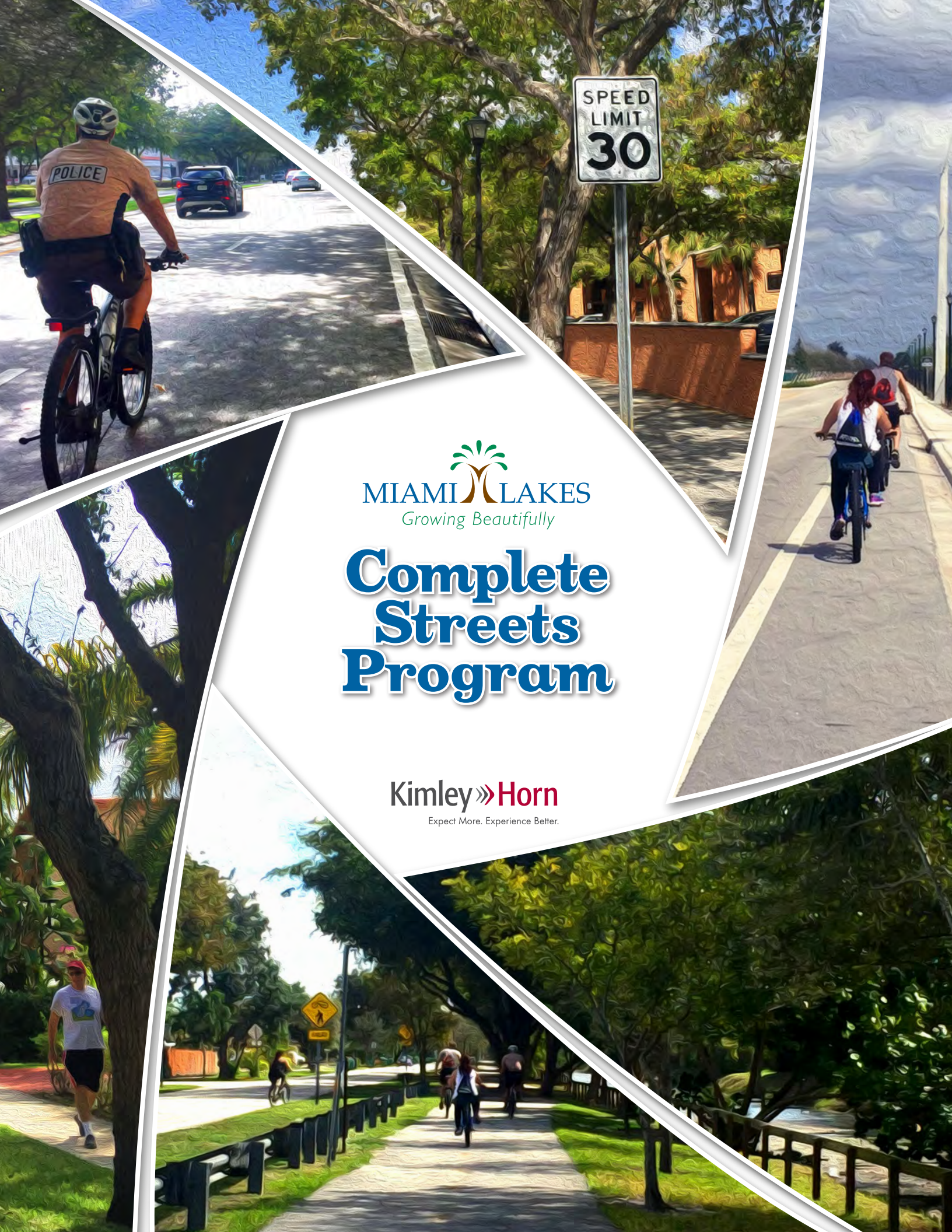

MIAMI LAKES

Growing Beautifully

Complete Streets Program

Kimley»Horn

Expect More. Experience Better.

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INTRODUCTION

The Town of Miami Lakes Complete Streets Program provides recommended street design improvements specific to the Town of Miami Lakes' roadways. Complete Streets are infrastructure enhancements that implement additional pedestrian and bike improvements to give all users a greater share of the right-of-way. The specific improvements can vary from pavement markings to new physical barriers built between travel lanes and bicycle and pedestrian pathways. Ultimately the improvements are focused on increasing safety of users while not compromising traffic flow.

The recommendations provided within this document are consistent with and build upon the foundation of the *Miami-Dade County Complete Streets Design Guidelines* program. The proposed design guidelines are customized to fit the context of the Town of Miami Lakes street typology and provide multimodal roadway improvements that take into consideration all users. Preparation of the Town of Miami Lakes Complete Streets Program was made possible through funding from the Miami-Dade Transportation Planning Organization (Miami-Dade TPO). To help execute this project, the Town of Miami Lakes partnered with the engineering and planning consulting firm, Kimley-Horn and Associates, Inc.

As emphasized in the *Miami-Dade County Complete Streets Guidelines*, Complete Streets provide several benefits across areas like public health, equitable travel, environmental sustainability, and community safety. By designing streets to prioritize additional modes of transportation, Complete Streets provide more residents access to jobs, entertainment, and points of interest within the community. While improving access is key, the improvements also ensure residents that the emphasis on mobility is shifting from focus on the motor vehicle to a healthier, sustainable, and safer means of travel.

This document provides an overview of Complete Streets components, presents existing conditions of the identified roadway typologies within the Town, and provides examples of what improvements are most applicable for implementation for each roadway type. Roadway typologies identified within this document take into consideration roadway volumes, existing roadway geometry and speeds, as well as adjacent land uses. Concept designs are provided for select roadway corridors within the Town detailing recommended improvements to be considered during design that take into consideration the Complete Streets guidelines.

Review of Plans and Policies

Previous applicable planning efforts and policies performed and adopted by the Town of Miami Lakes were reviewed and incorporated into the development of the Town's Complete Streets guidelines. The following is an overview of the plans reviewed and summary of how they were applied.

Greenways and Trails Master Plan

The Town's Greenways and Trails Master Plan focuses on the development of a network of off-road shared use paths (for bicycling, walking, in-line skating, etc.), as well as a network of on-road facilities including bike lanes on major thoroughfares and neighborhood greenways on low-speed, low-volume streets. The facility type recommendations provided within the Greenways and Trails Master Plan were incorporated into the development of the typical sections and street typology designations.

Beautification Master Plan

The Town's Beautification Master Plan provided recommendations and guidelines for the beautification of roadway features such as, Town gateways, major roadways and intersections, neighborhood roads, cul-de-sacs, and underpasses. The Complete Streets components recommended for the Town prioritizes the preservation of trees and landscaped buffers as well as provides spacing for transit facilities, furnishings, and street and pedestrian scaled lighting.

Miami Lakes Strategic Plan, 2015-2025

The Town's Strategic Plan includes the Town's Vision, Mission Statement, and Guiding Principles as well as outlines the Goals and Objectives identified by staff to be programmed within the Town's annual Work Plan. The Strategic Plan's goals supported through the implementation of the Complete Street guidelines include:

- Enhanced Mobility – Easier Vehicular and Non-Vehicular Transportation
- Enhance Signature Beauty and Park Landscaping
- Enhance Economic Development and Community Hubs

Town's Comprehensive Master Plan

The design guidelines outlined within the Town's Complete Streets Program complements the Town's Comprehensive Master Plan vision to create safe and convenient non-motorized transportation to connect communities, recreational parks, schools, office parks, and businesses.

ADA Sidewalk Master Plan

Recommended design elements follow the guidelines and regulations detailed in the 2010 Standards for Accessible Design in response to the Americans with Disabilities Act of 1990 (ADA). Sidewalk recommendations for roadways within the Town were incorporated into the development of the typical sections and street typology designations. Newly constructed or altered street level pedestrian walkways must contain curb ramps or other sloped areas at intersections to streets, roads, or highways to comply with ADA standards.

PUBLIC INVOLVEMENT AND PROJECT PRIORITIZATION

The Town hosted a public workshop at Town Hall on October 23, 2017 to provide an opportunity for the public to review the proposed Complete Streets recommendations and offer feedback on project prioritization prior to finalizing the guidelines. At the workshop, an interactive presentation led by Town staff and the consultant team was provided detailing the Complete Streets elements and the recommended roadway typology classifications. The meeting was attended by members of the public, Town Commission members, Town staff, and the Town Manager. The presentation slides presented at the workshop are provided in **Appendix B**.

Figure 1: Public workshop presentation

In addition to the presentation, three (3) workstations were setup at the meeting that allowed the public to review current and proposed roadway improvement projects integrating the Complete Streets elements, submit feedback using a dynamic interactive geographic information systems (GIS) mapping program, as well as submit recommendations on how the Town should prioritize future Complete Streets improvement projects by ranking prioritization criteria. Photos taken during the workshop are provided on the following pages.

Figure 2: Town staff providing an update on recently completed projects


Figure 3: Draft concept plans of current roadway projects within the Town

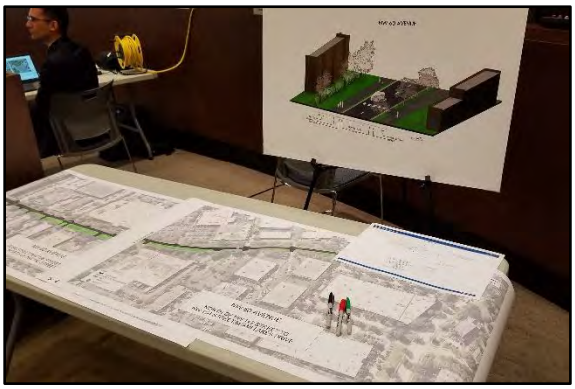



Figure 4: Interactive GIS mapping station


Project Prioritization Matrix

A project prioritization matrix was developed to assist the Town in gathering information from the public on the criteria most important to them on how project funding should be prioritized or distributed for future roadway projects. There were ten (10) prioritization criteria categories established for participants to rank in order from 1 to 10 (1 being the most important and 10 being the least important). The prioritization exercise allowed the public an opportunity to experience the challenges sometimes faced by Town staff during project selection and budgeting. While completing the exercise, participants expressed difficulty in ranking the criteria as they felt all listed criteria was important. The following is an outline of the prioritization criteria the public was asked to rank.

- Added Mobility Options – Project includes multiple mode types.
- Low Cost – Project has a low project cost required to complete the project.
- Safety – Proposed project increases safety for all users.
- Fills a Gap in the Network – Project makes connections between existing facilities.
- Social Equity – Allows for or enhances equal opportunities for all users.
- Economic Development "Placemaking" – Creates a sense of place and allows opportunities for economic growth.
- Propensity for Use – Project will be used by the most number of people.
- Improved Comfort/Quality of Existing Facilities – Makes existing facilities more comfortable for users.
- Health – Increases opportunities to make healthier choices.
- Feasibility – Ability to complete the project timely or in conjunction with another project.

Figure 5: Prioritization matrix

Of the completed forms submitted, propensity for use, safety, feasibility, fills a gap in the network, and added mobility options were the top five ranked criteria. Low project cost was ranked sixth, though important was not the main priority expressed by participants as they demonstrated that investments in projects that benefit the most people and improve safety are the highest priority. Through discussions at the meeting, the assumption was made that if the feasibility of the project's construction and the ability to integrate Complete Streets elements into the design of other projects is considered lower project cost may also be able to be achieved. A copy of the Prioritization Matrix distributed at the workshop is provided in **Appendix C**.

COMPLETE STREETS COMPONENTS

Complete Streets are streets designed to focus on safety and access for all users, of all ages and abilities. The *Miami-Dade County Complete Streets Design Guidelines* list the following components associated with the roadway and pedestrian realms to be considered by communities wanting to develop or redesign their streets to be multimodal.

Roadway Realm

- Bike lanes
- Bus lanes/transit lanes
- Turn lanes
- Parking lanes
- Through lanes
- Landscaping
- Pavement markings

Pedestrian Realm

- Sidewalks
- Street trees
- Benches/Furnishings
- Bike racks
- Lighting

Figure 6: Complete Street Cross Section Elements

Source: Miami-Dade County Complete Streets Design Guidelines, Figure 2-1 Cross-section elements

Many of the existing standards and guidelines available at the federal and state levels provide guidance on Complete Streets and their design. The most relevant of those standards and guides are:

- The American Association of State Highway and Transportation Officials' (AASHTO) A Policy on Geometric Design of Highways and Streets (the "Green Book")
- The Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways (the "Florida Greenbook")
- The Manual on Uniform Traffic Control Devices (MUTCD)
- FDOT Plans Preparation Manual (PPM)
- Americans with Disabilities Act (ADA) Standards for Accessible Design
- Miami-Dade County Public Works Manual

Miami Lakes Complete Streets Design Standards

The following Complete Street elements were selected as priority components by the Town of Miami Lakes to be included in the design of roadways within the Town. This section provides examples of the selected elements that were incorporated into the typical cross sections for each roadway typology outlined in this document.

The priority Complete Streets components for the Town of Miami Lakes include:

- Pavement markings
    - Crosswalks
    - Shared lane markings (Sharrows)
- Bike facilities
    - Buffered bike lanes
    - Green bike lanes
    - Bike boxes
- Sidewalks/Shared use paths
- Greenscaping

Other design elements that should be incorporated into the design and construction of roadways within the Town of Miami Lakes, that contribute to the safety and connectivity of Complete Streets and multimodal amenities include ADA enhancements, curb extensions, pedestrian refuges, and mid-block crossings. Design standards and guidance on how and when these elements should be incorporated into roadway improvements are provided in the references outlined in the previous section.

Aesthetically pleasing amenities that also provide functional use and value to a corridor that are part of the Complete Streets approach include street lighting, benches, bike racks, and wayfinding. These features assist roadway users in navigating the corridor while also providing

supportive amenities to the activities that occur within the right-of-way. Transit access and amenities to support transit use is also important. Types of transit amenities and components that should be incorporated into new designs or redevelopment projects include bus landings, bus shelters, as well as sidewalk connections from the transit facilities to adjacent destinations.

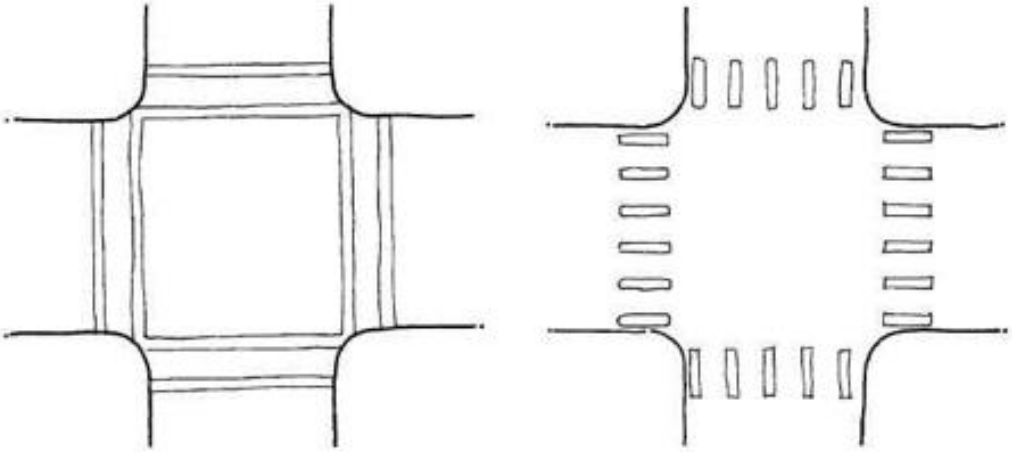
Pavement Markings

Pavement markings provide users within the right-of-way information regarding the rules of the road by giving lane boundaries, guides for turning, crosswalk locations, and warnings of potential hazards. Pavement markings work in conjunction with road signs and traffic signals to give users a clear picture of the roadway characteristics.

Crosswalks

Crosswalks are a critical part of the pedestrian network. A crosswalk is the portion of a roadway designated for pedestrians to use in crossing the street. Crosswalks within the Town of Miami Lakes should be clearly marked using materials or markings that provide a visual contrast with the surface of the street. Two crosswalk marking patterns commonly used are illustrated in **Figure 7**.

Figure 7: Sample Crosswalk Markings



US Department of Transportation, Federal Highway Administration, Designing Sidewalks and Trails for Access (Figure 4-41 and 4-21)

Newly constructed or altered street level pedestrian walkways must contain curb ramps or other sloped areas at intersections to streets, roads, or highways to comply with ADA standards.

Shared Lane Markings (Sharrows)

Figure 8: Sharrow

Sharrows are utilized on roads to indicate that a bicyclist is permitted to use the entire traffic lane when there are no exclusive facilities present. **Figure 8** is an image of a sharrow. Use cases for sharrows include the following:

- Roadways with low volumes and low speeds
- Roadways with traffic signals that are timed for average bike speeds

To enhance the appearance of sharrows added along a corridor, some communities are opting to add a green box or background behind the sharrow emblem as shown in **Figure 9**.

Figure 9: Sharrow with green background

Source: Miami-Dade County Complete Streets Guidelines

For additional information on different pavement marking applications, refer to the *Miami-Dade County Complete Streets Design Guidelines, National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide, and the FDOT Plans Preparation Manual*.

Bike Facilities

Buffered Bike Lanes

Buffered bike lanes provide additional separation from vehicular traffic by implementing a striped buffer between the lanes. Using pavement striping instead of a raised curb gives users the ability to pass each other and greater overall freedom entering and exiting the facility. Opportunities to implement buffered bike lanes include the following:

- High-speed arterials where more separation provides greater user comfort
- Commercial areas where users are continuously entering and exiting the facility
- Transit stops with increased bike and pedestrian traffic

Figure 10: Buffered Bike Lane - Striping

Source: Miami-Dade County Complete Streets Guidelines

Traffic delineators or flexposts within the buffered bike lane can also be used to separate the bike lane from the vehicle travel lane, as shown in **Figure 11**.

Figure 11: Barrier Separated Bike Lane – Delineators/Flexposts

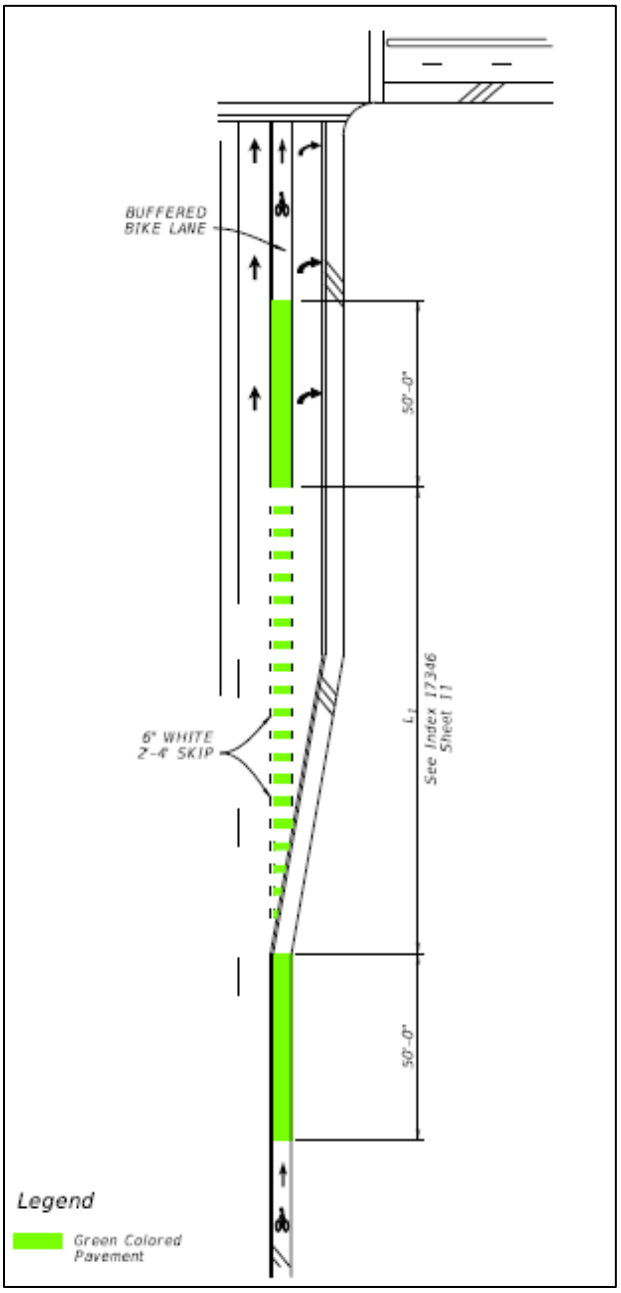
Source: City of Tucson, AZ

Green Bike Lanes

Green thermoplastic paint can be used in a striped pattern to identify conflict zones with traffic or can be implemented along the entire length of the facility. **Figure 12** is an example of the green striping used in a conflict zone from the *FDOT Plans Preparation Manual (PPM)*. Uses for green bike lanes are as follows:

- Where the bike lane and a right-turning movement conflict
- Where the bike lane and a dedicated bus bay conflict
- Where the bike lane and a vehicle merge lane conflict
- Areas of high volume traffic and low visibility

Figure 12: Green striping in a conflict zone



Source: FDOT Plans Preparation Manual Vol. 1 Ch. 8

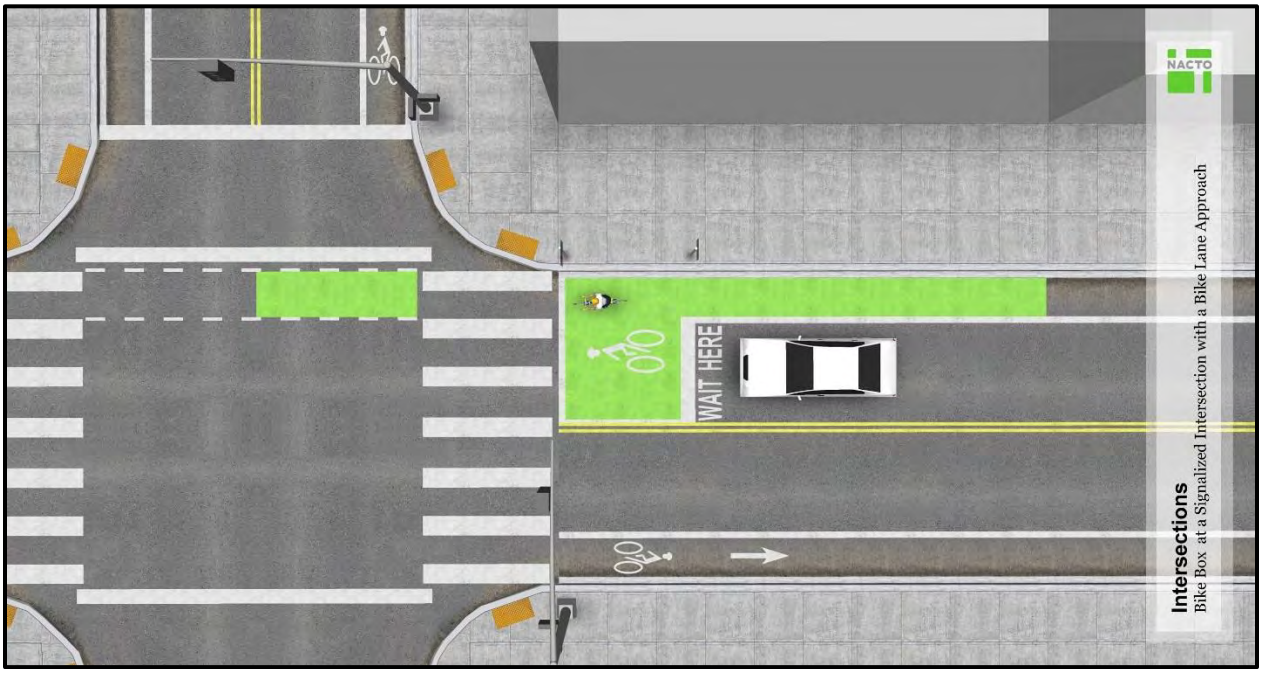
Bike Boxes

Bike boxes are an intersection treatment that provide space for bicyclist to queue in a more visible location and may help facilitate turning movement. It is directly attached to the bike lanes and is typically the same color as the bike lanes. **Figure 13** is an example of a bike box from the National Association of City Transportation Officials (NACTO).

Typical use cases for bike boxes include the following:

- Signalized intersections with high volumes of bicyclists
- Where extra protection for bikes making left turns are needed or when a specific bike route requires a left turn

Figure 13: Bike Box



Source: National Association of City Transportation Officials (NACTO)

Greenscaping

Greenscaping is the implementation of street trees, shrubbery, planters, and other vegetation along the transportation network. Greenery plays a critical role in the quality and usefulness of any multimodal facility. Adding landscaping has environmental benefits such as providing shade, carbon dioxide absorption, and supporting natural ecosystems. Greenscaping also creates a more aesthetically pleasing environment and a greater sense of place.

