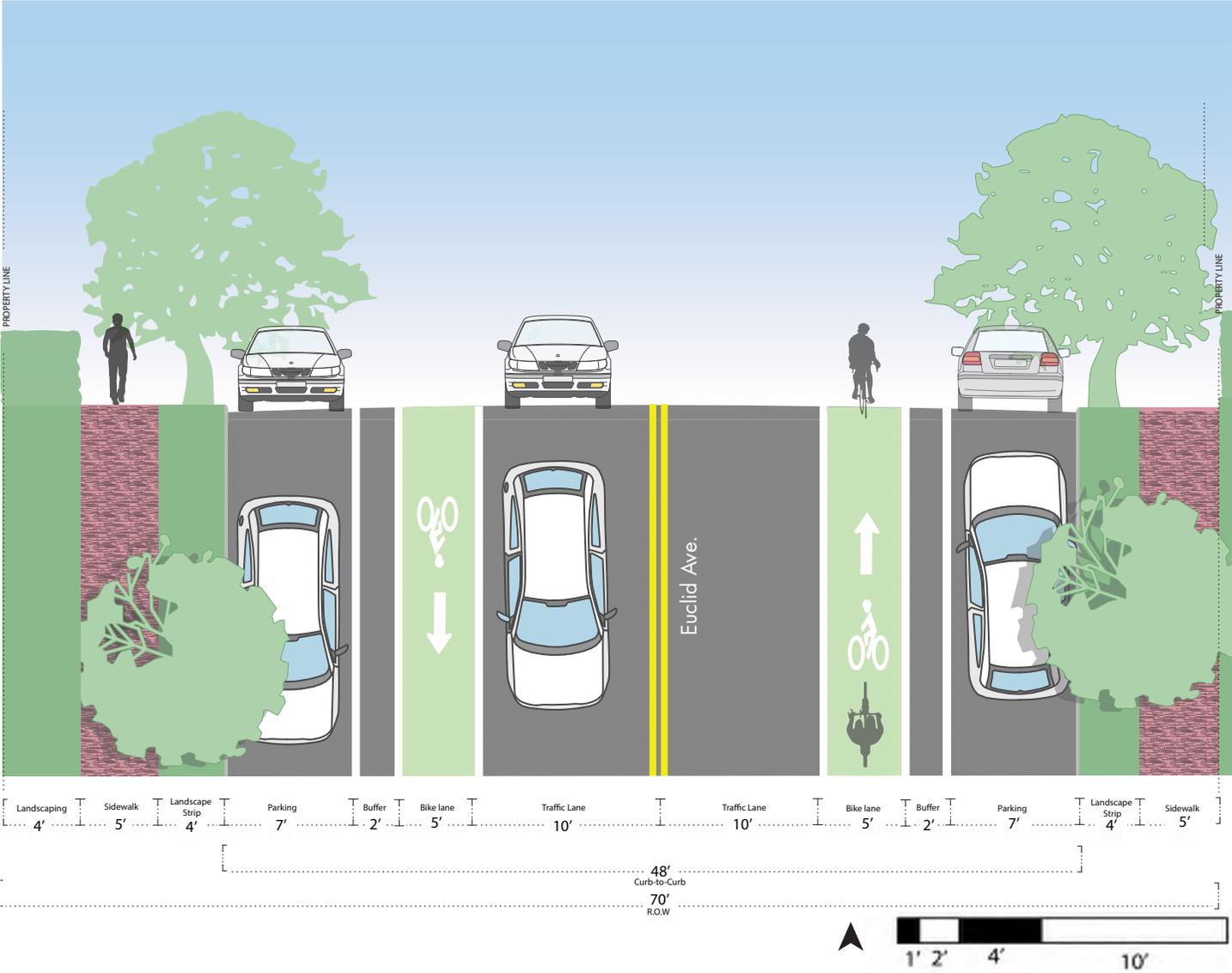
STREET DATA	
Public Right-of-Way Width	66'
Pavement Width	48' typical
Posted Speed Limit	25 mph
Daily Volume	NA
Project Limits	Between 17 Street and 5 Street
Project Length	Approximately 6,500', 1.23 Miles
Predominant Land Use	Multifamily Residential
Predominant Development Pattern	Compact urban apartment types
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	
Impact on modeshare	moderate
Upcoming Public Works Project	Yes

EXISTING CONDITIONS



Euclid Avenue is one of the most popular bicycle routes in Miami Beach. Making it as safe as possible, and attracting even more people to ride on this street is one of the best opportunities the city has to encourage a robust bicycle network.

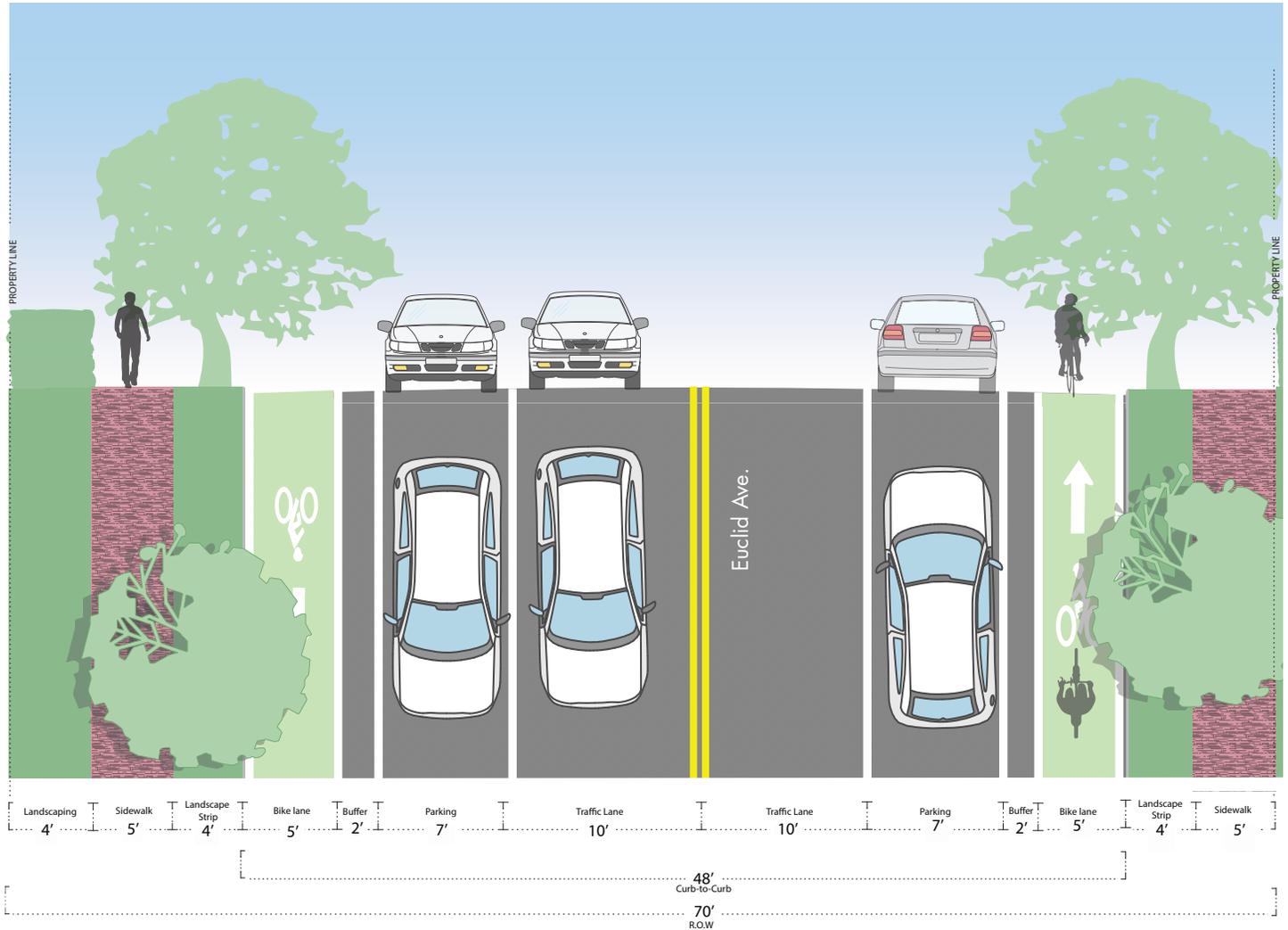
EUCLID AVENUE PROTECTED BIKE LANES



A quick fix to the existing conditions is to create a door-zone buffer space between the bike lane and the parked cars. Restriping the bike lane to accommodate a buffer is an inexpensive first step towards educating bicyclists and motorists to respect the buffer area for the safety of both types of users while more robust solutions are implemented.

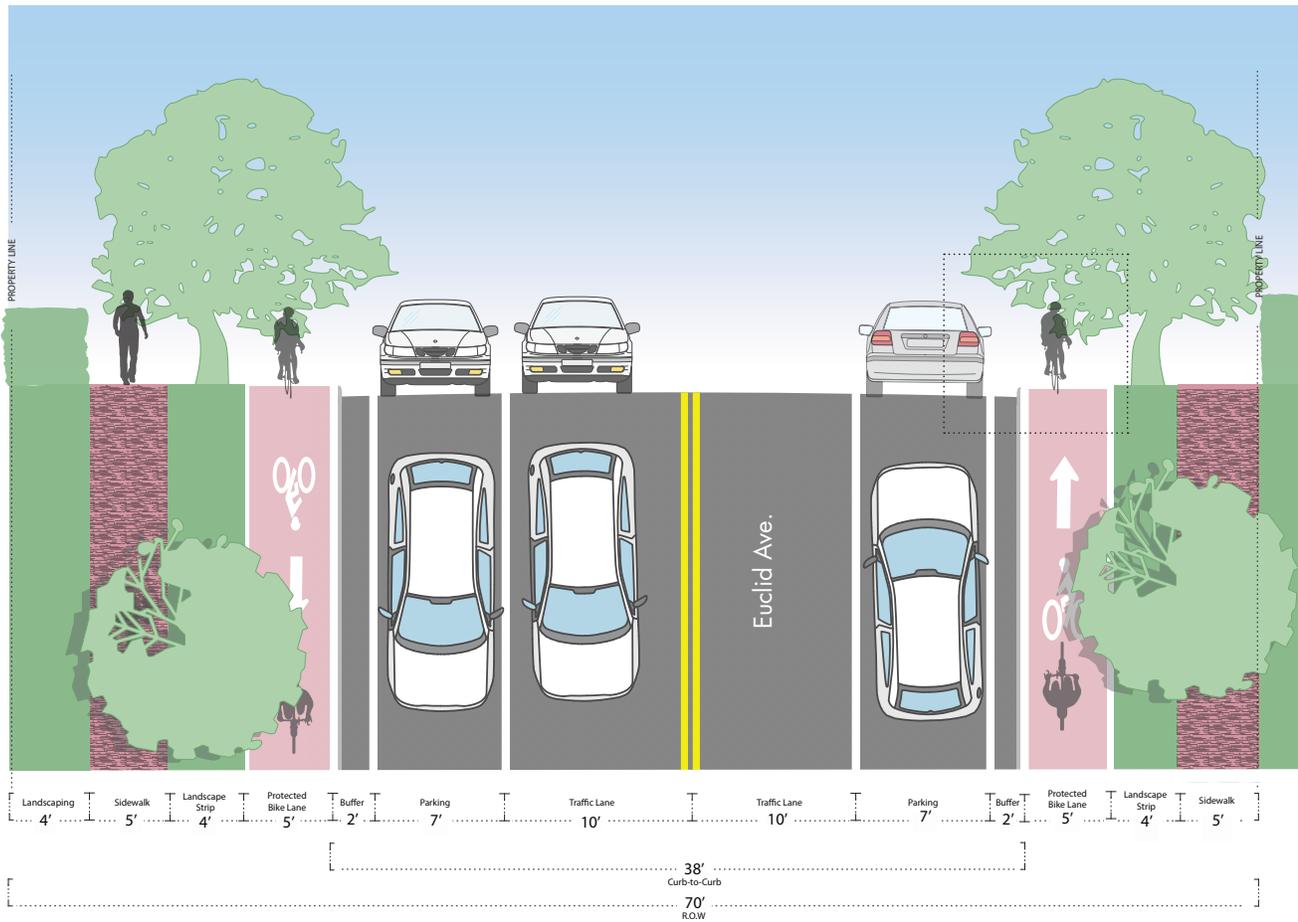
EUCLID AVENUE

BUFFERED BICYCLE LANES



A parking protected bicycle facility should be installed along Euclid. This facility would form part of a larger network of protected bicycle facilities around Miami Beach. This alternative should be considered in the initial phase as a first option.

SIDEWALK-LEVEL PROTECTED BIKE LANES



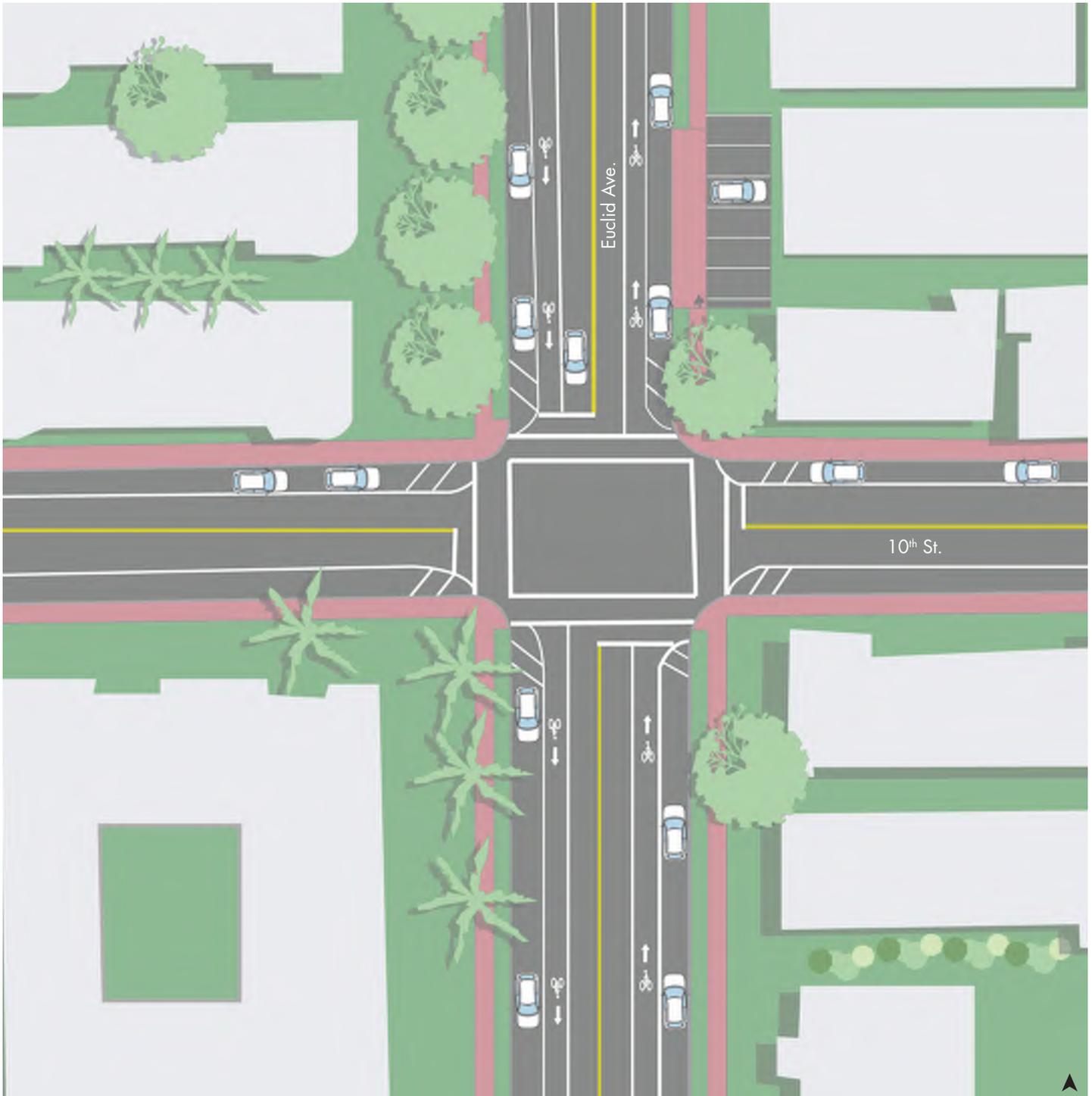
Refer to figure 3.26 of the street design guide for additional information.



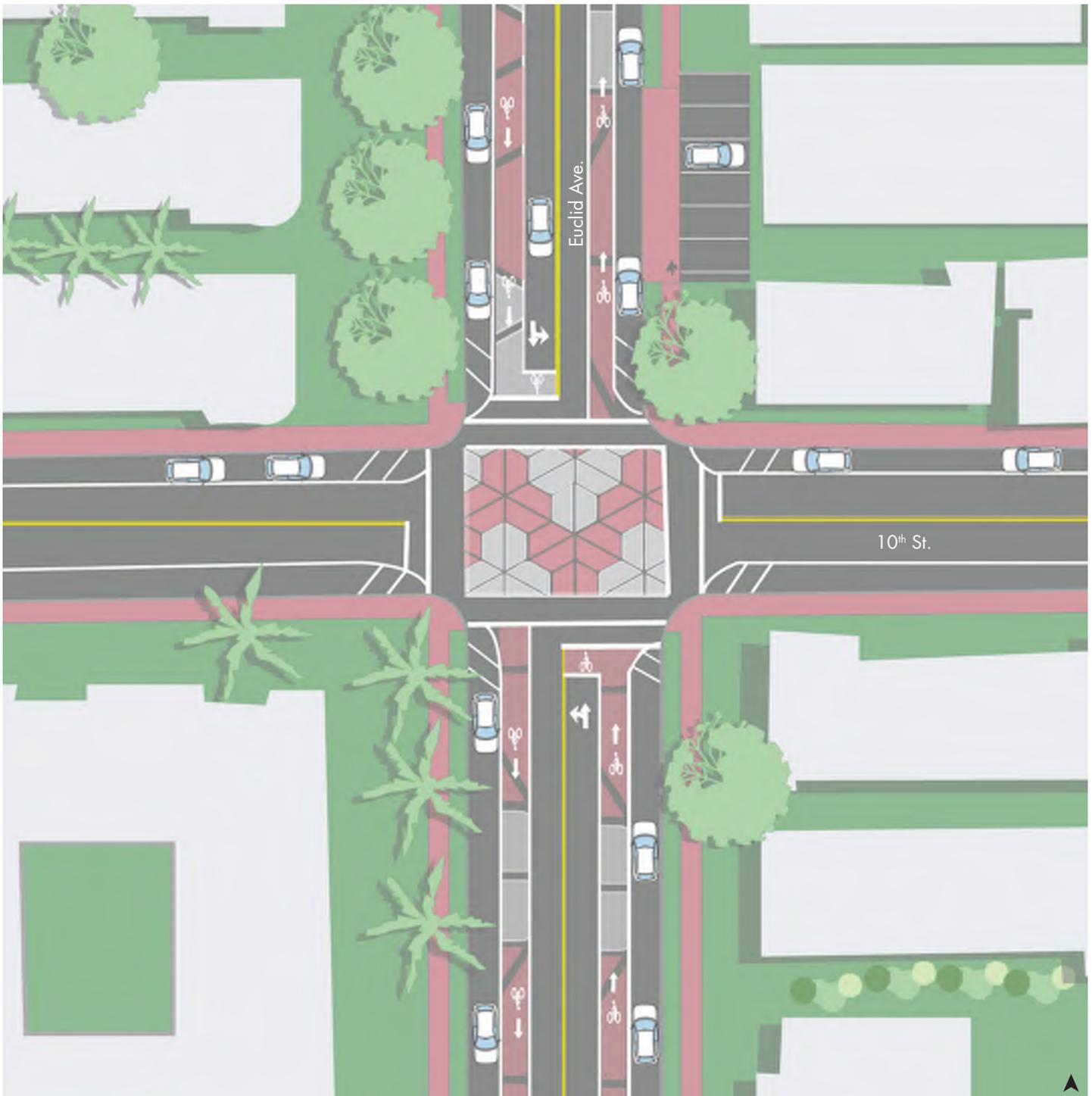
Over the long term, Euclid Avenue should be narrowed as much as possible, and the sidewalk expanded to provide additional street trees. The widened sidewalk area can be designated as a protected bicycle facility or not. With a narrow cross section, low volumes, and a bicycle priority designation, Euclid would also make for easy on-road cycling that is physically separated from the travel lane.

EUCLID AVENUE

EXISTING EUCLID AVE. AND 10TH ST. INTERSECTION



PROPOSED EUCLID AVE. AND 10TH ST. INTERSECTION

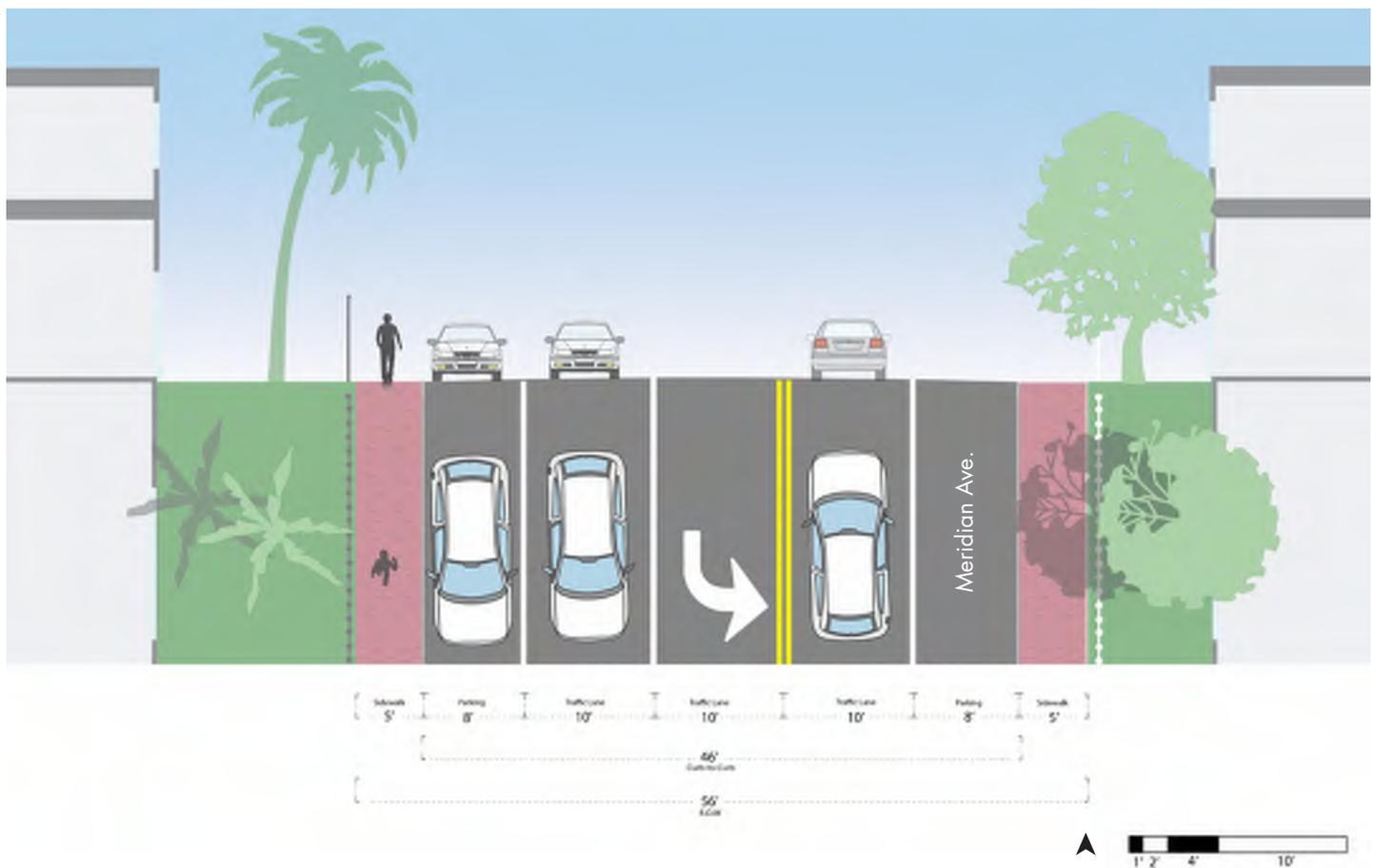


Intersections throughout Flamingo Park could have colorful designs/patterns painted in them. This safety measure would not only provide for improved pedestrian visibility, but would also encourage drivers to slow down as they pass through the intersection.