When designing, it is important to consider the space required for all types of greenery. Types of plants and their locations should be selected early in the design process so that space can be set aside for them in the design.

The addition of trees to the streetscape provides environmental benefits through increased air filtration and ecosystem habitat, all while creating a more inviting sidewalk environment with increased shade coverage. Trees create living and nesting places for birds, helping add biodiversity to urban environments while creating a more natural environment for all.

The following figures provide several examples of how the Town has used trees and landscaping to provide shade along their corridors as well as create natural buffers between the sidewalk and travel lanes.

Figure 14: Town of Miami Lakes greenscaping examples

Reference to the Town of Miami Lakes *Greenways and Trails Master Plan* and *Beautification Master Plan* should be made for more information on the specifications and standards for greenscaping and open space within the Town.

STREET TYPOLOGY

The existing roadways within the Town of Miami Lakes were inventoried and categorized based on an adaptation of the typologies established in the *Miami-Dade County Complete Streets Design Guidelines.* Roadway characteristics reviewed included number of lanes, speed limit, average daily traffic (ADT), and right-of-way width. The designation of a preferred Complete Streets typical section for each roadway type establishes a unified standard for all roadways within the Town of Miami Lakes and provides guidance on the type of roadway enhancements that are desired to be implemented to meet the goals and initiatives of the Town. The roadways within the Town were grouped into the following street typology categories:

- Thoroughfare
- Feeder Road
- Civic Street
- Local Roads
    - Local Commercial
    - Local Residential

Table 1 is a summary of the roadway characteristics for each of the identified street typologies.

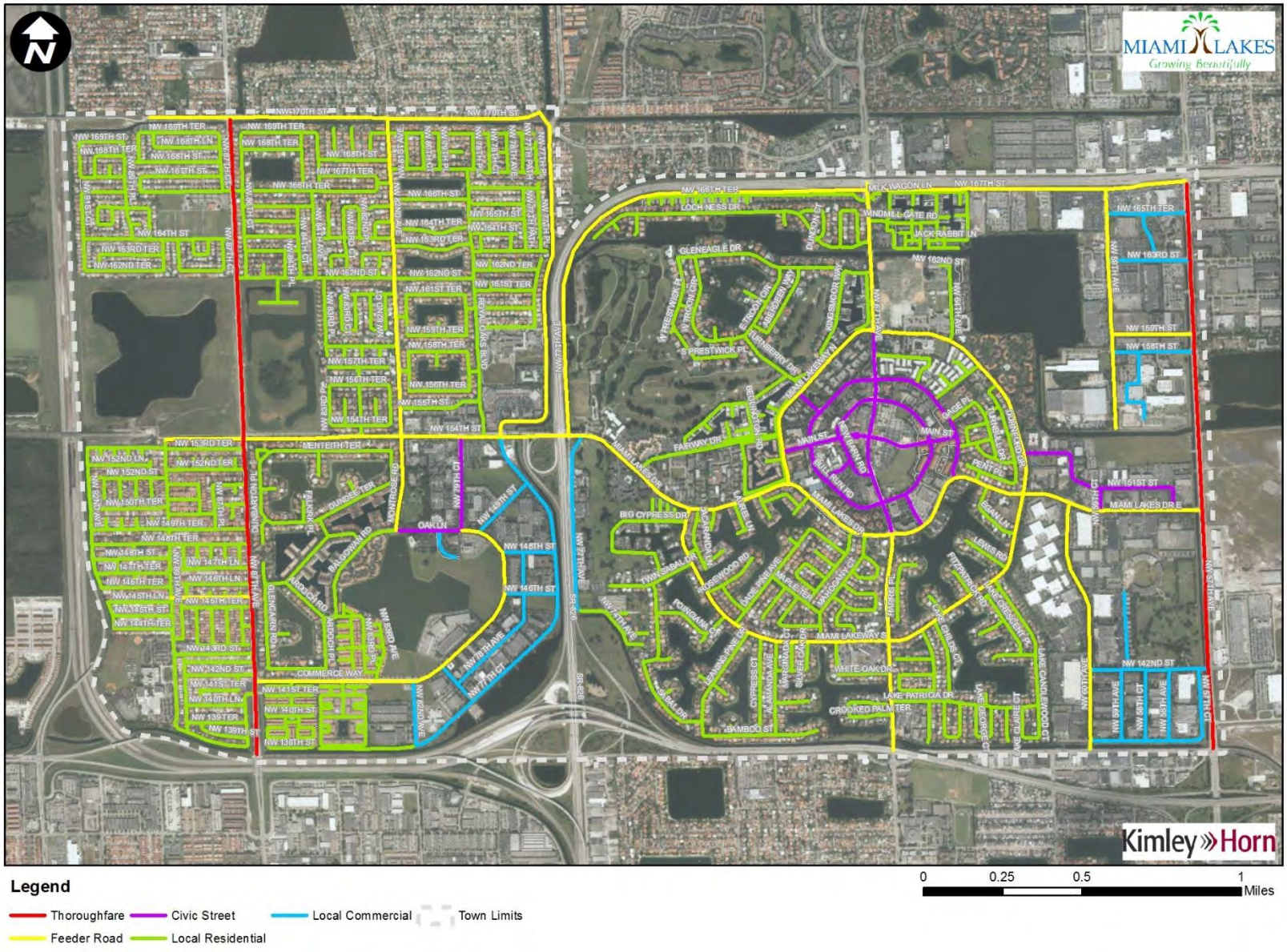
Table 1: Street Typology Characteristics

Street Type	Number of Lanes	Direction of Flow	Target Speed	Average Right-of-Way Width	Average Daily Traffic	On-Street Parking
Thoroughfare	4-6	2 way	30-35 mph	100'-80'	20,000	Rare
Feeder Road	2-4	1 or 2 way	20-35 mph	80'-70'	5,000-25,000	Rare
Civic Street	1-3	1 or 2 way	15-20 mph	50'	3,000-15,000	Yes
Local Commercial	1	1 or 2 way	15-20 mph	70'	NA	Rare
Local Residential	1	1 or 2 way	10-20 mph	50'	< 6,000	Yes

This section provides descriptions of each street typology, the specific design guidelines associated with the street typologies, and maps indicating the location of the designated roadways. **Figure 15** is a map illustrating the designated street typologies for each roadway within the Town.

For a complete list of roadways within the Town of Miami Lakes along with the identified typology designation, refer to **Appendix A**.

Figure 15: Town of Miami Lakes Street Typology Map



Thoroughfare

A Thoroughfare is a regionally significant roadway providing connections between cities and districts, as well as connections across barriers such as freeways and waterways. The corridor supports movement of large volumes of people and accommodates longer trips. This roadway type has the widest right-of-way of the four identified typologies. Characteristics of a Thoroughfare may include:

- Connects cities and districts
- Provides connections across barriers (e.g. freeways, waterways)
- Supports movement of large volumes of people, accommodates longer trips
- Transit stops
- Raised, often landscaped medians
- Sidewalks, with separation from travel lanes by landscaping or adjacent shared-use path
- Bike lanes

Examples of existing Thoroughfares within the Town are provided in **Figure 16**.

Figure 16: Sample Thoroughfare Corridors

NW 87th Avenue (Southbound)
(Note: Existing wall can restrict expansion of sidewalk and the addition of other Complete Streets improvements.)

Red Road (Northbound)

Figure 17 is a map of the roadways designated as Thoroughfares within the Town**. Figure 18** is the recommended typical section for the designated roadways. Suggested alternatives to the dimensions of the recommended complete streets elements associated with the street typology are provided in the subsequent table.

Figure 17: Town of Miami Lakes Thoroughfare Map

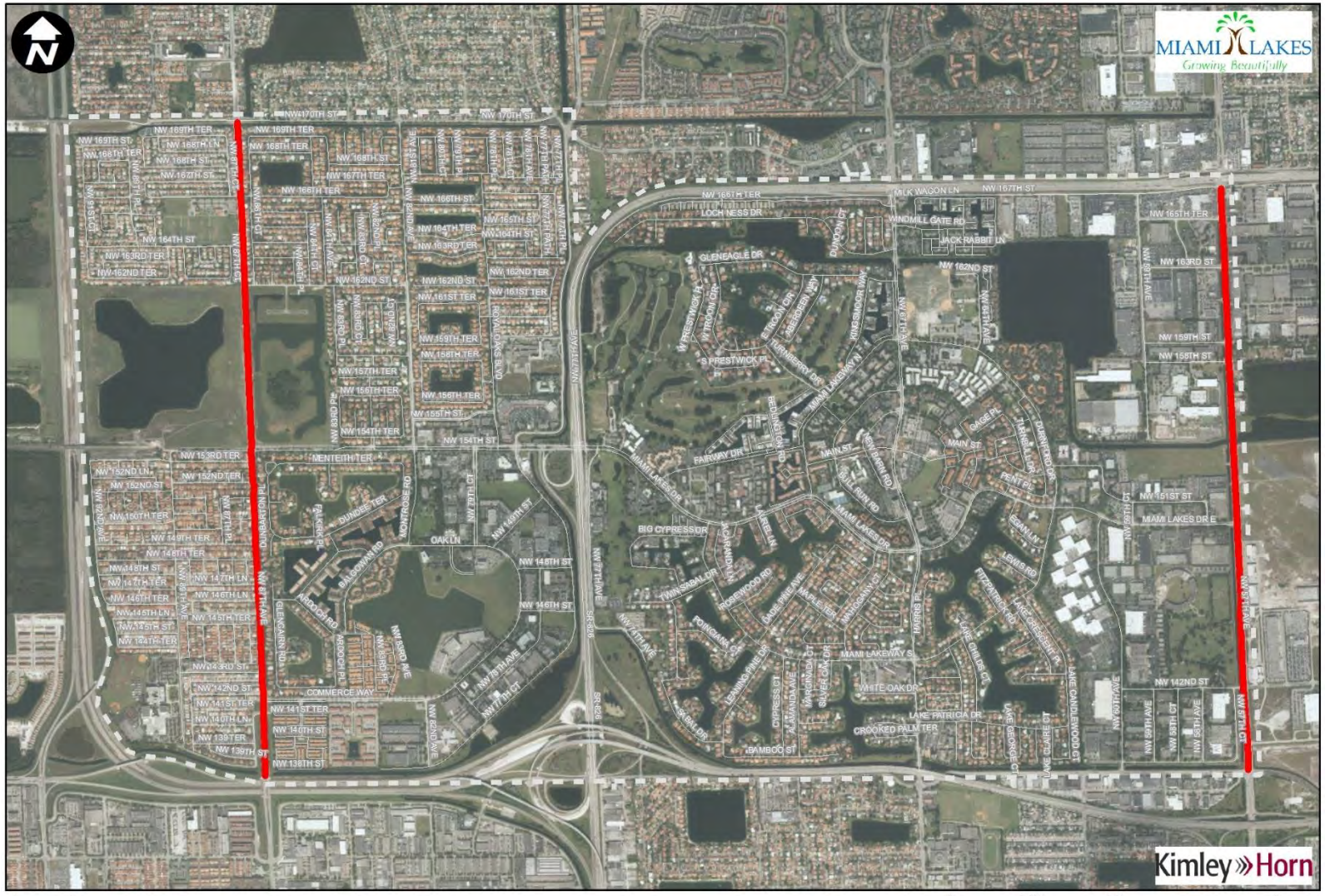
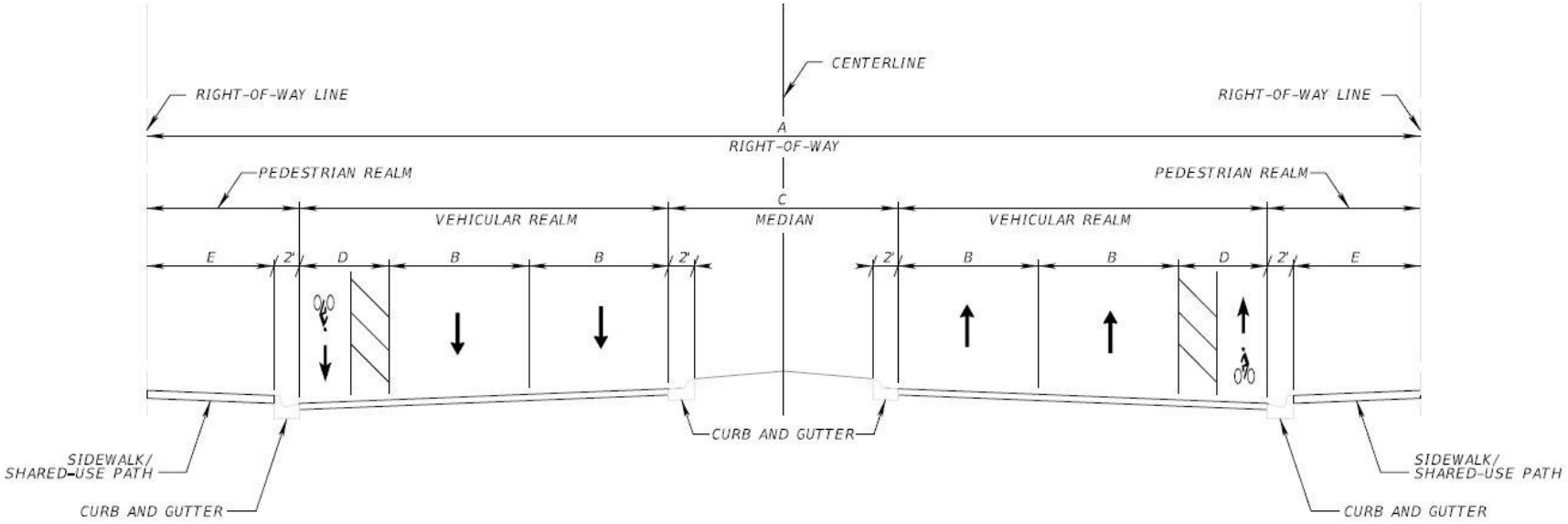


Figure 18: Thoroughfare Cross Section Design Standard



	RIGHT-OF-WAY		VEHICULAR REALM			PEDESTRIAN REALM	
	A		B	C	D	E	
	RIGHT-OF-WAY	LANES	TRAVEL LANE	MEDIAN (incl C&G)	BIKE LANE	SIDEWALK/SHARED-USE PATH	CURB & GUTTER
OPTION 1	100'	4-Divided	11'	18'	7' BUFFERED	10'	2'
OPTION 2	80'	4-Divided	11'	12'	4'	6'	2'
OPTION 3	80'	4-Undivided	11'	NONE	4'	12'	2'

Feeder Road

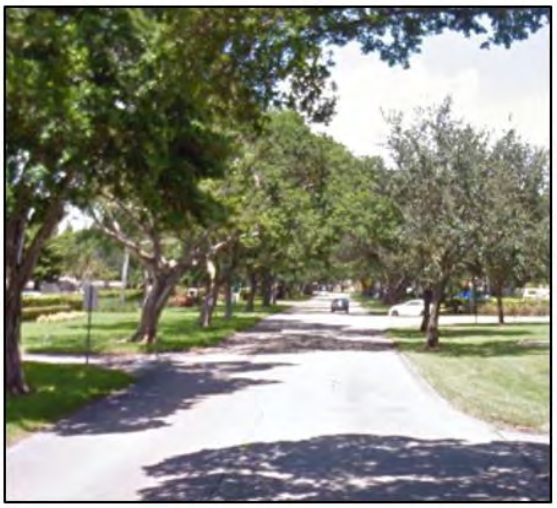
A Feeder Road is a key roadway that connects Thoroughfares and Civic Streets to provide access between urban centers and neighborhoods. Characteristics of a Feeder Road may include:

- Connections between urban centers and neighborhoods
- Connections to Thoroughfares and Civic Streets
- Transit stops
- Raised, often landscaped medians
- Sidewalks, with separation from travel lanes by landscaping or adjacent shared-use path
- Bike lanes or shared lane markings

Examples of existing Feeder roadways within the Town are provided in **Figure 19**.

Figure 19: Sample Feeder Corridors

NW 82nd Avenue (Southbound)



NW 60th Avenue (Northbound)

Figure 20 is a map of the roadways designated as Feeders within the Town**. Figure 21** is the recommended typical section for the designated roadways. Suggested alternatives to the dimensions of the recommended complete streets elements associated with the street typology are provided in the subsequent table.

Figure 20: Town of Miami Lakes Feeder Road Map

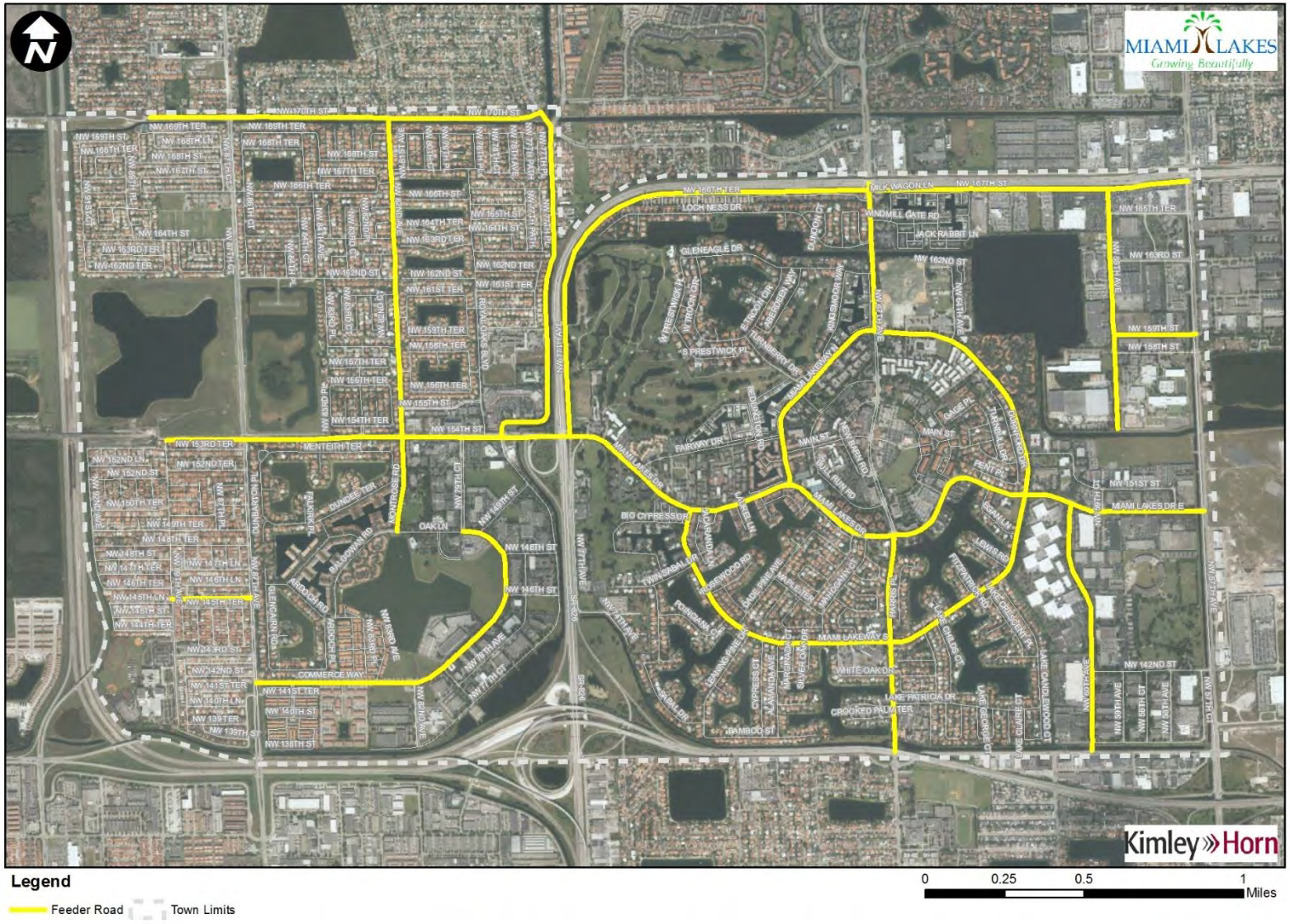
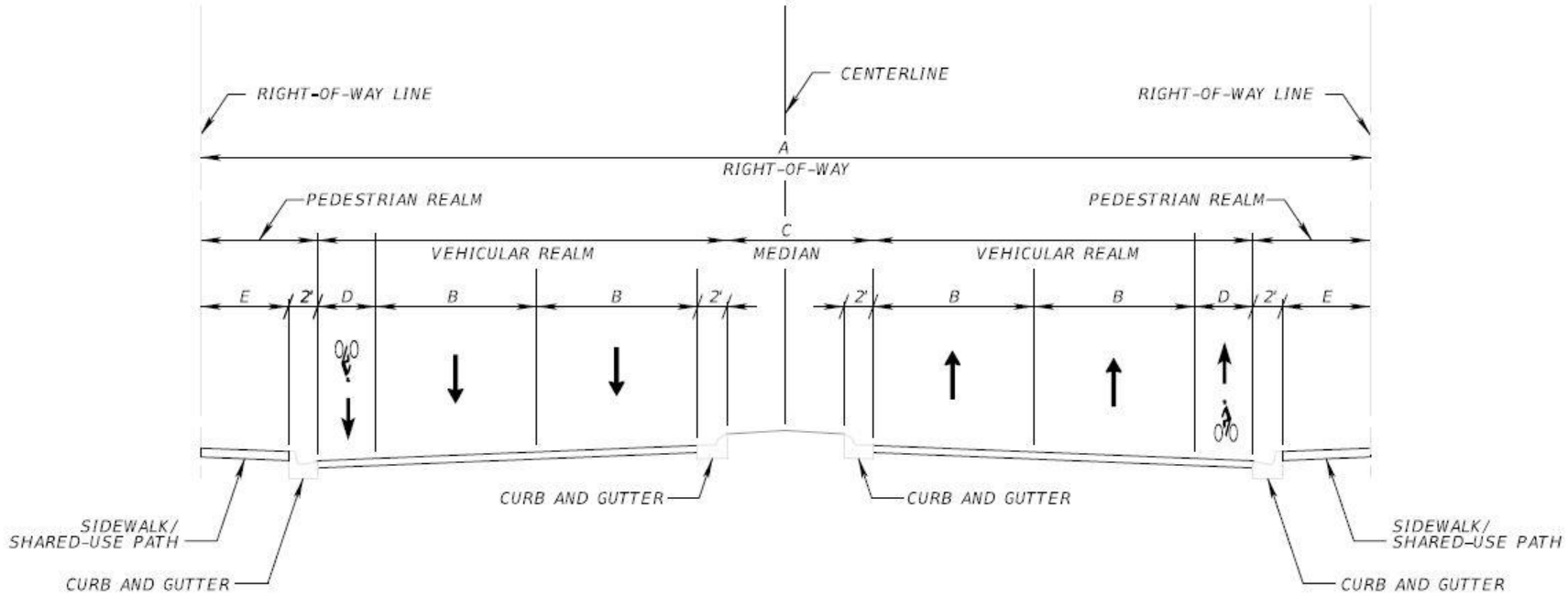


Figure 21: Feeder Road Cross Section Design Standard



	RIGHT-OF-WAY		VEHICULAR REALM			PEDESTRIAN REALM		
	A		B	C	D	H	E	
	RIGHT-OF-WAY	LANES	TRAVEL LANE	MEDIAN (incl C&G)	BIKE LANE	PEDESTRIAN BUFFER	SIDEWALK/SHARED-USE	CURB & GUTTER
OPTION 1	80'	4-Divided	11'	12'	4'	0	6'	2'
OPTION 2	80'	4-Undivided	11'	NONE	4'	2'	10'	2'
OPTION 3	70'	4-Undivided	10'	NONE	SHARROW	3'	10'	2'
OPTION 4	70'	2-Undivided	11'	NONE	7' BUFFERED	3'	12'	2'

NOTE: Where recommended, pedestrian buffers should be within the pedestrian realm, between the curb and sidewalk/shared-use path.

Civic Street

A Civic Street is a pedestrian-oriented street in shopping and entertainment destinations which provides access to businesses and institutional facilities. Civic Streets are intended to provide balance between the needs of people passing through as well as the needs of those who live and work along the street. Characteristics of a Civic Street may include:

- Serves local traffic
- Connects commercial areas and neighborhoods
- Prioritizes local activity
- Allows for through movement
- On-street parking
- Sidewalks
- Bike lanes or shared lane marking

Examples of existing Civic roadways within the Town are provided in **Figure 22**.

Figure 22: Sample Civic Corridors

Main Street (Westbound)

NW 151st Street (Westbound)

Figure 23 is a map of the roadways designated as Civic roadways within the Town**. Figure 24** is the recommended typical section for the designated roadways. Suggested alternatives to the dimensions of the recommended complete streets elements associated with the street typology are provided in the subsequent table.

Figure 23: Town of Miami Lakes Civic Street Map

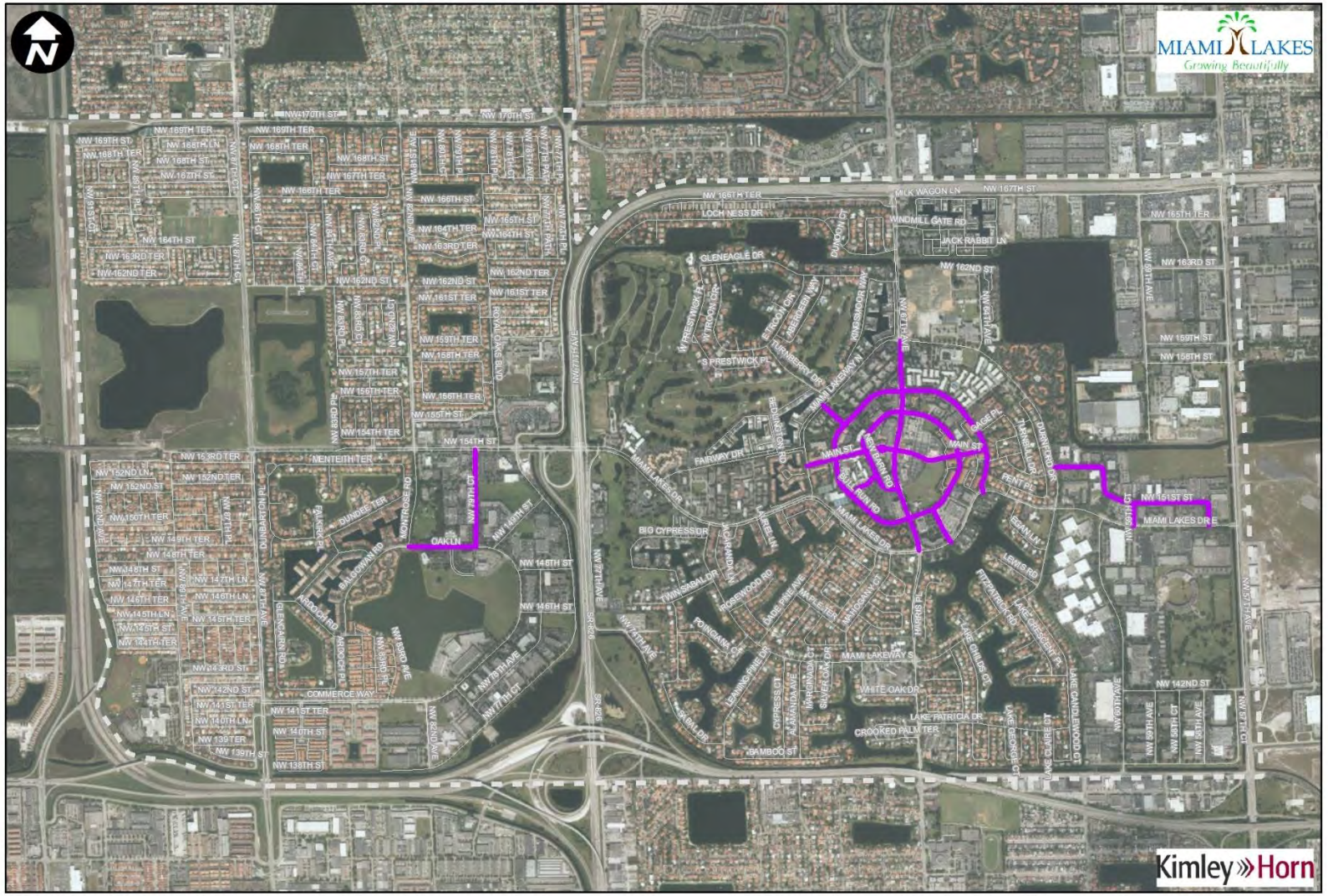
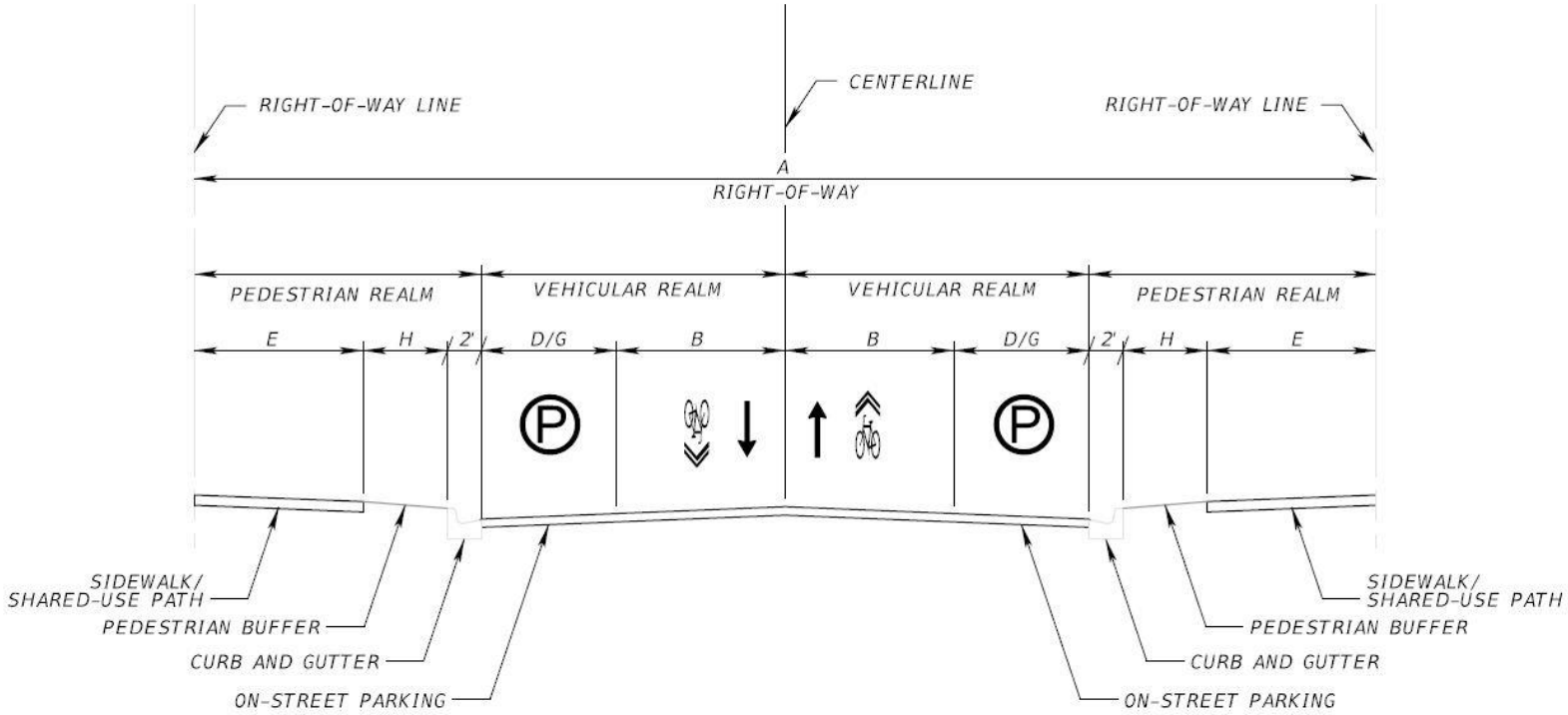


Figure 24: Civic Street Cross Section Design Standard



	RIGHT-OF-WAY		VEHICULAR REALM			PEDESTRIAN REALM		
	A		B	G	D	H	E	
	RIGHT-OF-WAY	LANES	TRAVEL LANE	ON-STREET PARKING	BIKE LANE	PEDESTRIAN BUFFER	SIDEWALK/SHARED-USE	CURB & GUTTER
OPTION 1	70'	2-Undivided	10'	8' ON-STREET PARKING	SHARROW	5'	10'	2'
OPTION 2	70'	2-Undivided	11'	NO ON-STREET PARKING	7' BUFFERED	5'	10'	2'
OPTION 3	80'	2-Undivided	11'	8' ON-STREET PARKING	7' BUFFERED	2'	10'	2'
OPTION 4	80'	4-Divided	11'	NO ON-STREET PARKING (*12' Median*)	SHARROW	2'	8'	2'

NOTE: For roadways without on-street parking, sharrows should be placed in the outside travel lane (lane closest to the curb).

Local Street

Local Streets have low vehicle volumes and traffic speeds compared to the other roadway typologies. Two local street types have been identified for the Town of Miami Lakes; Local Residential and Local Commercial. The characteristics for these two roadway types are provided below.

Local Commercial Street

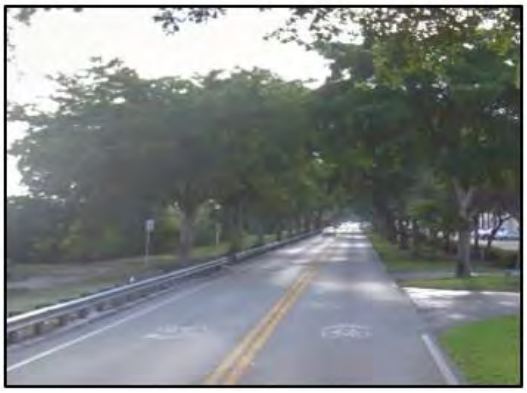
- Supplemental streets that provide secondary means of vehicular service
- Focus on commercial delivery and loading/unloading of goods
- Connections to transit
- Sidewalks
- Separated bike lanes

Local Residential Street

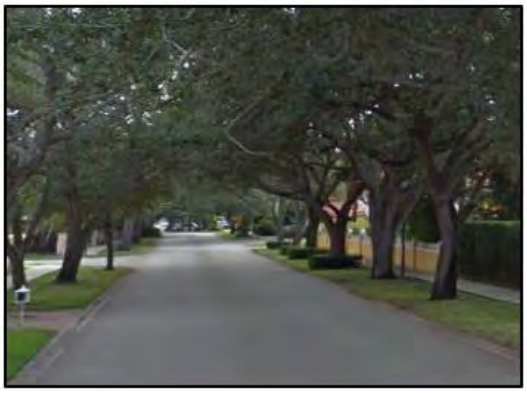
- Local streets with low vehicle volumes and low speeds
- Primarily provides connections to residential neighborhoods. May provide access to parks, schools or institutional facilities as well as local retail and services
- Little to no striping necessary
- Sidewalks
- Shared-lane markings along streets designated to have on-street facility by Town's *Greenways and Trails Master Plan*

Examples of existing local residential and commercial roadways within the Town are provided in **Figure 25**.

Figure 25: Sample Local Commercial and Residential Corridors



NW 77th Court (Southwest bound) - Commercial



NW 79th Avenue (Southbound) – Residential

Maps of the roadways designated as local commercial (**Figure 26**) and local residential (**Figure 28**) roadways are provided**.** Recommended typical sections for the designated roadways are provided in **Figure 27** and **Figure 29**. Suggested alternatives to the dimensions of the recommended complete streets elements associated with the street typologies are provided in the subsequent tables.

Figure 26: Town of Miami Lakes Local Commercial Street Map

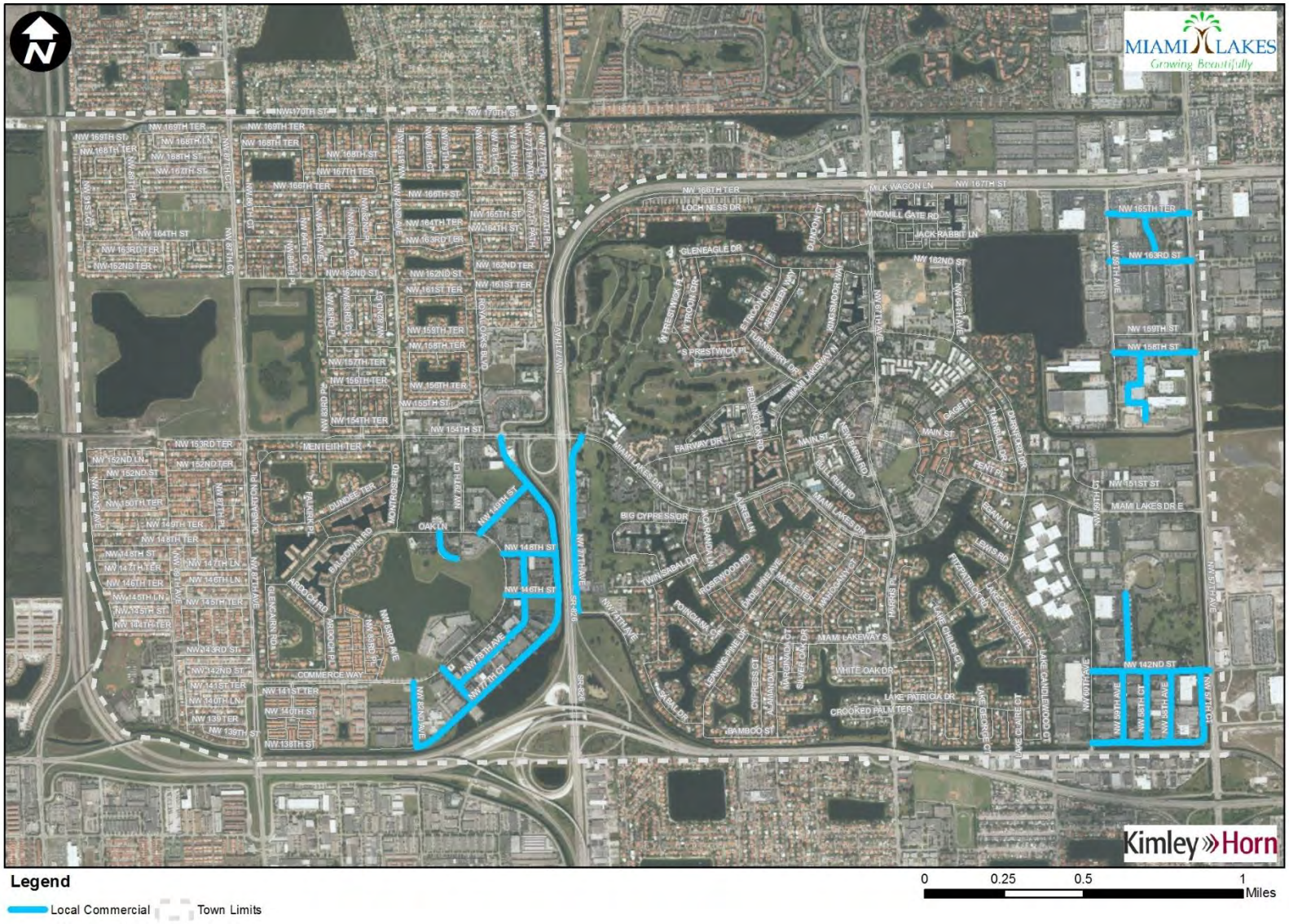
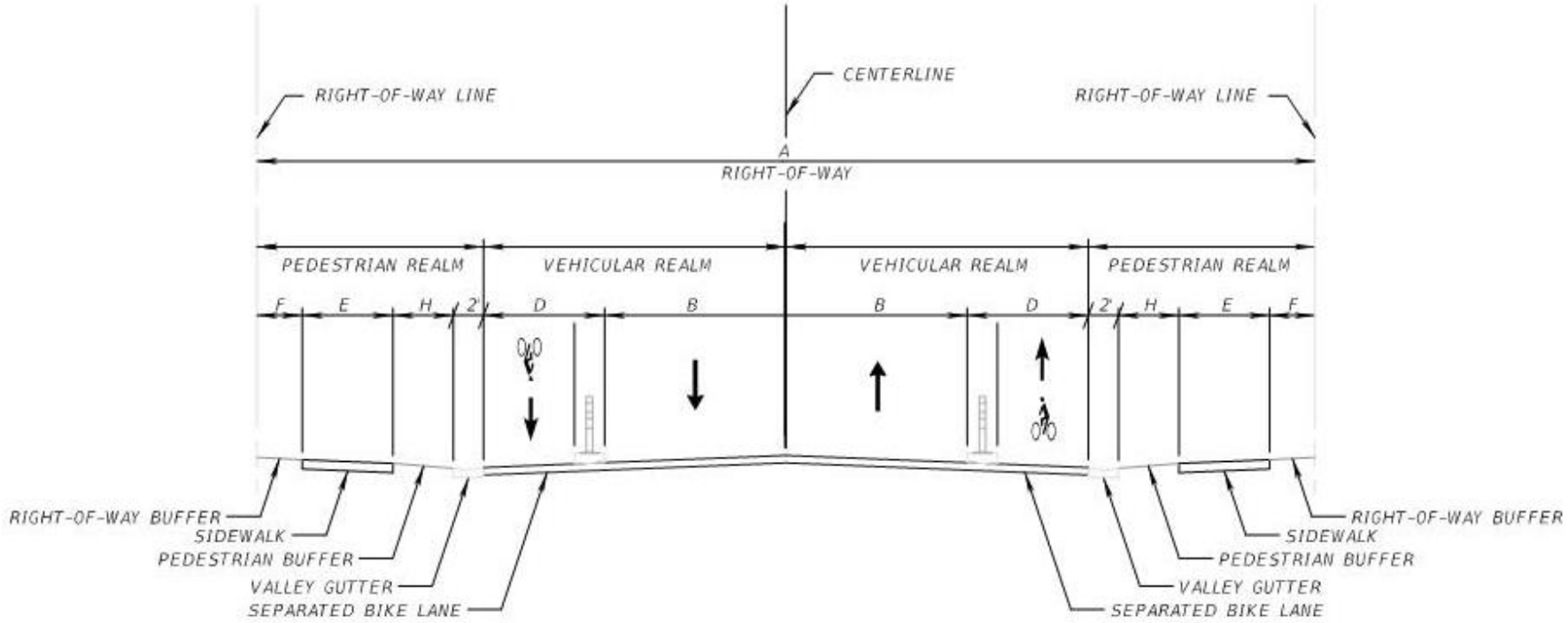


Figure 27: Local Commercial Street Cross Section Design Standard



	RIGHT-OF-WAY		VEHICULAR REALM		PEDESTRIAN REALM			
	A		B	D	H	E		F
	RIGHT-OF-WAY	LANES	TRAVEL LANE	BIKE LANE	PEDESTRIAN BUFFER	SIDEWALK	VALLEY GUTTER	ROW BUFFER
OPTION 1	70'	2-Undivided	12'	8' SEPARATED	4'	6'	2'	3'
OPTION 2	70'	2-Undivided	12'	8' SEPARATED	2'	8'	2'	3'
OPTION 3	70'	2-Undivided	12'	7' BUFFERED	4'	8'	2'	2'

NOTE: The right-of-way (ROW) buffer represents areas along the corridor that may have constraints and could restrict adding or widening recommended amenities due to existing fences, utilities or trees.

Figure 28: Town of Miami Lakes Local Residential Street Map

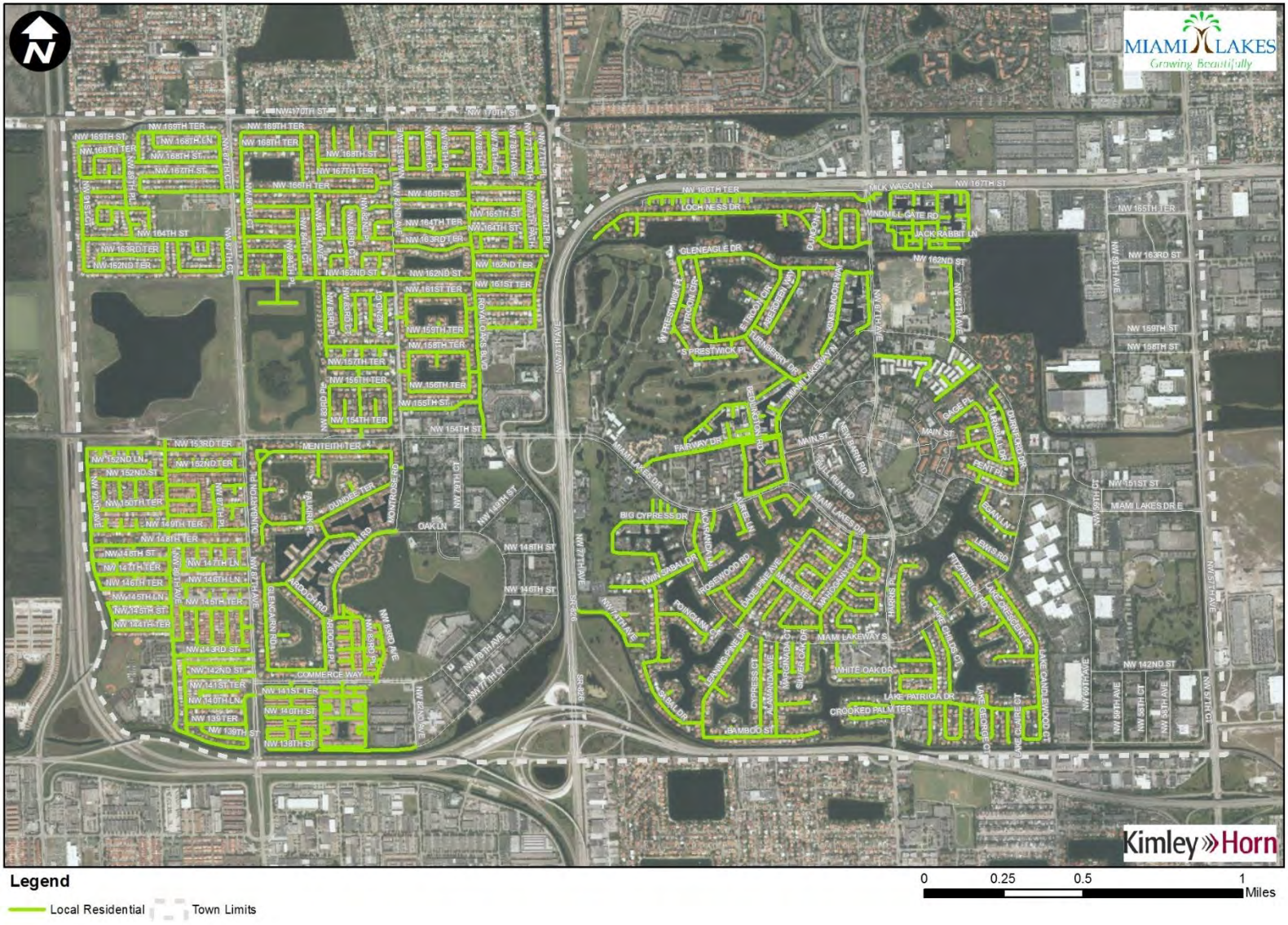
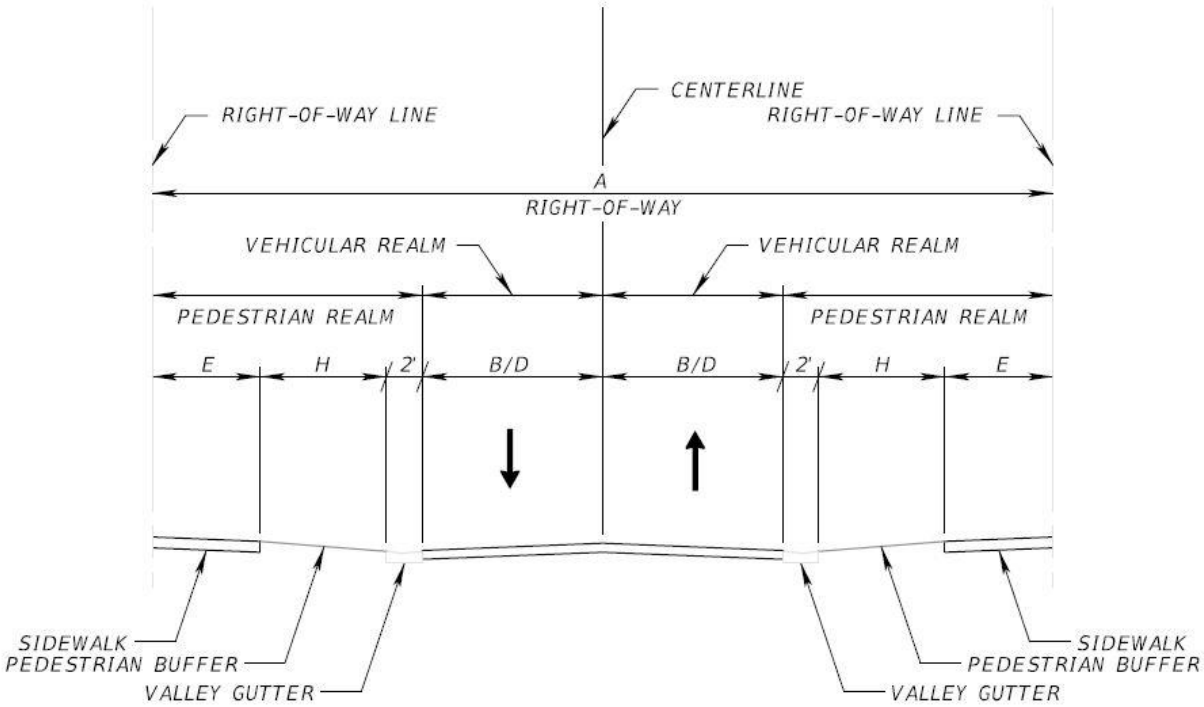


Figure 29: Local Residential Street Cross Section Design Standard



	RIGHT-OF-WAY		VEHICULAR REALM		PEDESTRIAN REALM		
	A		B	D	H	E	
	RIGHT-OF-WAY	LANES	TRAVEL LANE	BIKE LANE	PEDESTRIAN BUFFER	SIDEWALK	VALLEY GUTTER
OPTION 1	50'	2-Undivided	10'	SHARROW*	7'	6'	2'

***NOTE**: Sharrows will be recommended for roadways that are identified to have on-street facilities in the Town's *Greenways and Trails Master Plan*.