Bicycle boxes at intersections provide an additional safety for bicyclists and increases their visibility to motorists by shortening crossing distances at intersections. Bicycle boxes are placed first at intersections, while motor vehicles stop behind them. Bicycle boxes and intersection treatments can be found on the street design guide.

MERIDIAN AVENUE

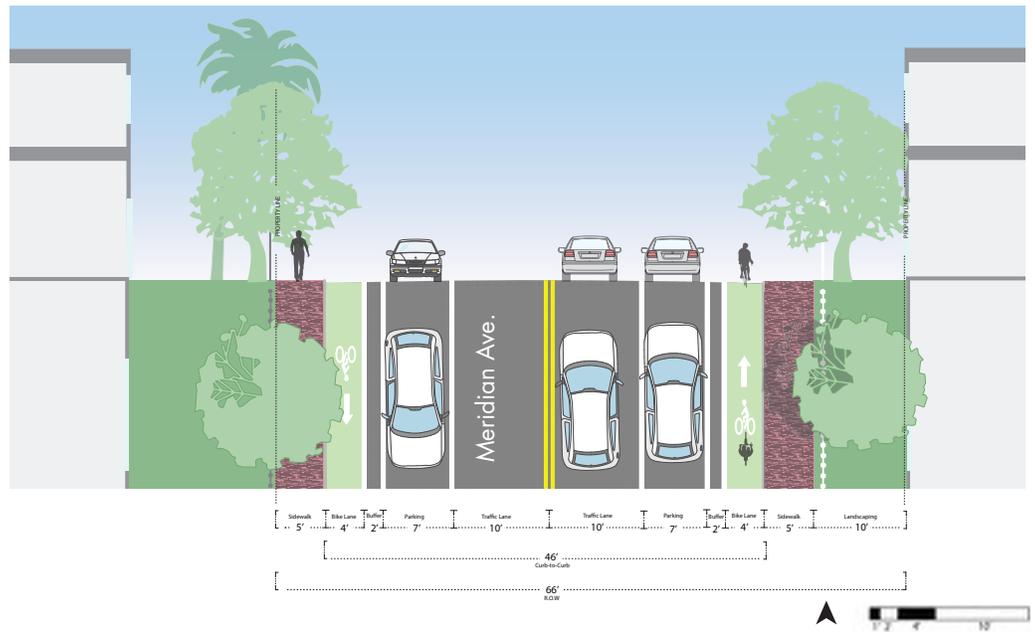
STREET DATA	
Public Right-of-Way Width	56'
Pavement Width	46' typical
Posted Speed Limit	25 mph
Daily Volume	9,600-12,000 ADT
Project Limits	Between Dade Boulevard and 4 Street
Project Length	Approximately 3,000', 0.56 Miles
Predominant Land Use	Multifamily Residential
Predominant Development Pattern	Compact urban apartment types
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	Lincoln Road, Flamingo Park



Meridian Between Dade Boulevard and 5th Street is another one of the main bicycle corridors in Miami Beach. The Crash data shows that it is one of the corridors with the most crashes over the past two years. The context of the street goes from mixed-use with a center turn lane in the north, to medium density residential with no center turn lane. Each has its own approach.

MERIDIAN AVENUE PROTECTED LANE

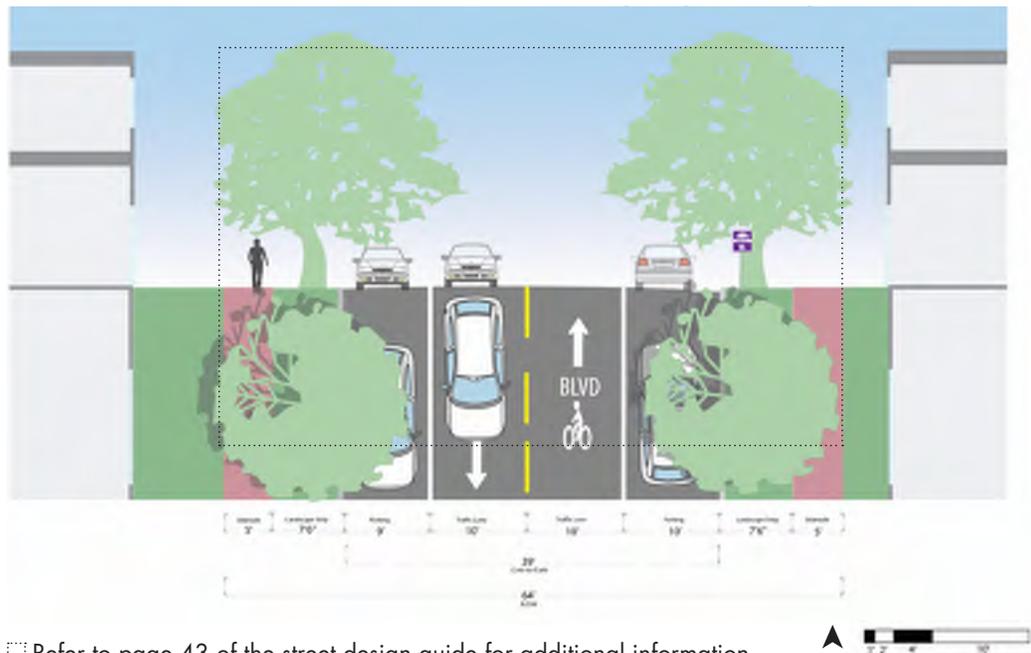
In the northern section of Meridian, where it currently has a center turn lane, a parking protected bike lane has been implemented.



NEIGHBORHOOD GREENWAY

Further south, traffic would have to be diverted from this corridor to prioritize bicycle travel in the street. Already compact conditions call for an on-street neighborhood greenway.

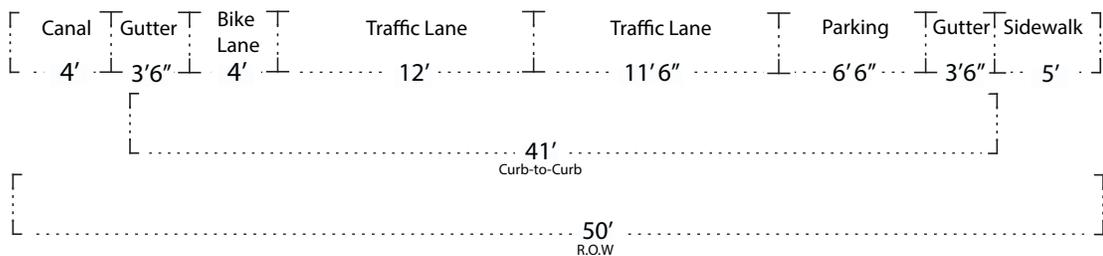
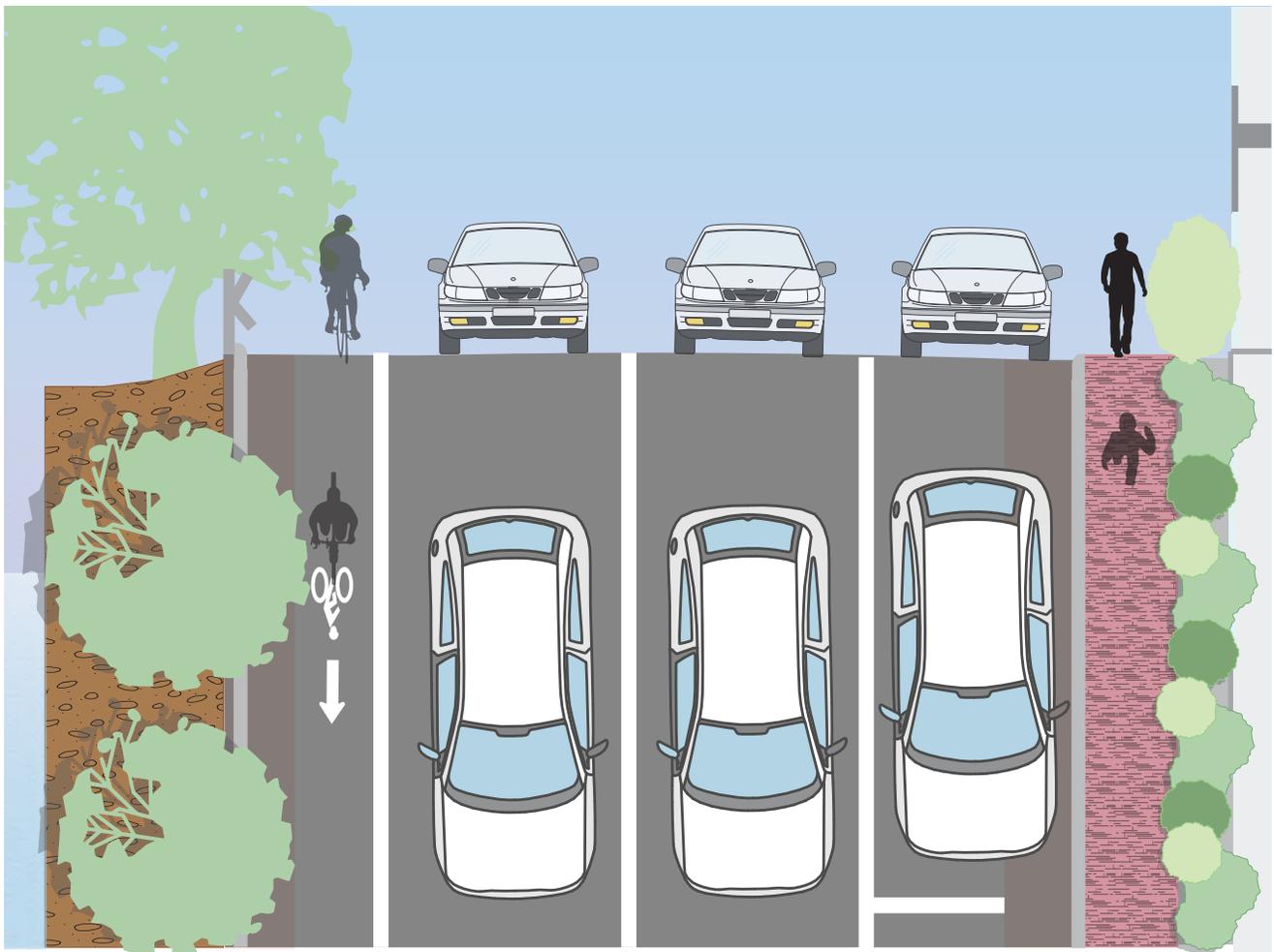
This segment of Meridian would become a designated greenway through interventions like signalization, reduced speeds and intersection treatments. Refer to the Street Design Guide for more information.



Refer to page 43 of the street design guide for additional information.

LOWER INDIAN CREEK

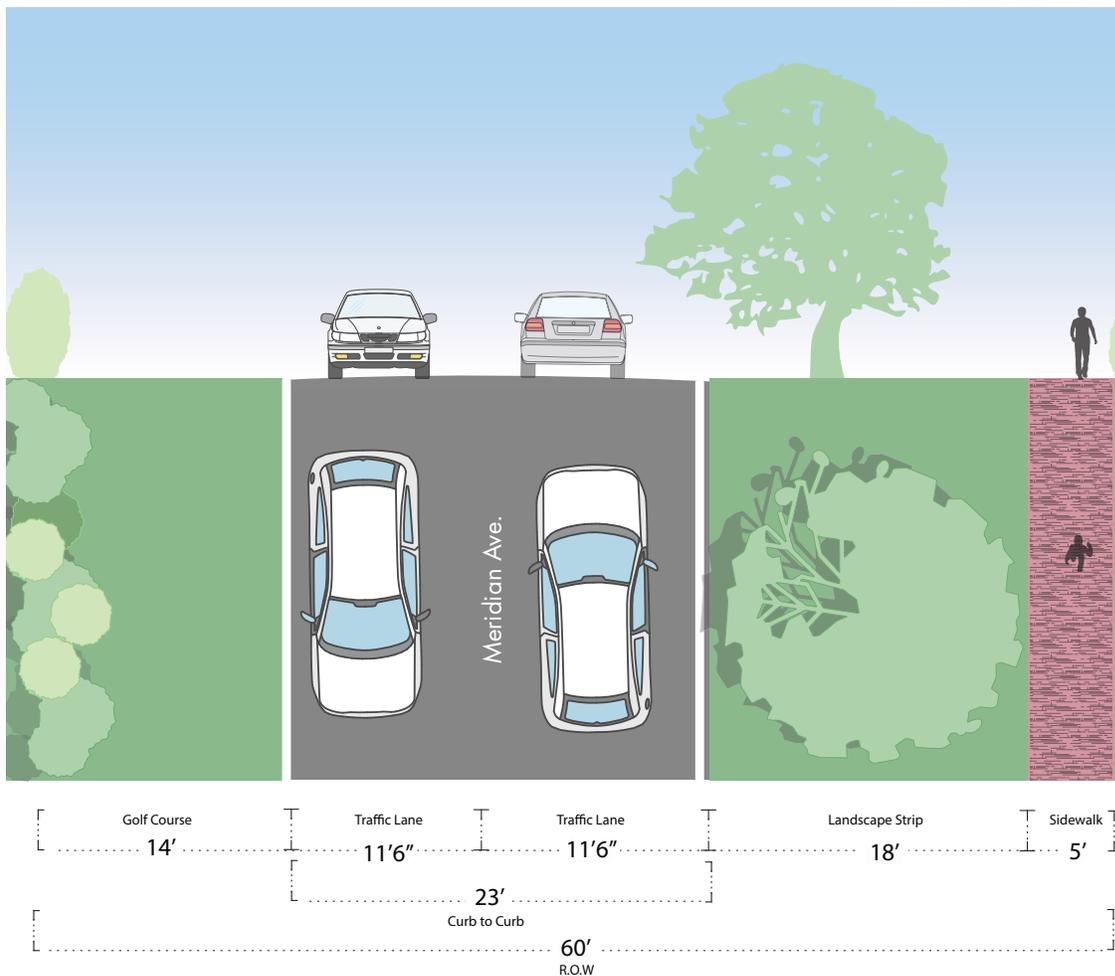
STREET DATA	
Public Right-of-Way Width	50'
Pavement Width	41' typical
Posted Speed Limit	35 mph
Daily Volume	NA
Project Limits	Between 41st and 26th Street
Project Length	Approximately 4,205', 0.80 Miles
Predominant Land Use	Multifamily Residential
Predominant Development Pattern	Compact urban apartment types/ Small hotels
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	Beach



MERIDIAN AVENUE

STREET DATA	
Public Right-of-Way Width	60'
Pavement Width	23' typical
Posted Speed Limit	25 mph
Daily Volume	9,600-12,000 ADT
Project Limits	Between 28 Street and Dade
Project Length	Approximately 3,000', 0.56 Miles
Predominant Land Use	Single Family Residential
Predominant Development Pattern	Suburban Detached
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	Miami Beach High School
Impact on modeshare	low
Upcoming Public Works Project	Yes - CIP

EXISTING CONDITIONS

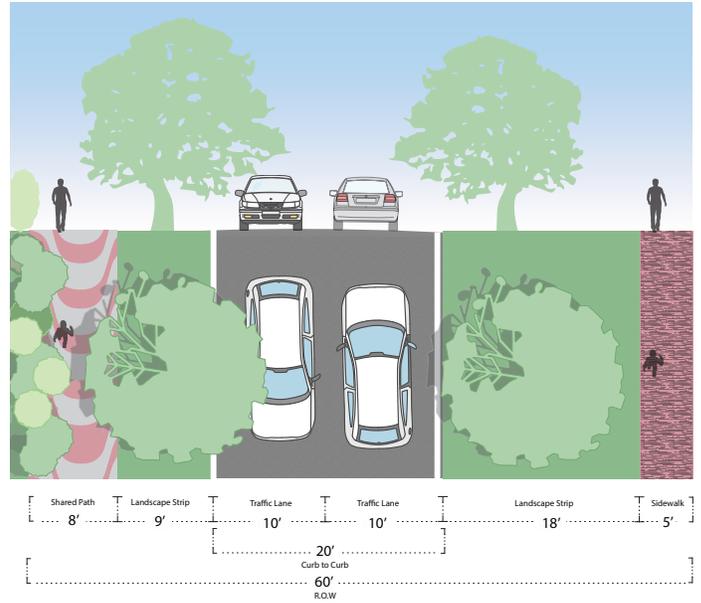


Meridian is a quiet neighborhood street. This segment is adjacent to the golf course and provides north/south connectivity parallel to Prairie Avenue.

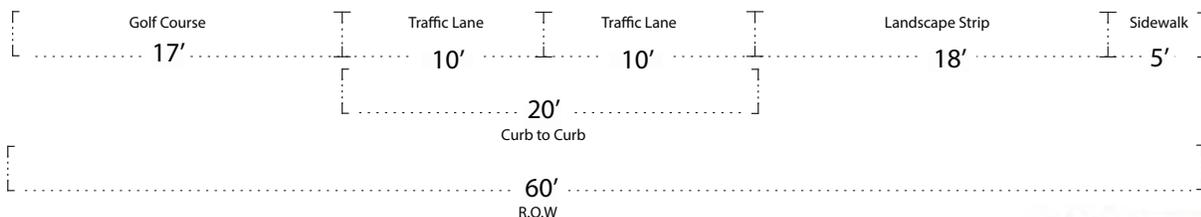
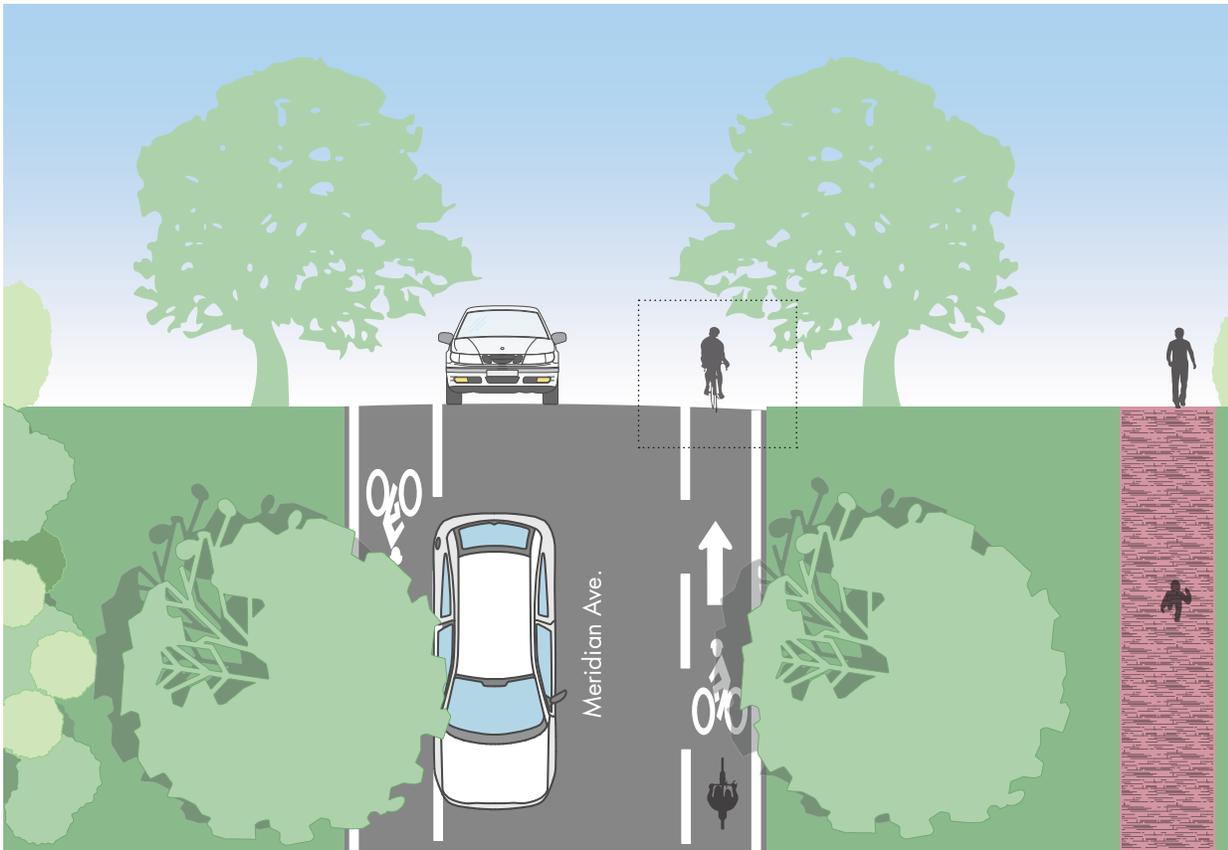
SHARED PATH

The most obvious option along this segment of Meridian is to provide some type of bicycle/pedestrian access adjacent to the golf course. Though high winds can often be a nuisance when riding this corridor, additional street trees and landscaping would be a benefit to any street redesign.

The option below tries to narrow the pavement as much as possible with an advisory bike lane. This allows for an increase the amount of green space and street trees.



ADVISORY BIKE LANE



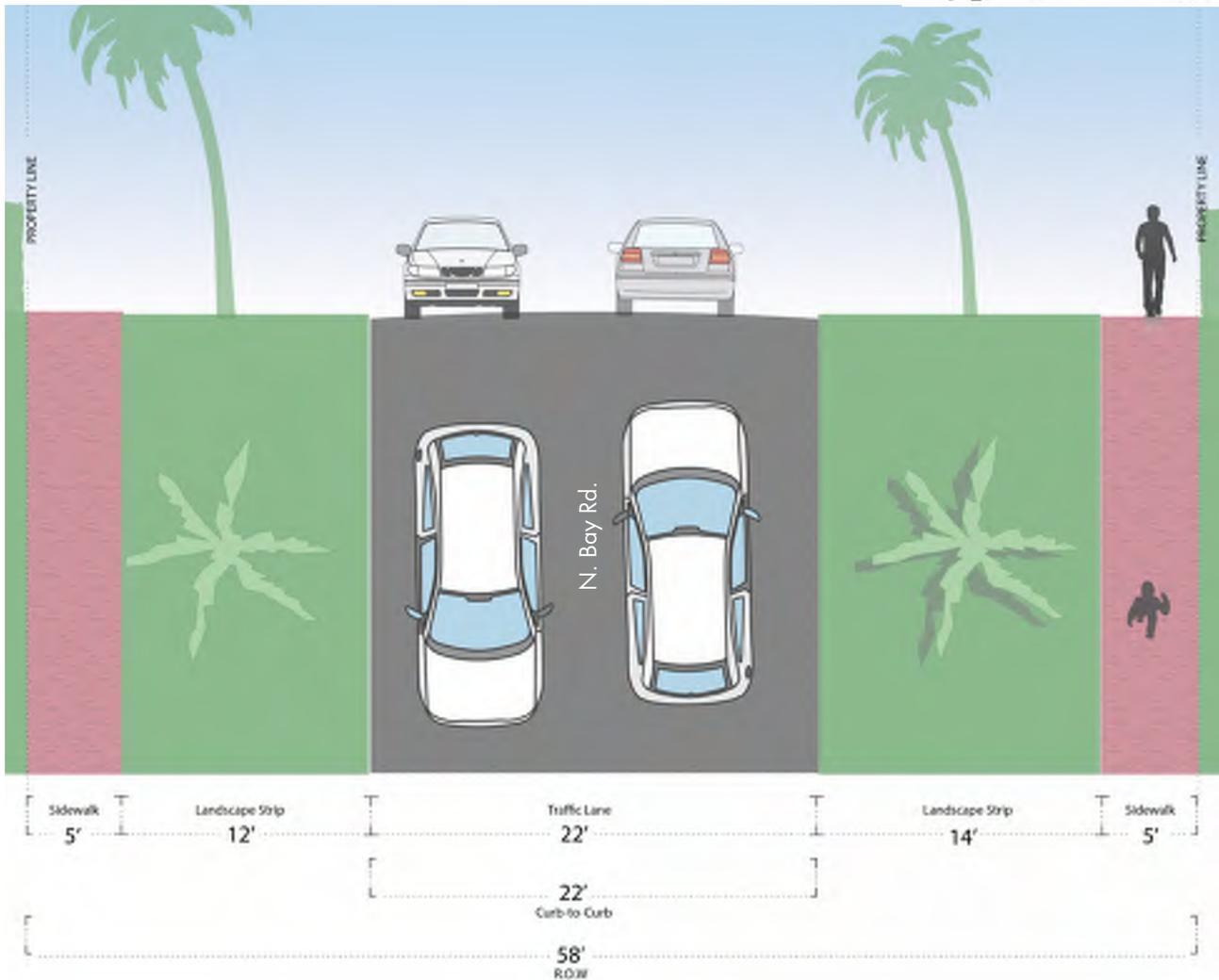
Refer to figure 3.12 of the street design guide for additional information.



NORTH BAY ROAD

STREET DATA	
Public Right-of-Way Width	58'
Pavement Width	22' typical
Posted Speed Limit	25 mph
Daily Volume	NA
Predominant Land Use	Single Family Residential
Project Limits	Between Alton Road and Alton Road
Project Length	Approximately 5,500', 1.0 Miles
Predominant Development Pattern	Detached single family homes with driveways.
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	There are several schools and small parks that generate pedestrian activity along this route.
Impact on modeshare	Low
Upcoming Public Works Project	Yes - CIP

EXISTING CONDITIONS



Lower North Bay Road, between Alton @ 20 Street and Alton at Chase Avenue is a well used north/south route that serves as a low stress alternative to the high volume and high speed conditions on Alton Road.

NORTH BAY ROAD BICYCLE BOULEVARD

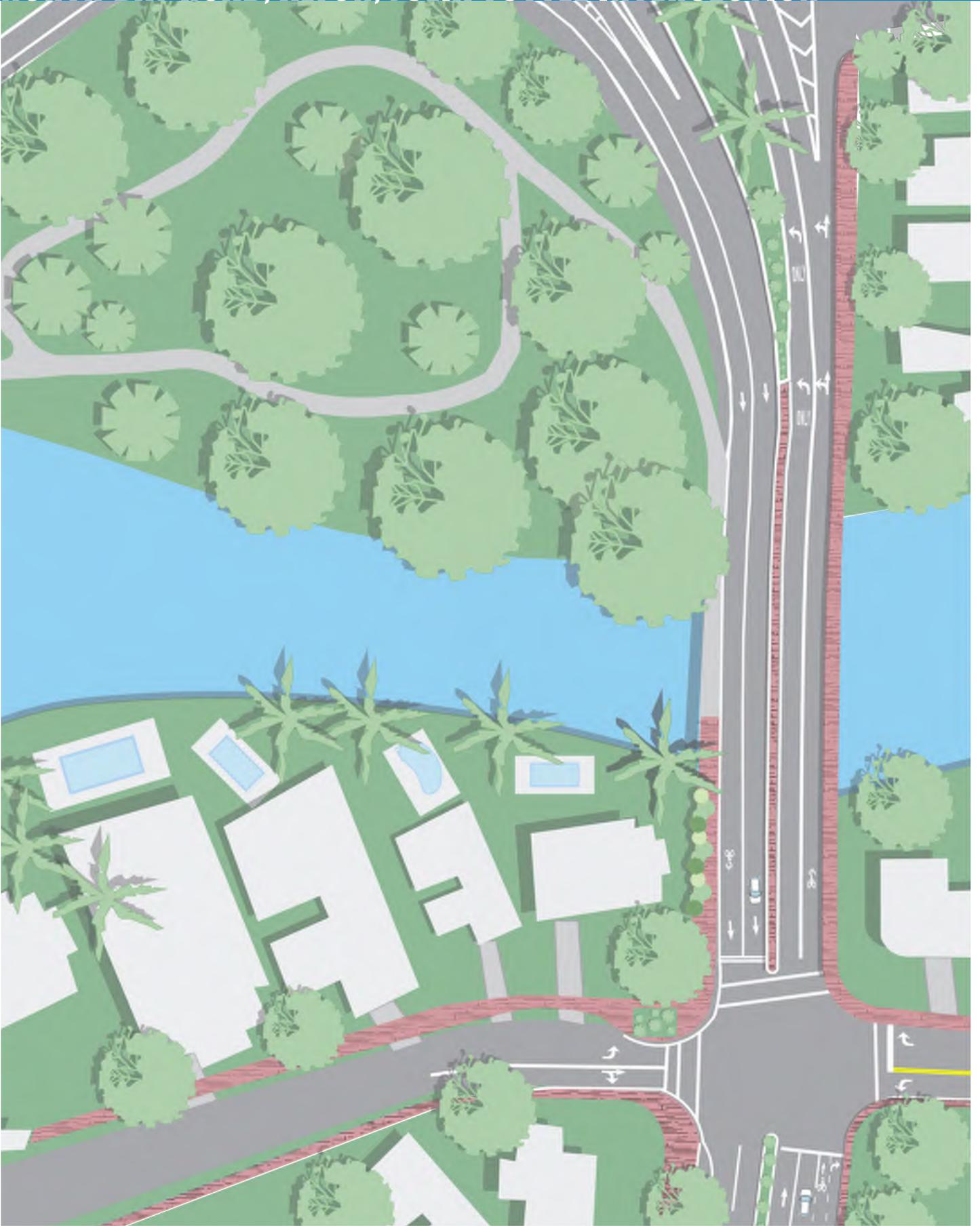


In many ways, lower North Bay Road, between Alton @ 20 Street and Alton at Chase Avenue, already functions like a bike boulevard. As described in the Street Design Guide, a bike boulevard is a street design technique that prioritizes bicycle travel on low volume residential streets. Traffic is diverted from these streets, and priority given to the bicyclists in the road. Given the low volume of cars observed on this street, and the existing traffic diversion devices (at the intersection with Chase Avenue), this is a prime candidate for improvements that will help convert this street into a true bicycle boulevard. Among the most important improvements to the corridor is the addition of street trees, bicycle boulevard pavement markings and traffic circles (or other traffic calming devices).

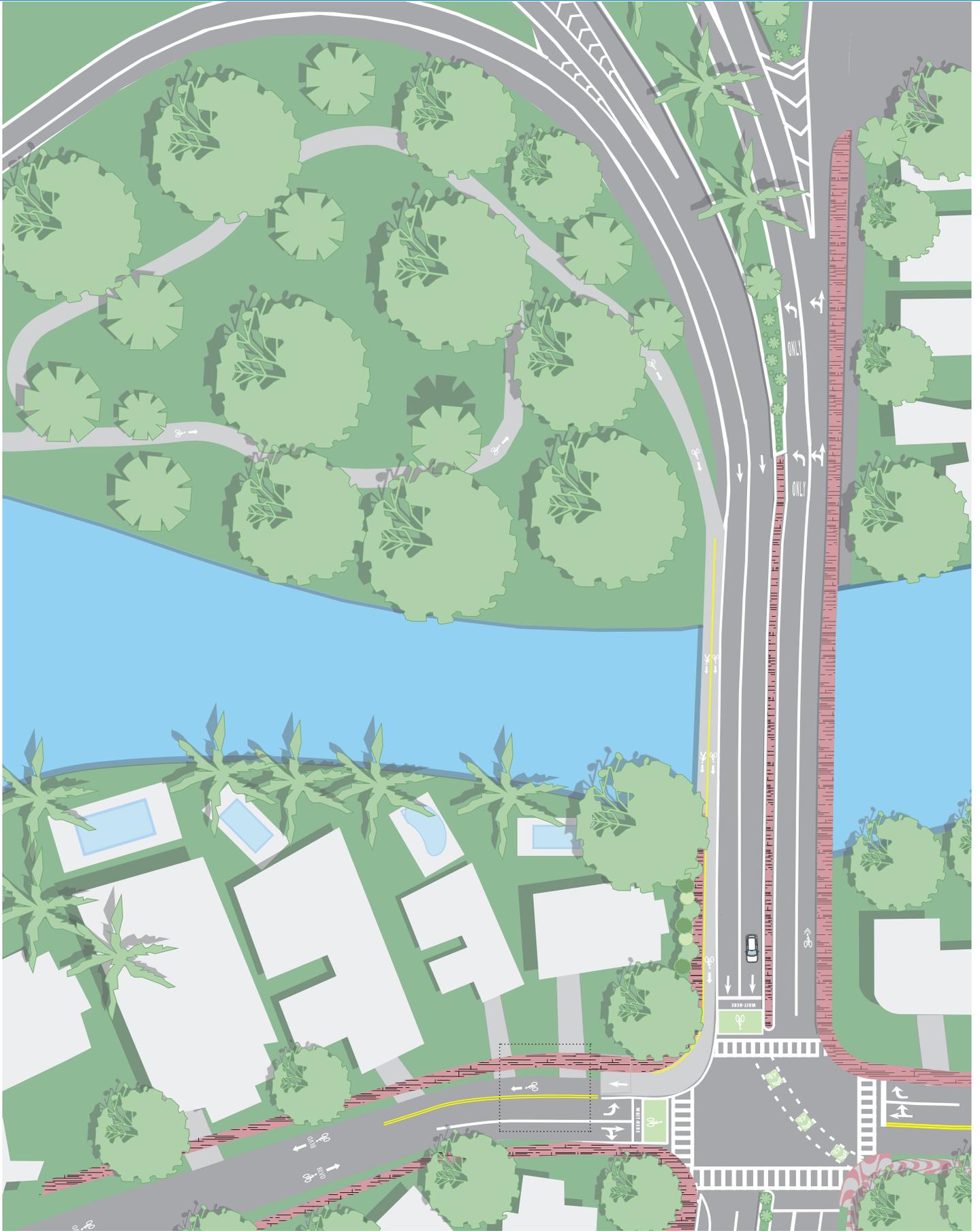
Typical sections in the October 2010 Bayshore BODR Documents show two 10' lanes and 2' concrete valley gutters. In general, we should strive for drainage solutions that do not increase the size of the street any more than necessary. The extra 2' added for the valley gutter rarely results in a well designed street. Any benefit you get from narrowing the lanes to 10', you effectively give up by widening the driver's field of vision by the extra 2' on either side. On a street like Lower North Bay Road, where we are proposing an on-street solution, we should do our best to make sure that the street is designed for the slowest speed traffic. Bike route signs have been included at intersections. Signage and pavement markings are specified in the Street Design Guide.

NORTH BAY ROAD, ALTON, JULIA TUTTLE INTERSECTION

Julia Tuttle Cswy Existing Conditions



Julia Tuttle Cswy Shared Path and Contra-flow bike lane

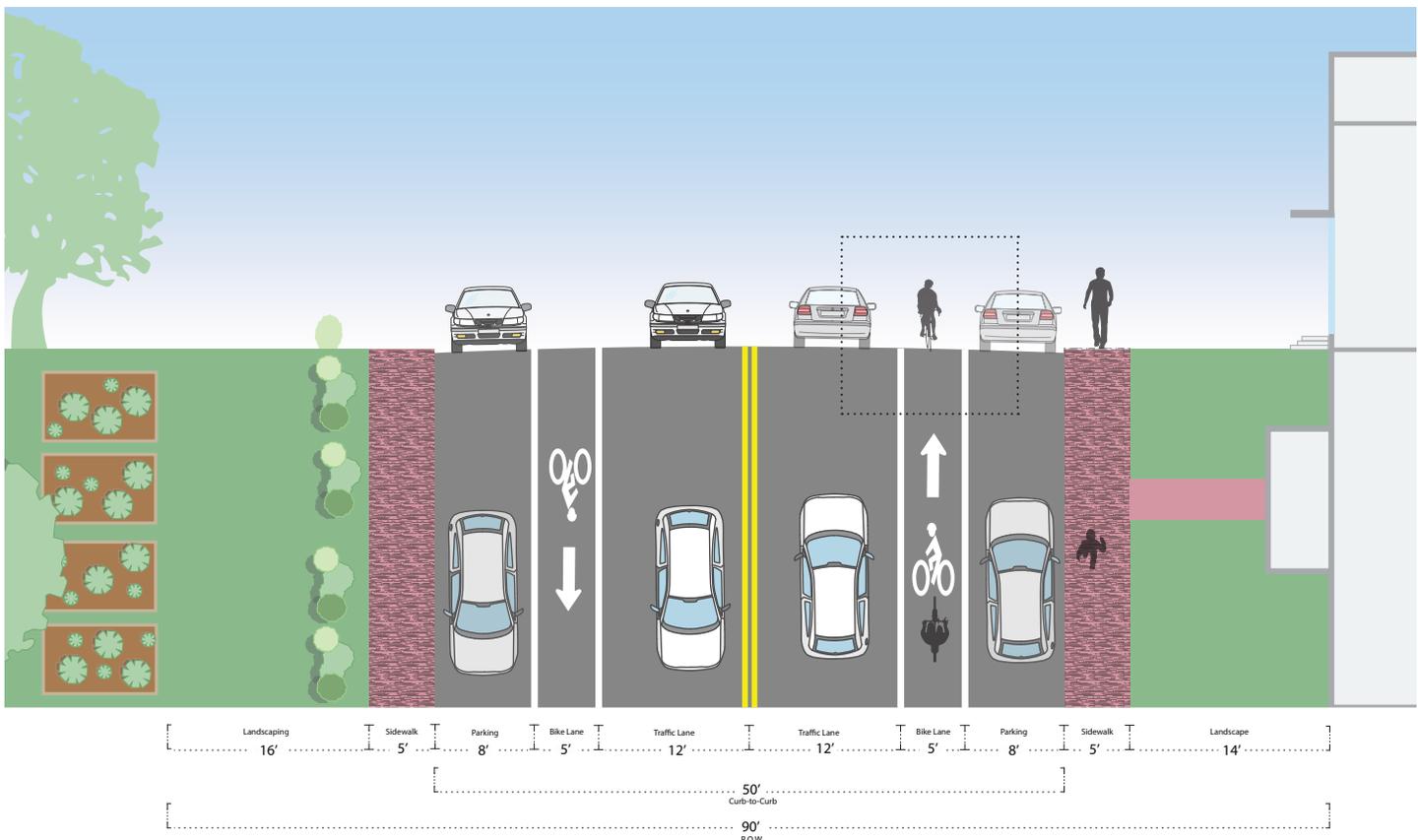


Refer to figure 3.14 of the street design guide for additional information.

DICKENS DRIVE / PARK VIEW ISLAND PARK

STREET DATA	
Public Right-of-Way Width	90'
Pavement Width	50' typical
Project Limits	Dickens Between 72nd and 77th Streets
Project Length	1,800' or 0.35 Miles
Posted Speed Limit	30 mph
Daily Volume	NA
Predominant Land Use	Compact Urban
Predominant Development Pattern	1 - 2 Residential Buildings
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	Park View island Park, Community Garden, Biscayne Elementary , North Shore Park
Impact on modeshare	low
Upcoming Public Works Project	Yes

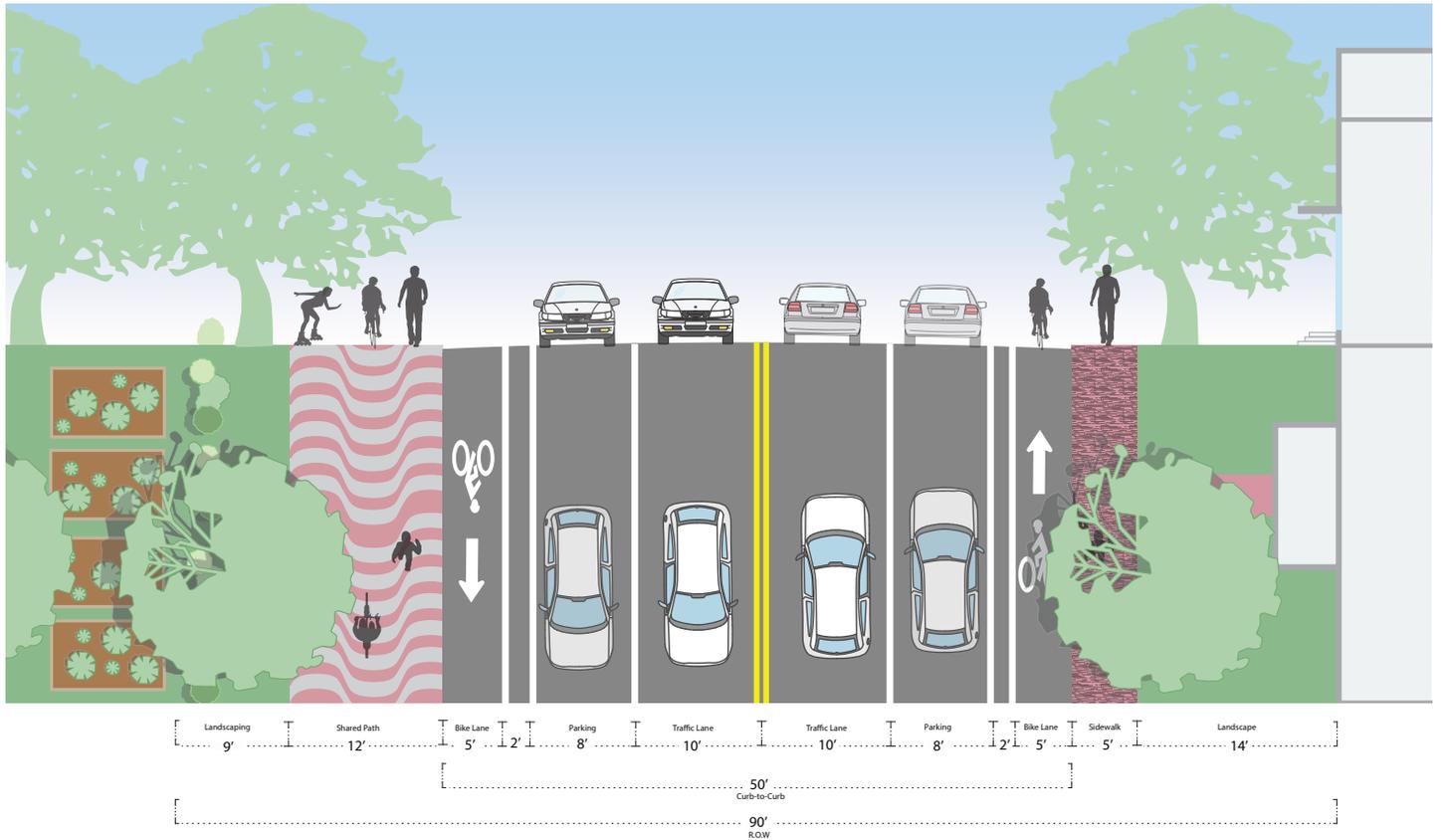
EXISTING CONDITIONS



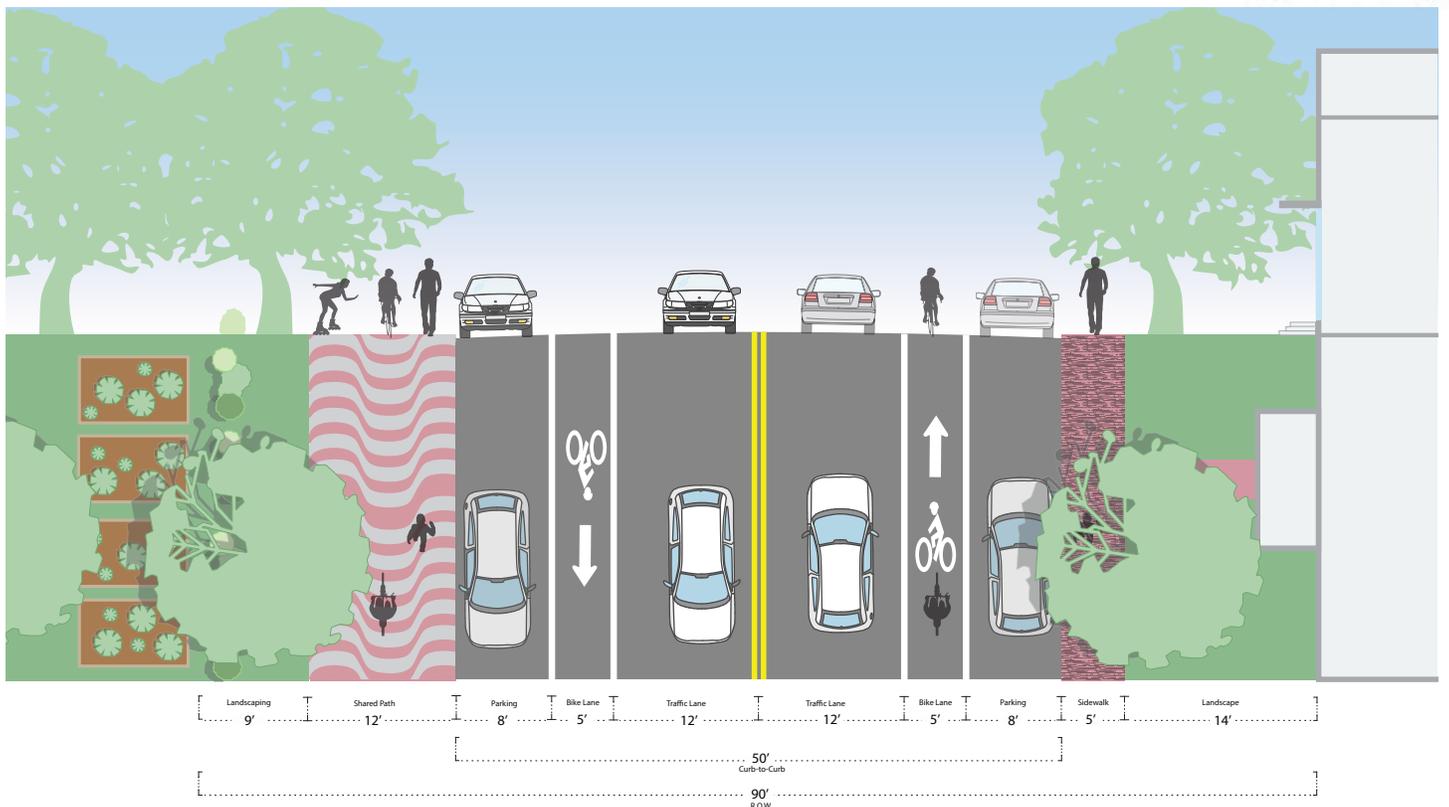
Refer to figure 3.18 of the street design guide for additional information.