TOWN INITIATIVES AND ECONOMIC OPPORTUNITIES

During the development of the street typology and roadway enhancements, attention was made towards the roadways within the Town's identified Complete Streets target areas around major destinations. The goal of these areas is to enhance the multimodal network and connectivity. To accomplish this goal, Complete Streets design standards should be applied as new projects or opportunities for development and redevelopment occur. Roadway enhancements within the strategic planning districts and around major destinations should be focused on walkability and enhanced multimodal connections for all users along the roadway. The Town's target areas are areas identified by the Town as:

- Opportunities for investment and redevelopment
- Places of interest along the corridors
- Underutilized land such a parking lots or vacant parcels
- Areas to encourage developers to build with a focus on multimodal access

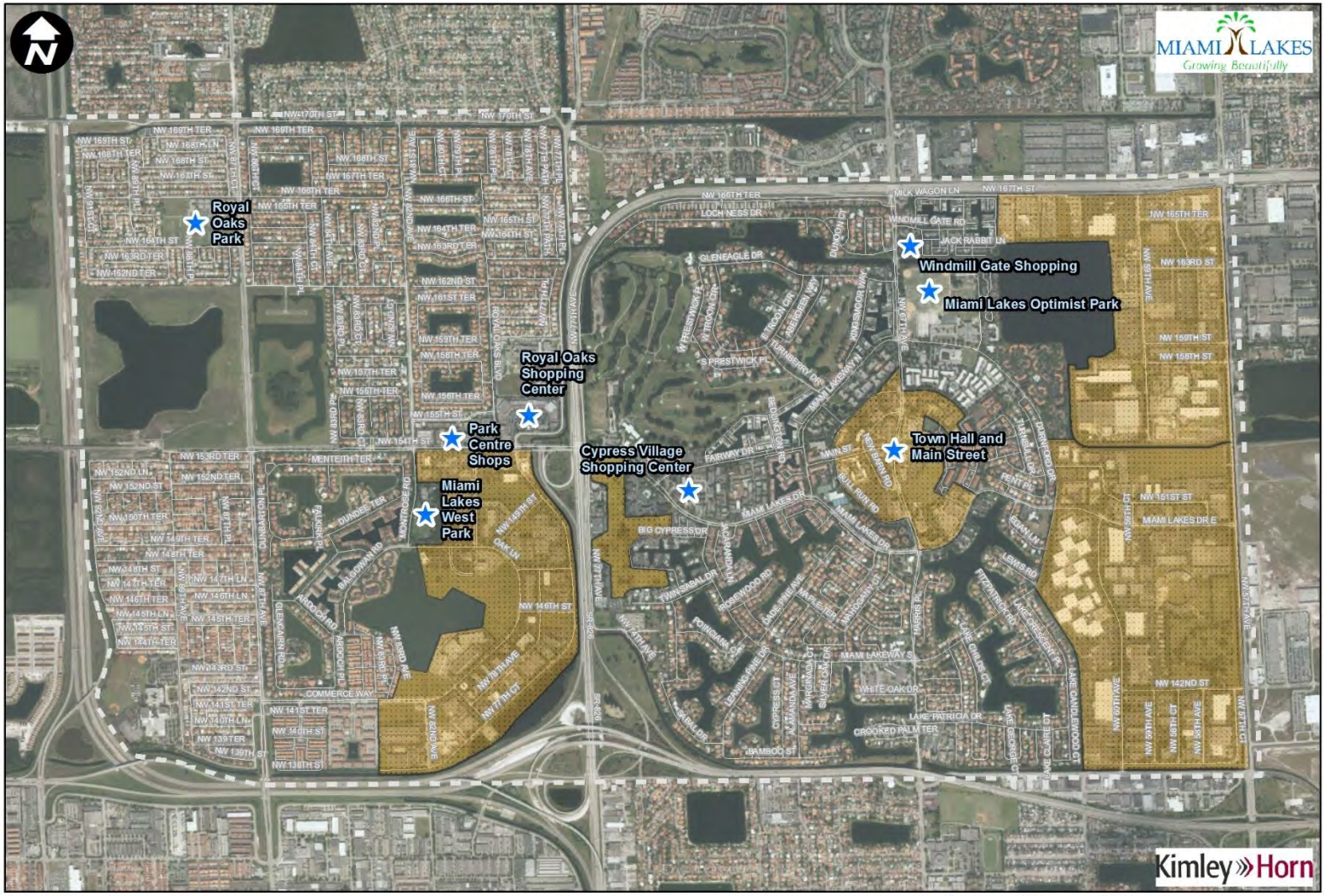
Locations identified as major destinations are locations that provide the community with recreational, commercial, retail, dining, entertainment, or government services. Identified popular and major destinations in Miami Lakes include the following:

- Miami Lakes West Park – Provides pavilions, a basketball court, lighted walking path, and a playground. The site also includes the Mary Collins Community Center.
- Park Centre Shops - Provides shopping and business services for the Miami Lakes Business Park West and surrounding areas.
- Royal Oaks Shopping Center - Provides shopping and business services in Miami Lakes.
- Cypress Village Shopping Center - Includes a mix of restaurants and retail stores.
- Town Hall and Main Street - Main Street, the centerpiece of Miami Lakes Town Center, is an open-air mall in the center of Miami Lakes offering a mix of uses.
- Royal Oaks Park - Multipurpose-use park with athletic fields, playground, picnic pavilions, exercise/bike trail, butterfly garden, and concession stand. Park also includes the Roberto Alonso Community Center.
- Miami Lakes Optimist Park - Multipurpose-use park with athletic fields, outdoor basketball courts, outdoor tennis courts, walking path, picnic pavilions, and batting cages with lighting. Site includes a marina for fishing and the Boundless Playground.
- Windmill Gate Shopping - Provides mix of restaurants and retail and is adjacent to the community's regional library.

Implementation of the recommended Complete Streets elements supports objectives under the following goals from the Town's *Strategic Plan, 2015-2025*. A map of the identified target areas and major destinations is provided in **Figure 30**.

- Enhance Mobility
- Enhance Economic Development & Community Hubs
- Enhance Signature Beauty and Park Landscape

Figure 30: Town of Miami Lakes Complete Streets Target Areas and Popular Locations



Safe Routes to School

One of the Miami Lakes Complete Streets goals is to design and develop neighborhoods that can facilitate children walking and biking safely to school in Miami Lakes by implementing capital projects that support development of safe routes to school. Florida's Safe Routes to School (SRTS) program focuses on helping communities address their school transportation needs and encourage more students to walk or cycle to school. It strives to enable and encourage children in grades Kindergarten through High School, including those with disabilities, to walk and bike to school; to make walking and biking to school safer and more appealing, and to facilitate the planning, development, and implementation of projects that will improve safety and reduce traffic, fuel consumption, and improve air quality in the vicinity of schools. In addition to encouraging more children to walk or cycle to school, the program also seeks to address the safety needs of children already walking or biking in less than ideal conditions.

Projects may include planning, design, and construction of infrastructure-related projects that will substantially improve the ability of students to walk and bicycle to school. The following types of projects are eligible under Florida Guidelines for funding:

Pedestrian Facilities: Includes new sidewalks and other pathways, sidewalk widening and sidewalk gap closures, all on the public right of way. Short pedestrian bridges may be able to be funded. Improvements to routes leading to bus stops.

Bicycle Facilities: Includes bicycle parking facilities such as bike racks, shelters and bike lockers on school grounds. These may be purchased for placement on public school property, but not on private property.

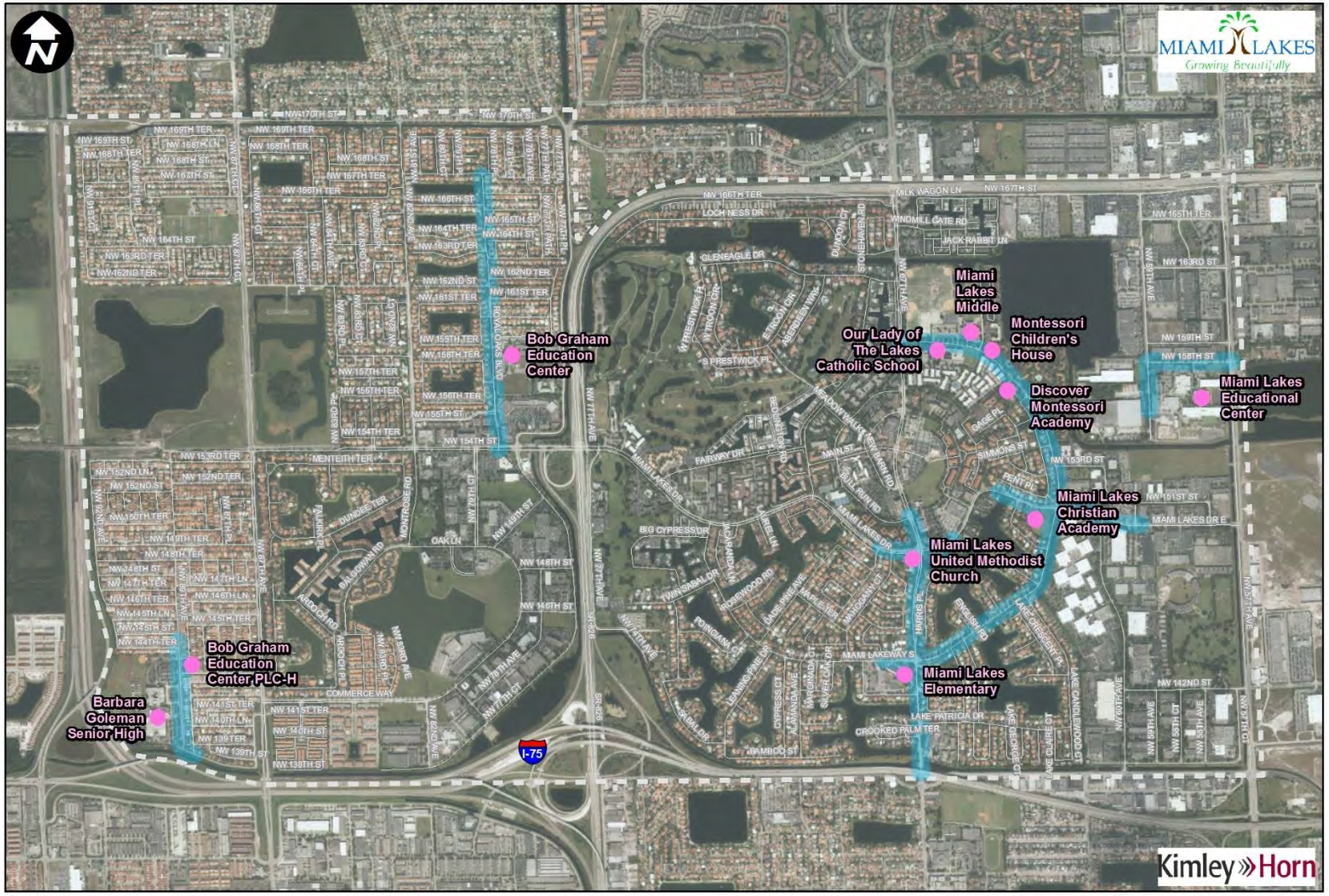
Traffic Control Devices: Includes new or upgraded marked crosswalks, pavement markings, traffic signs and signals, flashing beacons, bicycle-sensitive signal actuation devices, pedestrian countdown signals, pedestrian activated signal upgrades, and all other pedestrian and bicycle related traffic control devices.

Figure 31 provides a map of high priority school corridors within the Town of Miami Lakes.

All call for applications are done in September of each year and the completed applications are due by December 29.

For more information regarding the Safe Routes to School funding and program please visit http://www.srtsfl.org/

Figure 31: Town of Miami Lakes School Corridors



CONCEPTS

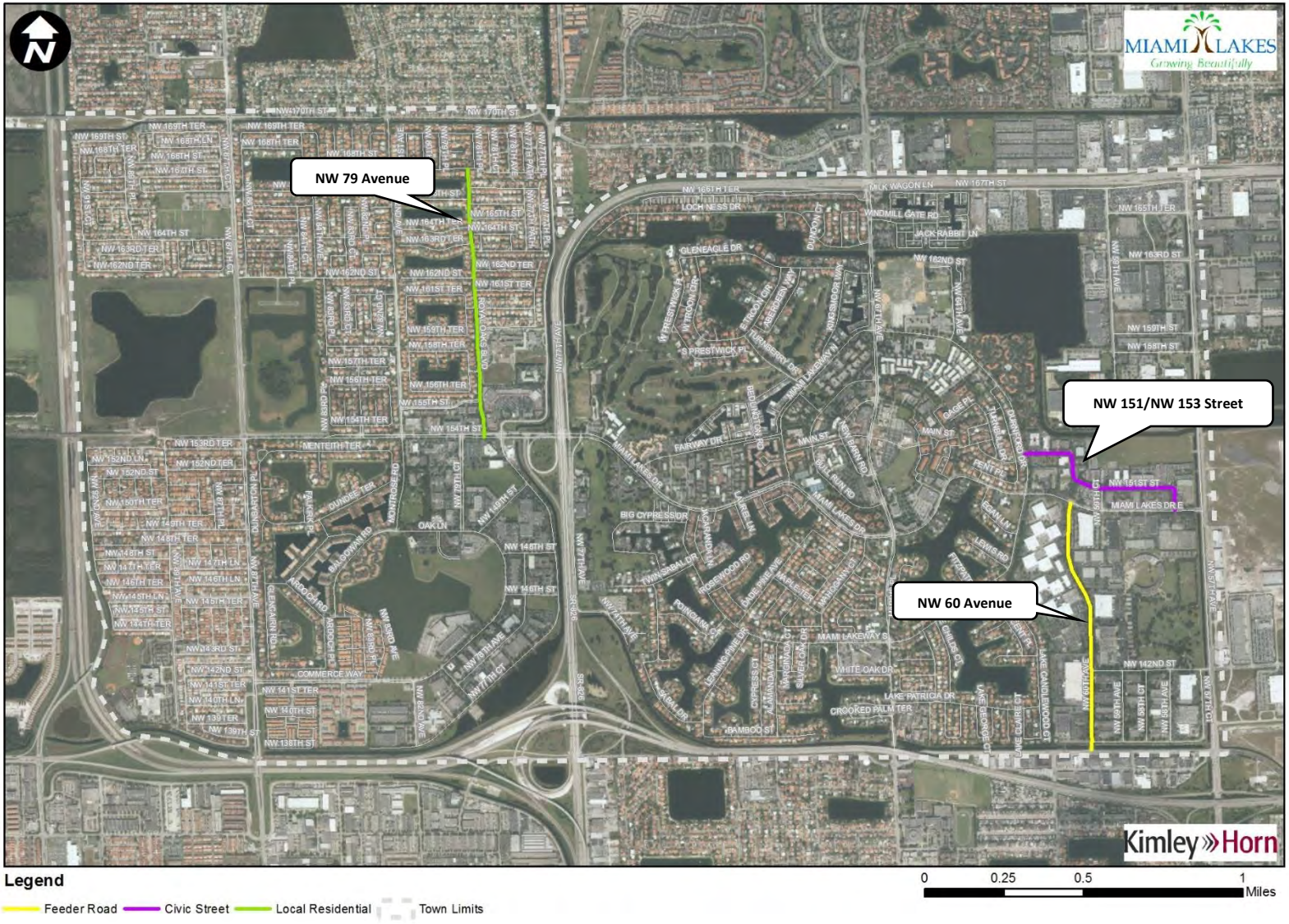
To demonstrate how the proposed Complete Streets cross section can be modified and applied to existing roadways within the Town, three (3) corridors were selected by Town staff to have concept designs created. The three corridors selected are listed below and illustrated in **Figure 32**:

- NW 151/NW 153 Street
- NW 60 Avenue
- NW 79 Avenue

Identified improvements and constraints are listed for each segment of the corridors and planning level construction cost estimates are provided at the end of this section.

For a complete list of roadways and their typology designation refer to **Appendix A.**

Figure 32: Concept Design Corridors



NW 151/NW 153 Street Corridor Overview

The NW 151/NW 153 Street corridor is categorized as a Civic roadway. Civic roadways are defined by the Miami Lakes Complete Streets Guidelines as pedestrian-oriented streets in shopping and entertainment areas that provide access to businesses and institutional facilities.

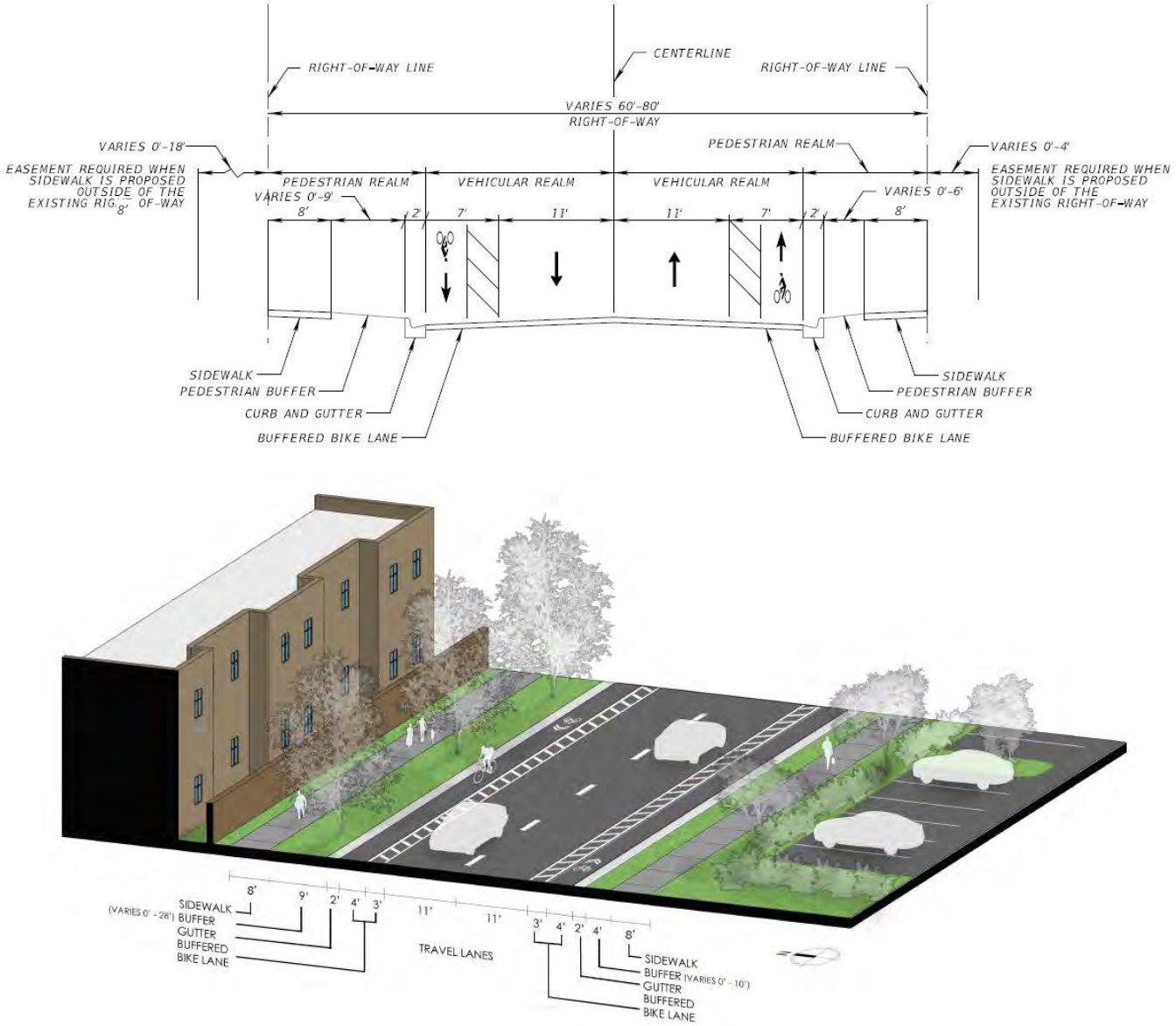
The existing land uses along the corridor consist of office complexes. Buildings are setback from the road by large parking lots with limited pedestrian connections between the existing sidewalks, transit stops, and businesses. There are currently no existing bike facilities along the corridor and bus stops have limited amenities. The corridor is located within the Town's target area and is intended to be redeveloped with higher density mixed use developments.

Table 2 is a summary table of the recommended improvements identified for the corridor and **Figure 33** illustrates the proposed cross section with conceptual rendering for the corridor. Detailed concept plans of the recommendations are provided on the subsequent pages.

Table 2: NW 151/NW 153 Street Recommended Improvement Summary

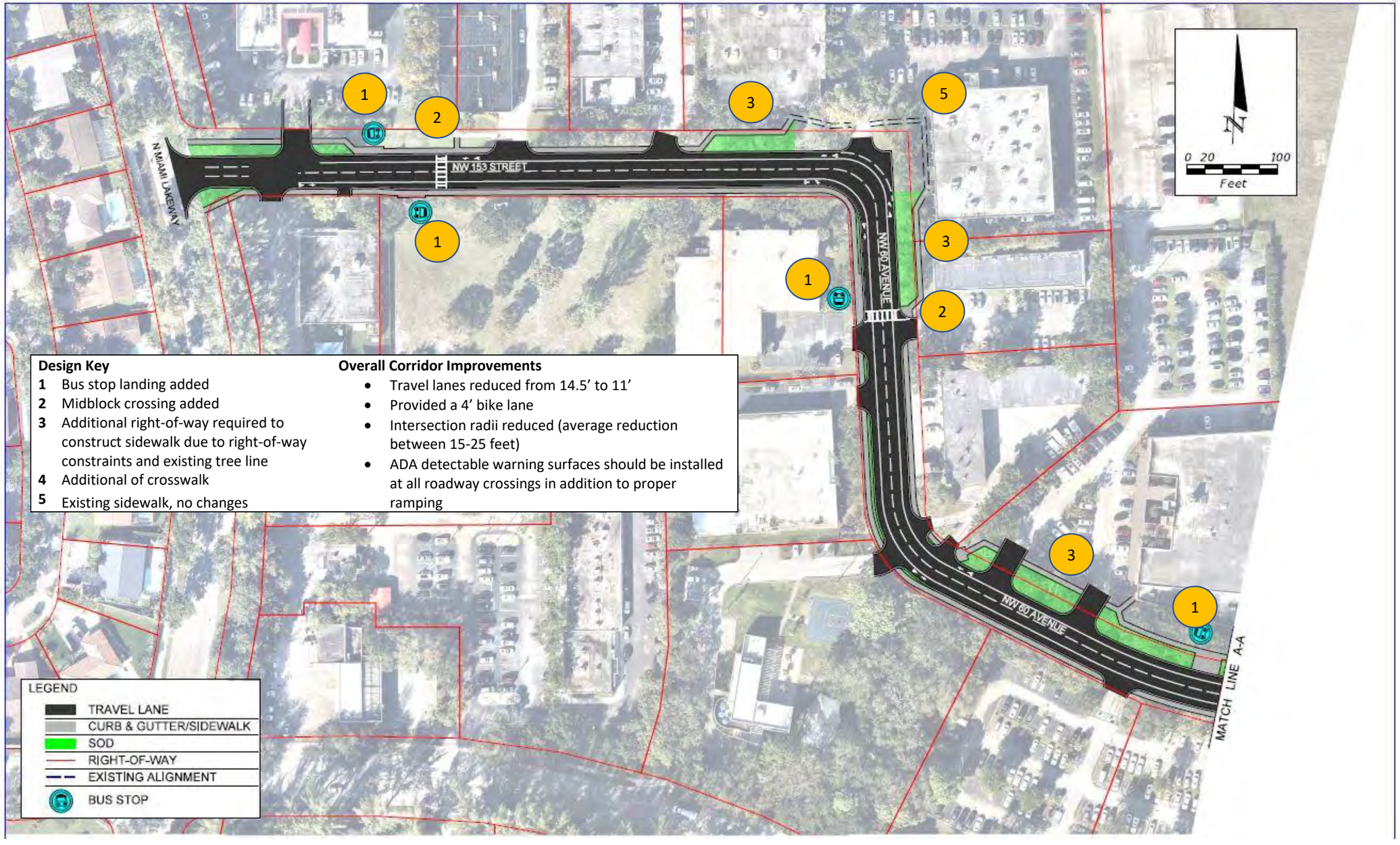
	NW 151 Street/153 Street	Existing	Proposed
Roadway Right-of-Way	Right-of-Way Width	60-80'	60-80'
	Number of Lanes	2	2
	Lane Width	14.5'	11'
	Intersection and Drway Radii	< 40'	15-25'
Bike Facility	Bike Lane/Sharrow	No	Buffered 7'
Pedestrian Facilities	Left Side Sidewalk (≤ 8') Shared Use Path (>8')	8'	8'
	Right Side Sidewalk (≤ 8') Shared Use Path (>8')	0'	8'
Transit	Bus Pads	0	4

Figure 33: NW 151/NW 153 Street Proposed Cross Section and Concept Rendering



NW 151/NW 153 Street – Civic Street Proposed Concept (A-1)

Figure 34: Civic Street - NW 151/NW 153 Street Proposed Concept (A-1)



NW 151/NW 153 Street – Civic Street Proposed Concept (A-2)

Figure 35: Civic Street - NW 151/NW 153 Street Proposed Concept (A-2)

Design Key

1 Bus stop landing added
2 Midblock crossing added
3 Additional right-of-way required to construct sidewalk due to right-of-way constraints and existing tree line
4 Additional of crosswalk
5 Existing sidewalk, no changes

Overall Corridor Improvements

- Travel lanes reduced from 14.5' to 11'
- Provided a 4' bike lane
- Intersection radii reduced (average reduction between 15-25 feet)
- ADA detectable warning surfaces should be installed at all roadway crossings in addition to proper ramping

NW 60 Avenue Corridor Overview

The NW 60 Avenue corridor is categorized as a Feeder roadway. Feeder roadways are defined by the Miami Lakes Complete Streets Guidelines as roadways that connect Thoroughfares and Civic Streets providing access between urban centers and neighborhoods.