DICKENS DRIVE / PARK VIEW ISLAND PARK

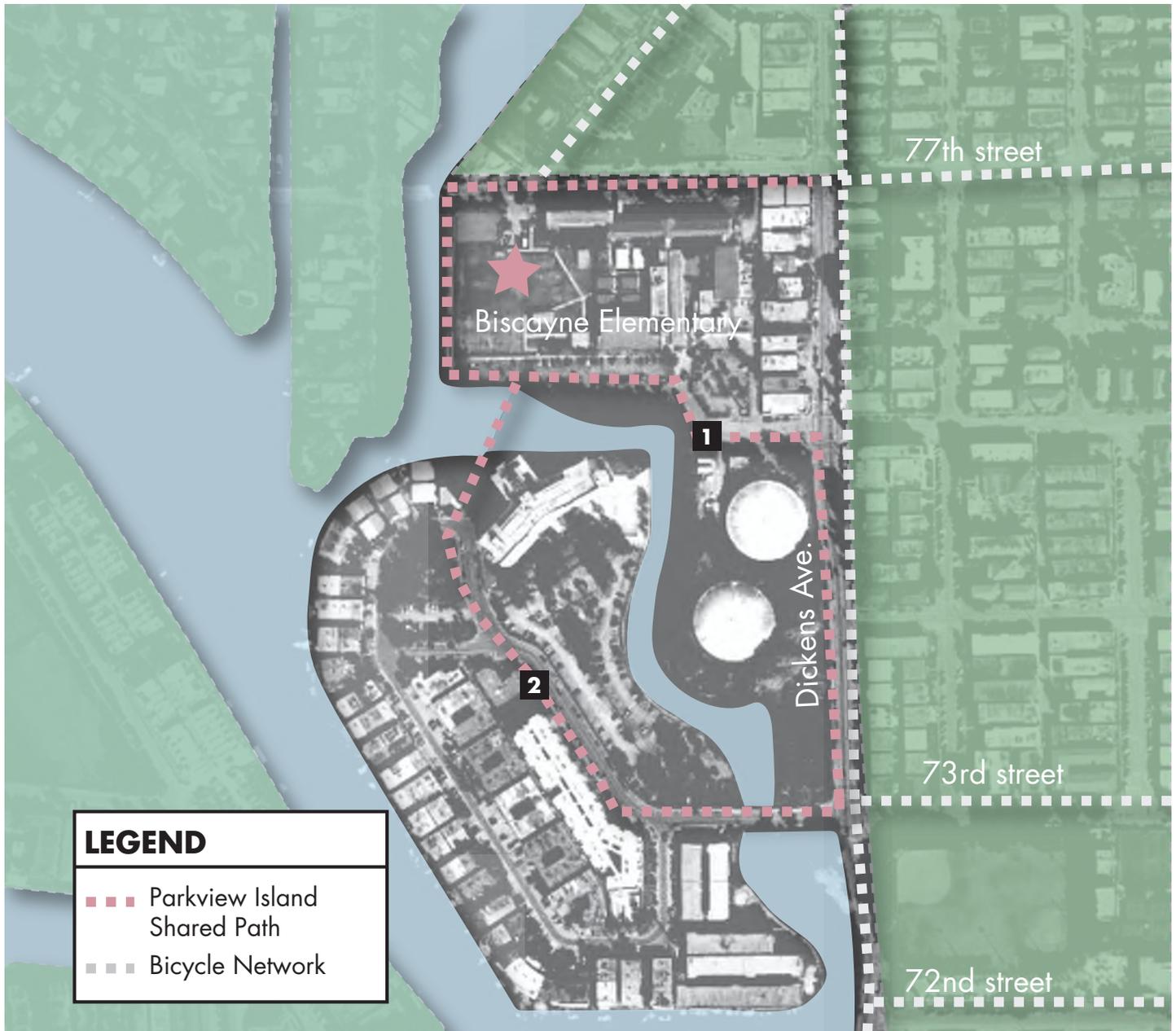
SHARED PATH AND PARKING PROTECTED BIKE LANE



SHARED PATH AND CONVENTIONAL BIKE LANE



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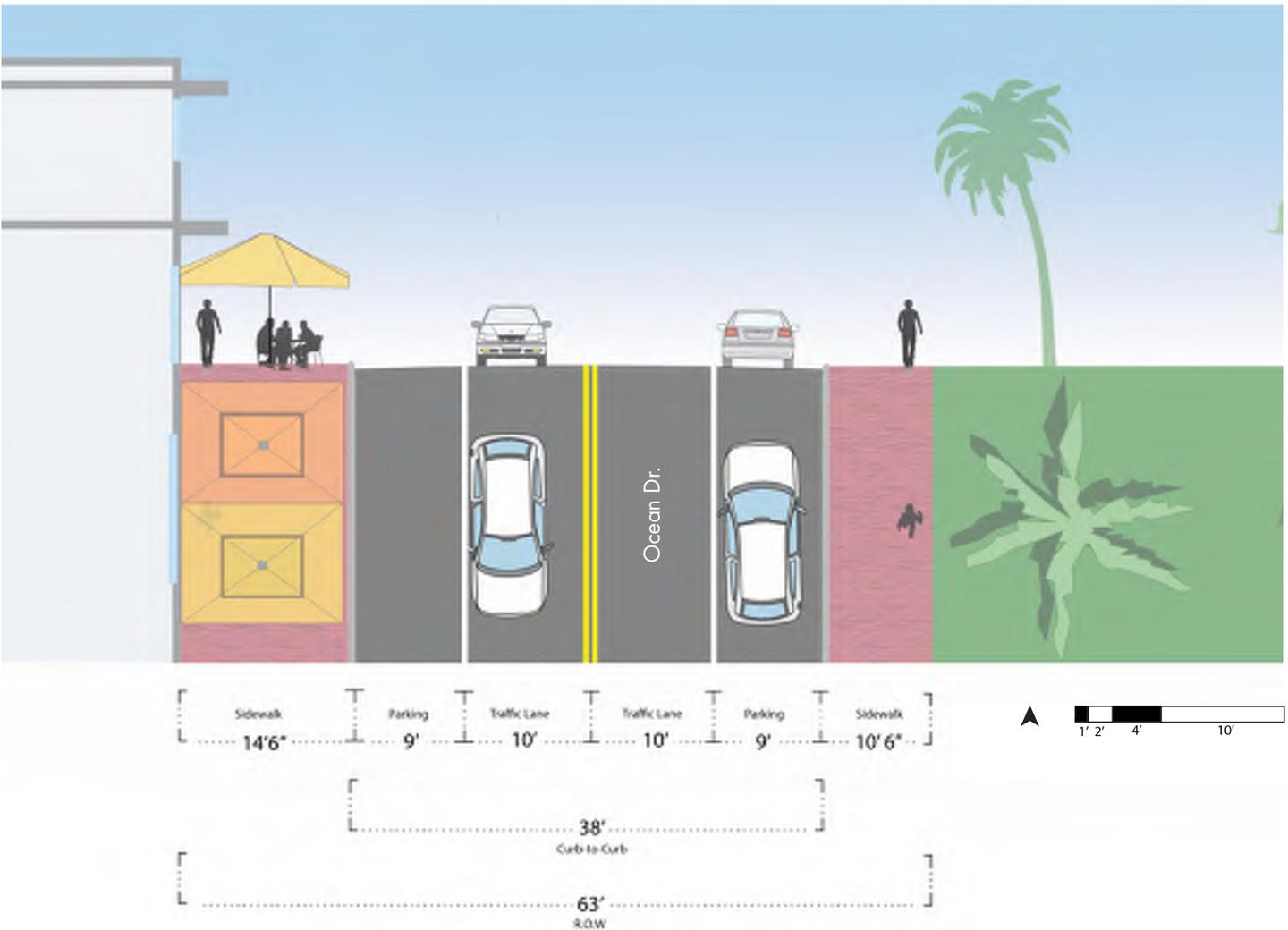
The first phase of the Park View Island shared path extends from Dickens Avenue at 73rd street to 77th street and loops behind Biscayne Elementary. This route provides safer access to the school and surrounding points of interest like the community garden located on Park View Island Park and North Shore Park.

The second phase will connect Park View Island via the bridges and along Wayne Avenue, thus increasing accessibility to Biscayne Elementary and encouraging bicycling to school.

OCEAN DRIVE

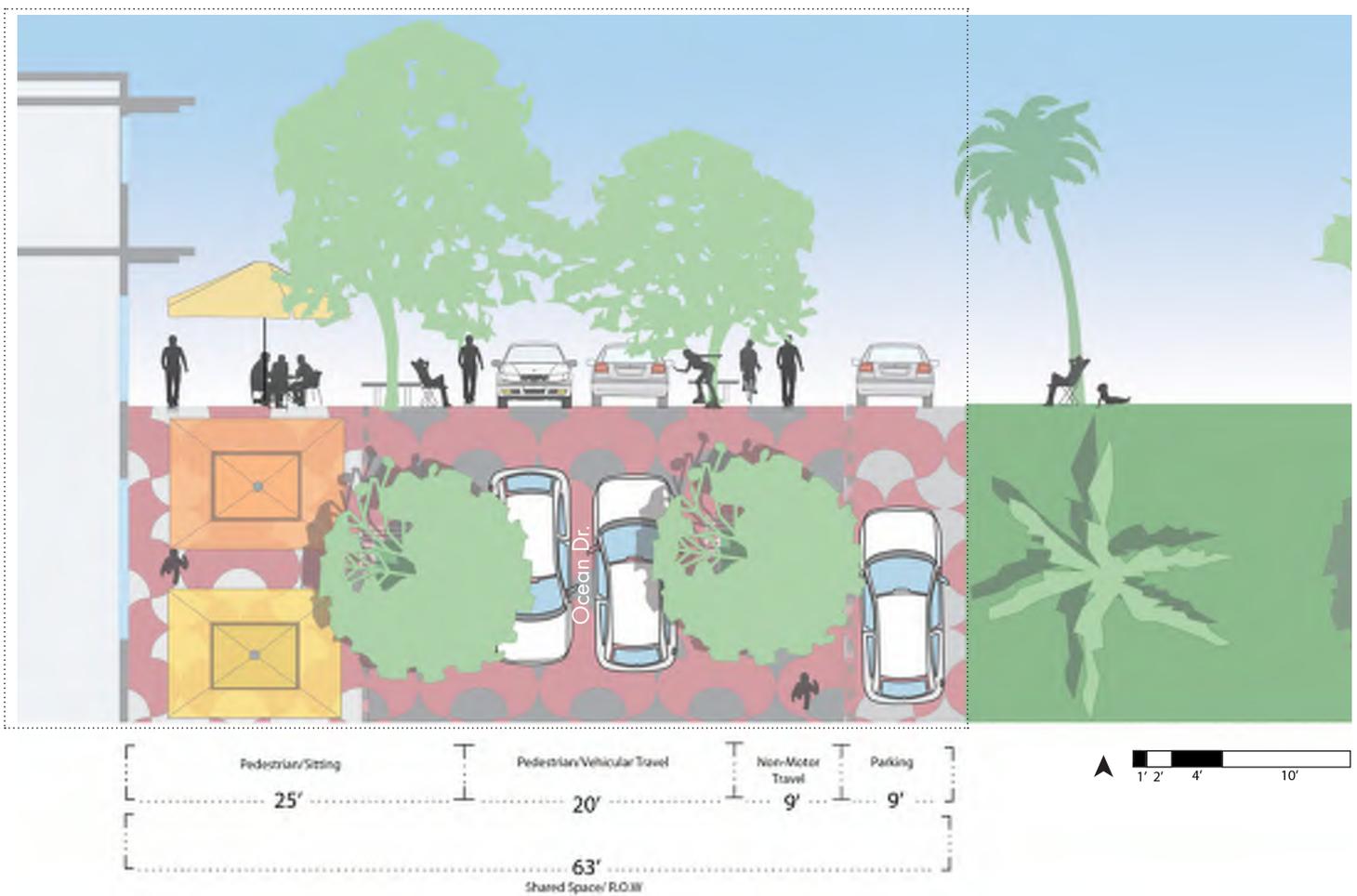
STREET DATA	
Public Right-of-Way Width	63'
Pavement Width	38' typical
Posted Speed Limit	25 mph
Project Limits	Between 15 Street and 5 Street
Project Length	Approximately 5,000', 0.94 Miles
Daily Volume	9,600 ADT
Predominant Land Use	3-12 story hotels with sidewalk cafe.
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	The beach , South Pointe Park
Impact on modeshare	low
Upcoming Public Works Project	Yes

EXISTING CONDITIONS



SHARED SPACE

Ocean Drive is the City's main public space. Recognizable all over the world, it is one of the reasons people come to visit South Florida. The City's main 'drag' has been discussed recently as the candidate for a street redesign. The proposal made here is for the entire ROW to be designed as a shared space. As such there would be minimal pavement markings, and total priority would be given over to pedestrians. There would be more space for sidewalk cafe's and the speed limit would have to drop to 20 MPH or less. In addition the design of the pavement would give the corridor a unique identity. In much the same way that Lincoln Road is one of the premier pedestrian corridors in the world, so too can Ocean Drive elevate its status to one of the great streets of the world with a shared space treatment.

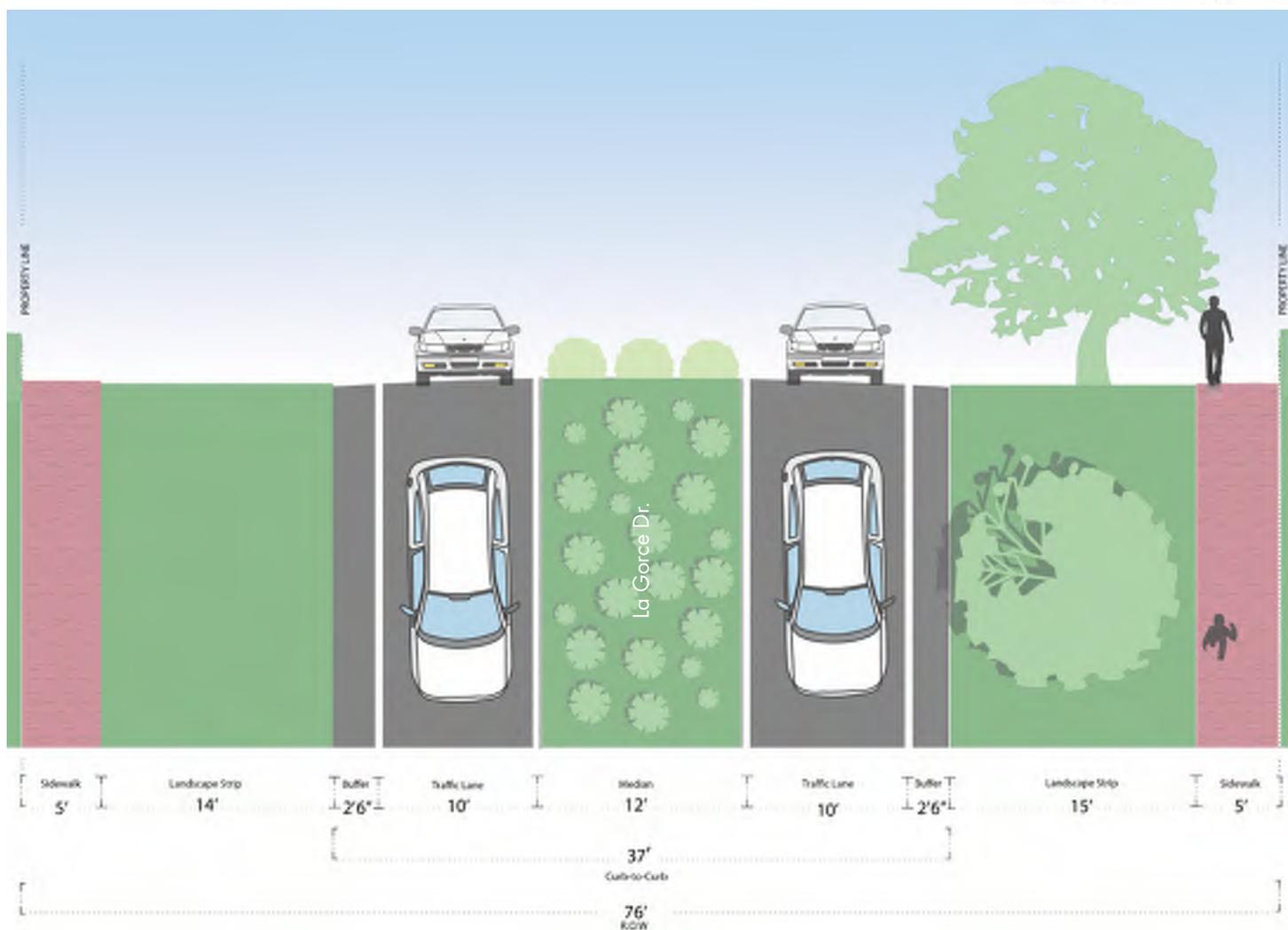
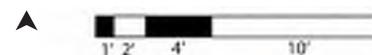


Refer to figure 4.10 of the street design guide for additional information.

PINE TREE DRIVE / LA GORCE DRIVE

STREET DATA	
Public Right-of-Way Width	76'
Pavement Width	37' typical
Posted Speed Limit	35 mph
Project Limits	Between 63 Street and 51 Street
Project Length	6,000' or 1.1 Miles
Daily Volume	4,800 ADT
Predominant Land Use	Single Family Residential
Predominant Development Pattern	Suburban Detached
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	This route serves as an important north - south connector in the greenway network.
Impact on modeshare	Moderate
Upcoming Public Works Project	Yes - Miami-Dade County

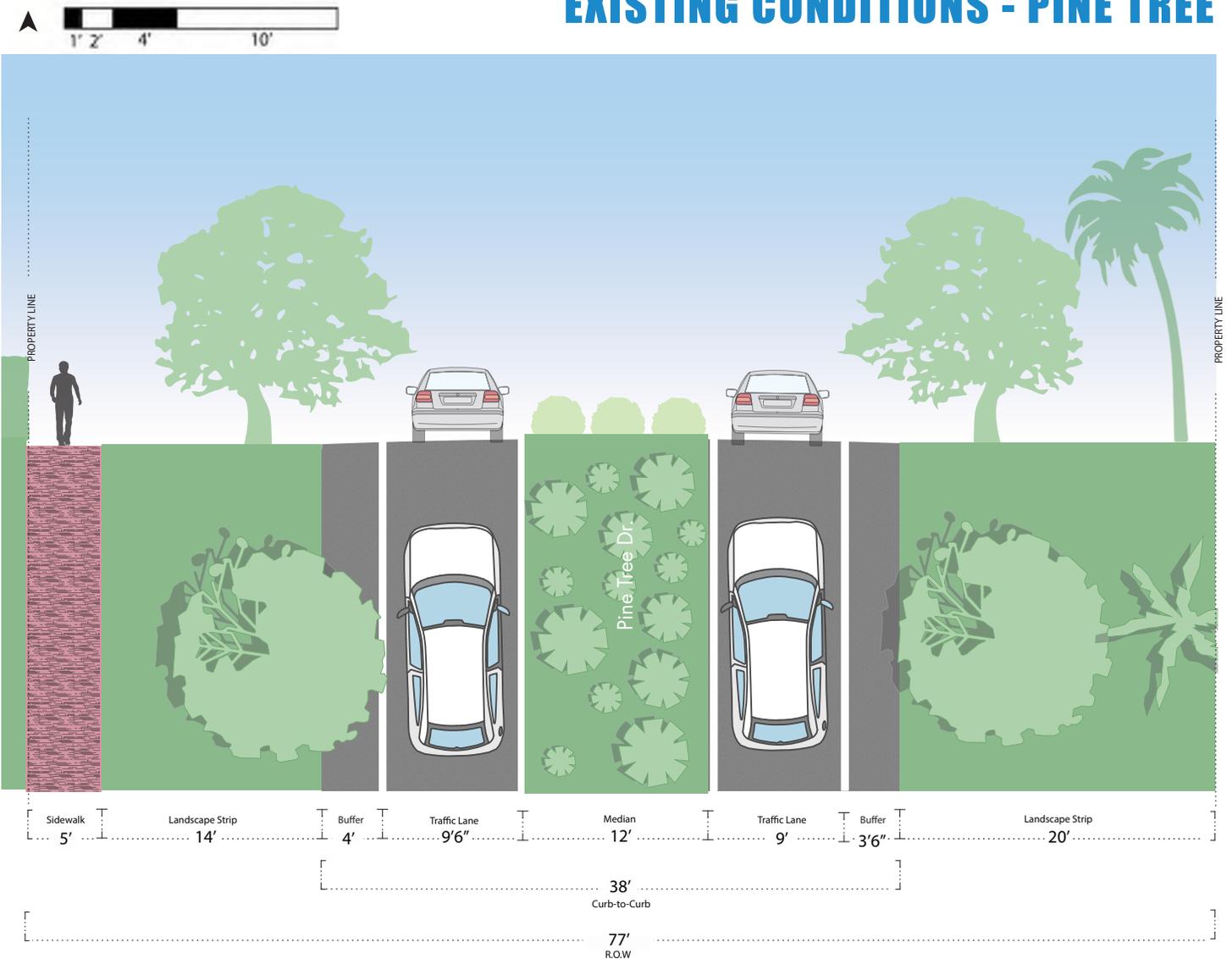
EXISTING CONDITIONS - LA GORCE



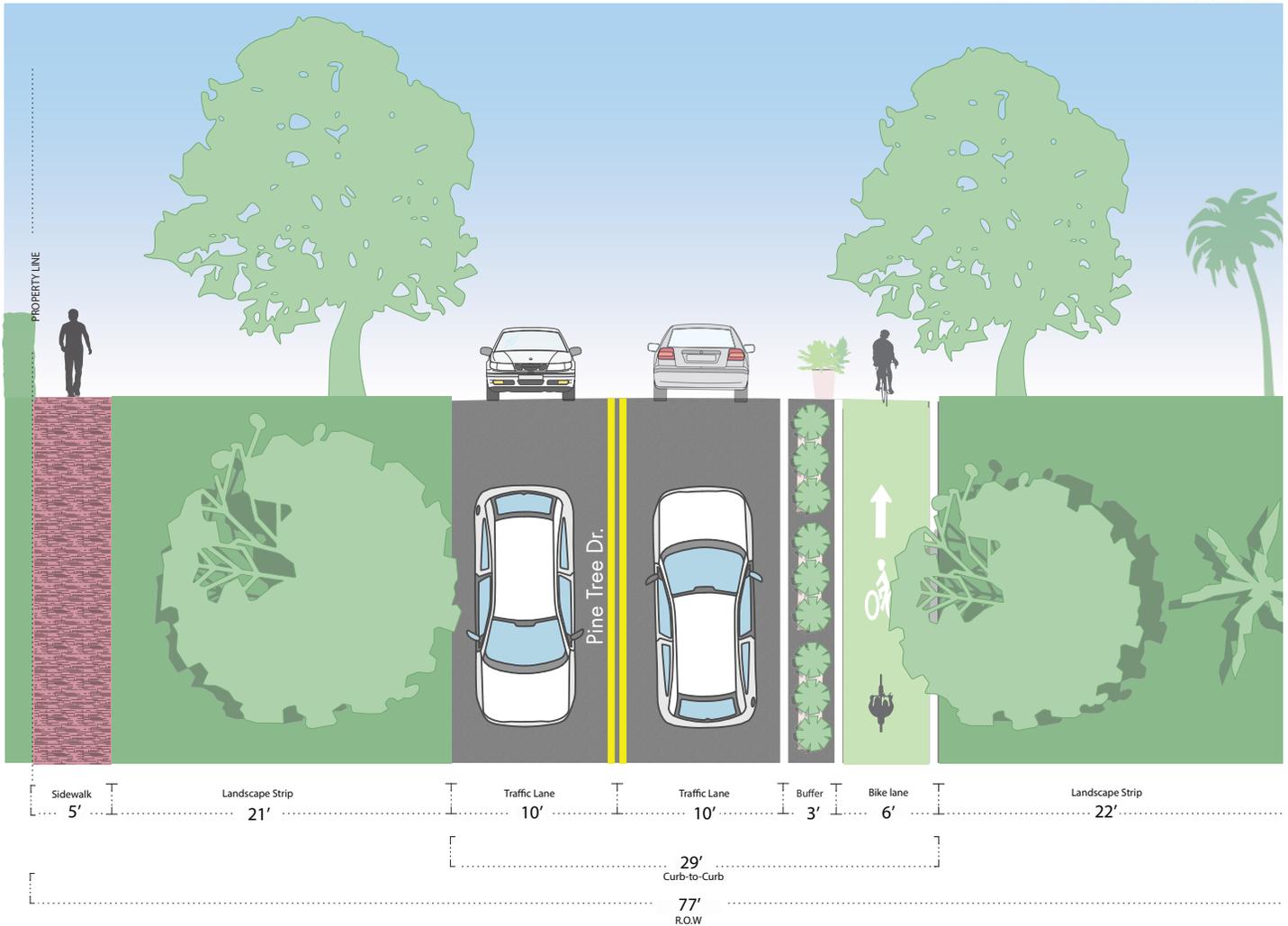
PINE TREE DRIVE / LA GORCE DRIVE

STREET DATA	
Public Right-of-Way Width	77'
Pavement Width	38' typical
Project Limits	Between 63 Street and 51 Street
Project Length	6,000' or 1.1 Miles
Posted Speed Limit	35 mph
Daily Volume	5,1200 ADT
Predominant Land Use	Single Family Residential
Predominant Development Pattern	Suburban Detached
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	This route serves as an important north - south connector in the greenway network.
Impact on modeshare	Moderate
Upcoming Public Works Project	Yes - Miami Dade County

EXISTING CONDITIONS - PINE TREE



PINE TREE / LA GORCE PROTECTED BIKE LANES



As the most direct route with connections south of 51 Street, a two-way set of protected bike lanes on Pine Tree would allow for the conversion of the street to two-way travel. If this option is chosen, no bicycle facility is needed on La Gorce, and the remaining space can be converted into green space. Any number of treatments found in the Street Design Guide can be used.

63RD STREET / PINE TREE / LA GORCE INTERSECTION

The intersection of 63 Street, Pine Tree and La Gorce is a pivotal moment in the Miami Beach Bicycle Network. It is one of only two places to go north / south. Traffic coming from Pine Tree merge with traffic on Alton to cross the bridge into North Beach. North Bay Road traffic also empty's out on to this corridor.



63RD STREET / PINE TREE / LA GORCE INTERSECTION



Refer to figure 3.32 of the street design guide for additional information.

63RD STREET / PINE TREE / LA GORCE INTERSECTION



Refer to figure 3.33 of the street design guide for additional information.

PINE TREE / LA GORCE COMBINATIONS

Pine Tree Drive and La Gorce have the potential to provide a critical north/south link between Nautilus to the south and North Shore to then north. The corridors are currently a one-way pair of two car travel lanes with an average daily volume of 7,200 between the two corridors. The low volume and ample roadway surface make for a flexible street design and allow for the inclusion of on-street bicycle facilities and a significant increase in greenway space.

Within the overall network, connections must be made at 51st Street and 63rd Street (see page x-y for intersection details). The corridors are the subject of an upcoming Miami - Dade county capital improvement project, which will allow for their redesign as part of a milling/repaving project. Before then, the Alton Road repaving project will happen requiring a short term and long term strategy.

Given the low traffic volumes, these corridors are prime candidates for a road diet and should be reduced to one lane in each direction, with on-street bicycle facilities and additional street trees and landscape strips. The pages that follow describe several variations in street design for the corridors.

PHASE 1: SHORT TERM - ONE WAY PAIR CAR LANE + BIKE LANE

One-way pair of bike lanes. Southbound on La Gorce, northbound on Pine Tree.

- Replace one car lane in either direction with a bike lane.
- One-way pair of bike lanes. Southbound on La Gorce, northbound on Pine Tree.
- Additional landscaping (moveable or permanent) dividing car lane from bike lane.
- Additional space added to landscape strip (4' -5')
- Easy and immediate retrofit from existing condition

PHASE 2: SHORT TERM - CONVERT BOTH TO TWO WAY CAR TRAVEL, WITH ONE WAY PROTECTED BIKE LANES

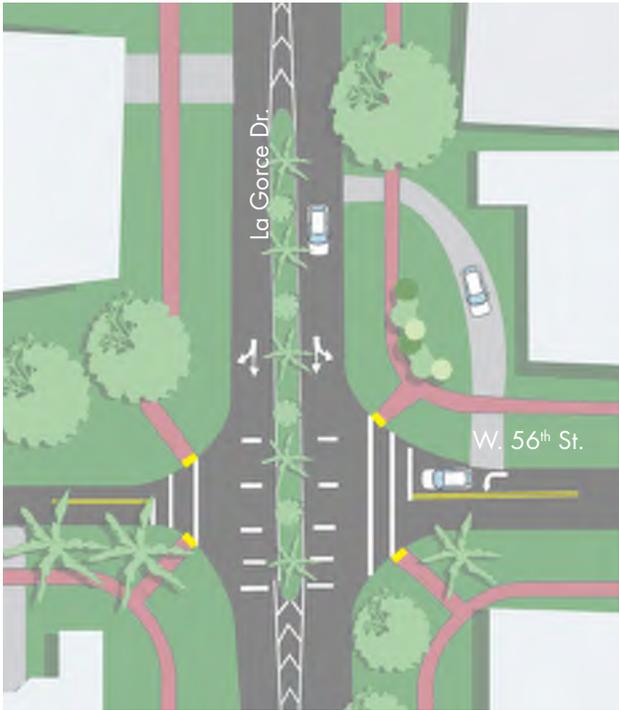
- One-way pair of bike lanes. Southbound on La Gorce, northbound on Pine Tree.
- Two-way car travel on both streets - additional capacity to accommodate for reconstruction of Alton Road, between 51 and 63 Streets.
- Removal of medians at intersections.
- Preliminary Approval by Miami - Dade County
- Increase in car capacity

PHASE 3: LONG TERM - ONE WAY PAIR CAR LANE + BIKE LANE

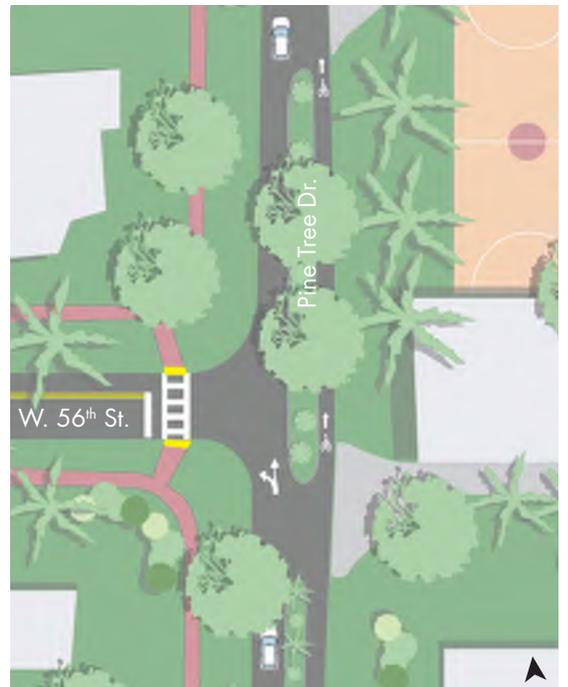
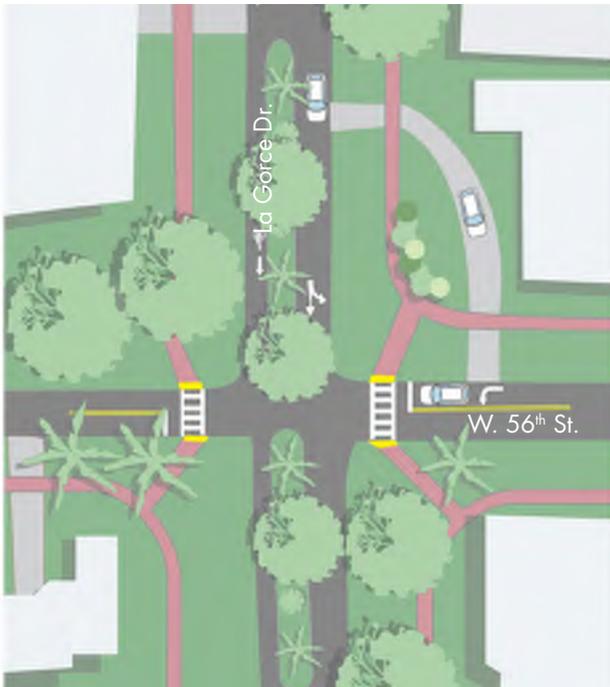
- Revert back to one lane of car travel in each direction.
- One-way pair of bike lanes remains. Southbound on La Gorce, northbound on Pine Tree.
- Addition of medians and landscape space.
- Additional space added to landscape strip

PINE TREE / LA GORCE COMBINATIONS

EXISTING CONDITIONS



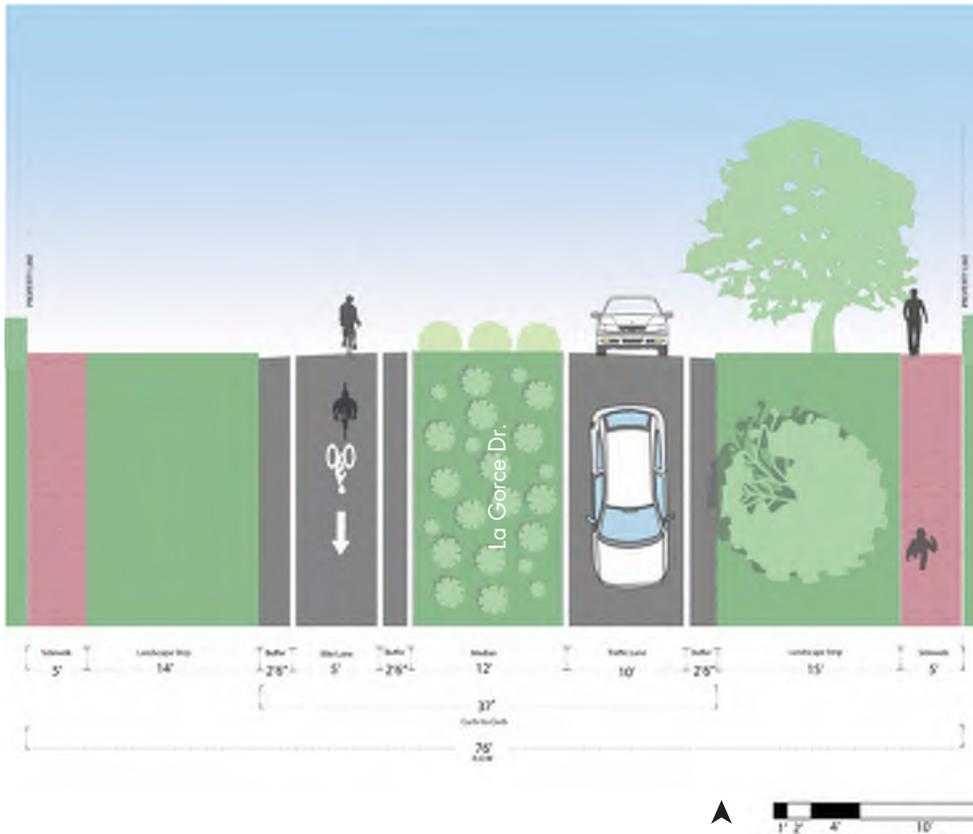
FUTURE CONDITIONS



The primary recommendation for these corridors is the removal of one lane of traffic in each direction (from both Pine Tree and La Gorce) and the implementation of buffered and physically protected bike lanes. The data shows that for both Pine Tree and La Gorce there are just under 9,900 average cars per day, well under the 25,000 ADT threshold used to evaluate four lane roads for reduction in capacity. At the time when both Pine Tree and La Gorce are due for reconstruction, their lane widths should be significantly reduced, and more space given over to the landscape strip, or in the case of this design, to a wide, tree-planted median.

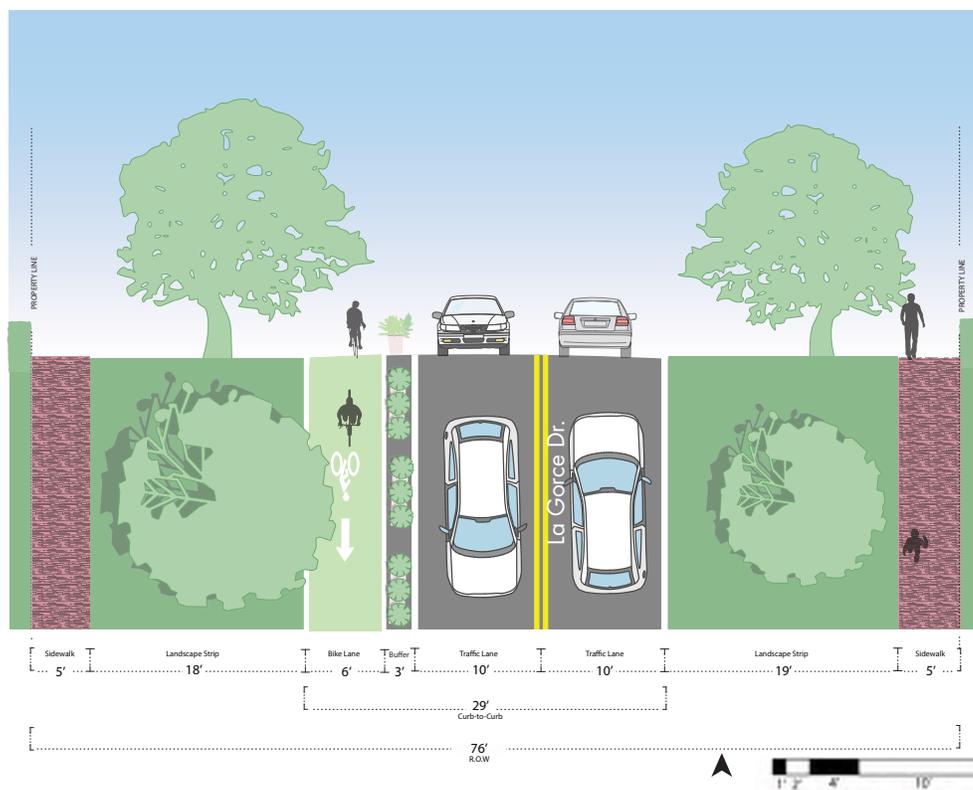
PINE TREE / LA GORCE COMBINATIONS

PHASE 1: ONE-WAY PROTECTED BIKE LANE



The most immediate thing that can be done to improve connectivity on these two corridors is the removal of one lane of traffic in each direction (from both Pine Tree and La Gorce) and the implementation of buffered and protected bike lanes. Phase 1 results in a net decrease in automobile network capacity, and an increase in greenspace.

PHASE 2: ONE-WAY PROTECTED BIKE LANE



As with the one-way proposal on Pine Tree, this proposal assumes the creation of a one-way protected bike lane that forms a one-way pair with Pine Tree, which would have a similar configuration. Here, rather than remove car capacity, travel lanes are made two-way. Phase 2 results in a net increase in automobile network capacity.

PINE TREE / LA GORGE COMBINATIONS

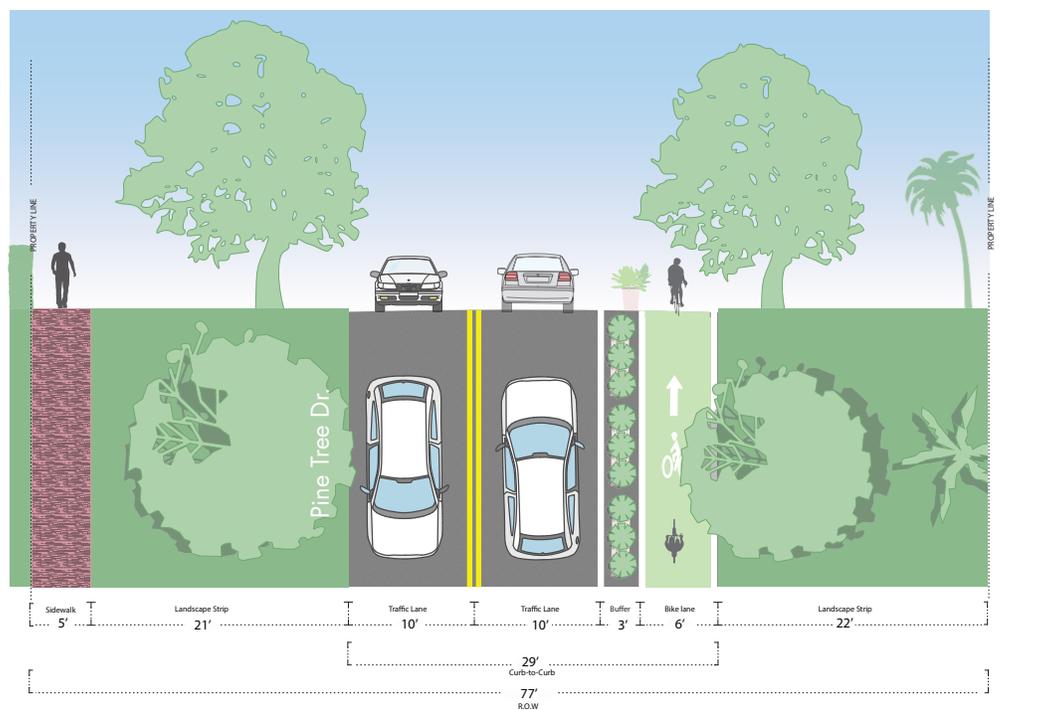
PHASE 1: ONE-WAY PROTECTED BIKE LANE

Without very much investment, a buffered and protected bike lanes can be implemented within the current width of Pine Tree. Over the long term additional medians and street trees should be added to create a well shaded greenway.



PHASE 2: ONE-WAY PROTECTED BIKE LANE

The existing 36' pavement width allows for great flexibility in redesigning the street. This proposal assumes the creation of a one-way protected bike lane that forms a one-way pair with Pine Tree, which would have a similar configuration.

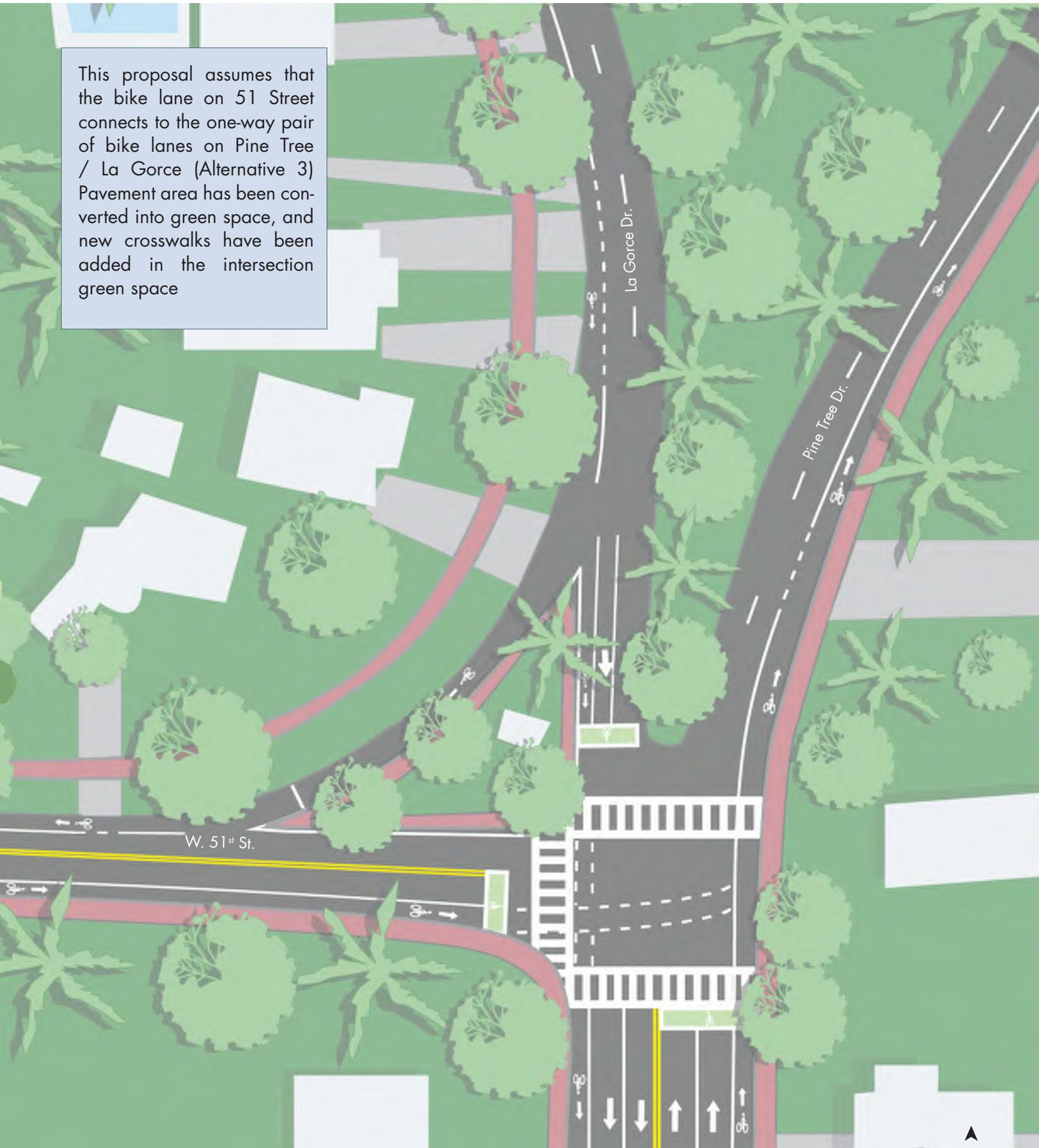


51ST STREET / PINE TREE / LA GORCE INTERSECTION - EXISTING



51ST STREET / PINE TREE / LA GORCE INTERSECTION PROPOSED

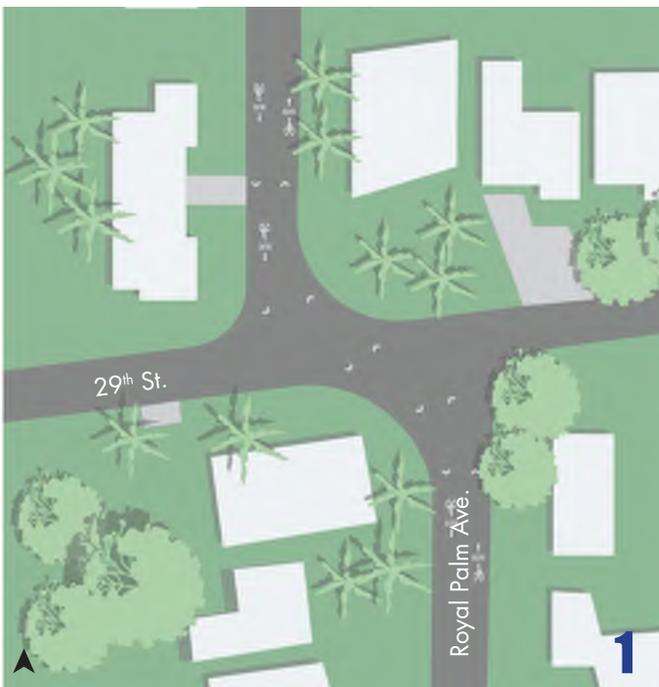
This proposal assumes that the bike lane on 51 Street connects to the one-way pair of bike lanes on Pine Tree / La Gorce (Alternative 3) Pavement area has been converted into green space, and new crosswalks have been added in the intersection green space