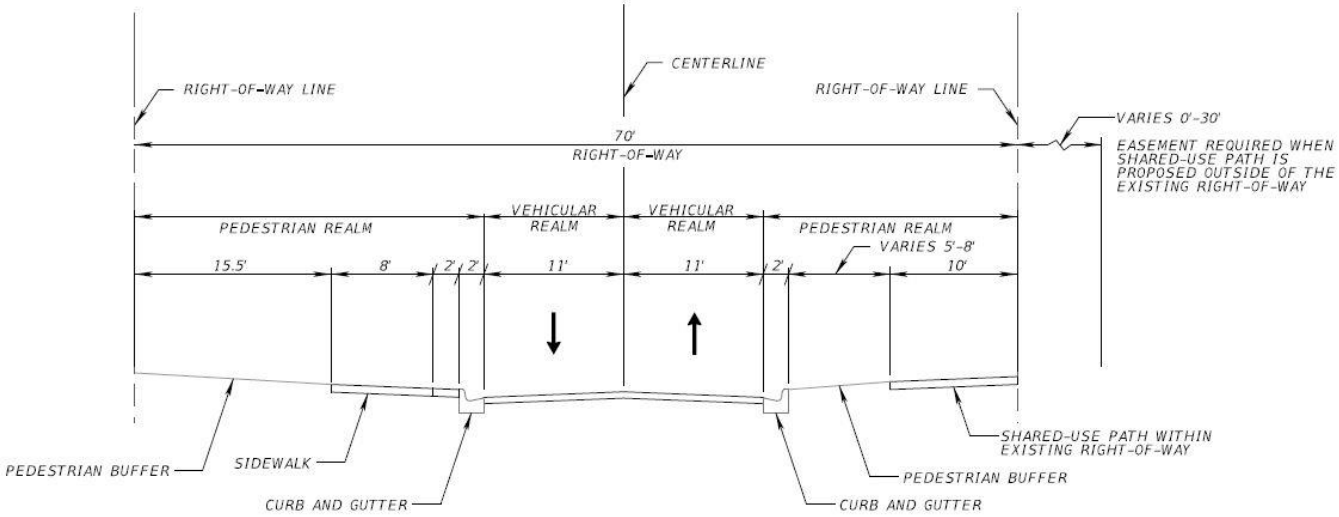
The existing land uses along the corridor consist of office complexes. Buildings are setback from the road by large parking lots with limited pedestrian connections between the existing sidewalks, transit stops, and businesses. There are currently no existing bike facilities along the corridor and bus stops have limited amenities. The corridor is located within the Town's target area and is intended to be redeveloped with higher density mixed use developments.

Table 3 is a summary table of the recommended improvements identified for the corridor and **Figure 36** illustrates the proposed cross section and concept rendering for the corridor. Detailed concept plans of the recommendations are provided on the subsequent pages.

Table 3: NW 60 Avenue Recommended Improvement Summary

NW 60 Avenue		Existing	Proposed
Roadway Right-of-Way	Right-of-Way Width	70'	70'
	Number of Lanes	2	2
	Lane Width	14.5'	11'
	Intersection and Driveway Radii	< 30'	15-25'
Bike Facility	Bike Lane/Sharrow	No	No
Pedestrian Facilities	Left Side Sidewalk (≤ 8') Shared Use Path (>8')	8'	8'
	Right Side Sidewalk (≤ 8') Shared Use Path (>8')	0'	10'
Transit	Bus Pads	5	9

Figure 36: NW 60 Avenue Proposed Cross Section and Concept Rendering



NW 60 Avenue – Feeder Road Proposed (B-1)

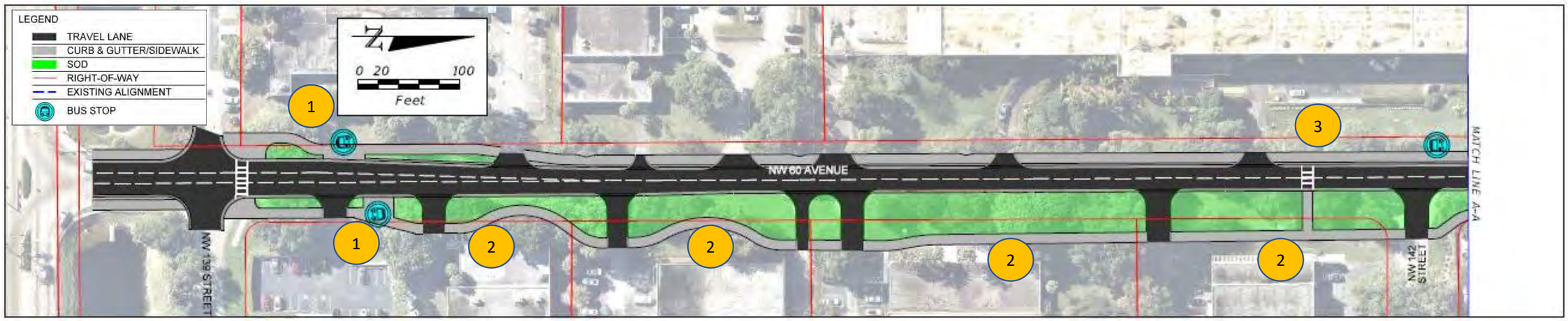
Design Key

1. Bus stop landing added
2. Additional right-of-way required to construct sidewalk due to right-of-way constraints and existing tree line
3. Midblock crossing added

Overall Corridor Improvements

- Travel lanes reduced from 14.5’ to 11’
- Intersection radii reduced (average reduction between 15-25 feet)
- ADA detectable warning surfaces should be installed at all roadway crossings in addition to proper ramping

Figure 37:NW 60 Avenue Proposed (B-1)



NW 60 Avenue – Feeder Road Proposed (B-2)

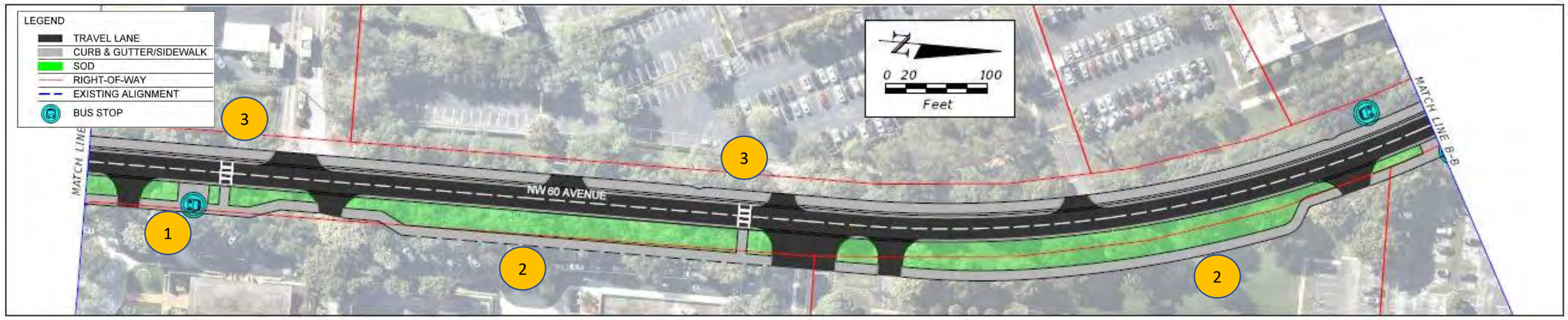
Design Key

1. Bus stop landing added
2. Additional right-of-way required to construct sidewalk due to right-of-way constraints and existing tree line
3. Midblock crossing added

Overall Corridor Improvements

- Travel lanes reduced from 14.5’ to 11’
- Intersection radii reduced (average reduction between 15-25 feet)
- ADA detectable warning surfaces should be installed at all roadway crossings in addition to proper ramping

Figure 38: NW 60 Avenue Proposed (B-2)



NW 60 Avenue – Feeder Road Proposed (B-3)

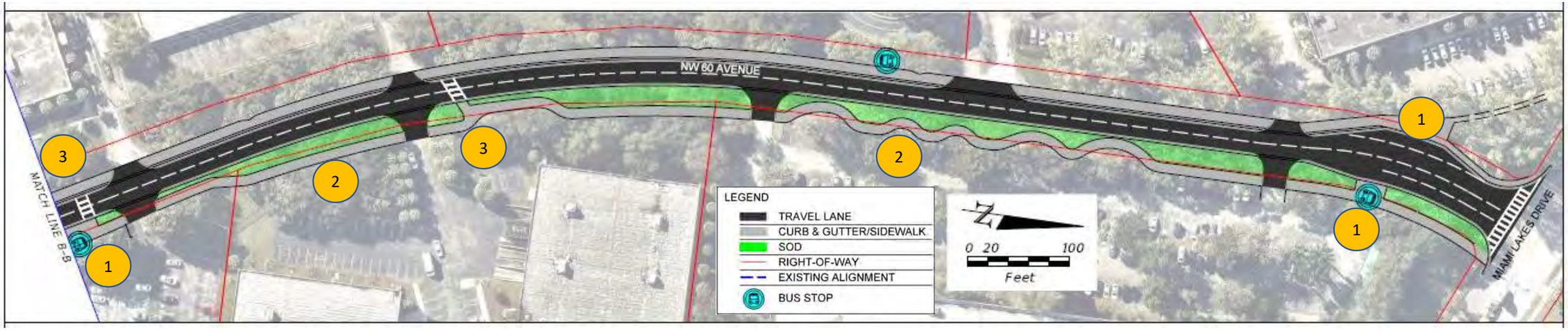
Design Key

1. Bus stop landing added
2. Additional right-of-way required to construct sidewalk due to right-of-way constraints and existing tree line
3. Midblock crossing added

Overall Corridor Improvements

- Travel lanes reduced from 14.5’ to 11’
- Intersection radii reduced (average reduction between 15-25 feet)
- ADA detectable warning surfaces should be installed at all roadway crossings in addition to proper ramping

Figure 39: NW 60 Avenue Proposed (B-3)



NW 79 Avenue Corridor Overview

The NW 79 Avenue corridor is categorized as a Local Residential roadway. Local Residential roadways are defined by the Miami Lakes Complete Streets Guidelines as roadways that primarily serve local trips and provide access to residential neighborhoods, parks, schools or institutional facilities. The roadways have low vehicle volumes and low traffic speeds.

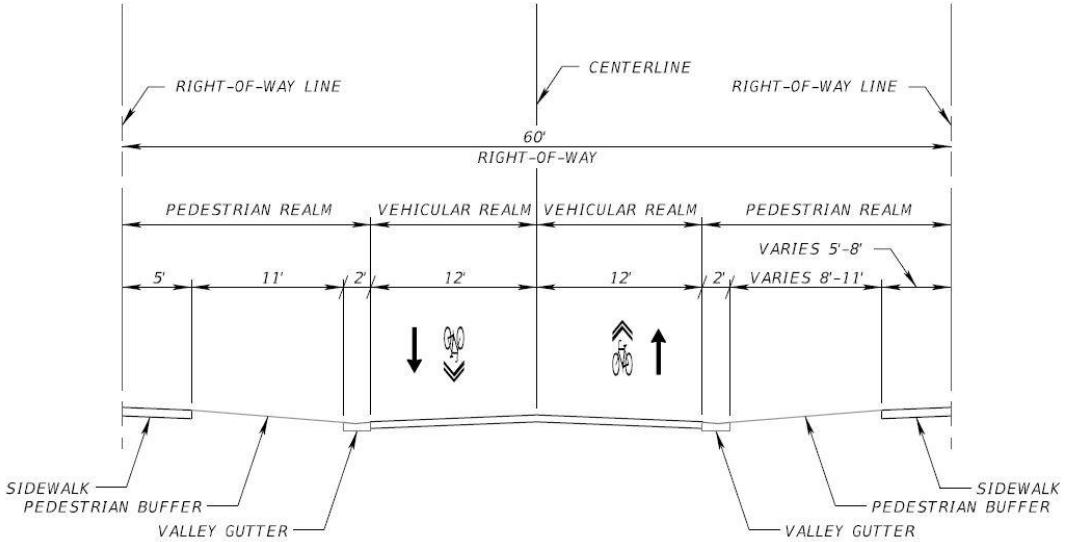
The existing land uses along the corridor consist of single family residential homes, with connections to Bob Gram Education Center and the Royal Oaks Plaza. There are currently no existing bike facilities along the corridor and bus stops have limited amenities. There are constraints along the corridor due to existing trees and residential walls/fences that impact sidewalk expansion opportunities. The corridor is located within a designated school corridor.

Table 4 is a summary table of the recommended improvements identified for the corridor and **Figure 40** illustrates the proposed cross section and concept rendering for the corridor. Detailed concept plans of the recommendations are provided on the subsequent pages.

Table 4: NW 79 Avenue Recommended Improvement Summary

	NW 79 Avenue	Existing	Proposed
Roadway Right-of-Way	Right-of-Way Width	60'	60'
	Number of Lanes	2	2
	Lane Width	12'	12'
	Intersection and Driveway Radii	< 50'	15-25'
Bike Facility	Bike Lane/Sharrow	No	Yes
Pedestrian Facilities	Left Side Sidewalk (≤ 8') Shared Use Path (>8')	5'	5'
	Right Side Sidewalk (≤ 8') Shared Use Path (>8')	5'	5' (8' near school)
Transit	Bus Pads	0	2

Figure 40: NW 79 Avenue Proposed Cross Section and Concept Rendering



NW 79 Avenue – Local Residential Proposed (C-1)

Design Key

1. Existing ROW constraints due to trees and adjacent property features inhibits sidewalk expansions
2. Bus stop landing added
3. Right-of-way constraints inhibit sidewalk expansion north of NW 160th Terrace due to existing residential wall along segment
4. Added standard crosswalk markings to existing textured crosswalk
5. Propose expanding existing sidewalk adjacent to school to 8'. Additional ROW may be required due to existing tree line
6. Propose addition of crosswalk markings

Overall Corridor Improvements

- Green sharrows added the full length of the corridor
- Intersection radii reduced (average reduction between 15-25 feet)
- ADA detectable warning surfaces should be installed at all roadway crossings in addition to proper ramping

Figure 41: NW 79 Avenue Proposed (C-1)

NW 79 Avenue – Local Residential Proposed (C-2)

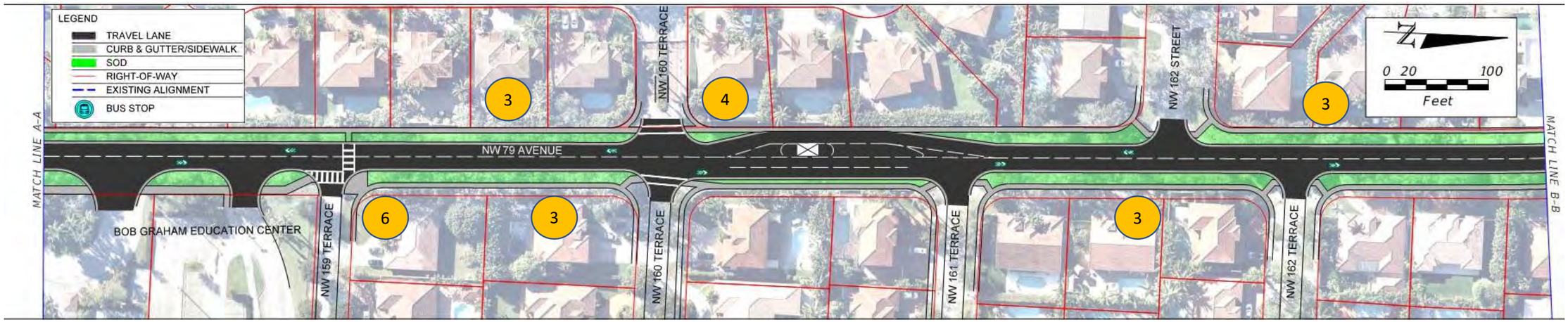
Design Key

1. Existing ROW constraints due to trees and adjacent property features inhibits sidewalk expansions
2. Bus stop landing added
3. Right-of-way constraints inhibit sidewalk expansion north of NW 160th Terrace due to existing residential wall along segment
4. Added standard crosswalk markings to existing textured crosswalk
5. Propose expanding existing sidewalk adjacent to school to 8'. Additional ROW may be required due to existing tree line
6. Propose addition of crosswalk markings

Overall Corridor Improvements

- Green sharrows added the full length of the corridor
- Intersection radii reduced (average reduction between 15-25 feet)
- ADA detectable warning surfaces should be installed at all roadway crossings in addition to proper ramping

Figure 42: NW 79 Avenue Proposed (C-2)



NW 79 Avenue – Local Residential Proposed (C-3)

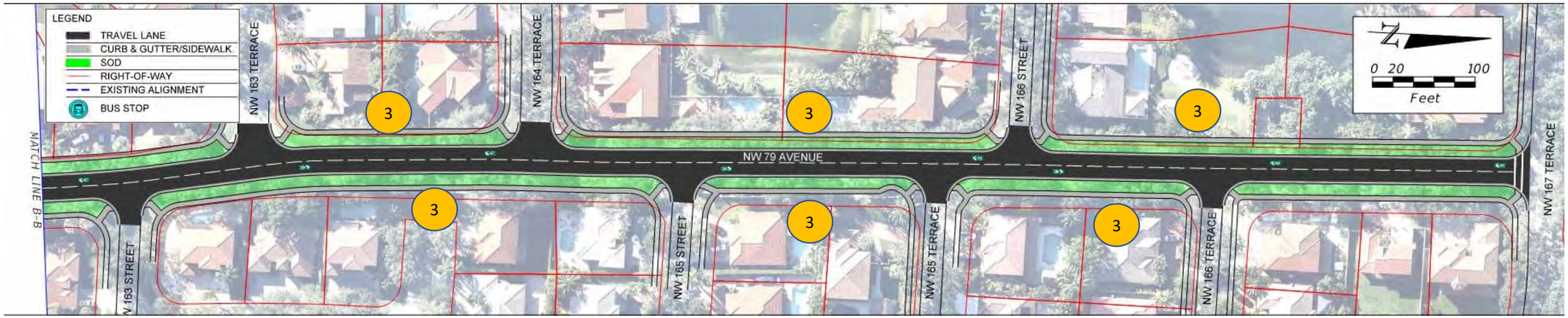
Design Key

1. Existing ROW constraints due to trees and adjacent property features inhibits sidewalk expansions
2. Bus stop landing added
3. Right-of-way constraints inhibit sidewalk expansion north of NW 160th Terrace due to existing residential wall along segment
4. Added standard crosswalk markings to existing textured crosswalk
5. Propose expanding existing sidewalk adjacent to school to 8'. Additional ROW may be required due to existing tree line
6. Propose addition of crosswalk markings

Overall Corridor Improvements

- Green sharrows added the full length of the corridor
- Intersection radii reduced (average reduction between 15-25 feet)
- ADA detectable warning surfaces should be installed at all roadway crossings in addition to proper ramping

Figure 43: NW 79 Avenue Proposed (C-3)



OPINION OF PROBABLE CONSTRUCTION COST ESTIMATES

As part of the concept design for the three corridors preliminary planning level opinion of probable construction cost estimates were developed. The proposed modified Complete Streets cross sections for each corridor are provided with the cost estimates.

The construction cost estimates provide pay items for roadway, signing, and marking enhancements. The cost estimates do not include estimates for replacement of existing signs, design, permitting, survey, Geotech, construction observation services, right-of-way acquisition, or landscaping.

NW 151/153 Street (Civic Street)

ITEM NUMBER	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL COST
	ROADWAY PAY ITEMS				
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	SY	3706	$ 4.00	$ 14,824.00
334-1-13	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C	TN	1631	$ 86.87	$ 141,685.00
337-7-83	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22	TN	816	$ 85.91	$ 70,102.60
520-1-10	CONCRETE CURB & GUTTER, TYPE F	LF	3225	$ 22.30	$ 71,917.50
522-1	SIDEWALK, CONCRETE, 4" THICK	SY	4204	$ 39.13	$ 164,502.60
527-2	DETECTABLE WARNINGS	SF	816	$ 26.81	$ 21,877.00
570-1-2	PEFORMANCE TURF, SOD	SY	3127	$ 3.16	$ 9,881.40
		ROADWAY SUBTOTAL			**$ 494,790.10**
	SIGNING AND PAVEMENT MARKING PAY ITEMS				
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	EA	18	$ 423.21	$ 7,617.80
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID 12"	LF	344	$ 1.84	$ 633.00
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	LF	614	$ 3.50	$ 2,149.00
711-11-160	THERMOPLASTIC, STD, WHITE, MESSAGE	EA	18	$ 106.82	$ 1,922.80
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	EA	25	$ 52.13	$ 1,303.30
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	LF	100	$ 2.39	$ 239.00
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	GM	2	$ 4,105.75	$ 6,442.90
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	GM	1	$ 4,321.29	$ 2,568.30
		SIGNING AND MARKING SUBTOTAL			**$ 22,876.10**
		SUB TOTAL			**$ 517,666.20**
	CONTINGENCY	LS	15%	-	$ 77,649.93
		GRAND TOTAL			**$ 595,316.13**

Kimley-Horn and Associates, Inc. has no control over the cost of labor, materials, equipment, or services furnished by others, or over methods of determining price, or over competitive bidding or market conditions. Any and all professional opinions as to costs reflected herein, including but not limited to professional opinions as to the costs of construction materials, are made on the basis of professional experience and available data. Kimley-Horn and Associates, Inc. cannot and does not guarantee or warrant that proposals, bids, or actual costs will not vary from the professional opinions of costs shown herein.

NW 60th Avenue (Feeder Road)

ITEM NUMBER	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL COST
	ROADWAY PAY ITEMS				
520-1-10	CONCRETE CURB & GUTTER, TYPE F	LF	4,070	$ 22.30	$ 90,761.00
522-1	SIDEWALK, CONCRETE, 4" THICK	SY	5063	$ 39.13	$ 198,115.20
527-2	DETECTABLE WARNINGS	SF	1360	$ 26.81	$ 36,461.60
570-1-2	PEFORMANCE TURF, SOD	SY	8000	$ 3.16	$ 25,280.00
		ROADWAY SUBTOTAL			**$ 350,617.80**
		SUB TOTAL			**$ 350,617.80**
	CONTINGENCY	LS	15%	-	$ 52,592.67
		GRAND TOTAL			**$ 403,210.47**

Kimley-Horn and Associates, Inc. has no control over the cost of labor, materials, equipment, or services furnished by others, or over methods of determining price, or over competitive bidding or market conditions. Any and all professional opinions as to costs reflected herein, including but not limited to professional opinions as to the costs of construction materials, are made on the basis of professional experience and available data. Kimley-Horn and Associates, Inc. cannot and does not guarantee or warrant that proposals, bids, or actual costs will not vary from the professional opinions of costs shown herein.

NW 79th Avenue (Local Residential)

ITEM NUMBER	DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL COST
	ROADWAY PAY ITEMS				
327-70-4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	SY	3954	$ 4.00	$ 15,816.00
334-1-13	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C	TN	1740	$ 86.87	$ 151,153.80
337-7-83	ASPHALT CONCRETE FRICTION COURSE, TRAFFIC C, FC-12.5, PG 76-22	TN	791	$ 85.91	$ 67,954.90
520-1-10	CONCRETE CURB & GUTTER, TYPE F	LF	2740	$ 22.30	$ 61,102.00
520-3	VALLEY GUTTER - CONCRETE	LF	3500	$ 20.26	$ 70,910.00
522-1	SIDEWALK, CONCRETE, 4" THICK	SY	4775	$ 39.13	$ 186,845.80
527-2	DETECTABLE WARNINGS	SF	600	$ 26.81	$ 16,086.00
570-1-2	PEFORMANCE TURF, SOD	SY	7733	$ 3.16	$ 24,436.30
		ROADWAY SUBTOTAL			**$ 594,304.80**
	SIGNING AND PAVEMENT MARKING PAY ITEMS				
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	EA	11	$ 423.21	$ 4,655.40
711-11-123	THERMOPLASTIC, STD, WHITE, SOLID 12"	LF	175	$ 1.84	$ 322.00
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	LF	440	$ 3.50	$ 1,540.00
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	EA	14	$ 52.13	$ 729.90
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	LF	225	$ 2.39	$ 537.80
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	GM	1.84	$ 4,105.75	$ 7,554.60
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	GM	0.65	$ 4,321.29	$ 2,808.90
		SIGNING AND MARKING SUBTOTAL			**$ 18,148.60**
		SUB TOTAL			**$ 612,453.40**
	CONTINGENCY	LS	15%	-	$ 91,868.01
		GRAND TOTAL			**$ 704,321.41**

Kimley-Horn and Associates, Inc. has no control over the cost of labor, materials, equipment, or services furnished by others, or over methods of determining price, or over competitive bidding or market conditions. Any and all professional opinions as to costs reflected herein, including but not limited to professional opinions as to the costs of construction materials, are made on the basis of professional experience and available data. Kimley-Horn and Associates, Inc. cannot and does not guarantee or warrant that proposals, bids, or actual costs will not vary from the professional opinions of costs shown herein.

APPENDIX A: MIAMI LAKES ROADWAY INVENTORY

Street Name	Typology	Segment Length in Miles
ABERDEEN WAY	Local Residential	0.28
ALAMANDA AVE	Local Residential	0.29
ARDOCH PL	Local Residential	0.16
ARDOCH RD	Local Residential	0.20
BALGOWAN RD	Local Residential	0.38
BALLANTRAE CT	Local Residential	0.05
BAMBOO CT	Local Residential	0.03
BAMBOO ST	Local Residential	0.36
BEDLINGTON RD	Local Residential	0.59
BERWICK WAY	Local Residential	0.05
BIG CYPRESS CT	Local Residential	0.08
BIG CYPRESS DR	Local Residential	0.44
BOTTLE BRUSH DR	Local Residential	0.21
BRAEMAR CT	Local Residential	0.03
BRECKNESS PL	Local Residential	0.26
BRIAR PATCH PL	Local Residential	0.19
BRIDGE END RD	Local Residential	0.19
BULL RUN RD	Civic Street	0.67
BURNSIDE WAY	Local Residential	0.05
CAIRNRYAN CT	Local Residential	0.04
CASSIA PL	Local Residential	0.08
CEDAR CT	Local Residential	0.12
COCONUT AVE	Local Residential	0.07
COCONUT CT	Local Residential	0.07
COMMERCE WAY	Feeder Road	0.91
COTTON TAIL RD	Local Residential	0.10
COW PEN RD	Civic Street	0.48
CROOKED PALM CT	Local Residential	0.03
CROOKED PALM LN	Local Residential	0.12
CROOKED PALM PL	Local Residential	0.04
CROOKED PALM TER	Local Residential	0.14
CROWN GATE CT	Local Residential	0.04
CROWN GATE DR	Local Residential	0.15
CROWN GATE PL	Local Residential	0.04
CYPRESS CT	Local Residential	0.31
DADE PINE AVE	Local Residential	0.41
DADE PINE CT	Local Residential	0.11
DALKEITH LN	Local Residential	0.05
DORNOCH ROUND	Local Residential	0.04

DUNBARTON PL	Local Residential	0.34
DUNDEE TER	Local Residential	0.43
DUNOON CT	Local Residential	0.17
DURNFORD DR	Local Residential	0.34
E LOCH ISLE DR	Local Residential	0.14
E TROON CIR	Local Residential	0.27
EAGLE NEST LN	Civic Street	0.51
EGAN LN	Local Residential	0.21
ENGLISH RD	Local Residential	0.07
FAIRWAY DR	Local Residential	0.47
FALKIRK PL	Local Residential	0.06
FEARN DR	Local Residential	0.07
FINTRY PL	Local Residential	0.08
FITZPATRICK RD	Local Residential	0.09
FOX DEN CT	Local Residential	0.13
GAGE PL	Local Residential	0.13
GARVOCK PL	Local Residential	0.06
GLENCAIRN LN	Local Residential	0.07
GLENCAIRN RD	Local Residential	0.33
GLENCAIRN TER	Local Residential	0.18
GLENEAGLE DR	Local Residential	0.55
GLENNY TER	Local Residential	0.03
GOVERNORS SQUARE BLVD	Local Commercial	0.12
GREENTREE LN	Local Residential	0.05
HALDIMAND PL	Local Residential	0.05
HARRIS PL	Local Residential	0.22
HARRIS TER	Local Residential	0.03
HOLLY RD	Local Residential	0.29
HUTCHINSON RD	Local Residential	0.12
JACARANDA LN	Local Residential	0.41
JACK RABBIT LN	Local Residential	0.19
KILMARNOCK DR	Local Residential	0.20
KINGSMOOR WAY	Local Residential	0.39
KIPPFORD CT	Local Residential	0.06
LAKE BLUE DR	Local Residential	0.26
LAKE CANDLEWOOD CT	Local Residential	0.53
LAKE CHAMPLAIN TER	Local Residential	0.14
LAKE CHILDS CT	Local Residential	0.26
LAKE CLAIRE CT	Local Residential	0.15
LAKE COMO TER	Local Residential	0.12
LAKE CRESCENT PL	Local Residential	0.22

LAKE GENEVA RD	Local Residential	0.08
LAKE GEORGE CT	Local Residential	0.23
LAKE JUNE RD	Local Residential	0.09
LAKE LURE CT	Local Residential	0.26
LAKE PATRICIA DR	Local Residential	0.50
LAKE PLACID CT	Local Residential	0.13
LAKE SARANAC AVE	Local Residential	0.23
LAKE SUCCESS PL	Local Residential	0.10
LAUREL LN	Local Residential	0.14
LEANING PINE DR	Local Residential	0.47
LEMON TREE LN	Local Residential	0.08
LEWIS RD	Local Residential	0.15
LOCH NESS CT	Local Residential	0.04
LOCH NESS DR	Local Residential	0.99
LOCH NESS LN	Local Residential	0.07
MAHOGANY CT	Local Residential	0.38
MAIN ST	Civic Street	0.59
MAPLE TER	Local Residential	0.19
MARGINADA CT	Local Residential	0.09
MEADOW WALK	Civic Street	0.09
MENTEITH PL	Local Residential	0.09
MENTEITH TER	Local Residential	0.43
MIAMI LAKES DR	Feeder Road	0.57
MIAMI LAKES DR E	Feeder Road	0.13
MIAMI LAKEWAY N	Feeder Road	1.42
MIAMI LAKEWAY S	Feeder Road	1.60
MILK WAGON LN	Local Residential	0.31
MONTROSE RD	Feeder Road	0.30
MOULTRIE PL	Local Residential	0.15
N LOCH ISLE DR	Local Residential	0.11
N MIAMI LAKEWAY	Feeder Road	0.02
NEW BARN RD	Civic Street	0.36
NW 138TH ST	Local Residential	0.59
NW 138TH TER	Local Residential	0.11
NW 139TH LN	Local Residential	0.04
NW 139TH ST	Local Commercial	0.36
NW 139TH ST	Local Residential	0.15
NW 139TH TER	Local Residential	0.29
NW 140TH LN	Local Residential	0.19
NW 140TH ST	Local Residential	0.15
NW 140TH TER	Local Residential	0.15

NW 141ST LN	Local Residential	0.12
NW 141ST TER	Local Residential	0.27
NW 142ND LN	Local Residential	0.22
NW 142ND ST	Local Commercial	0.37
NW 142ND ST	Local Residential	0.34
NW 143RD ST	Local Residential	0.40
NW 143RD TER	Local Residential	0.30
NW 144TH ST	Local Residential	0.21
NW 144TH TER	Local Residential	0.31
NW 145TH LN	Local Residential	0.20
NW 145TH ST	Local Residential	0.33
NW 145TH TER	Local Residential	0.24
NW 146TH LN	Local Residential	0.22
NW 146TH ST	Feeder Road	0.25
NW 146TH ST	Local Commercial	0.17
NW 146TH TER	Local Residential	0.22
NW 147TH LN	Local Residential	0.25
NW 147TH TER	Local Residential	0.23
NW 148TH ST	Local Commercial	0.17
NW 148TH ST	Local Residential	0.24
NW 148TH TER	Local Residential	0.49
NW 149TH TER	Local Residential	0.49
NW 150TH ST	Local Residential	0.15
NW 150TH TER	Local Residential	0.35
NW 151ST ST	Civic Street	0.27
NW 151ST ST	Local Residential	0.10
NW 151ST TER	Local Residential	0.20
NW 152ND LN	Local Residential	0.20
NW 152ND ST	Local Residential	0.25
NW 152ND TER	Local Residential	0.25
NW 153RD ST	Civic Street	0.15
NW 153RD TER	Local Residential	0.49
NW 154TH ST	Feeder Road	2.83
NW 154TH TER	Local Residential	0.20
NW 155TH ST	Local Residential	0.26
NW 156TH TER	Local Residential	0.38
NW 157TH TER	Local Residential	0.25
NW 158TH ST	Local Commercial	0.26
NW 158TH TER	Local Residential	0.41
NW 159TH ST	Feeder Road	0.26
NW 159TH TER	Local Residential	0.46

NW 160TH ST	Local Residential	0.03
NW 160TH TER	Local Residential	0.33
NW 161ST TER	Local Residential	0.54
NW 162ND ST	Local Residential	0.77
NW 162ND TER	Local Residential	0.59
NW 163RD ST	Local Commercial	0.26
NW 163RD ST	Local Residential	0.37
NW 163RD TER	Local Residential	0.66
NW 164TH ST	Local Residential	1.03
NW 164TH TER	Local Residential	0.25
NW 165TH ST	Local Residential	0.46
NW 165TH TER	Local Commercial	0.26
NW 165TH TER	Local Residential	0.68
NW 166TH ST	Local Residential	0.24
NW 166TH TER	Local Residential	1.78
NW 167TH ST	Feeder Road	1.75
NW 167TH ST	Local Residential	0.44
NW 167TH TER	Local Residential	0.66
NW 168TH LN	Local Residential	0.20
NW 168TH ST	Local Residential	0.53
NW 168TH TER	Local Residential	0.46
NW 169TH ST	Feeder Road	0.05
NW 169TH ST	Local Residential	0.14
NW 169TH TER	Local Residential	1.00
NW 170TH ST	Feeder Road	1.23
NW 57TH AVE	Thoroughfare	1.78
NW 57TH CT	Civic Street	0.07
NW 57TH CT	Local Commercial	0.21
NW 58TH AVE	Local Commercial	0.38
NW 58TH CT	Local Commercial	0.23
NW 59TH AVE	Feeder Road	0.75
NW 59TH AVE	Local Commercial	0.22
NW 59TH CT	Civic Street	0.07
NW 60TH AVE	Civic Street	0.12
NW 60TH AVE	Feeder Road	0.79
NW 64TH AVE	Local Residential	0.24
NW 6600 BLOCK	Civic Street	0.01
NW 67TH AVE	Civic Street	0.66
NW 67TH AVE	Feeder Road	1.15
NW 70TH AVE	Local Residential	0.02
NW 70TH CT	Local Residential	0.03

NW 71ST AVE	Local Residential	0.03
NW 71ST CT	Local Residential	0.03
NW 72ND AVE	Local Residential	0.04
NW 72ND CT	Local Residential	0.03
NW 72ND PL	Local Residential	0.03
NW 73RD AVE	Local Residential	0.03
NW 73RD CT	Local Residential	0.02
NW 73RD PL	Local Residential	0.02
NW 74TH AVE	Local Residential	0.21
NW 77TH AVE	Feeder Road	0.84
NW 77TH AVE	Local Commercial	0.56
NW 77TH CT	Feeder Road	1.22
NW 77TH CT	Local Commercial	1.23
NW 77TH PATH	Local Residential	0.38
NW 77TH PL	Local Residential	0.53
NW 78TH AVE	Local Commercial	0.50
NW 78TH AVE	Local Residential	0.18
NW 78TH CT	Local Residential	0.18
NW 78TH PL	Local Residential	0.22
NW 79TH AVE	Local Residential	0.84
NW 79TH CT	Civic Street	0.30
NW 79TH CT	Local Residential	0.25
NW 79TH PL	Local Residential	0.15
NW 80TH AVE	Local Commercial	0.15
NW 80TH AVE	Local Residential	0.04
NW 80TH CT	Local Residential	0.11
NW 81ST AVE	Local Residential	0.11
NW 81ST CT	Local Residential	0.25
NW 82ND AVE	Feeder Road	1.00
NW 82ND AVE	Local Commercial	0.20
NW 82ND CT	Local Residential	0.52
NW 82ND PL	Local Residential	0.37
NW 83RD AVE	Local Residential	0.61
NW 83RD CT	Local Residential	0.57
NW 83RD PASS	Local Residential	0.04
NW 83RD PATH	Local Residential	0.18
NW 83RD PL	Local Residential	0.91
NW 84TH AVE	Local Residential	0.27
NW 84TH CT	Local Residential	0.53
NW 84TH PATH	Local Residential	0.14
NW 84TH PL	Local Residential	0.08

NW 85TH AVE	Local Residential	0.19
NW 85TH CT	Local Residential	0.16
NW 86TH CT	Local Residential	0.46
NW 87TH AVE	Thoroughfare	2.00
NW 87TH CT	Local Residential	0.64
NW 87TH PL	Local Residential	0.43
NW 88TH AVE	Local Residential	0.27
NW 88TH CT	Local Residential	0.42
NW 88TH PATH	Local Residential	0.14
NW 88TH PL	Local Residential	0.60
NW 89TH AVE	Local Residential	0.89
NW 89TH CT	Local Residential	0.37
NW 89TH PL	Local Residential	0.43
NW 90TH AVE	Local Residential	0.21
NW 90TH CT	Local Residential	0.13
NW 91ST AVE	Local Residential	0.21
NW 91ST CT	Local Residential	0.48
NW 92ND AVE	Local Residential	0.53
OAK LN	Civic Street	0.21
OAK LN	Feeder Road	0.28
OAK WALK	Local Residential	0.05
ORCHID DR	Local Residential	0.31
PALMETTO FRONTAGE RD	Local Residential	0.31
PALMETTO PALM AVE	Local Residential	0.27
PARKINSONIA DR	Local Residential	0.18
PENT PL	Local Residential	0.19
POINCIANA CT	Local Residential	0.29
QUEEN PALM TER	Local Residential	0.14
RAVENWOOD PL	Local Residential	0.06
REDNOCK LN	Local Residential	0.19
ROSEWOOD RD	Local Residential	0.18
ROYAL PALM AVE	Local Residential	0.03
ROYAL PALM CT	Local Residential	0.04
ROYAL PALM LN	Local Residential	0.05
S LOCH ISLE DR	Local Residential	0.14
S PRESTWICK PL	Local Residential	0.13
SABAL DR	Local Residential	0.67
SAWMILL LN	Local Residential	0.05
SEAGRAPE TER	Local Residential	0.11
SHADOW CT	Local Residential	0.05
SHARPECROFT CT	Local Residential	0.05

SHARPECROFT DR	Local Residential	0.14
SILVER OAK DR	Local Residential	0.18
SIMMONS ST	Local Residential	0.11
STONEHAVEN RD	Local Residential	0.26
TABEBUIA LN	Local Residential	0.16
TORPHIN PL	Local Residential	0.08
TURKEY RUN TER	Local Residential	0.05
TURNBERRY DR	Local Residential	0.25
TURNBULL DR	Local Residential	0.19
TURTLE ROCK TER	Local Residential	0.04
TWIN SABAL DR	Local Residential	0.27
W LOCH ISLE DR	Local Residential	0.16
W PRESTWICK PL	Local Residential	0.36
W TROON CIR	Local Residential	0.38
WHITE OAK DR	Local Residential	0.26
WILLOW CREEK DR	Local Residential	0.10
WILLOW LN	Local Residential	0.23
WINDMILL GATE RD	Local Residential	0.25
WOOD WALK	Local Residential	0.08

APPENDIX B: PUBLIC WORKSHOP PRESENTATION, OCTOBER 23, 2017

MIAMI LAKES
Growing Beautifully

Complete Streets Program

Kimley»Horn
Expect More. Experience Better.

Agenda

- Project Overview
- What is a Complete Street
- Miami Lakes Street Typologies
- Public Input
- Meeting Wrap-up

Project Overview

- Project Objective
- Review of past studies and current policies
- Roadway inventory
- Development of Miami Lakes specific roadway typology
- Develop Miami Lakes Complete Streets Guidelines
- Develop sample concept designs and cost estimates

What is a Complete Street?

- Infrastructure enhancements that use additional pedestrian and bike improvements to give ALL users a greater share of the right-of-way
  - Designing for all modes of transportation, all people, all ages, regardless of physical ability
  - Physical barriers between travel lanes and pedestrian/bicycle pathways
  - Pavement markings
- Focus: increasing safety without compromising traffic flow
  - Sustainable modes of travel
  - Alternative ways to access to jobs, entertainment, and points of interest

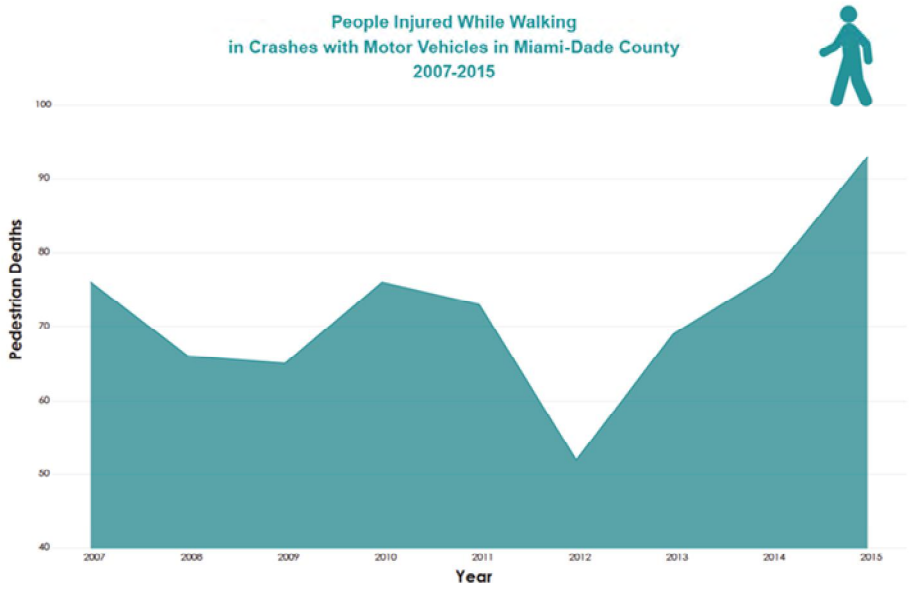
County Complete Streets

Focuses on safety and access for all users, of all ages and abilities.

- Provides policy and guidance to all parties involved in street design projects
  - Supports the development of streets that are safe for all users, with consistency in policy and design across all street projects in the County
- Champions innovative designs which treat all people equally whether they are walking, bicycling, taking transit, or using an automobile.

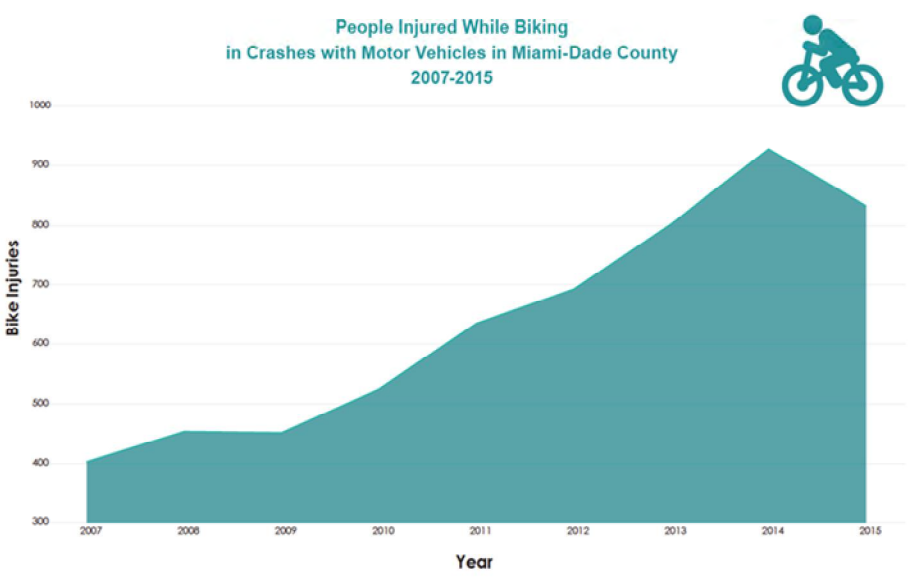
Safer People, Safer Streets

Pedestrian Fatalities



Data: Florida DHSMV

Bicyclist Injuries



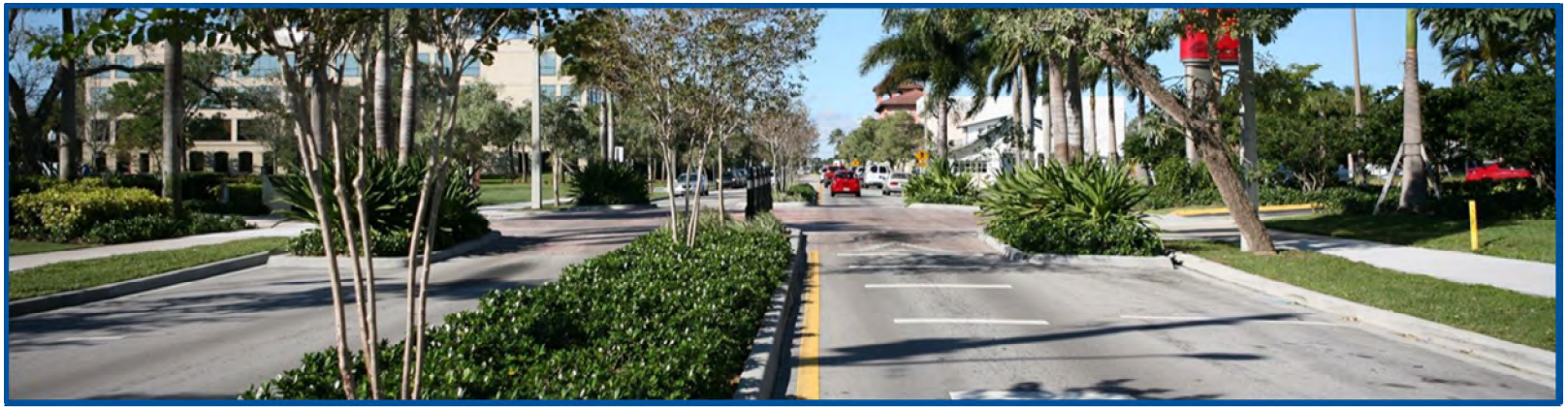
Data: Florida DHSMV

Safer People, Safer Streets

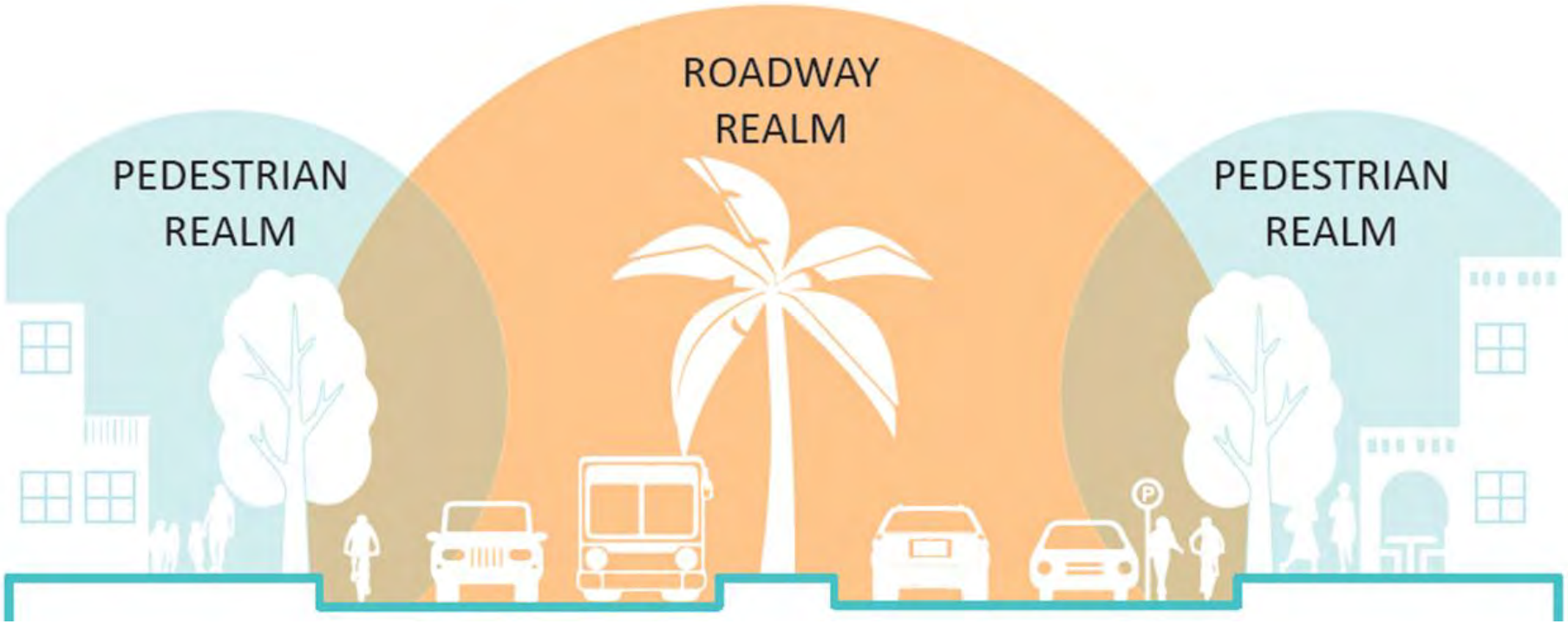
FIGURE 2-1 FATALITY RATES BY IMPACT SPEED/MIAMI-DADE COMPLETE STREETS DESIGN GUIDELINES DRAFT

Safer People, Safer Streets

- Recognizes that the way we design our streets impacts the behavior of street users
  - Safety of all users as the fundamental theme
  - Guide users through physical and environmental cues
  - Manage speed
  - Encourage walking, bicycling, and public transit use
  - Embrace the unique place characteristics around the street



Cross-Section Elements



Examples in Miami-Dade

SW 27th Avenue - Before

Examples in Miami-Dade

SW 27th Avenue - After

Examples in Miami-Dade

SW 57th Ave – Before

Examples in Miami-Dade

Red Road – After

How Are Streets Categorized?