ROYAL PALM AVENUE

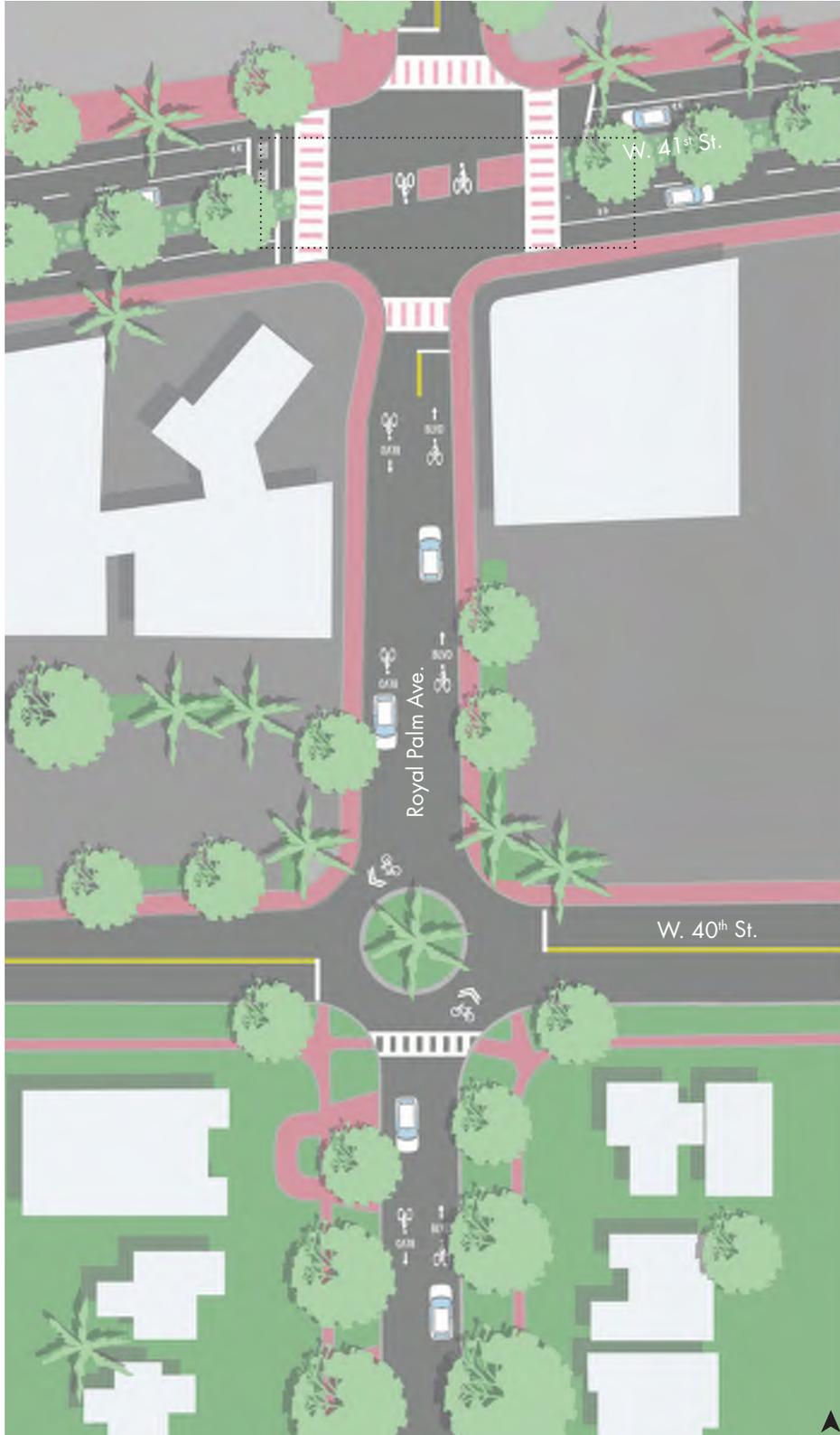
STREET DATA	
Public Right-of-Way Width	73'
Pavement Width	22' typical
Posted Speed Limit	25 mph
Project Limits	Between 20 Street and Sheridan
Project Length	Approximately 5,500', 1.0 Miles
Daily Volume	300 ADT
Predominant Land Use	Single Family Residential
Predominant Development Pattern	Suburban Detached
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	This is a neighborhood street in the heart of Bayshore.
Impact on modeshare	low
Upcoming Public Works Project	Yes - CIP

BICYCLE BOULEVARD



Royal Palm Avenue is a slow, low volume street. It provides connectivity to a bike lane north of 41 Street, and to the high school. It also connects to 41 Street, a major commercial corridor. Along the residential portion of the corridor the pavement width is so low that it already provides a substantial traffic calming effect. Additional efforts to make this corridor an official bike boulevard include traffic circles at cross streets like 29 street (above), bicycle boulevard pavement markings and branded signage consistent with the Street Design Guide.

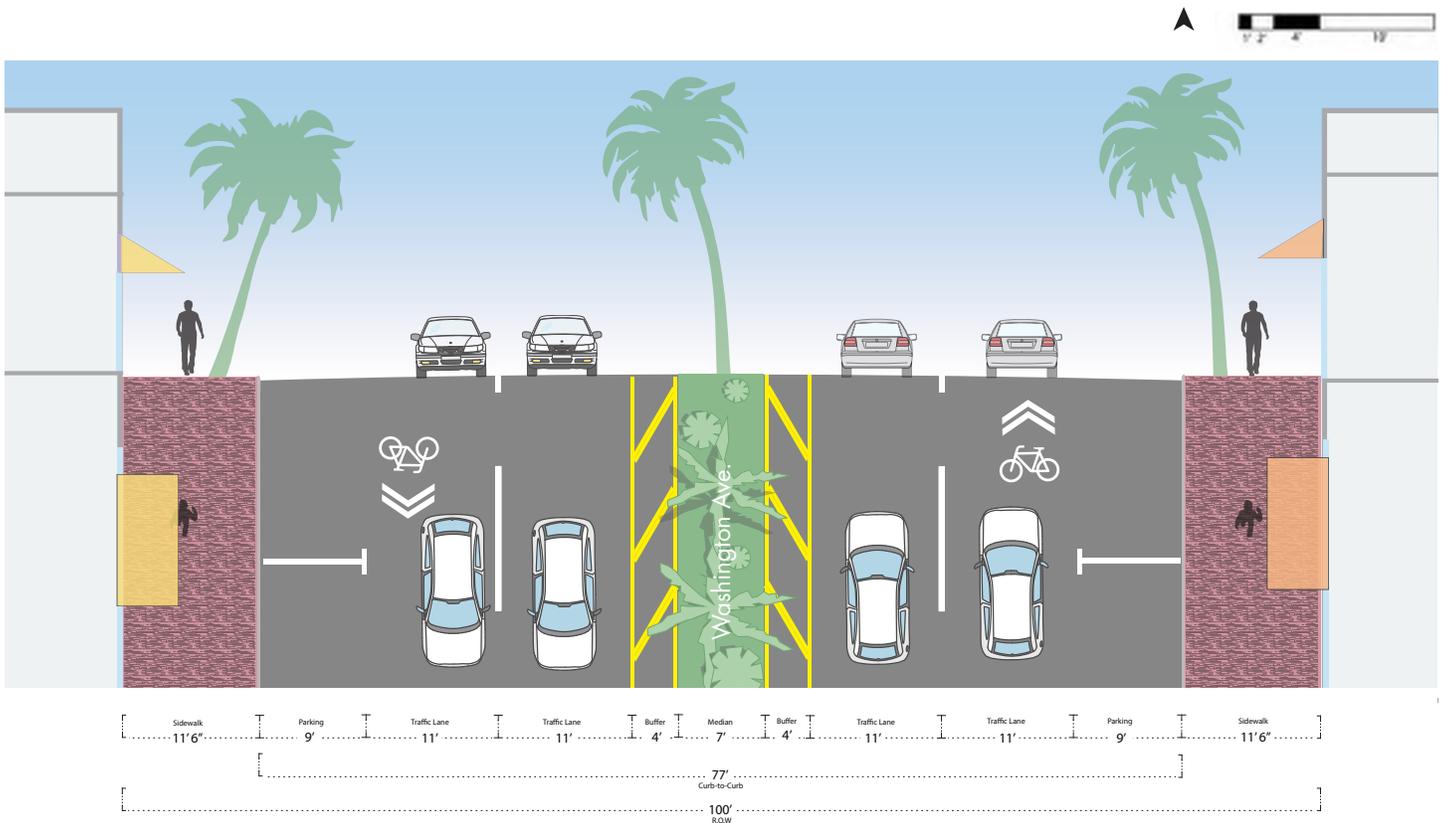
If designed as a bicycle boulevard, left turn lanes from 41 Street would be eliminated and a center median with bicycle and pedestrian refuge.



Refer to figure 3.40 of the street design guide for additional information.

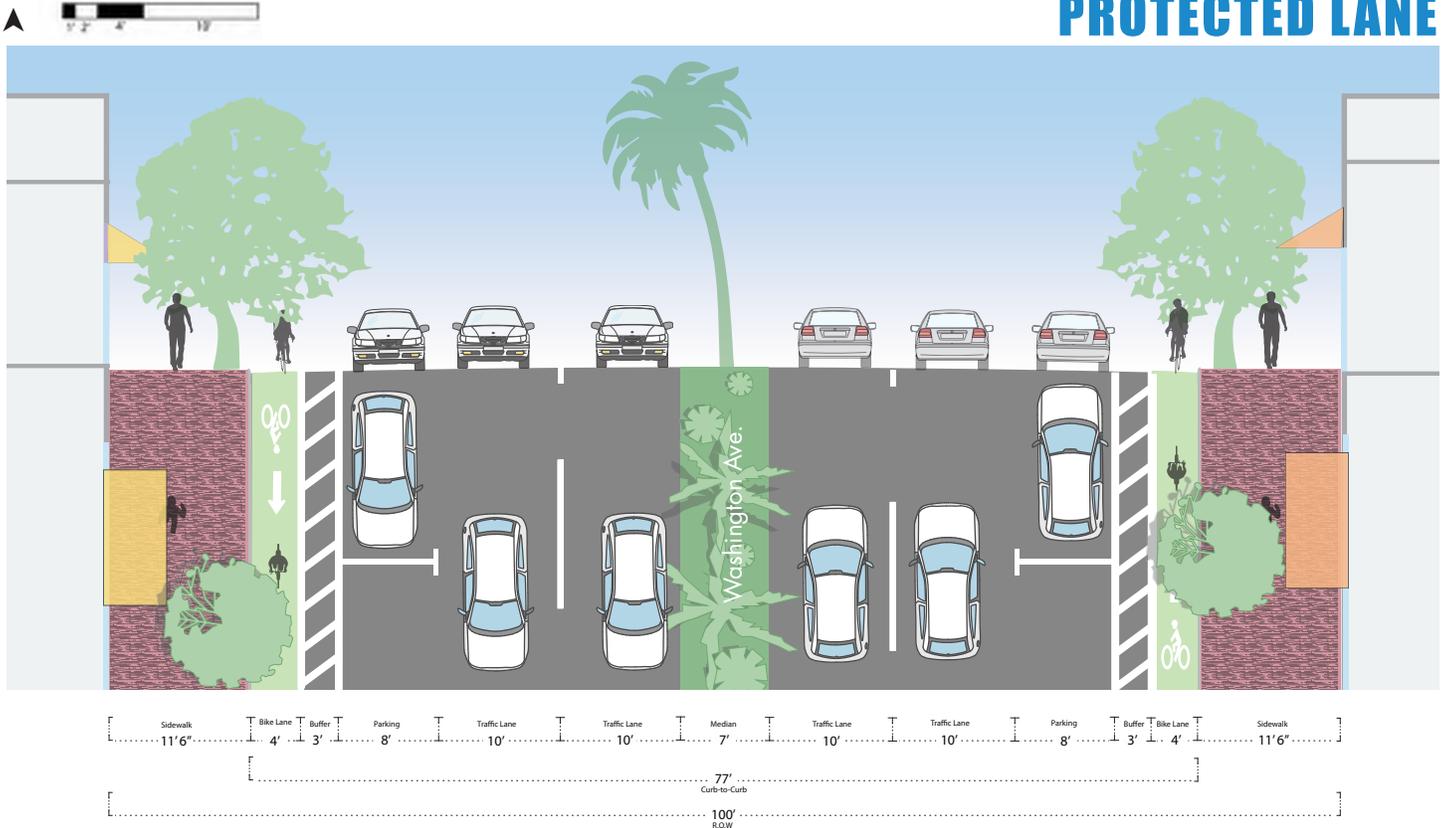
WASHINGTON AVENUE

STREET DATA	
Public Right-of-Way Width	95'
Pavement Width	74' typical
Posted Speed Limit	25 mph
Daily Volume	32,550 ADT
Project Limits	Between 15 Street and Dade Boulevard
Project Length	Approximately 9,000', 1.7 Miles
Predominant Land Use	mixed use commercial
Predominant Development Pattern	small scale main street, larger hotels
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	Miami Beach, commercial, civic uses
Impact on modeshare	high
Upcoming Public Works Project	Yes

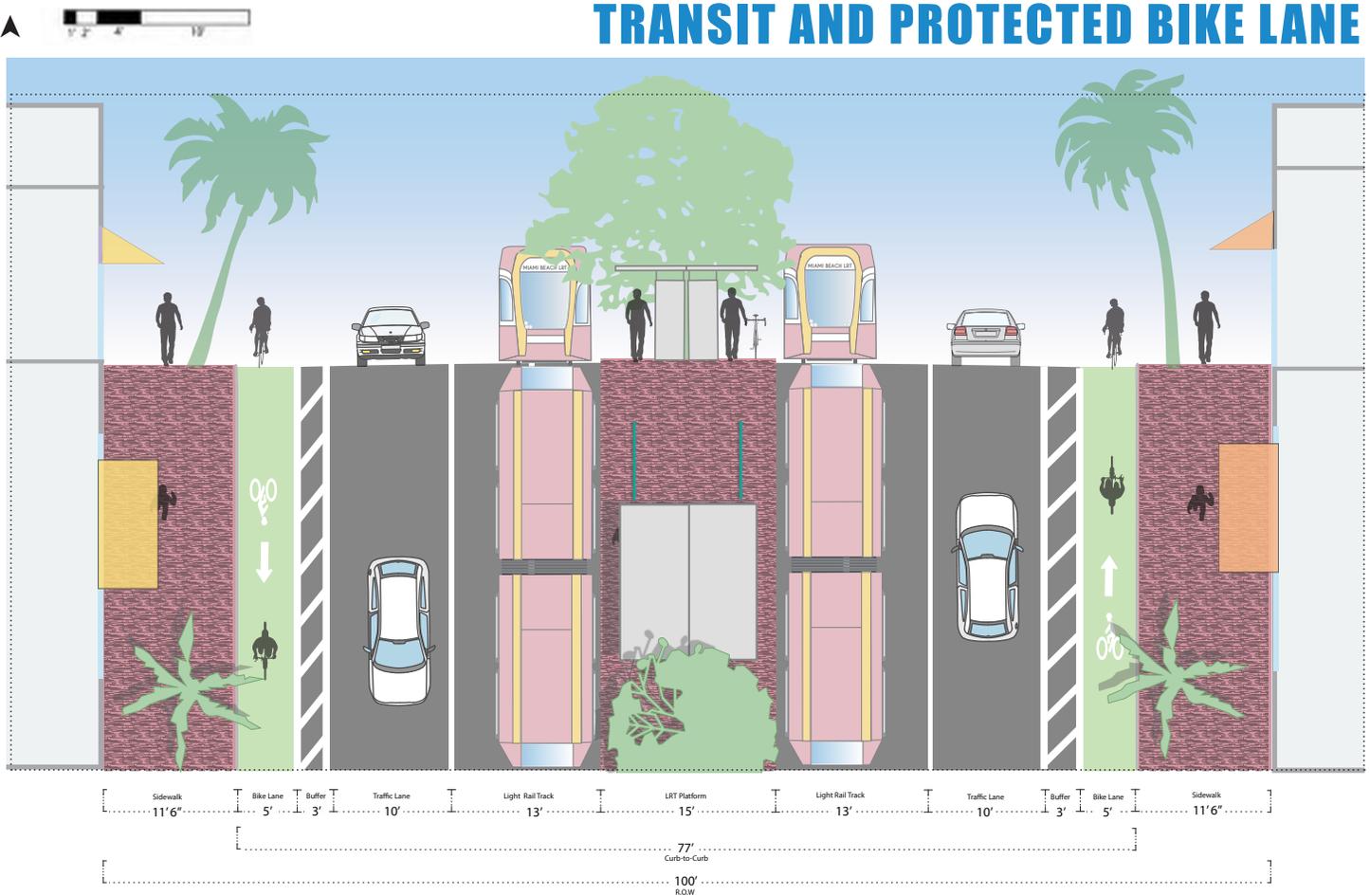


Washington Avenue is another of the iconic Miami Beach Streets. It is also a major transit corridor and a major contributor to bicycle and pedestrian crashes. The proposals on the following page show the short term addition of protected bike lanes by restriping the street, and the long term addition of premium transit down the middle of the street.

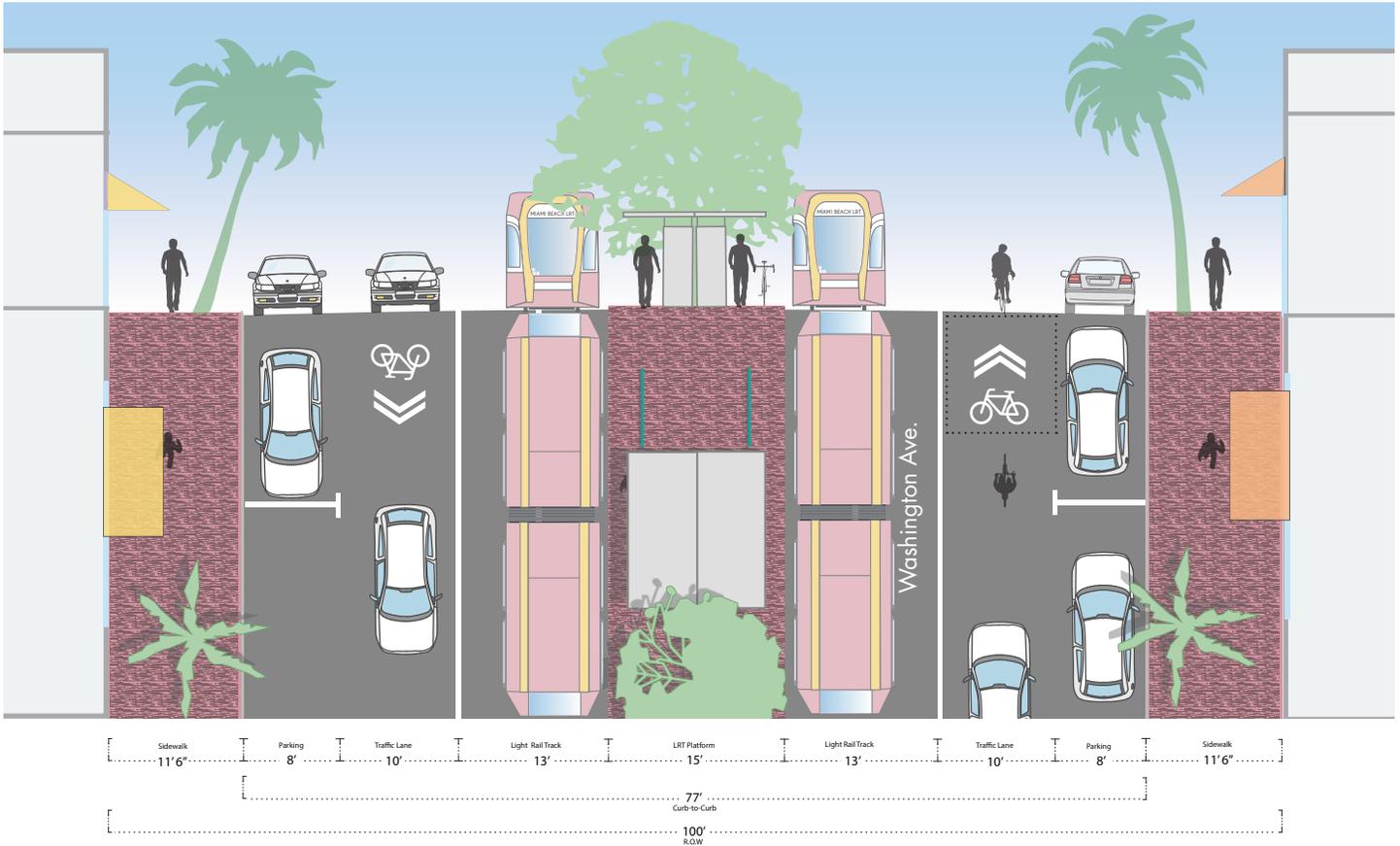
PROTECTED LANE



TRANSIT AND PROTECTED BIKE LANE

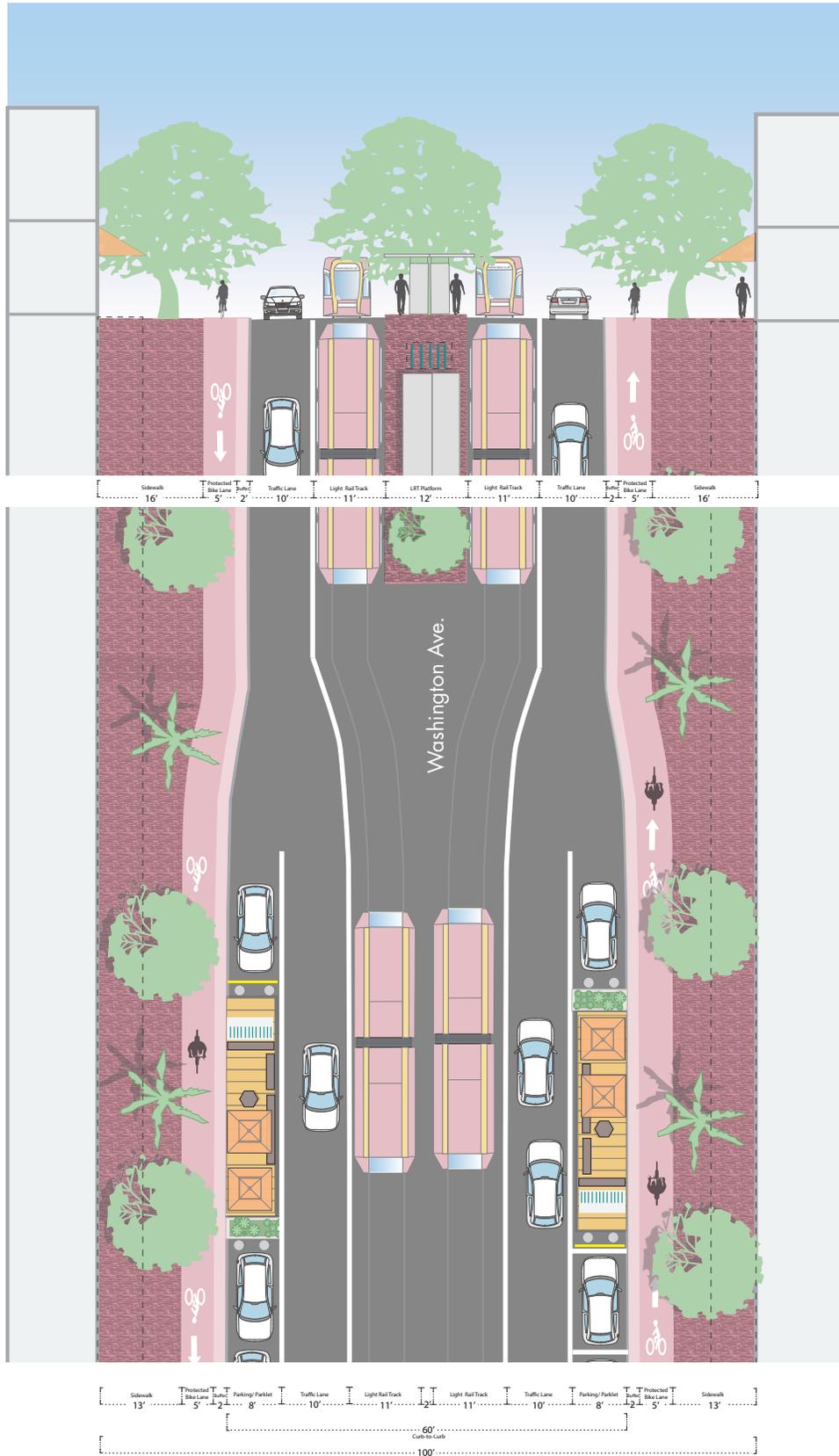
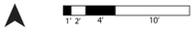


Refer to figure 4.3 of the street design guide for additional information.