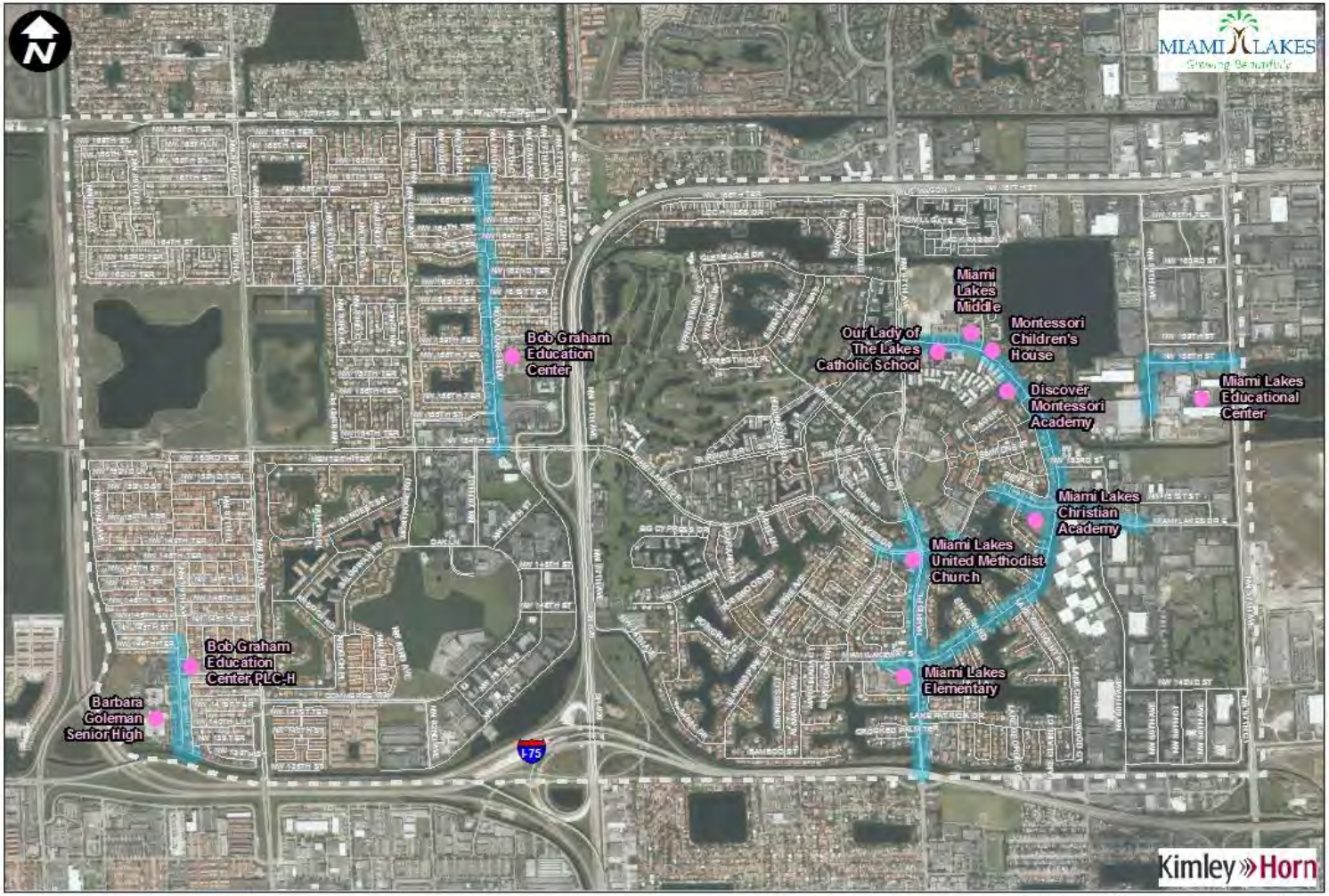
- Roadway typologies developed from County's Complete Streets Guidelines
  - Modified to be Miami Lakes specific
- Factors
  - Functional classification system
  - Existing roadway characteristics
  - Land uses

Miami Lakes Roadway Typologies

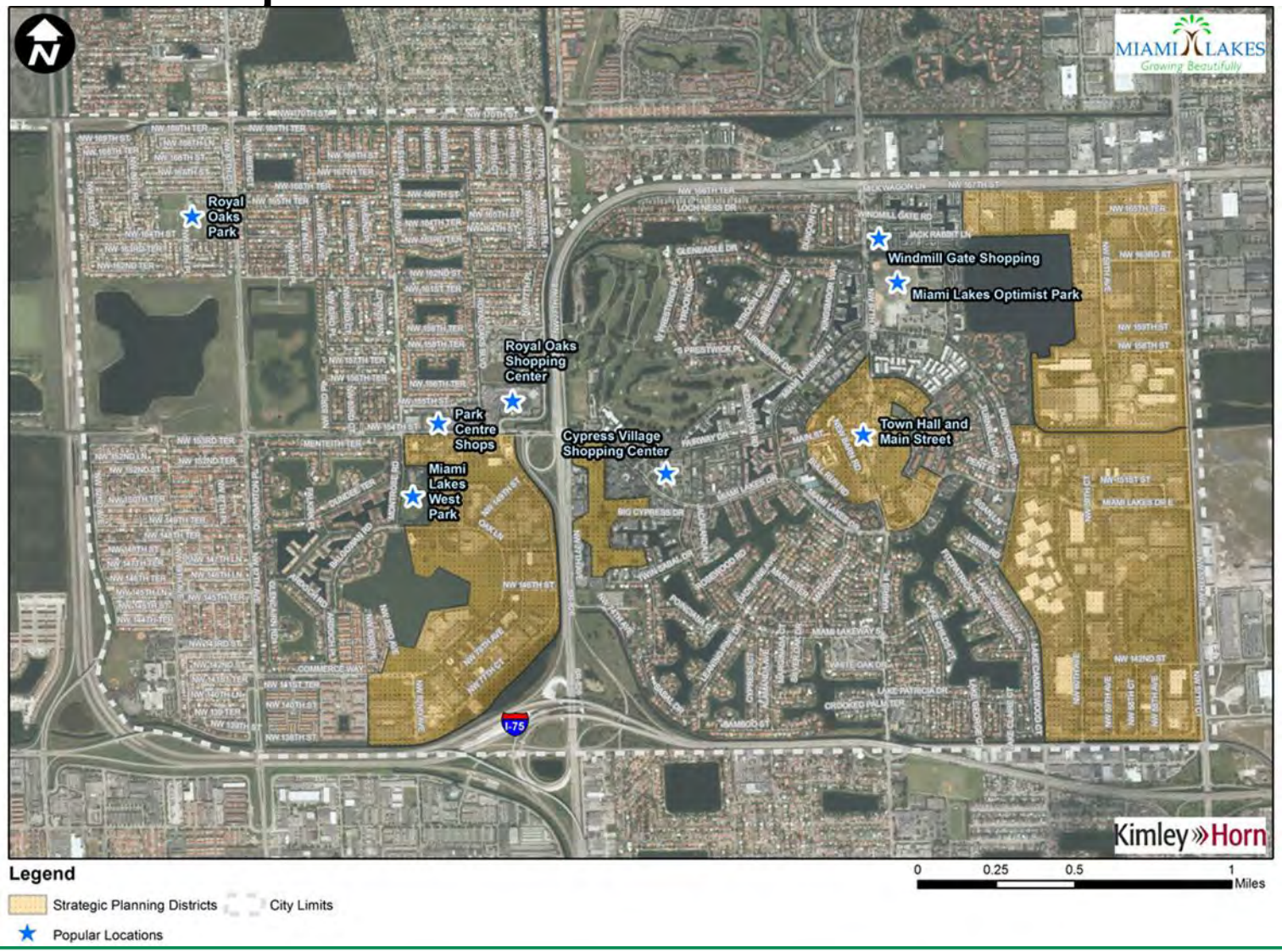
- Thoroughfare
- Feeder Road
- Civic Street
- Local Roads
  - Local Commercial
  - Local Residential

Street Type	Number of Lanes	Direction of Flow	Target Speed	Average Right-of-Way Width	Average Daily Traffic	On-Street Parking
Thoroughfare	4-6	2 way	30-35 mph	100'-80'	20,000	Rare
Feeder Road	2-4	1 or 2 way	20-35 mph	80'-70'	5,000-25,000	Rare
Civic Street	1-3	1 or 2 way	15-20 mph	50'	3,000-15,000	Yes
Local Commercial	1	1 or 2 way	15-20 mph	70'	NA	
Local Residential	1	1 or 2 way	10-20 mph	50'	< 6,000	Yes

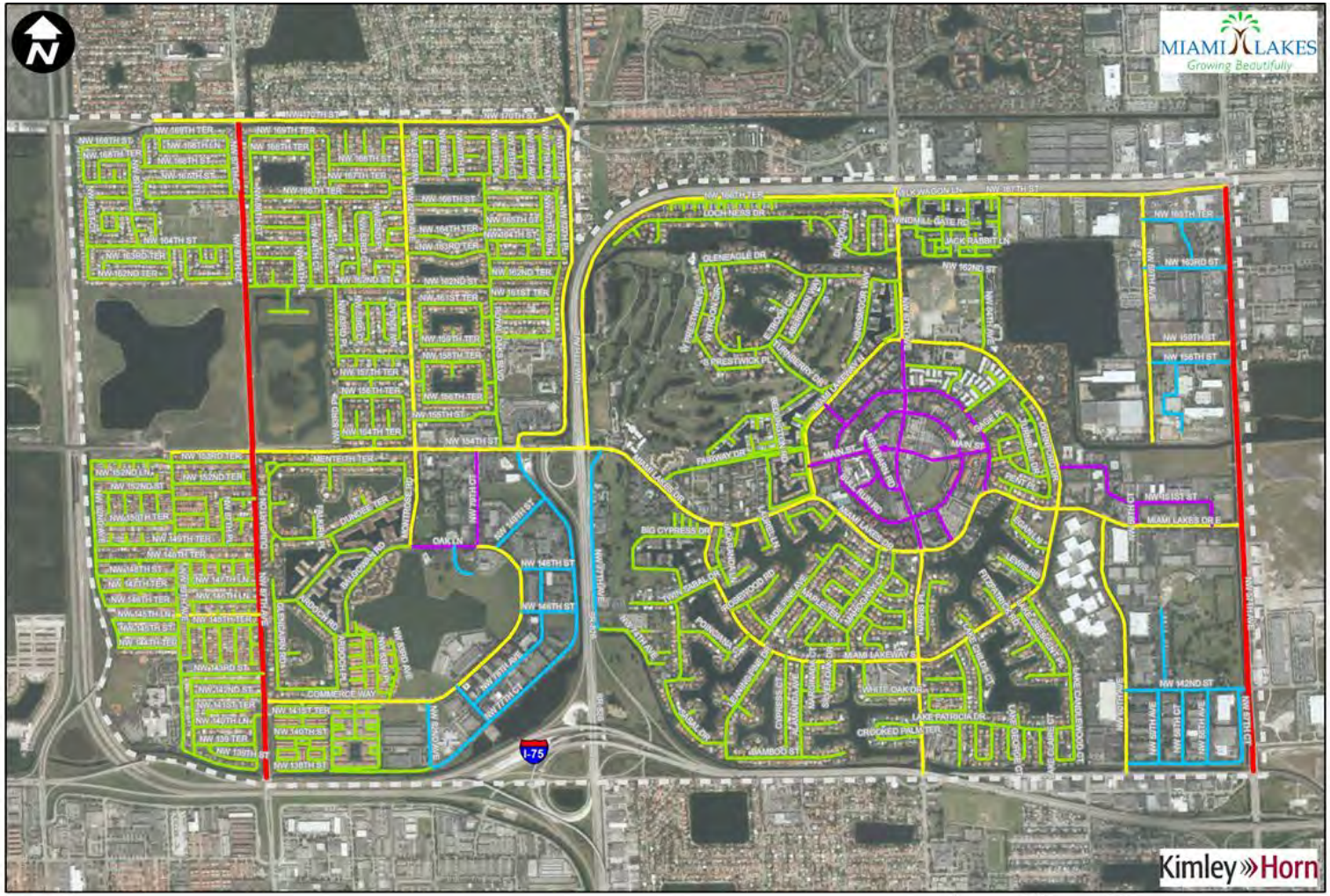
School Corridors Overview



Complete Streets Target Areas
Major Destinations Overview

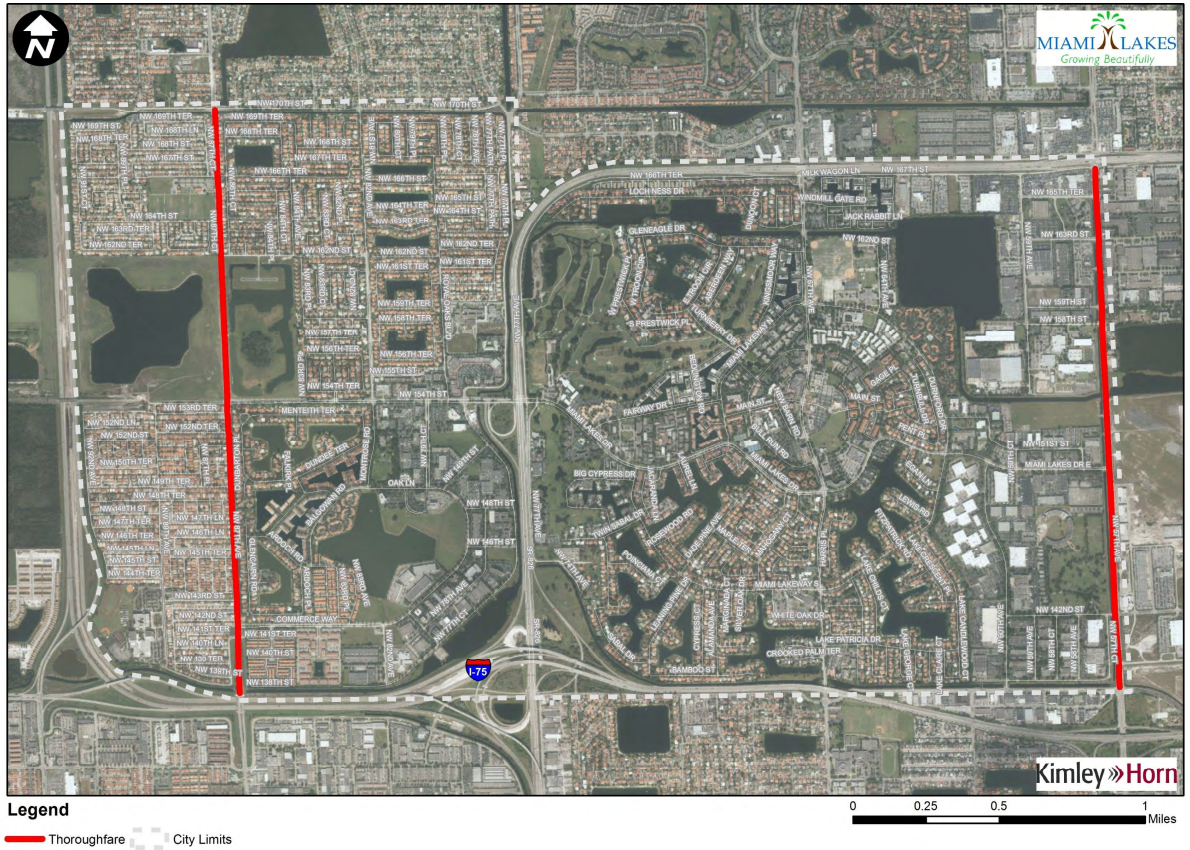


Street Typology Overview

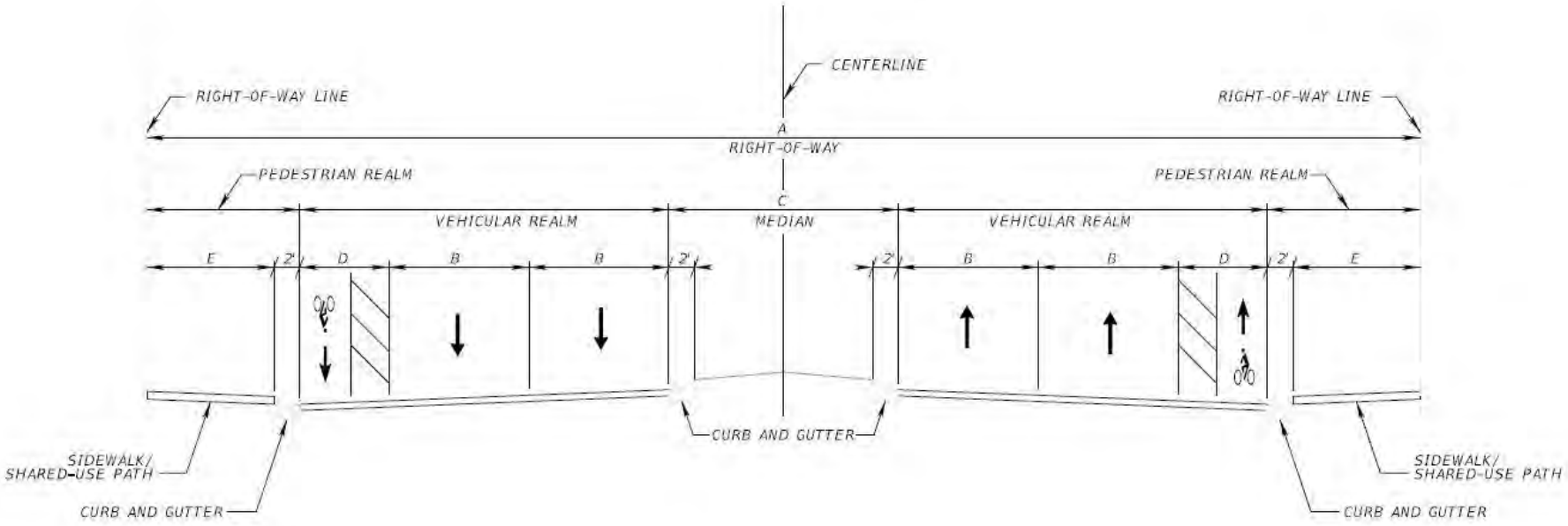


Thoroughfare

- Provides connections to different areas of the County
- Provides connections across barriers (e.g. freeways, waterways)
- Supports movement of large volumes of people, accommodates longer trips