Refer to figure 4.3 of the street design guide for additional information.

TRANSIT, PARKLETS AND PROTECTED BIKE LANES

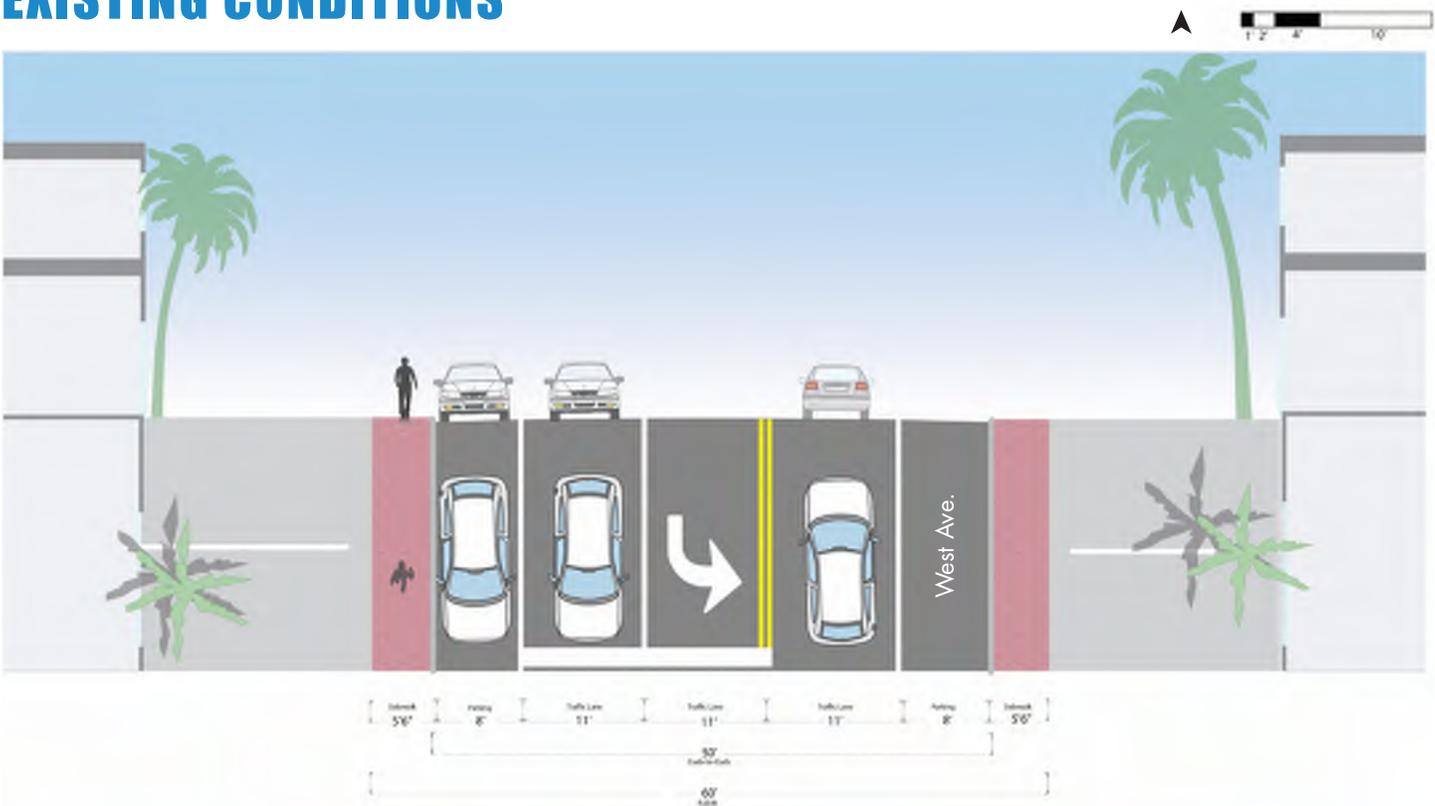


Refer to figure 4.3 , 5.4 and 5.5 of the street design guide for additional information.

WEST AVENUE

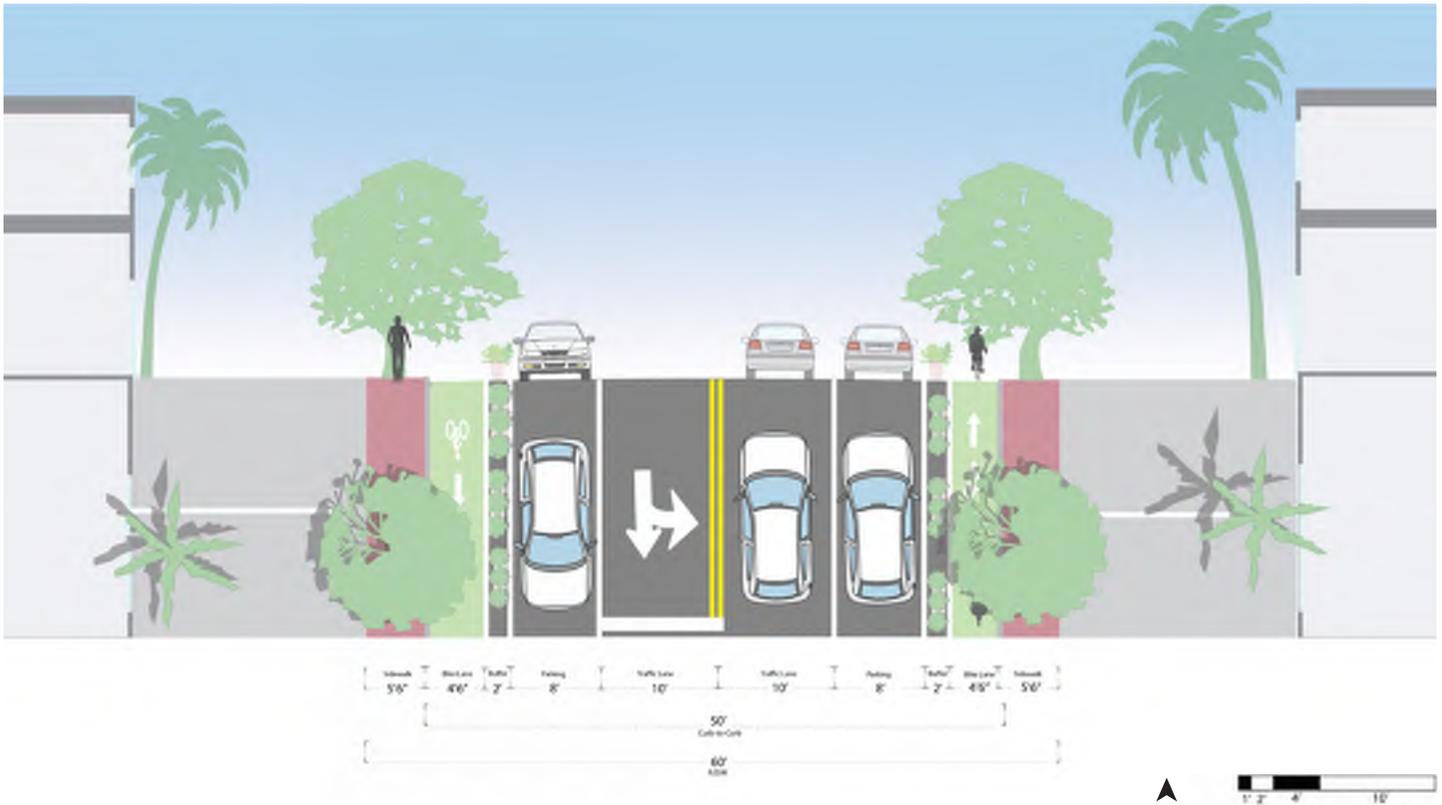
STREET DATA	
Public Right-of-Way Width	60'
Pavement Width	50' typical
Posted Speed Limit	25 mph
Daily Volume	12,000 ADT
Project Limits	Between 20 Street and 5 Street
Project Length	Approximately 7,600', 1.43 Miles
Predominant Land Use	Single Family Residential
Predominant Development Pattern	Suburban Detached
Bicycle / Pedestrian trip generator(s) (parks, paths, bike shop, etc.)	Lincoln Road, Miami Beach Convention Center
Impact on modeshare	high
Upcoming Public Works Project	Yes - CIP

EXISTING CONDITIONS



West Avenue is one of the most popular bicycle routes in Miami Beach. Making it as safe as possible, and attracting even more people to ride on this street is one of the best opportunities the city has to encourage a robust bicycle network.

WEST AVENUE PROTECTED BIKE LANE (A)



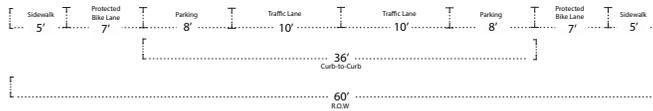
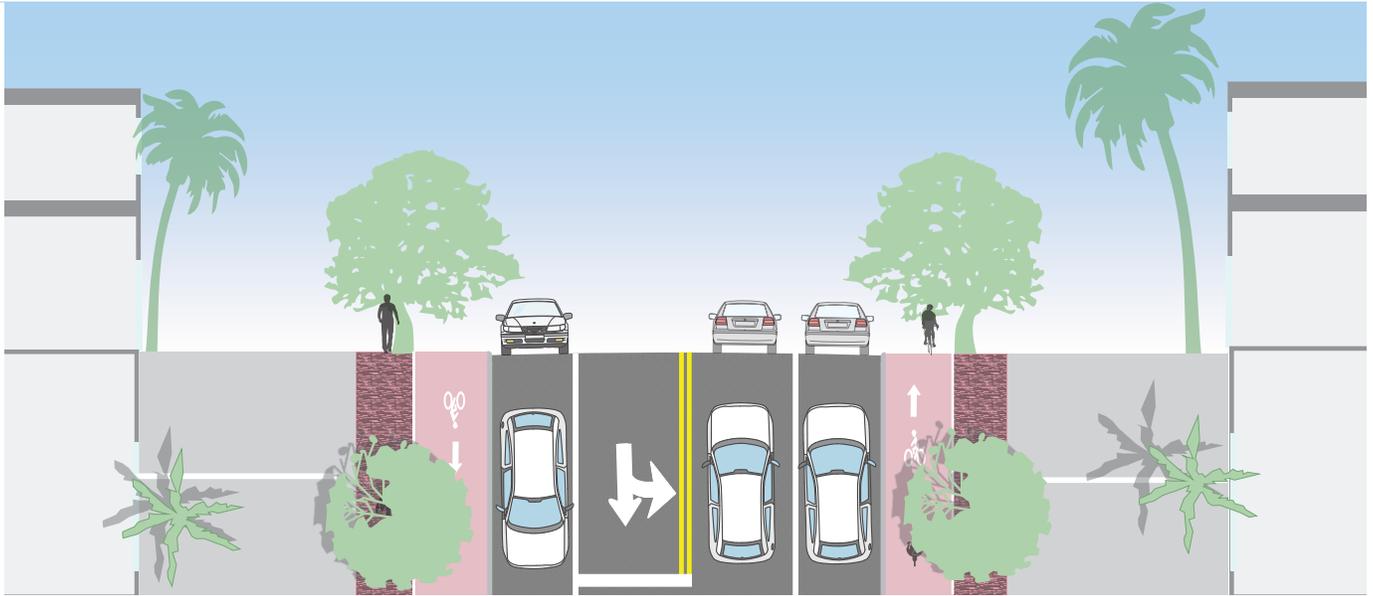
Alternative A, above, shows a parking protected bike lane with green pavement markings. As designed, these new lanes will stretch from just north of 6th Street to Dade Boulevard (inclusive of a new bridge spanning the Collins Canal). In order to fully connect to 5th Street the plan may look to include sharrows between 5th street and the start/end of the bicycle lanes. Additional east-west connections will also be made between the West Avenue neighborhood and Flamingo Park.

Below, Alternative B, shows a sidewalk level protected bike lane, also with pavement treatment to differentiate it from the sidewalk, and Alternative C is a conventional bike lane. In each scenario. The travel lanes are narrowed, and additional street trees added to the corridor. Existing parking supply is preserved.

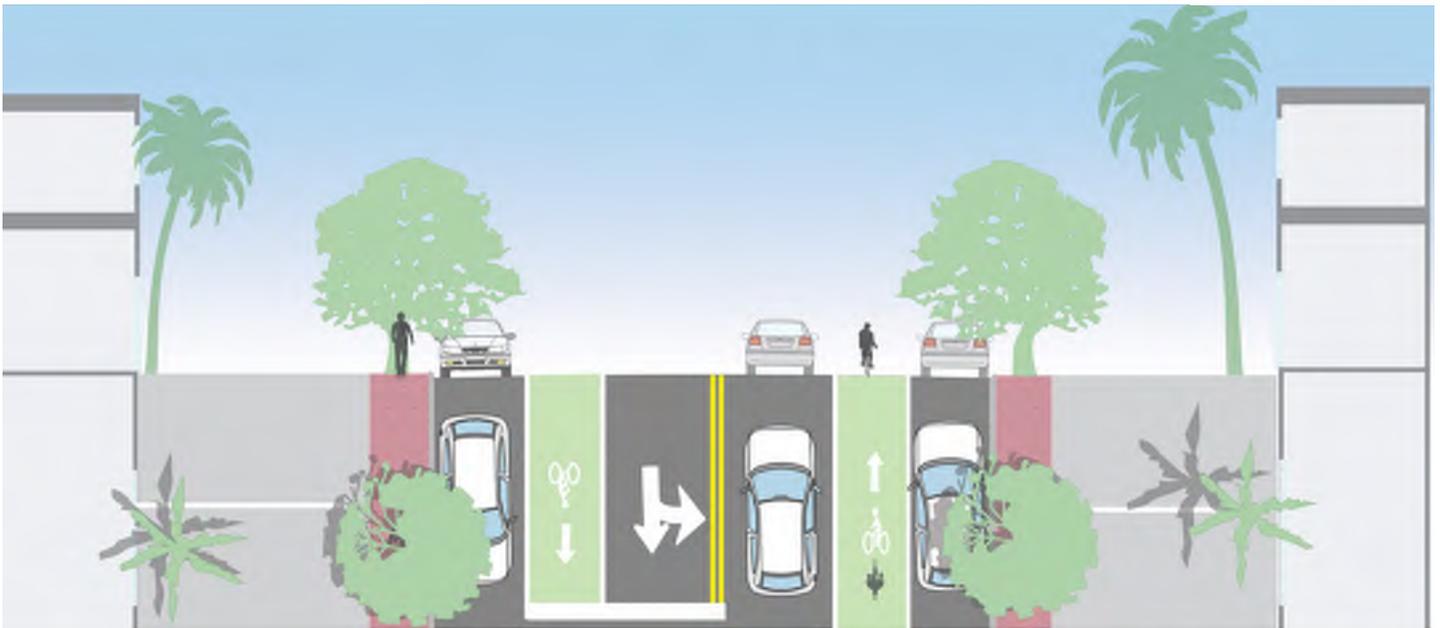
One point of discussion with County staff revealed that the center turn lane might be removable. In such a case, there are additional opportunities for additional street treatments.

WEST AVENUE

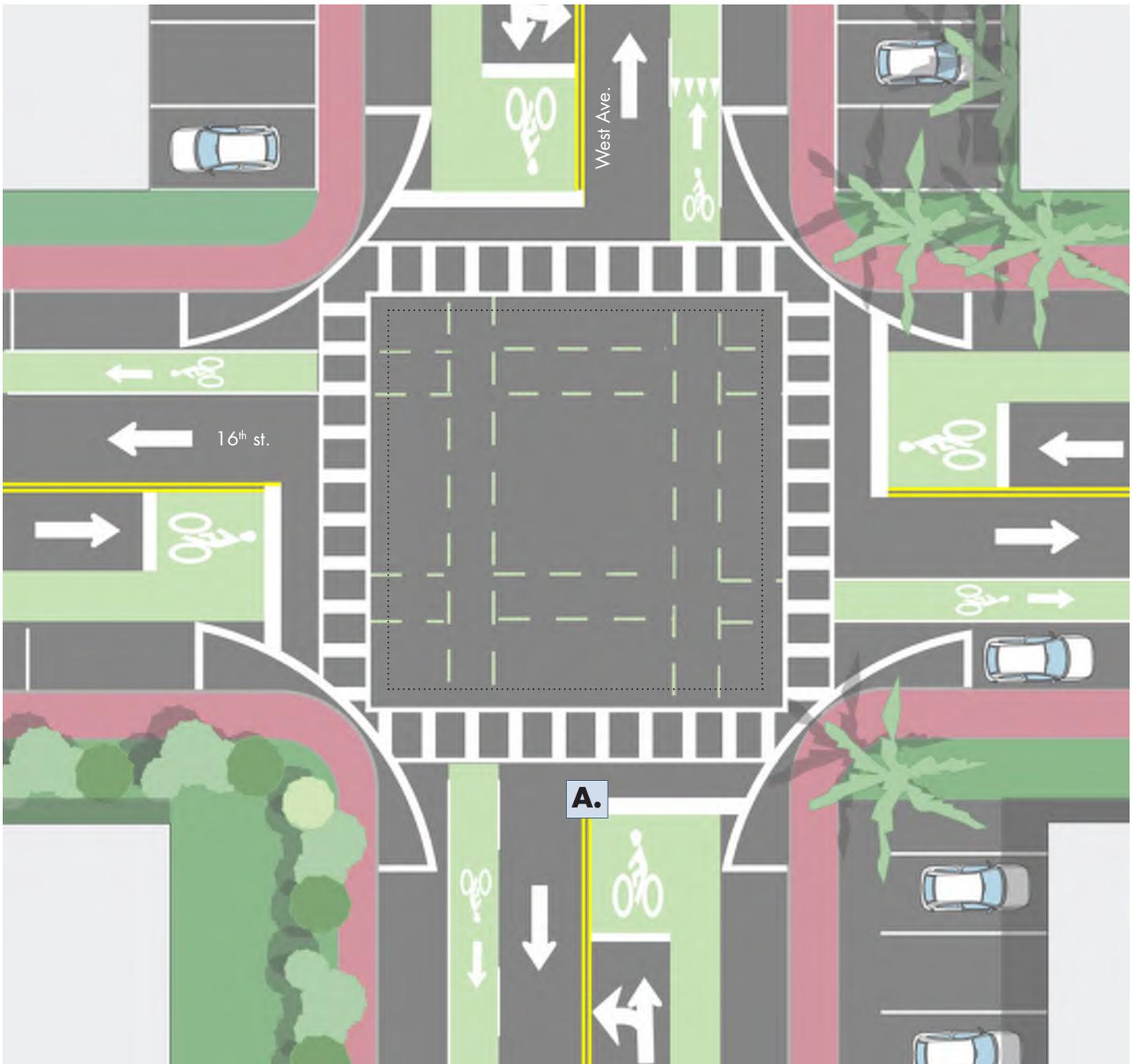
SIDEWALK -LEVEL PROTECTED BIKE LANE



BIKE LANE



INTERSECTION TREATMENT - BIKE LANE BIKE BOX

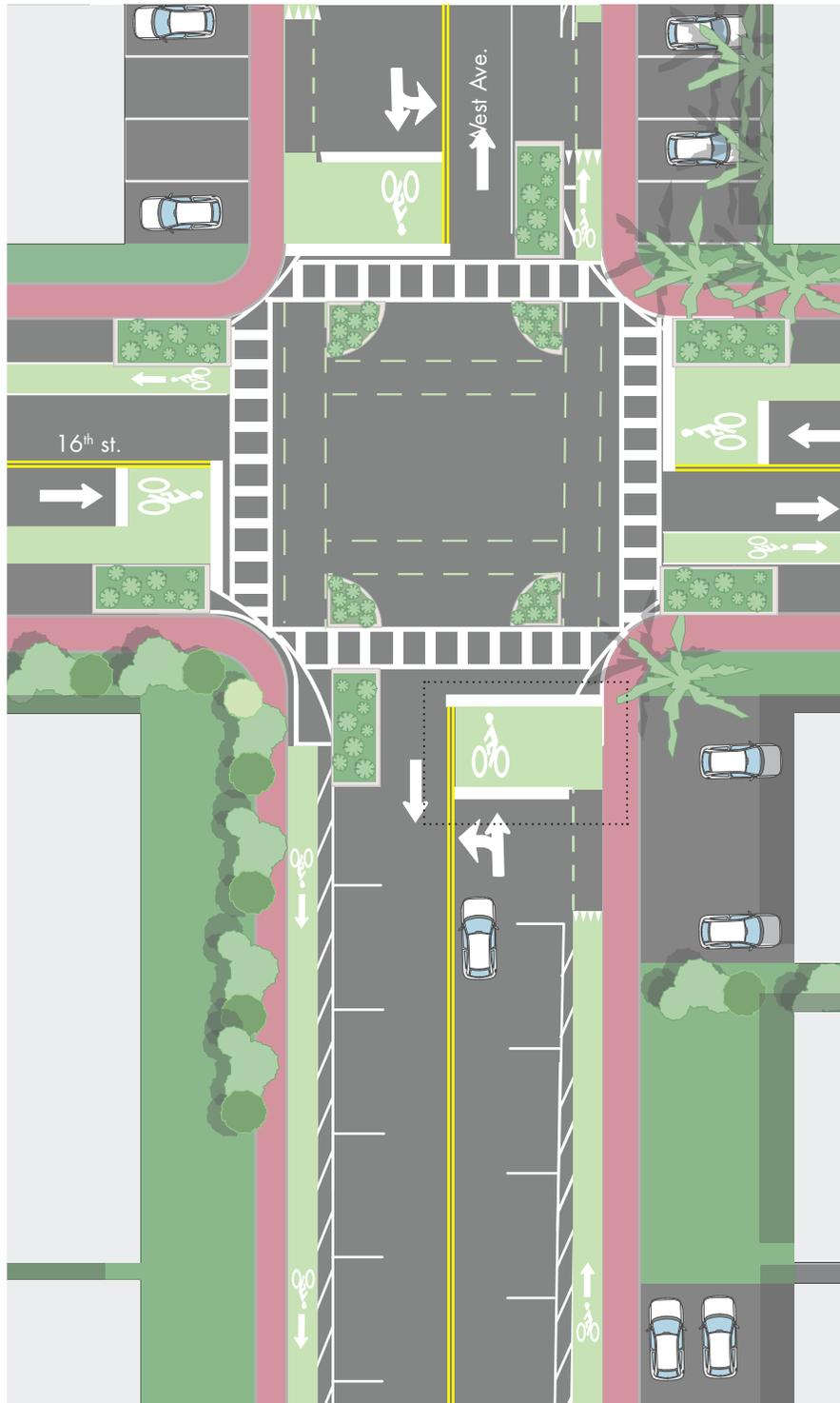


Refer to figure 3.31 of the street design guide for additional information.