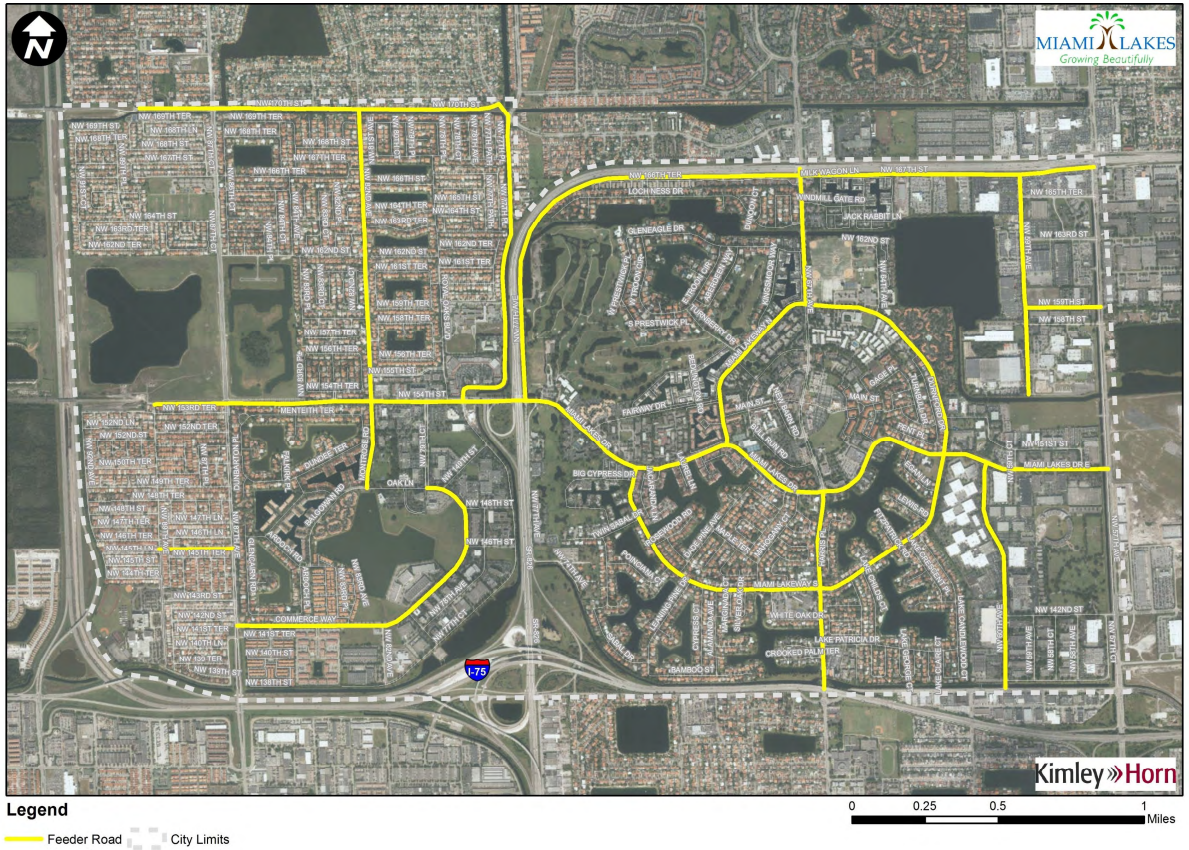
Thoroughfare



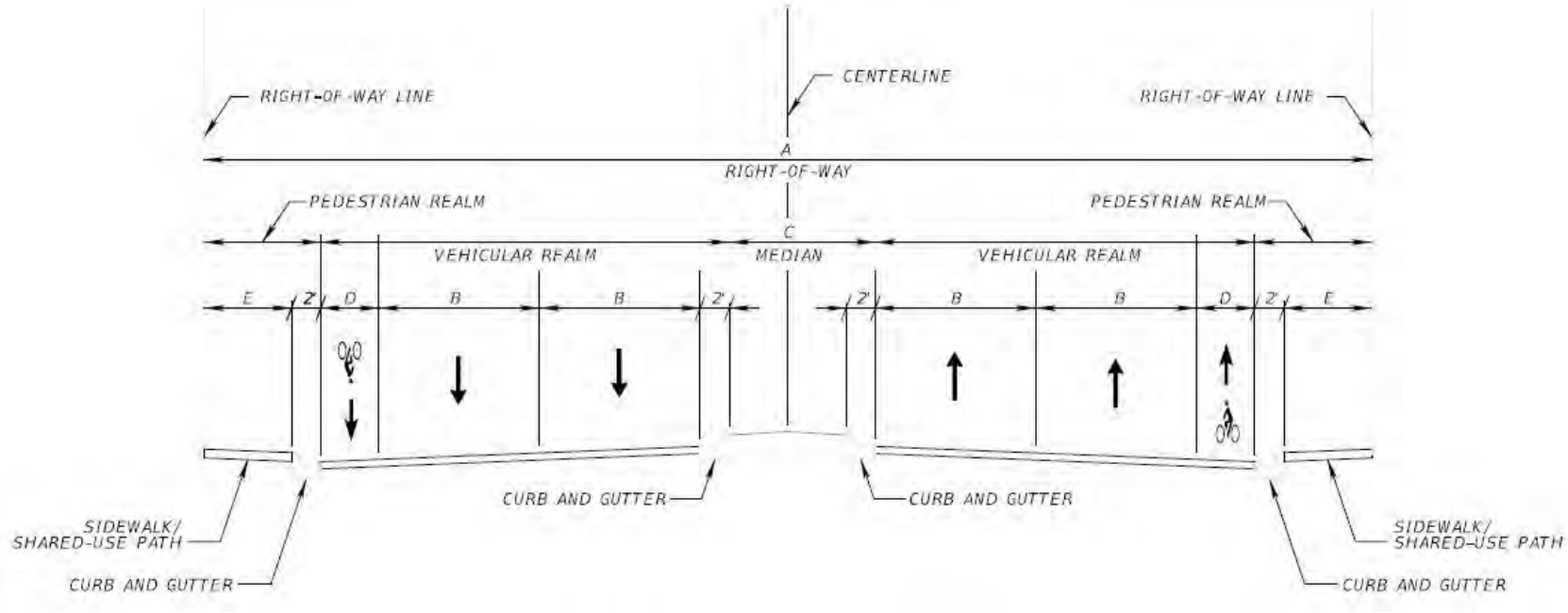
	RIGHT-OF-WAY		VEHICULAR REALM			PEDESTRIAN REALM	
	A		B	C	D	E	
	RIGHT-OF-WAY	LANES	TRAVEL LANE	MEDIAN (incl C&G)	BIKE LANE	SIDEWALK/SHARED-USE PATH	CURB & GUTTER
OPTION 1	100'	4-Divided	11'	18'	7' BUFFERED	10'	2'
OPTION 2	80'	4-Divided	11'	12'	4'	6'	2'
OPTION 3	80'	4-Undivided	11'	NONE	4'	12'	2'

Feeder Road

- Connections between urban centers and neighborhoods
- Connections to Thoroughfares and Civic Streets



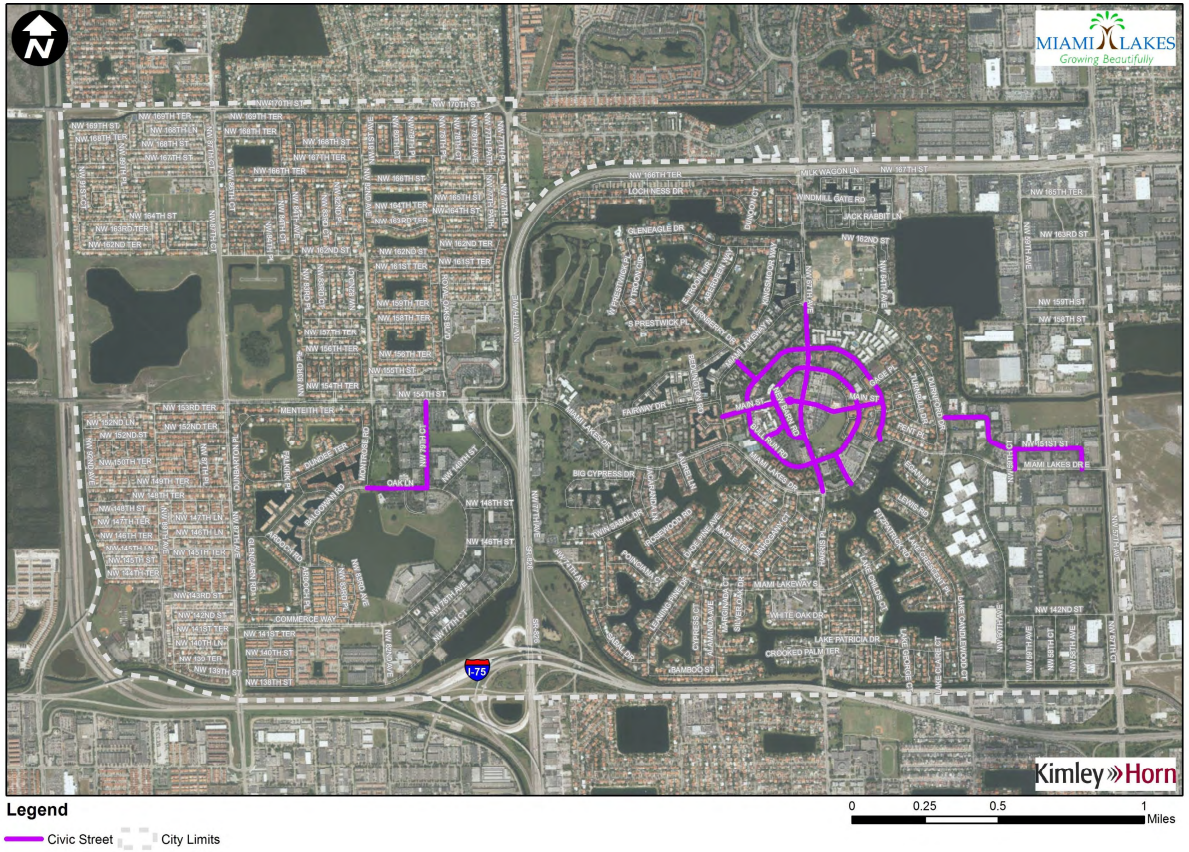
Feeder Road



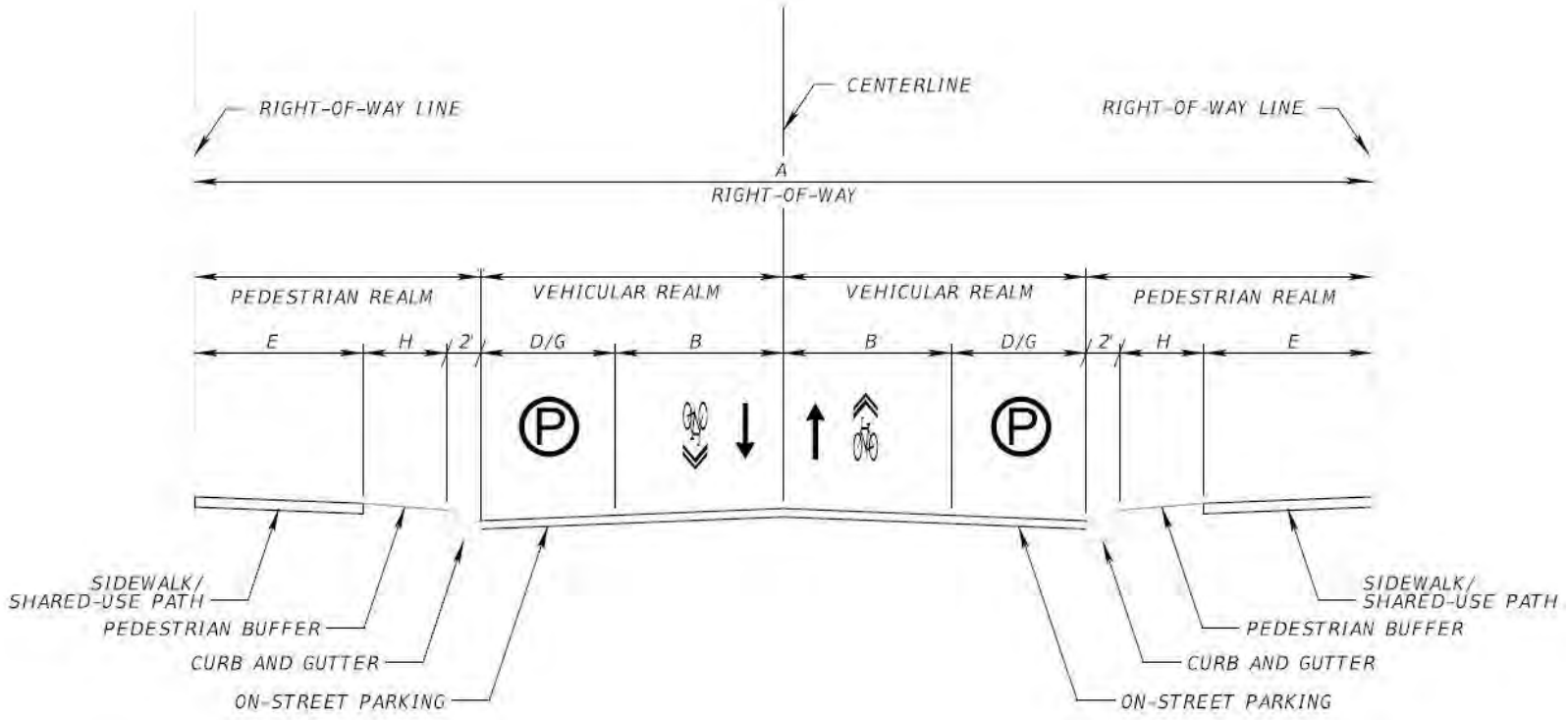
	RIGHT-OF-WAY		VEHICULAR REALM			PEDESTRIAN REALM		
	A		B	C	D	H	E	
	RIGHT-OF-WAY	LANES	TRAVEL LANE	MEDIAN (incl C&G)	BIKE LANE	PEDESTRIAN BUFFER	SIDEWALK/SHARED-USE	CURB & GUTTER
OPTION 1	80'	4-Divided	11'	12'	4'	0	6'	2'
OPTION 2	80'	4-Undivided	11'	NONE	4'	2'	10'	2'
OPTION 3	70'	4-Undivided	10'	NONE	SHARROW	3'	10'	2'
OPTION 4	70'	2-Undivided	11'	NONE	7' BUFFERED	3'	12'	2'

Civic Street

- Prioritizes local activity
- Serves commercial areas and neighborhoods
- Higher pedestrian activity



Civic Street

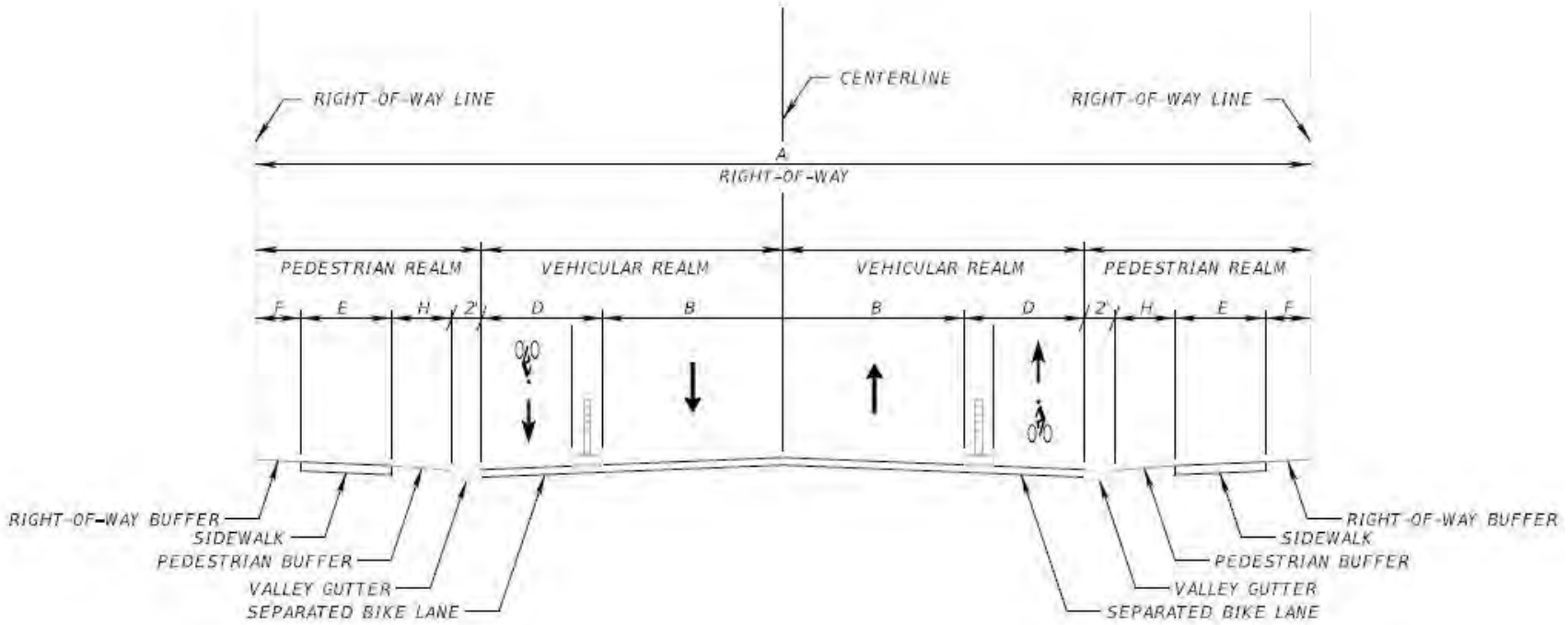


	RIGHT-OF-WAY		VEHICULAR REALM			PEDESTRIAN REALM		
	A		B	G	D	H	E	
	RIGHT-OF-WAY	LANES	TRAVEL LANE	ON-STREET PARKING	BIKE LANE	PEDESTRIAN BUFFER	SIDEWALK/SHARED-USE	CURB & GUTTER
OPTION 1	70'	2-Undivided	10'	8' ON-STREET PARKING	SHARROW	5'	10'	2'
OPTION 2	70'	2-Undivided	11'	NO ON-STREET PARKING	7' BUFFERED	5'	10'	2'
OPTION 3	80'	2-Undivided	11'	8' ON-STREET PARKING	7' BUFFERED	2'	10'	2'
OPTION 4	80'	4-Divided	11'	NO ON-STREET PARKING (*12' Median*)	SHARROW	2'	8'	2'

Local Commercial Street

- Provides a short link between two streets
- Serves commercial and industrial uses
- May have higher truck traffic

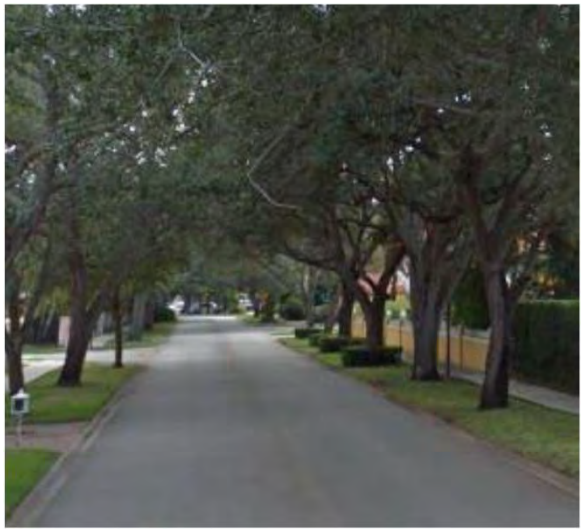
Local Commercial Street

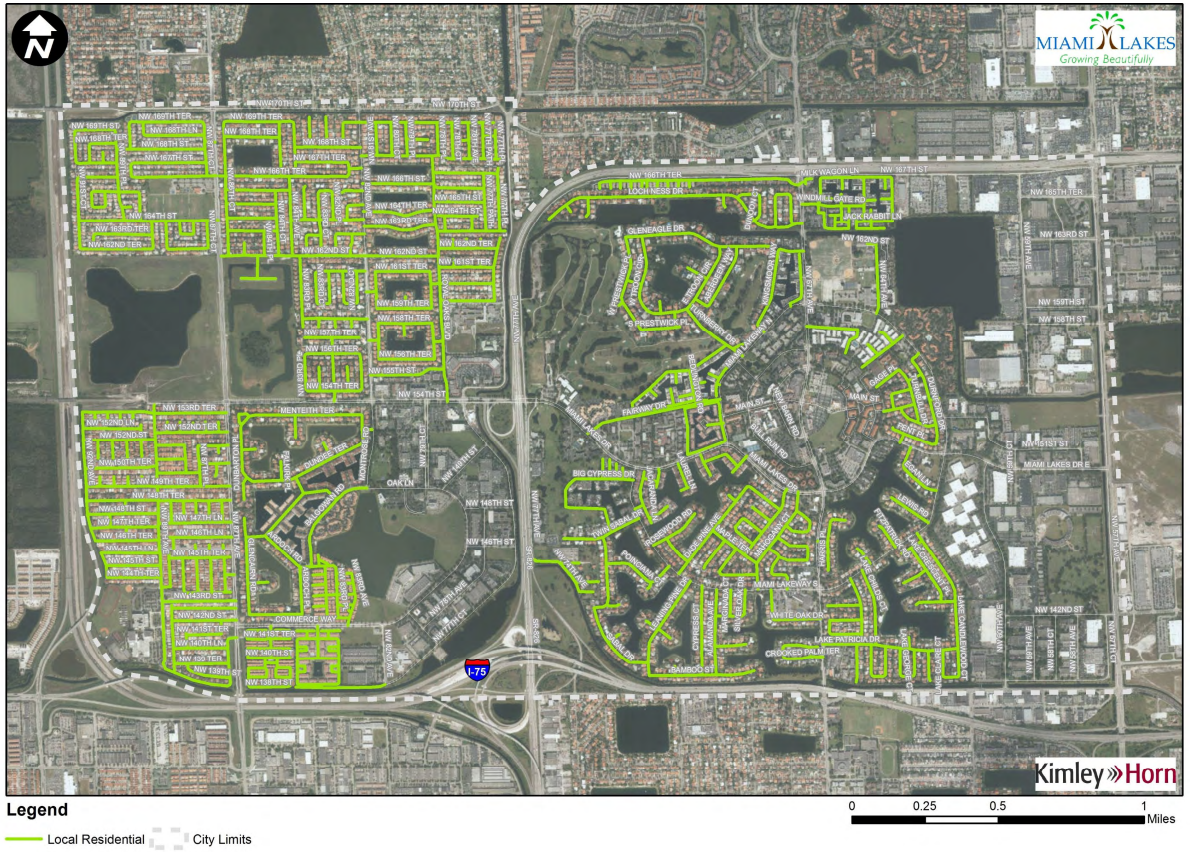


	RIGHT-OF-WAY		VEHICULAR REALM		PEDESTRIAN REALM			
	A		B	D	H	E		F
	RIGHT-OF-WAY	LANES	TRAVEL LANE	BIKE LANE	PEDESTRIAN BUFFER	SIDEWALK	VALLEY GUTTER	ROW BUFFER
OPTION 1	70'	2-Undivided	12'	8' SEPARATED	4'	6'	2'	3'
OPTION 2	70'	2-Undivided	12'	8' SEPARATED	2'	8'	2'	3'
OPTION 3	70'	2-Undivided	12'	7' BUFFERED	4'	8'	2'	2'

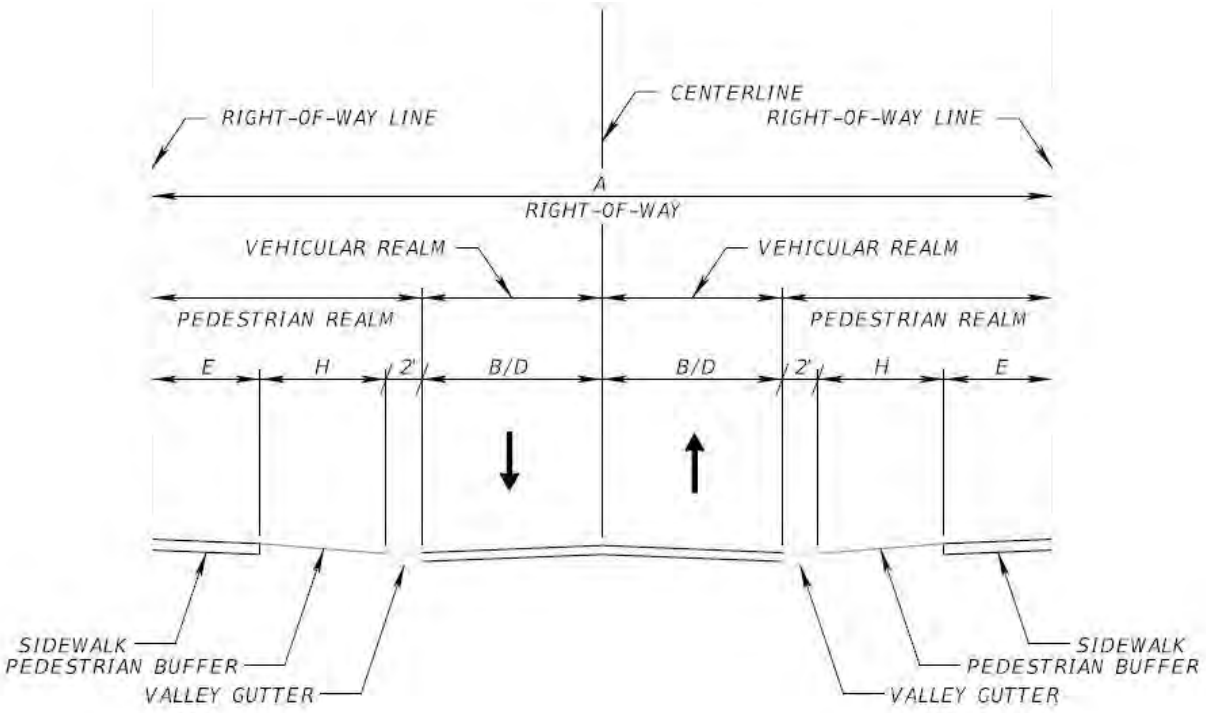
Local Residential Street

- Local streets with low vehicle volumes and slow speeds
- Primary function of serving local trips
- May provide access to parks, schools or institutional facilities as well as local retail and services
- Almost exclusively serves local traffic





Local Residential Street



	RIGHT-OF-WAY		VEHICULAR REALM		PEDESTRIAN REALM		
	A		**B**	**D**	**H**	**E**	
	RIGHT-OF-WAY	LANES	TRAVEL LANE	BIKE LANE	PEDESTRIAN BUFFER	SIDEWALK	VALLEY GUTTER
OPTION 1	50'	2-Undivided	10'	SHARROW*	7'	6'	2'

Breakout Session

- Breakout Stations
  - Interactive Mapping Station
  - Prioritization Matrix
  - Concept Plans
  - General Questions

APPENDIX C: PRIORITIZATION MATRIX

PROJECT PRIORITIZATION

Rank the following project criteria in order from 1 to 10 (1 being the most important and 10 being the least important.)
Please provide recommendations or comments in the adjacent space provided.

	Rank	Comments
Added Mobility Options *Includes multiple mode types*		
Low Cost *Low cost to complete the project*		
Safety *Increases safety for all users*		
Fills a Gap in the Network *Makes connections between existing facilities*		
Social Equity *Allows for or enhances equal opportunities for all users*		
Economic Development/ "Placemaking" *Creates a sense of place and allows opportunities for economic growth*		
Propensity for Use *Projects that will get used by the most amount of people*		
Improved Comfort/ Quality of Existing Facilities *Makes existing facilities more comfortable for users*		
Health *Increases opportunities to make healthier choices*		
Feasibility *Ability to complete the project timely or in conjunction with another project*		