The drawing above shows how a bicycle facility might go through an intersection. In this case, the intersection of 17 Street and West was chosen to demonstrate. A pavement level parking protected bicycle passes through the intersection adjacent to the sidewalk and landscaped planters (B). A stop bar and bicycle signal indicate to the cyclist that they have to stop at the pedestrian crosswalk (A). The bike lane is marked to show the continuity of the lane through the intersection. Maintaining a tight curb radius is key to slowing traffic and providing a safe crossing for pedestrians (C).

WEST AVENUE

PARKING PROTECTED BIKE LANE & INTERSECTION



Refer to figure 3.30 of the street design guide for additional information.

Parking protected bicycle lanes take advantage of existing capacity for on-street parking and rearranges the street configuration, allocating space for bicycle lanes along the curb. Parked cars act as a barrier between cyclists and moving vehicles. A buffer between the bike lane and the passenger side of the parked vehicle provides a “door zone” that helps to avoid collisions and facilitates loading/unloading. The buffer zone varies depending on the ROW with a minimum of 2 feet. Examples are provided on the street design guide.

SIDEWALK- LEVEL PROTECTED BIKE LANE & INTERSECTION

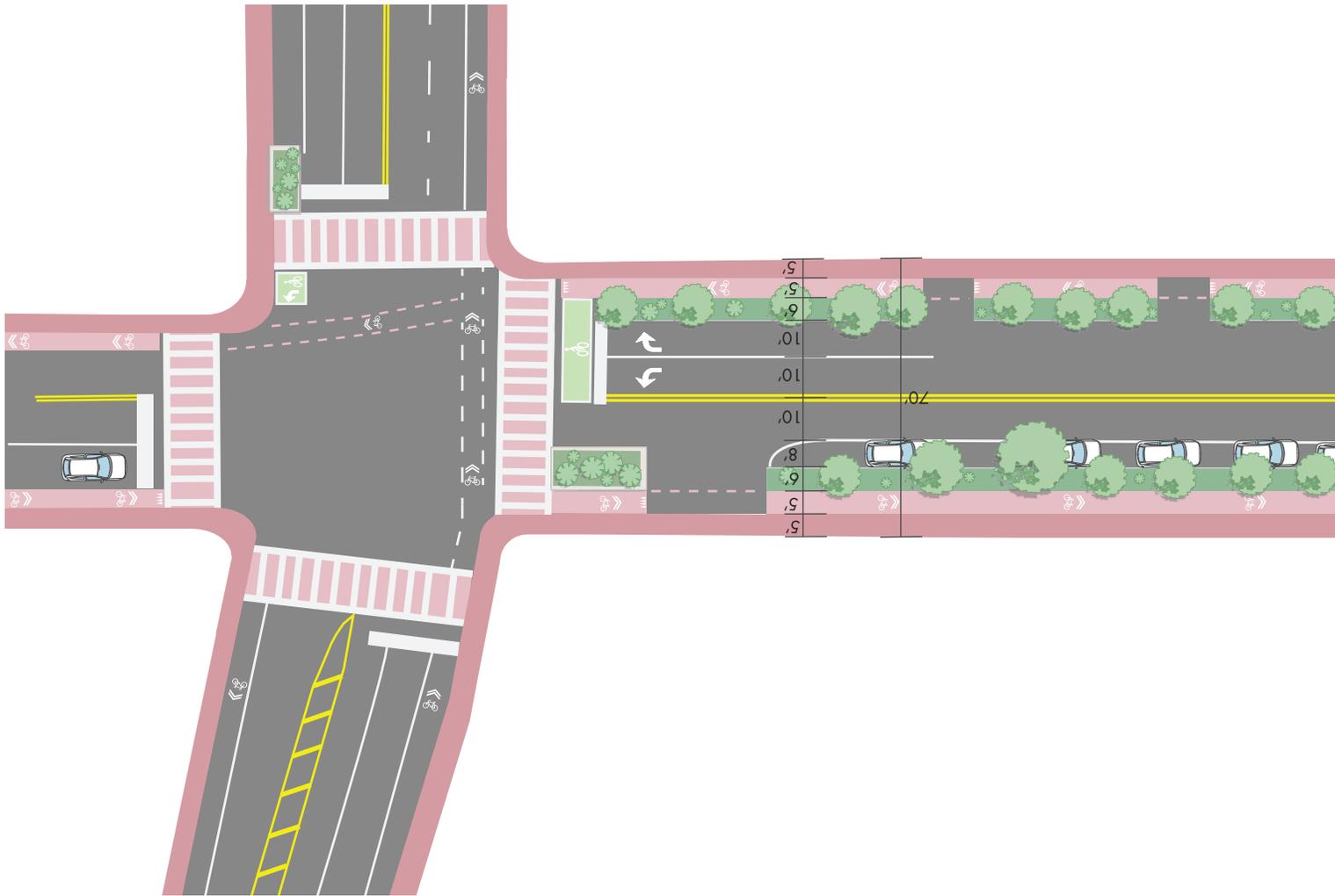


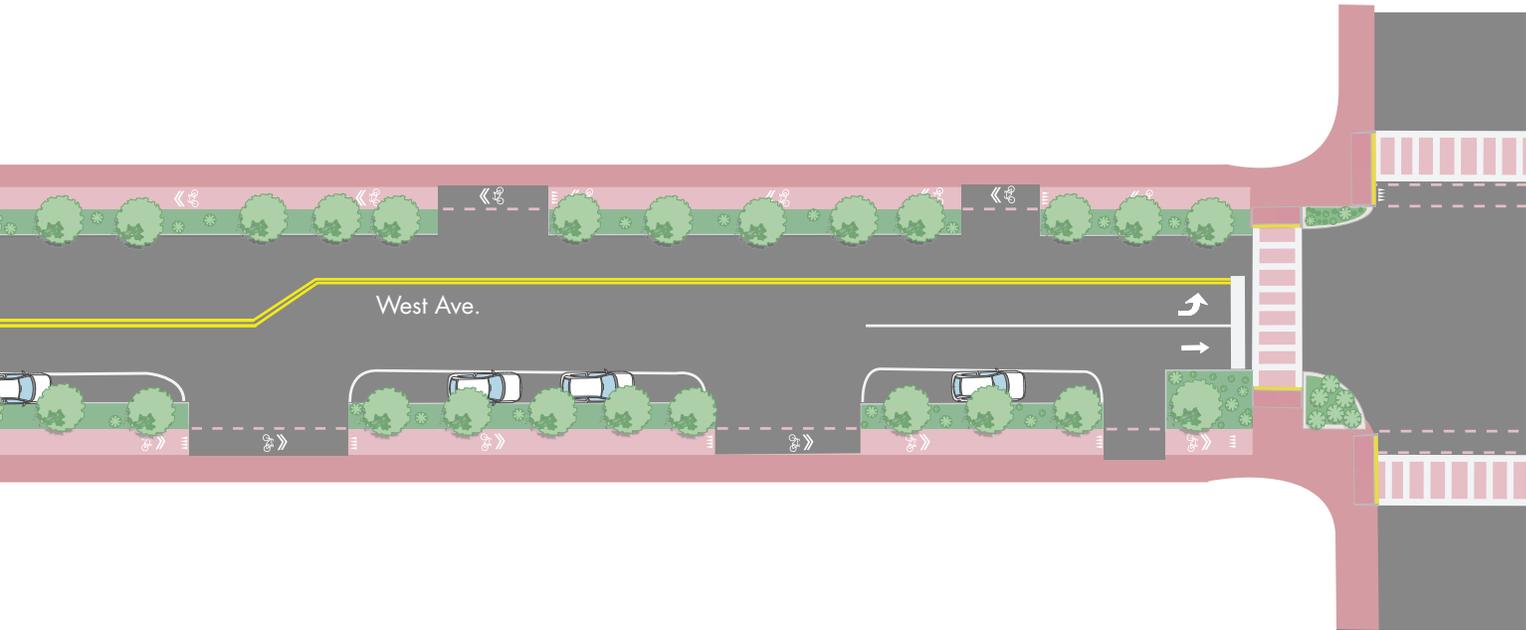
Sidewalk-level bicycle lanes are inherently protected from traffic through vertical separation. In addition, pavement markings or different color treatments help to visually separate pedestrians from bicyclists. In order to protect cyclists from door collisions, this type of facility must accommodate a painted buffer and a 4' lane, or be wide enough (5' min.) so as to encourage cyclists to ride in the middle of the lane and avoid conflict.

WEST AVENUE

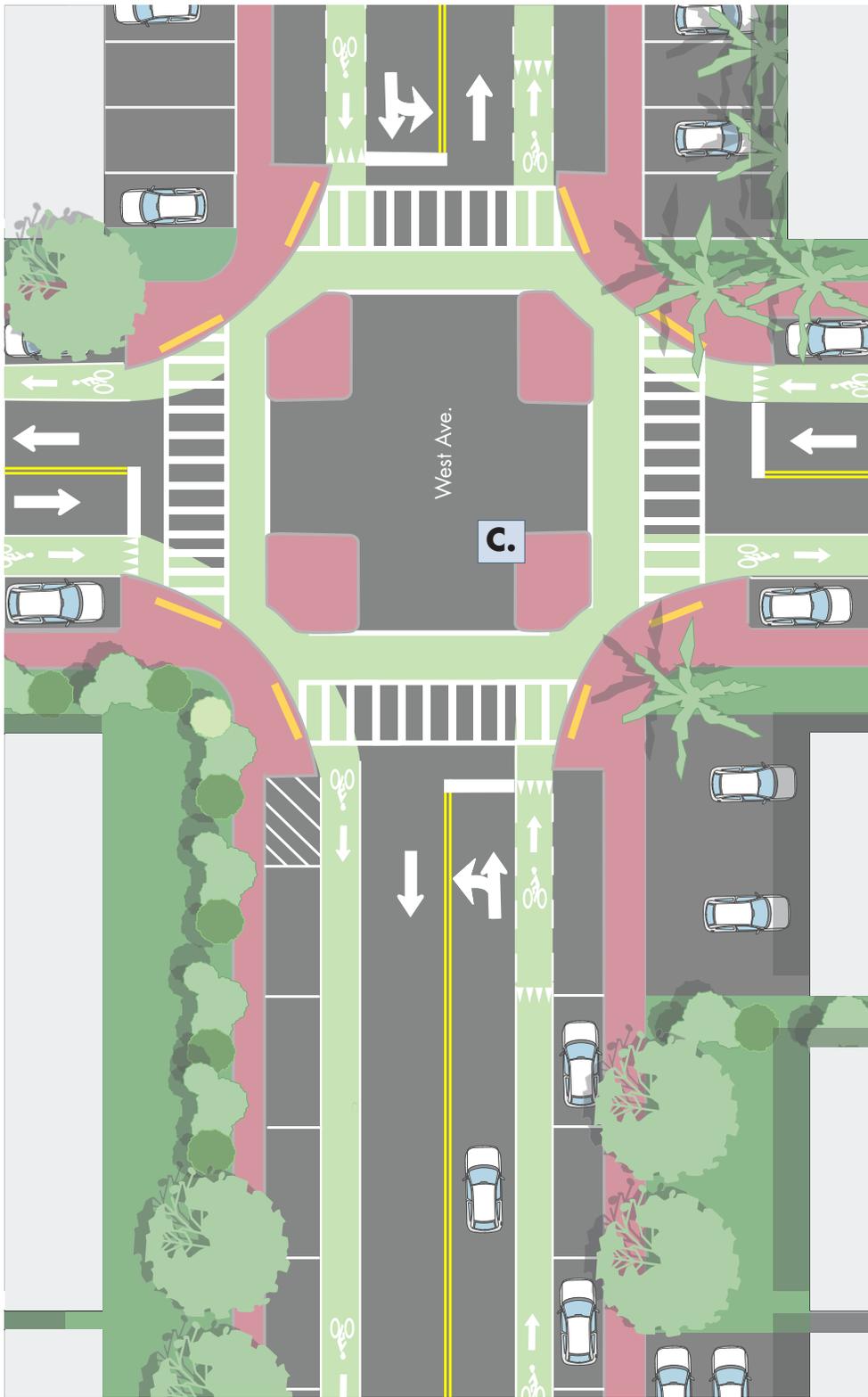
SIDEWALK-LEVEL PROTECTED BIKE LANE INTERSECTION

Example of landscaped, sidewalk-level protected bicycle lane along West Avenue, between 17th street and Lincoln Lane.





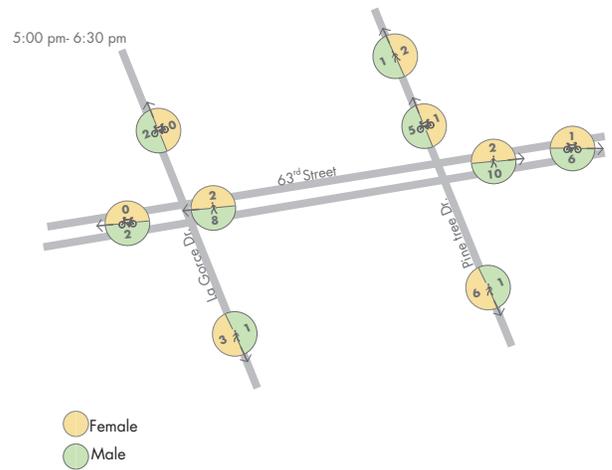
CONVENTIONAL BIKE LANE & PROTECTED INTERSECTION



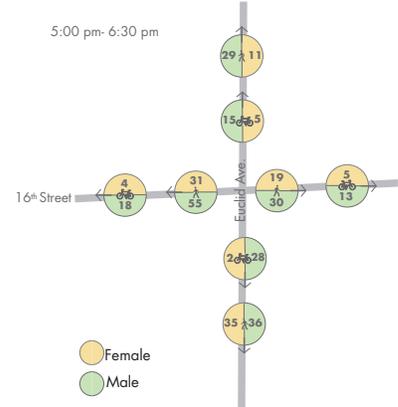
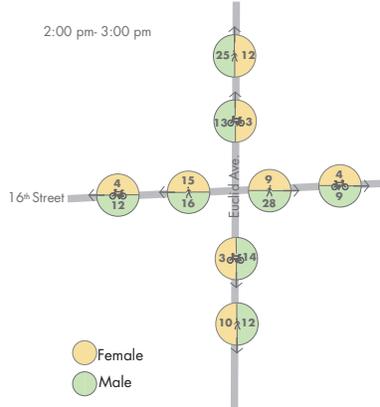
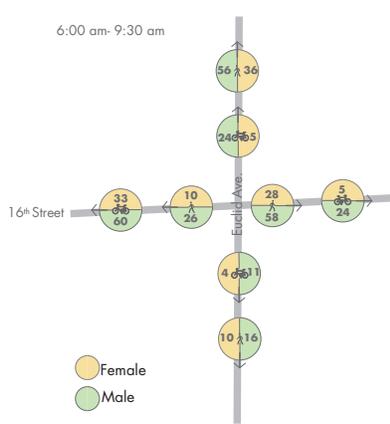
Protected intersections guarantee a high level of safety. These types of intersections might be the most appealing for all kinds of users thus noticeably increasing ridership in combination with protected bike lanes (not shown). Protected intersections accommodate all bicycle movements. Multimodal intersection design is usually enhanced with bicycle signals. (See Street Design Guide: Signals)

APPENDIX: BICYCLE-PEDESTRIAN COUNTS

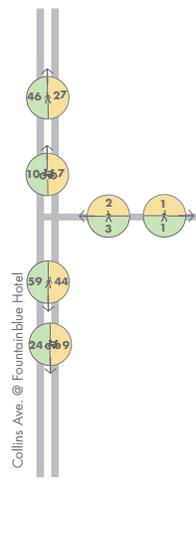
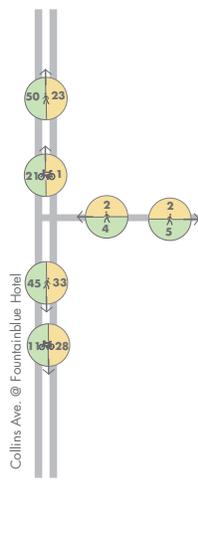
BICYCLE PEDESTRIAN COUNTS



La Gorce Dr./ Pine Tree Dr. @ 63rd Street



Euclid Ave. @ 16th Street

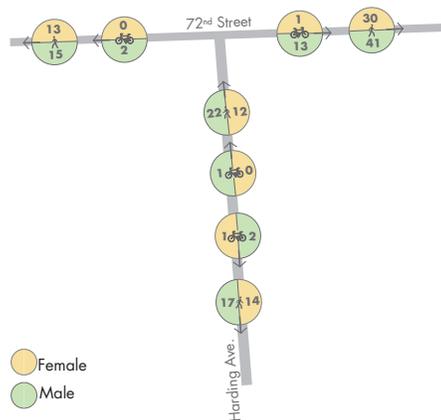


Collins Ave. @ Fountainblue Hotel

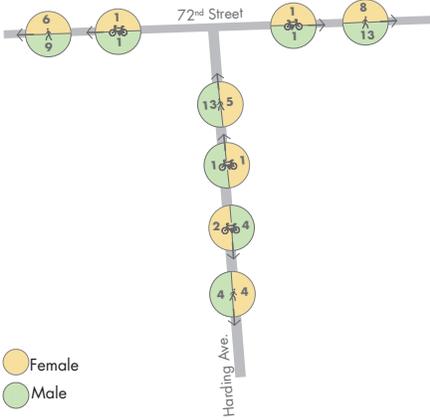
The bicycle and pedestrian counts shown here, were conducted from 11/7/15 -11/14/15, in order to have a baseline measure before this bicycle pedestrian master plan is implemented. In addition, this count helped to inform decisions regarding bike facilities, landscape and overall streetscape recommendations in some cases.

BICYCLE PEDESTRIAN COUNTS

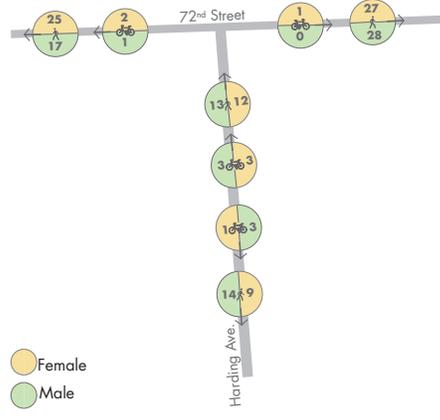
6:00 am- 9:30 am



2:00 pm- 3:00 pm

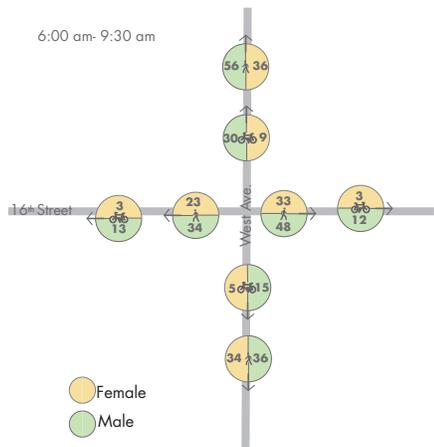


5:00 pm - 6:30 pm

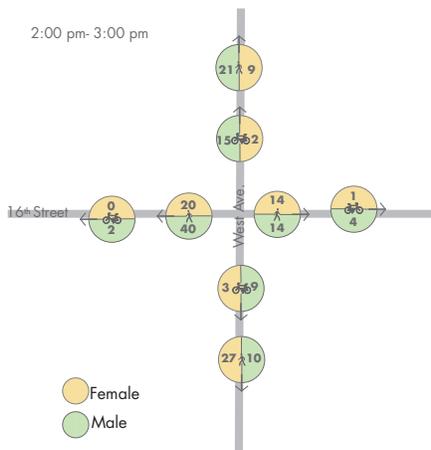


Hardung Ave. @ 72nd Street.

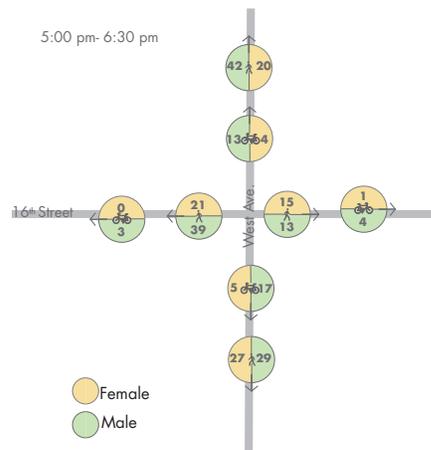
6:00 am- 9:30 am



2:00 pm- 3:00 pm



5:00 pm- 6:30 pm



West Ave. @ 16th Street

6:00 am- 9:30 am



5:00 pm- 6:30 pm



Female
Male

Venetian Causeway.

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APPENDIX: IMPLEMENTATION CHART

MASTER PLAN IMPLEMENTATION MATRIX

PHASE 1: FILLING IN THE GAPS

Project Information											Input or Mode/Year										Year of Imp.				FMSH SCORE			
Project Number	Project Name	Project Description	Project Area	Project Goals	Public ID#	Revised ID#	Project Start	Project End	Type	Other Info	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
1	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
2	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
3	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
4	Multi-Use	Multi-Use	Multi-Use	Multi-Use and					Development	40000	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
		Multi-Use and																										
5	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
6	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
7	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
8	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
9	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
10	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
11	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
12	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
13	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
14	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
15	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
16	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
		Multi-Use																										
17	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
18	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
19	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
20	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	
21	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
22	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
23	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
24	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
25	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
26	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
27	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
28	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
29	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			
30	Multi-Use	Multi-Use	Multi-Use	Multi-Use					Development																			

MASTER PLAN IMPLEMENTATION MATRIX

PHASE 2: IMPROVEMENTS TO EXISTING FACILITIES

Project Information														Impact on Modalities										Type of Imp.		FEMA SCORE			
Project Number	Project Name	Project Classification	Project Area	Project Location	Public Use	Recreational Use	Private Use	Other Use	Type	Order of magnitude	2025A Project Length	Imp on Ped	Imp on Bicycl	Imp on Walk	Imp on Mass	Imp on Auto	Imp on Air	Imp on Rail	Imp on Water	Imp on Other									
1	Waterpark	Waterpark	South Beach	Public Blvd N.E. Palm Dr			NA		Public Use		2025A / 2025B	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2	Public Blvd	Waterpark	Public Blvd	Public Ave. and Water Ave	SP	SP			Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
3	4th Ave	Public Use	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	7th Ave	Public Use	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
5	10th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
6	13th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
7	16th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
8	19th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
9	22nd Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
10	25th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
11	28th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
12	31st Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
13	34th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
14	37th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
15	40th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
16	43rd Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
17	46th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
18	49th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
19	52nd Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
20	55th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21	58th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
22	61st Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
23	64th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
24	67th Ave	Waterpark	Public Blvd	Public Ave. and Public Blvd	SP	SP	NA		Public Use		2025A / 2025B	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

MASTER PLAN IMPLEMENTATION MATRIX

PHASE 3: AS PIRATIONAL

Project Information														Impact on Modifiers										Rate of Imp.				B01 Index	PMSI SCORE
Project Number	Project Name	Project Description	Block Area	Project Link	Public RCV	Revenue Value	Project Impact	Early to Issue	Type	Order of magnitude	NOAA Project Length	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub	Imp on 1000' Sub				
1	Health Ave	Health Ave P	Health Ave	Health Ave P	SP	SP	20 mph	NA	Public/Highway		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2	Health Ave	Health Ave P	Health Ave	Health Ave P	SP	SP	20 mph		Public/Highway		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
3	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP		NA	development		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	20 mph	NA	governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
13	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
14	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
15	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	20 mph	NA	Public/Highway		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
18	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		Public/Highway		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
19	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	20 mph	NA	Public/Highway		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		Public/Highway		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
21	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
22	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	20 mph		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
23	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	20 mph		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
24	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
25	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP	NA		governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
26	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
27	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
28	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
29	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
31	W-2	W-2/Thomson P	Health Ave	Health Ave P	SP	SP			governing		2000/20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		